



# WASHAKIE COUNTY CONSERVATION DISTRICT

## ANNUAL REPORT

### JULY 1, 2006 - JUNE 30 2007



**NRCS Instructing Participants During Range Monitoring Workshop.**



**Local Volunteers Unloading Christmas Trees To Be Recycled.**

# INTRODUCTION

Two of the oldest Conservation Districts in the State of Wyoming consolidated to form the Washakie County Conservation District in 1990. This combined the Nowood Conservation District, which was formed in 1941 in Ten Sleep, and the Washakie Conservation District, which was formed in 1943 in Worland.

The Washakie County Conservation District is a local government and a governmental subdivision of the state as defined and established by the Wyoming Statutes at Title 11, Chapter 16, et seq., entitled, "Wyoming Conservation District Law".

The Washakie County Conservation District's Board of Supervisors (5 members) are elected by the people of Washakie County at General Elections, by popular vote. The elected members represent both the rural and urban population within Washakie County.

Conservation District Board members are the only locally elected board charged specifically with the responsibility of representing local people on natural resource issues.

The Washakie County Conservation District's Board of Supervisors employ a Director and an Education Specialist to implement their projects and programs, which are supported by a mill levy, which is voter approved, and by grants.



## BOARD OF SUPERVISORS

Chairman	Tom Harrington
Vice-Chairman	Rick Six
Secretary/Treasurer	Nancy Frederick
Supervisor	Aaron Anderson
Supervisor	Dan Rice
Associate Supervisor	Jim Miller (not shown)
Associate Supervisor	Dan Hampton (not shown)

# A SUMMARY OF THE WASHAKIE COUNTY CONSERVATION DISTRICT'S ACTIVITIES AND ACCOMPLISHMENTS

## YOUTH EDUCATION

### WATER QUALITY

In the fall of 2006, Worland sixth grade students participated in the International Day of Water Monitoring. The 122 students were divided into small work groups and monitored water at six sites in the Worland area. In addition to the water monitoring, they observed land use, types of vegetation, amount of vegetation cover, and substrate composition. In addition, the students used GPS units to locate the sites, studied riparian soils, and looked for signs of wildlife use in the riparian areas. The teachers were assisted again this year by NRCS and BLM personnel.



Students Testing the Water's pH.

For the 6th year in a row, the Worland High School Advanced Biology students completed water quality studies during the first nine weeks of the school year. The District's Education Specialist assists with these studies and also provides equipment and supplies. The studies involve researching local watersheds, learning proper sampling procedures and safety practices, and development and implementation of a monitoring plan. GPS and Arcview mapping skills are also taught as part of this project. The students studied four sites that had differing landscapes.



Advanced Biology Students Collecting Macroinvertebrates.

## WATER QUALITY CONTINUED

Earth Science students at Worland High School used the Wyoming Game and Fish's stream trailer to study river system behavior. The stream trailer resided at the school for over a week while the students set up different land use scenarios and recorded the stream channel behavior under the different conditions. Ten classes, totaling over 125 students, had the opportunity to learn from stream trailer use.



Students Study River System Behavior Using a Stream Trailer.

The District assisted all of Worland's third grade students with their study of the water cycle with presentations of the Districts' Enviroscape and groundwater models. In addition, the students played the water journey game, which reinforces their understanding of the water cycle.



Students Learning About the Effects of Non-Point Source Pollution to a Watershed.



Students Write About the Journey of a Water Drop.

Fifth grade students extended their look at ecosystems with a trip to the local BLM managed "Duck Swamp", where they could observe upland, wetland, and riparian environments.

## FIELD TRIPS

The District assisted Southside Elementary teachers with their studies of the rocks and the rock cycle with a field trip of the local geology. Fifth and third grade classes took part in learning about rock formations dating back millions of years, to the present. Students collected examples of igneous, sedimentary, and metamorphic rock, in addition to fish scale fossils.



BLM Geologist Shows Students a Springtime Seep Feature in the Flathead Sandstone Formation.



Students Planting Trees Near Pond on the Lyman Ranch

Students from 5th through 8th grade joined forces this past spring in planting seedling trees at their Outdoor Classroom on the Lyman Ranch in Ten Sleep. The students planted over 100 tree and shrub seedlings and conducted water quality monitoring on the ponds.

A day in the Big Horn Mountains at the Nature Conservancy's Tensleep Preserve is a great way to learn about trees; from life cycles and identification, to fire's role in the forest. That is just what third grade students did with the help of the District's Education Specialist and Worland BLM's fire crew.

After a field trip to the Ten Sleep Fish Hatchery and a look at Ten Sleep Creek's aquatic insects, two classes of fourth grade students learned about fish life cycles by playing "Hooks and Ladders", a game that simulates the migration and life cycle of Pacific Salmon.

Geo-caching was a great way to burn off the springtime energy and learn about the use of GPS technology for 115 eighth grade students. The students learned to enter GPS points to navigate a geo-caching course at the Moonrock Equestrian Center. Personnel from NRCS, BLM, and the District assisted the teachers with this activity.

Damselflies and Dragonflies are two of Southside school second graders favorite insects. They study them in the fall with numerous related activities in all the core curriculum areas.

Although they were stormed out of a field trip to the mountains, that didn't stop the 2nd graders from Southside school from taking a field trip to a local park to learn how to snow shoe and cross-country ski, which was an extension from their science unit on animal adaptations.

## POSTER CONTEST



Grand Prize Poster Contest Winners for 2007 Soil and Water Stewardship Week for Washakie County. Second Grade (left) and Fifth Grade (right).

The Soil and water Stewardship Week's theme in 2007 was "Today is the Day to be a part of Conservation's Power". Presentations were made to each 2nd and 5th grade class in Washakie County and the students participated in the annual poster contest. Presentations focused on the importance of alternative energy sources. Over 180 posters were submitted and the winning posters were on display in downtown Worland during Stewardship Week.

## OUTDOOR CLASSROOM



Students Planting Trees at the WCCD's Outdoor Classroom.

Students from Worland's summer enrichment class learned about plant collecting and identification at the District's Outdoor Classroom. While at the Outdoor Classroom, the students also learned about local birds and how to use binoculars. During the month long summer enrichment program, these K-5 students also learned about planting and raising corn, soil types, and they dissected owl pellets with the District's Education Specialist.

Worland High School's National Honor Society students assisted with spring clean up and tree planting at the District's Outdoor Classroom as one of their community service projects.

## RECYCLING

The District assisted Worland fourth graders with their studies of landfills and recycling with a trip to the local landfill and recycling center, where they learned the principals of proper recycling and waste disposal. The classroom follow up, to the field trip, included learning the process of paper recycling from shreds, to pulp, to screening and drying.



Students Making New Paper From Paper Shreds.

The District continues to assist Washakie County schools in their efforts to recycle by replacing classroom recycling bins. In 2002, the District first purchased classroom recycling bins for all of Washakie County schools. With new schools with additional classrooms, and the wear and tear on the bins over time, the District decided to once again purchase bins to ensure that there were enough recycling bins for everyone. In most of Washakie County's schools, there are classes or groups of students that are responsible for emptying the bins.

## BAT STUDIES



Students Check the Wind Speed and Record Weather During Echolocation Monitoring Session.

The District continued its support of the High School Advanced Biology Bat Monitoring program. The students monitored two sites on seven different evenings. This project also includes instruction on the use of GPS equipment and computer mapping, and the District continues to fund the program with a grant from the Wyoming Governors Big Game License Coalition.

Elementary students also took their turn learning about bats; second graders learned about a bats keen sense of smell, and fourth graders learned about how echolocation works to supplement their study of sound.

## RECYCLING



Big Horn Rural Electric Employees Chipping Christmas Trees into Mulch, Free to Local Residents.

This marked the 12th year of the Christmas Tree Recycling Program, which began for the purpose of saving landfill space. The Christmas Trees are picked up every year by volunteers, stockpiled, then chipped by Big Horn Rural Electric, which for the past two years, donated their equipment and manpower. The chips were made available, at not cost, to local residents.

The Washakie County Conservation District continues to support the Ten Sleep Recycling Drop Center with the help of the Ten Sleep Sage Stompers 4-H Club, who transport the recyclables from the Drop Center, to Worland as a community service project. The District continues to pay mileage to the 4-H Club to and from Worland. In an effort to reduce the amount of non-recyclable material that was getting into the recycling bins, the District moved the bins to a location close to the Ten Sleep Town Hall.

## TREE PROGRAM

The District's Tree Program enables farmers, ranchers, and other landowners to obtain trees at a nominal cost. The purpose of the program is to encourage the owners to plant effective windbreaks to protect buildings, cropland and feedlots, for erosion control, reforestations, Christmas tree plantings, and other conservation practices. This year the District sold 5000 seedlings, and we continue to offer windbreak and water system planning assistance. Four windbreaks and one wildlife planting were installed this year using seedling trees purchased from the District. The District's new equipment; a Tree Planter and a Weed Barrier Machine was used to plant the trees and shrubs and install the weed barrier.

The District continues to maintain the Living Snow Fence, which was installed in 2005. This site was chosen due to snow drifting in the area, which causes Washakie County Road & Bridge crews to spend extra time plowing in the winter.

The District assisted the Worland Garden Club with their annual celebration of Arbor Day, by donating seedling trees and providing education about the trees, for all of Washakie County's third grade students.

## WATER QUALITY

The District staff continued with the third year of water quality monitoring on six streams in Washakie County, in July. The monitoring program is focused on streams that were included on the Wyoming DEQ's 303(d) list, which includes the Bighorn River, Nowood River, Sage Creek, Slick Creek, Fifteen Mile Creek, and Nowater Creek. Water quality information was again gathered on each site for *E. coli* and chemical constituents. The funding for this project is from a Wyoming DEQ's 319 grant, which was awarded to the District in 2005. Prior to monitoring, the WCCD's Sampling and Analysis Plan was updated to reflect changes to last year's plans.

The cost-share for the septic system and animal feeding operation improvements is being funded by 319 funds as well. Twenty inadequate and/or failing septic systems have been replaced and three animal feeding operation improvements have been completed since the fall of 2005. The Steering Committee continues to meet, as needed, for updates on implementation projects and to rank septic system projects.

The District began implementation of the Big Horn River Watershed Plan in July of 2006, using a grant from the Wyoming Department of Agriculture. A public meeting was held in June to update local residents on cost share programs available, what had been accomplished during the first year of implementing the watershed plan, and participants were given an overview of what the water quality data was showing about the health of local streams.

Publishing of the Big Horn Basin Snow Pack Information brochure was accomplished, which is sent out December through May.



Slick Creek, Looking Downstream From the District's Monitoring Site Location.

# WATERSHED PLANNING

The District has completed the following activities identified in the Big Horn River Watershed Plan:

1. A workshop was held to introduce the plan, showcase the previous year's implementation activities, update residents on current water quality monitoring data and activities, and to outline this coming year's activities.
2. An implementation activity notebook was developed.
3. Articles were published in the WCCD's quarterly newsletter and the local newspaper regarding reasons for watershed planning efforts, availability of cost share programs, and status of implementation projects.
4. An information booth emphasizing BMP implementation, water quality monitoring, and watershed planning was set up during the County Fair, WESTI Ag Days, and the Worland Trade Show.
5. Participated in the local radio stations "coffee talk", that emphasized the progress achieved through the plan.
6. Monitored the water of six local streams over the past three years.
7. Participated in the "National Day of Monitoring" annually.
8. Assisted the Worland High School Advance Biology students with water quality monitoring studies.
9. Instructed students on watershed function using the G & F Stream Trailer, the Enviroscope and the Groundwater Model.
10. A range workshop was held to teach residents how to monitor rangeland and identify plants.
11. Two animal feeding operations were upgraded using the District's cost share dollars.
12. A drought workshop was hosted to provide information on cost share dollars available for drought assistance, information on cooperative monitoring, and information on the Governors Drought Task Force.
13. Hosted an irrigation technology workshop to help increase the awareness of soil moisture technology.
14. Disseminated the quarterly Barnyards and Backyards conservation magazine.
15. The District, with the assistance of the Boy Scouts, affixed storm drain buttons to storm sewer inlets.
16. Participated in the Household Wasted Collection Day event.
17. Remediated a total of 20 failing and/or inadequate septic systems.
19. Completed 12 subdivision reviews for construction suitability for septic systems.



NRCS Giving the Watershed Pan Meeting Attendees an Overview of Farm Bill Programs Available.

## WORKSHOPS



Dr. Waggoner, University of Wyoming, Speaking to Drought Workshop Attendees About Range Utilization.

The District hosted a Drought Workshop in May which included presentations from the Wyoming Department of Agriculture on the Governors Drought Task Force, from Farm Service Agency and NRCS on drought programs that are available through the Farm Bill, from the BLM on their drought issues, from the University of Wyoming on utilization and grazing, and from the Guardians of the Range on Joint Cooperative Monitoring.

A Range Monitoring workshop was held in June at Castle Gardens and the Nature Conservancy's Tensleep Preserve. Topics covered during the workshop included plant identification of grasses, forbs, and weeds, grazing response index, plant community state comparisons, and setting up a photo point transect. Workshop instruction was provided by the Washakie County Weed & Pest, Tensleep Preserve, and the NRCS. In addition to the instruction, the District provided range kits and range monitoring booklets and the Weed & Pest provided Weeds of the West books to each participant.



NRCS Personnel Instructing Workshop Attendees on Range Monitoring Techniques.

The District hosted a Water Management Workshop in March, which featured information about new soil moisture measuring technology, irrigation systems comparison, and NRCS cost-share programs. NRCS personnel presented information on the advantages and disadvantages of different types of irrigation systems and how to get the most out of each system. In addition, NRCS provided information on Farm Bill cost share programs. A special guest speaker from MorphH2O Water Management provided the attendees with information on the importance of irrigation scheduling and demonstrated the ECH2O soil moisture sensor technology. Because of the interest in the ECH2O technology, several producers and the Wyoming Sugar Company requested cost share funds from the District to purchase several of the sensors.

## OTHER DISTRICT INVOLVEMENTS

The District, in conjunction with NRCS, continues to participate in a statewide project with the University of Wyoming and Wyoming Climatologist, to monitor forage and soil moisture in the Fifteenmile drainage. District helped install a data logger and range cages and NRCS has been downloading the moisture data and clipping the forage inside the cages. The forage clipping information will be used to correlate to the moisture data. The Worland BLM personnel have been reading the rain gauge near the site as well. This will be the third year of the project.

The District purchased a Fusion Tool, which landowners may use at no charge, to help in fusing plastic pipe together. The District has seen an increase in stockwater pipeline projects and there is no local businesses that have the tool available.

The District continues to participate in the Bighorn Forest Steering Committee meetings to keep abreast of the Bighorn Forest Service activities.

A District informational display was exhibited during the Washakie County Fair, Worland Trade Show, WESTI Ag Days, and Worland Health Fair. The display represents current District activities and accomplishments.

Throughout the year, District activities are promoted through the use of local cable, radio station, newspapers, displays, and the District's newsletter.

The Cottonwood/Grass Creek Coordinated Resource Management group approached the District, proposing to petition to form a Watershed Improvement District, which would be the first in Wyoming to include land in more than one county. The District has been working with the Hot Springs Conservation District on the proposed formation.



The District held their Conservation District Awards Banquet, where they honored volunteers who have helped them accomplish the many activities that are spelled out in the District's Big Horn River Watershed Plan and the District's Natural Resource Land Use Plan. Awards were presented for Outstanding Reporter, Outstanding Teacher, and Outstanding Cooperator. In addition, awards were given to the various groups that have assisted the District.

Maruice and Kathy Bush Received the Outstanding Cooperator's Award During the District's Conservation Awards Banquet.

## **INTERNAL AFFAIRS**

**District minutes were sent to the Natural Resources Conservation Service, Wyoming Department of Agriculture, Wyoming Association of Conservation Districts, Wyoming Board of Agriculture, Washakie County Planning Commission, Washakie County Commissioners, Washakie County Legislator, Jerry Geis, and Worland and Ten Sleep Mayors.**

**Yearly, a budget request to carry out the District goals is submitted to the Wyoming Department of Agriculture and Wyoming Department of Audit, and a special Budget Hearing was held this year in the third week of July.**

**In January, the powers and duties of the District and supervisors, as clarified in 11-16-122 of the Conservation District Law, were reviewed.**

**The District utilizes a one-mill levy, which was passed during the 2002 General Election. In addition to the mill levy passing, the voters passed a petition recall vote, which has allowed the District to better accomplish their long range planning, which includes using the mill levy as matching dollars for grant funding. A one-half mill levy was initially passed in 1992 on a Special Election, then the question was placed on the General Ballot and passed by voters in 1994 and again in 1998.**

**District staff and supervisors attended the following meetings/seminars/workshops, or gave presentations to groups throughout the year: WACD Convention, WACD Area III meeting, Reduce, Reuse, Recycle Coalition meetings, Ag Ambassador meetings, Washakie Watersheds Steering Committee meetings, Washakie County Commissioner meetings, Bighorn Forest Service Steering Committee meetings, WESTI Ag Days, Worland Rotary Club, WCDEA Training, NACD Leadership Training, and NACD Convention.**

**The District continues to budget for dues to the Wyoming Association of Conservation Districts, Wyoming Conservation District's Employees Association, USDA Bridger Plant Materials Center, and the National Association of Conservation Districts.**

**The District invited legislatures Debbie Hammons and Jerry Geis to a meeting to give an overview of District projects and to also update them on upcoming legislation.**

**The Director attended the Department of Agriculture, Wyoming Association of Conservation Districts, and Wyoming Conservation District Employees Association's certification seminar, which was held in March. The Director was certified in having knowledge of all aspects of her job including all activities and financial reporting.**

**Landowners were provided with GIS maps, upon request, showing their conservation activities.**

**The District's surge valve was utilized again this year for the irrigation of an alfalfa field.**

## ON-THE-GROUND COST SHARE PROJECTS

As a result of the Water Management Workshop held in April, the District teamed up with Wyoming Sugar Company, Beet Research Committee and local producers; Sage Creek Land and Cattle Company and Palesk Farms, to purchase and installed three monitoring stations. One sensor was installed in a barley field and the other two were installed in beet fields, both which were irrigated using a sprinkler. Each monitoring station included three probes; one 4” deep, one 18” deep, and one 36” deep. Each probe logs information about the soil moisture and is downloaded into a computer program along with temperature and precipitation data. The information collected may help growers increase their profitability by using irrigation water more efficiently, using fertilizers more effectively, saving electricity costs, and helping to control disease in crops. In addition, the District is currently working to form a committee of interested folks to focus on additional grant money to help more producers purchase this technology.



Wyoming Sugar CEO and Field Manager Installing the ECH2O Water Monitoring System.

The District offers cost share to Washakie County residents for “On-the-Ground” projects. Acceptable proposals can include any project for the implementation of natural resource improvement. Successful applicants can receive 50% cost share, with a maximum of \$10,000. To date, the District has approved an application for a multi-row windbreak, a water tap and saddle tee for a stockwater well, 3 PV Solar projects, a streambank stabilization project, 3 septic system projects, and a reservoir cleaning. A total of \$19,505.29 has been used to cost share “On-the-Ground” projects since July of 2006.

**WASHAKIE COUNTY CONSERVATION DISTRICT  
FINANCIAL STATEMENT  
FISCAL YEAR 2007**

**INCOME – \$338,995**

Mill Levy	145,864.00	Reimbursed Expense Income	4,030.00
Tree Program	2,645.00	Banquet Arts Council Grant	500.00
Appropriations	8,824.00	WACD WQ Match Grant	4,264.00
Watershed Implementation	20,000.00	Interest Income	2,284.00
AFO/Septic Grant	63,863.00	Other Income	1,294.00

**EXPENSE - \$313,532.00**

**ADMINISTRATION**

Personnel	66,462.00
Mileage/Meals/Lodging	4,012.00
Special Projects	55,406.00
Accounting	478.00
Office Supplies	4,500.00
Training	511.00
Resource Library	100.00
Dues	8,952.00
Postage/Advertising	1,842.00
Tree Equipment Maintenance	2,000.00
Phone/Internet	1,110.00
Living Snow Fence Maintenance	858.00
Reimbursable Expense Income	4,048.00
Meeting Expense	191.00

**OPERATIONS**

Watershed Grant	4,342.00
WQ Consultant	3,967.00
AFO/Septic Program	95,007.00
Education Program	6,285.00
Program Services	86,079.00
Miscellaneous	3,256.00

**INDIRECT COSTS**

Insurance	1,046.00
Bonds	480.00
Payroll Costs	20,006.00