



Goose Creek Watershed Annual Newsletter

Goose Creek Watershed Group
Sheridan County Conservation District
Natural Resources Conservation
Service

Volume 1, Issue 1
May 2006

Goose Creek Watershed Plan Summary

Background

In the 1990's the United States Geological Survey (USGS) and the Wyoming Department of Environmental Quality (WDEQ), analyzed water samples collected at different locations within the Goose Creek Watershed. Results from the data collected showed that the Goose Creek Watershed and its tributaries had elevated levels of fecal coliform bacteria. In response, the WDEQ placed Big Goose Creek, Little Goose Creek, Goose Creek and several of the tributaries on Wyoming's "List of Impaired Waterbodies".

To address the elevated concentrations of fecal coliform bacteria in the Goose Creek Watershed, the Sheridan County Conservation District (SCCD), the City of Sheridan and Sheridan County directed a comprehensive watershed assessment in 2001-2002. The results of the study confirmed

high levels of bacteria, and provided a foundation on which to begin a local watershed planning and remediation effort.

The state of Wyoming, through the WDEQ or EPA provides regulatory intervention on impaired waterbodies. Wyoming is fortunate in that the WDEQ encourages locally-led planning and involvement, through incentive based measures, to make the needed watershed improvements, which allows the residents to guide the process. In return, the residents are expected to address watershed concerns, acknowledging that water quality standards are only one part of a larger problem.

Watershed Planning

Upon completion of the Assessment, the SCCD received federal grants to initiate a watershed planning and improvement effort. In September of 2003, the SCCD convened a

small group of City and County officials and residents to identify the best way to proceed. In November of that same year, the SCCD hosted a public meeting to discuss monitoring results and the local planning process. At that meeting, participants preferred a local planning process and some volunteered to serve as a planning committee. Initiating in January of 2004 and continuing over the next few months, members met at monthly planning committee meetings to identify concerns, outline objectives, and develop action items. In September of 2004, one year after the initial start-up meeting, the group was ready to submit a draft watershed plan to the WDEQ. Over the next two months the plan was reviewed and released for a 45 day public comment period, including an open house. The final draft of the plan was approved by the WDEQ in April of 2005, and filed with

Continued on page 2

Highlights

- The first information and education task completed from the plan was to have a logo contest. Claire Korpela designed the winning logo.
- Since 2001—several improvement projects have been completed using funds administered by the District/NRCS partnership. Projects include: 9 animal feeding operation improvements and 3 septic system improvements on the Goose Creek Watershed.
- A workshop on septic systems drew approximately 65 people. Topics included: water quality and soils, operation and maintenance, rules and regulations, and alternative technologies. Additional workshops will be held in the future.
- A booklet is being drafted that describes resource issues/concerns on the watershed. The group will discuss distribution at their next meeting.
- A new website for the District will also provide the resource and other information once developed.
- The next meeting for the Goose Creek Watershed is set for May 2, at Sheridan College in room 102 of the Griffith Memorial Building.

Resource Cooperatives, Working Together for a better Community

NRCS/SCCD

The NRCS/SCCD is continually involved with helping the watershed groups in the county with funding and assistance for various watershed improvements. Along with funding and technical assistance for improvements to Animal Feeding Operations, they also provide support for stream bank restoration, and septic system improvement. For more information, please contact NRCS/SCCD at 672-5820 ext. 3.

City Of Sheridan

Last summer the City of Sheridan conducted stenciling on the city storm drains that directly flow into the Goose Creek Watershed. The intent of the stenciling is to help promote awareness of the watershed and reduce the amount of pollution dumped into the watershed, via these drains. For more information contact the City of Sheridan at 674-6483.



Sheridan County

Sheridan County is currently involved in a project that will map the existing septic systems located within the county. This map project will allow an effective way to access GIS information on septic system permits. Sheridan County will be identifying properties throughout the county that do not have permits in a effort to bring them up to standards and to establish permits. For more information contact County Engineer Bruce Yates @ 674-2920.

Septic System Permits Are Required for Everyone!

Did You Know? A permit to install or *modify* a septic system is required in all areas of Sheridan County. This is true even in rural areas where building permits are not required. Permits can be obtained from the Sheridan County Engineer's Office.

the County Clerk's office.

The Goose Creek Watershed Plan

Several issues are addressed within the Goose Creek Watershed Plan (GCWP). Among these issues are water quality, water quantity, upland areas, riparian corridors and stream channels, general information and education, financial conditions, and overall plan implementation.

Since **Water quality** is one of the largest concerns, there are several objectives that deal with various impacts. These concerns are mainly directed towards bacteria contributions to the watershed. Bacteria originates in the digestive tracts of warm-blooded animals—i.e. wildlife (including waterfowl), livestock, pets and other domestic animals, and humans. The bacteria enters the watershed through direct discharge or runoff (including rural and urban septic systems and urban storm water) carrying animal and human waste.

Water quantity is a factor due to low stream flows affecting water quality, stream temperatures, the sustainability of fisheries and the recreational uses of streams.

SCCD/NRCS Water Quality Improvement Program

The Sheridan County Conservation District (SCCD) and the Natural Resources Conservation Service (NRCS) have an ongoing water quality improvement program.

This completely voluntary program provides financial and technical assistance for water quality improvement projects. Projects can include improvements to animal feeding operations (AFO's) and septic systems, as well as streambank channel restoration activities. Projects are selected based on their potential improvement to water quality.

Funding for the program comes from a combination of federal and state grants administered by the SCCD USDA program funds. Eligible projects qualify for approximately 50% of the

Upland areas, riparian corridors and stream channels are concerns since many of these areas within the watershed contribute to the poor water quality and the overall health of the watershed.

Many of the upland areas within the watershed have bare ground and/or are lacking in vegetative cover. This contributes to an increase in stormwater runoff, turbidity, increased erosion and decreased infiltration.

Vegetative buffer zones along riparian corridors are addressed since these areas help increase filtering capacity, reduce runoff and increase infiltration and stream shading.

Stream channels are important because many streams or stream segments are unstable and contribute to excessive sediment. This affects many different water quality parameters and has a negative impact on aquatic life.

General information and education is also necessary. Implementation of the Goose Creek Watershed Plan will only be a success if it is built upon voluntary public participation, confidence, and trust in the process.

Financial conditions are a ma-

cost of the improvement.

Under the current septic sign-up, the program has contracts with 9 landowners in Sheridan County to do septic system improvements. In the past two years, 10 projects have been contracted with 7 installed. Since 2001, 22 AFO's and 5 stream restoration projects have been completed or are under construction.

Animals feeding operations and streambank restoration are on a continuous sign-up. The current application deadline for septic sign-ups is over but it is anticipated that the next sign-up will occur in late summer of 2006.

Interested individuals may still contact the SCCD/NRCS office for program information, at 672-5820, ext. 3.

For the major backbone of the plan. Conservation efforts, such as the GCWP, can be quite expensive and unaffordable for landowners and municipalities. To address these needs, funding resources, in the form of grants, are required to encourage restoration projects that improve water quality and water quantity.

Further, successful **plan implementation** is only possible with on-going efforts directed by the planning committee with guidance from the SCCD. The plan must be dynamic to accommodate for future concerns and technologies.

There are several action items that are addressed in the GCWP. These action items are intended to handle the concerns and issues that are identified within the Plan. The items were developed by the Goose Creek Watershed Planning Committee, and in many cases action items overlapped and could be used to address multiple concerns. Action items that are included are:

- Provide Information and Education
- Administer Local Improvement Programs
- Investigate Septic and City

Joint Effort Under Way to Study Alternative Septic System Technology

As part of Phase II of a non-point source management study being conducted for the Goose Creek Watershed, the Sheridan County Conservation District (SCCD), the City of Sheridan, and Sheridan County, will be evaluating options for the development of alternative individual sanitation systems technologies.

This evaluation will include general assessment of the relative performance of such technologies, considering the soil types, groundwater levels, surface drainage features, and weather conditions found in the study area.

Phase II of the study will use data from Phase I (scheduled to be conducted and finished this summer) to identify areas where alternative sanitation technolo-

Sewer Systems

- Identify alternative sanitation technologies
- Install storm water best management practices
- Evaluate funding sources for improvements
- Improve partnership opportunities
- Maintain an active steering committee
- Monitor Progress

Additional Comments

The Goose Creek Watershed Planning Committee recognized that wildlife contributions to bacteria levels and low stream flows are issues of concern in the Goose Creek Watershed; however, they noted that they have limited ability to address these concerns apart from information and education activities.

For additional information contact the Sheridan County Conservation District at 672-5820 ext. 3.

gies should be employed both in terms of existing developed areas as well as provide a matrix of options for future development being contemplated by the County.

This matrix of options shall identify under what circumstances each system is a viable option so that the appropriate staff, boards, and commissions can weigh the options and work with developers to implement the best system for the circumstances.

Phase II of the study is scheduled to be completed by November 30, 2006. For more information regarding this study please contact the SCCD, the City of Sheridan or Sheridan County.