

Nemaha Natural Resources District

Insight



**ANNUAL
REPORT**

Fall 2009

The Year in Review: Look Inside for Highlights from 2009



Muddy Creek Watershed dam under construction on Larry Bohlken property in September.



New concrete approaches were poured last summer to support this bridge across Honey Creek on the Steamboat Trace.



NRD Urban Special Project funding helped with construction of this trail around Stanton Lake in Falls City.



Funds are available from the NRD to purchase flow meters for wells pumping >50 gpm.



Abandoned wells like this one are scattered across the countryside in southeast Nebraska.

Place Your Tree Order Today!

Even though spring is a distant thought, it's not too soon to think about ordering trees for that windbreak, shelterbelt, or wildlife planting you've been planning. In fact, the Nemaha NRD starting accepting orders November 1 for seedling trees and shrubs. Whether planting yourself or enlisting the NRD's help, here's what you need to know:

If you will plant your own trees:

- Orders must be placed in lots of 25/species (no exceptions)
- Orders will be accepted until March 1, 2010, or until inventories are depleted (don't delay; order now while your choices are still available!)
- All species are \$0.85/tree, plus a \$2.00 packaging/handling charge & sales tax (payable in advance)
- Trees will be available in April, 2010

If you want the NRD to plant your trees:

- a minimum order of 200 trees is required
- fall site preparation is required if the ground is in sod
- orders are due and payable no later than December 31, 2009
- Planting charges: \$1.00/tree, plus sales tax (does not include cost of trees @ \$0.85 each)

Seven conifer, 10 deciduous, and 12 shrub species are available to choose from. Contact the NRD at (402) 335-3325 or check our website for a full listing or for more information.

REMINDER:

The entire Steamboat Trace trail is closed to all users during the rifle deer hunting season starting Saturday, November 14, through Sunday, November 22, and again from January 1-15, 2010. No one is allowed on the trail during this time without permission from the NRD. Hunting and/or possession of weapons is never allowed on the Steamboat Trace.

Annual Report:-----

FY 2009 Highlights

Buck & Duck Creek Watersheds:

Buck Creek - During the past year all design work on the Buck Creek Watershed structure near Peru has been completed. The NRD wrapped up land rights acquisition and is in a position to begin construction on the dam in the immediate future. Once federal 404 permits are approved, the project will be bid out with the bulk of the construction beginning in spring, 2010.

Duck Creek - Design continues on the Duck Creek Watershed structure near Peru, which will include a public recreation component. The NRD is working with NRCS and the Nebraska Game and Parks Commission to develop a recreation and fisheries habitat plan for the 62-acre reservoir. NRCS is also looking at options for constructing two sediment control structures above the reservoir to reduce siltation and extend the lifespan of the reservoir. At this time construction is scheduled for 2011.

Buck and Duck Creek Watershed Management Program - In 2009 the NRD kicked off the Buck and Duck Creek Watershed Management Program. The program is a cooperative effort of the NRD, NRCS, and DEQ to implement management practices above both of the planned reservoirs to improve water quality. A steering committee made up of representatives from sponsoring agencies and landowners was created to help guide the process, which will provide incentives to participating landowners who install management practices. To date over 20 landowners have agreed to participate in the program. Funding for the program is also being provided by the Nebraska Environmental Trust.

Big Muddy Creek Watershed:

Two more grade control structures were completed, and a bid was recently awarded to build a structure for Larry Bohlken. Two more were built with federal EQIP funds within the watershed as well. The road dam on Ray Caspers' property has been delayed due to issues with obtaining a federal 404 permit. It is hoped that by resubmitting the permit with more documentation it will be approved, and construction can begin soon on this important structure.

Small Dams Program:

Three small dam projects were built since the fall of 2008. These projects were financed by combining federal program funds with NRD and landowner contributions. The structure built on Dennis Schuster's land near Lewiston in Pawnee County is also the 60th small dam built within the Turkey Creek Watershed.

Camp Cornhusker Lake Renovation - In the spring of 2009, work was completed on the restoration of Camp Cornhusker Lake south of Humboldt. The six-acre lake, which serves as the center piece for the camp, is used by boy scouts for both recreational and educational activities. The NRD provided \$45,000 to the Cornhusker Council of the Boy Scouts of America to help match a grant they received from the Nebraska Environmental Trust.

Watershed Repair:

Work continued into 2009 to complete repairs to several watershed structures damaged by flood waters in the summer of 2008. Federal assistance from both FEMA and Emergency Watershed Protection funds supplemented the NRD's normal maintenance budget. When FY09 ended in June, a total of 13 structures were repaired using outside contractors. In addition NRD staff removed significant debris and in some cases reseeded another nine structures.

One unusual project this year involved the replacement of the drawdown valve at Iron Horse Trail Lake last fall. The original valve could no longer be operated, so a diving crew that specializes in this type of work was hired to help with removing the defective valve and installing a new one.



Crews work on replacing a defective drawdown valve at Iron Horse Trail Lake.

Recreation:

All four of the NRD's public recreation areas were popular with users again this year. Use at Kirkman's Cove was very high this past summer particularly during the Memorial Day and Independence Day weekends. Wirth Brothers Lake appears to be getting more use than in the past as water levels in the 34-acre lake have been more reliable, and users are discovering that it includes one of the best beaches in southeast Nebraska.

The NRD continues to replace aging facilities at the recreation areas, which this year included a new restroom at Kirkman's Cove. Users may also have noticed that almost all the old, traditional style picnic tables have been replaced with immovable, pedestal tables. This was done to reduce maintenance and vandalism.

Iron Horse Trail Lake Renovation - Shanahan Bros. Construction from Lincoln was awarded the contract at the October NRD meeting to carry out the renovation plans for this public recreation reservoir. Originally estimated at nearly \$3 million, their bid came in just under \$2 million. Work will include removal of sediment and construction of a sediment retaining structure above the lake as well as several in-lake fisheries improvements and angler access points. Much of the funding for this project will come from state and federal grants leaving the NRD to pick up only a fraction of the cost. Because of the magnitude of the work, the park was closed in August and will remain closed for the next 12-18 months. The closure includes the public hunting area behind the dam at the lake.

Park Permits - Nemaha NRD permits are required at Kirkman's Cove and Wirth Brothers Lake for 2010 (Iron Horse Trail Lake will be closed in 2010 for renovation). So far in 2009 the NRD has taken in over \$9,400 in park permit revenue and \$4,500 in electrical hookup fees. New annual park permit stickers for 2010 will be available soon. If you purchased an annual permit last year, watch your mailbox in December for renewal information.

Steamboat Trace - After two years of work, the NRD has finally completed all repairs to the trail caused by floods in 2007 and 2008. Earlier this year NRD staff installed new abutments under the Honey Creek bridge between Peru and Brownville. The bridge was damaged during the floods. Total cost of all the cleanup and repairs to the trail over the past 2 years was over \$75,000. The trail continues to be popular with users both locally and across the country. The Nebraska Educational Television Network (NET) recently shot video footage along the trail to use for future program development.

Urban Special Projects:

Three Urban Special Projects were completed last year in Nebraska City, Falls City, and at the Freeman School in Adams. The projects included a landscaping project at Wildwood Park, trail at Stanton Lake Park, and an outdoor classroom, respectively. For FY2010 two projects were approved for funding in Sterling (educational/nature trail) and Falls City (wetland educational area development).

Conservation Assistance:

\$149,921 of State Soil & Water Conservation Program funds coupled with about \$10,848 of NRD funds provided 50% cost-share for:

- 185,753 linear feet of terraces
- 4.16 acres of grass waterways
- 40,352 linear feet of tile
- 2,731 cubic yards of diversions

The next sign-up will be January 4, 2010, through June 1, 2010, at your local NRCS office.

Nebraska Buffer Strip Program - Over 150 landowners are currently enrolled in the Nebraska Buffer Strip Program within the Nemaha NRD. This program created in 1998 by the Nebraska Legislature provides annual payments for grass filter strips or riparian forest buffers along vulnerable surface water resources. Funding comes from a fee assessed on pesticides registered for sale in Nebraska, and the NRDs and USDA NRCS help the Nebraska Department of Agriculture administer the program. Some of the first 10-year contracts that would have expired have already been renewed by landowners interested in reducing sediment and pollutants in runoff.

Trees, Grass, & Wildlife Programs:

Approximately 20,000 trees and shrubs were distributed and/or planted by the NRD during the spring of 2009.

As part of the NRD's no-till drilling program, about 29 acres were seeded for private landowners during the fall of 2008 and spring of 2009. In addition the NRD also seeded five dams that were constructed last year. Anyone interested in NRD drilling services must submit an application no later than October 1 for fall seeding and March 1 for spring seeding.

Two WILD Nebraska contracts were completed last year in Otoe and Pawnee Counties. These involved renovating pastureland and grassland, interseeding legumes,

and timber stand improvement. Funding for WILD Nebraska comes from a partnership between the NRD and Nebraska Game and Parks.

In Pawnee and Richardson Counties two Partners for Wildlife contracts were completed, and one is underway. Tree clearing is the major emphasis of these contracts, and funds are provided through an agreement with the U.S. Fish & Wildlife Service.

All Hazard Mitigation Plan:

The All Hazard Mitigation Plan for Johnson, Nemaha, Otoe, Pawnee, and Richardson Counties is nearing completion. JEO Consulting, the firm hired to complete the plan, recently submitted a draft plan to FEMA for their initial review. Once comments are received from FEMA, any changes requested by FEMA will be made to the plan; and the final version should be submitted in early 2010. In addition to the NRD, counties, numerous communities, schools, rural water districts, and other entities participated in the planning process. The plan not only identifies potential hazards such as tornados, ice storms, floods, and drought, but also proposes mitigation efforts that can be taken to reduce the impact of the potential disaster. Projects identified by the participants may be eligible for future funding from FEMA.

Information & Education:

Once again Norris High School repeated their appearance as the southeast Nebraska representative at the state Envirothon competition held at Ponca State Park in May; the NRD contributed \$100 toward their registration. Envirothon is a team competition for high school students that tests their knowledge on a variety of natural resources topics.

The Nemaha NRD was selected to hold the 2009 Area VI Range Judging Contest at Burchard Lake in September. About 100 high school students competed from five schools with Superior High School taking home the bulk of the honors.

Other activities that the Nemaha NRD participated in to increase natural resources education and public awareness included:

- NRD Directors Seminar: Nemaha NRD staff organized a seminar in February for newly elected as well as existing NRD directors to increase their knowledge of NRD programs, projects, and procedures;
- Nearly 700 trees were provided to third graders at 16 schools throughout the District in April. Each spring the NRD distributes the trees and provides planting and care information to the youngsters.
- Water Celebration at Peru State College in March: annual event that provides a day of hands-on educational water activities for about 200 fifth graders from throughout southeast Nebraska;
- Envirothon Training Workshop: this one-day workshop was held in Kearney in June to help educators prepare students for Envirothon competitions. About 15 teachers spent the day learning about the Envirothon topic areas: soils, aquatics, forestry, wildlife, range, natural resources policy;
- Husker Harvest Days: NNRD staff assisted with the natural resources display at this annual event held near Grand Island.

NeRAIN:

During 2009 about 50 dedicated volunteers throughout the District faithfully checked their rain gauges every morning around 7:00 a.m. as part of the Nebraska Rainfall Assessment and Information Network. Results of their commitment to this program may be viewed by clicking on the NeRAIN icon on the front page of the Nemaha NRD's website, www.nemahanrd.com. More volunteers are still needed in various locations throughout the NRD, so contact our office if you are interested.

Personnel Updates:

In March Amanda Hartman joined the Nemaha NRD staff as the NRD Clerk in the Falls City NRCS office. The vacant seat on the board of directors in Subdistrict 4 was filled in May with the appointment of Wayne Goering from Nebraska City.

Water Resources Report 2009

Groundwater Levels

• A network of 115 wells (irrigation, livestock, domestic, and public water supply) located throughout the District were measured in the spring and fall of 2008 and 2009. A comparison of the spring readings indicated an average groundwater rise of 0.26 feet, and the fall readings indicated an average groundwater decline of 0.02 feet (essentially no change).

Well Abandonment

• A new record total of 117 abandoned wells were decommissioned this fiscal year through the District Cost-Share Program totaling \$44,070 in payments. Since the program's inception in 1994, the District has provided cost-share funds for the closure of 1,057 abandoned wells. A portion of the funding is provided annually by the Nebraska Department of Natural Resources.

• Three special projects with additional funding administered through the Nebraska Department of Environmental Quality and provided by the Nebraska Environmental Trust Fund resulted in 47 of the 117 wells closed within the Villages of Rulo, Verdon, and the City of Humboldt at 100% cost-share.

• The District provides 75% cost-share for the decommissioning of abandoned wells with a maximum of \$500 for each smaller diameter, cased type well and \$700 for each larger diameter, hand dug type well. Approval prior to the closure is required, and the work must be conducted by a licensed pump installer or well driller. Funds are available – Sign Your Abandoned Well Up Today!

Groundwater Management

• On February 1, 2009, the District's revised Groundwater Management Rules and Regulations became effective.

• An approved permit is required prior to the construction of any new water well designed to pump greater than 50 gallons per minute. A well driller's testhole log must also accompany the permit application, but testhole drilling does not require a permit. Well permits must be approved by the NRD Board.

• A complete copy of the District's Groundwater Management Plan and associated Rules and Regulations is available upon request and may be found on the District website.

Phase II Groundwater Quality Management Area

• A Phase II GWQMA was established in January of 2004 for northwest Richardson County. The 73 square mile area includes all land east and south of Pawnee and Nemaha Counties, respectively, north of the North Fork of the Big Nemaha River, and west of Highway 75.

- Elevated levels of nitrate in the groundwater prompted the designation.
- Within this area, cost-share assistance is available for soil sampling and complete fertilizer control systems – contact the District office for more information.
- Annual groundwater sampling occurred in July with 20 wells sampled for nitrate-nitrogen averaging 7.08 parts per million (ppm), which was down from 8.36 ppm last year!

Irrigation Well Registrations

• Is your irrigation well properly registered with the Nebraska Department of Natural Resources (NDNR)? Improperly or unregistered irrigation wells are considered "illegal wells" according to State Statutes and could ultimately be required to cease pumping or to be decommissioned. Registration of irrigation wells has been required since 1957.

• How do I know if my well is properly registered? District staff can assist you with looking up the information, or you can log on to NDNR's website at <http://dnrdata.dnr.ne.gov/wellssql/?&> and search by several methods such as owner name, legal location, county, or NRD.

• What if I discover that my irrigation well(s) is not registered, is listed in a previous owner's name, or is not shown to be in the correct location? Contact District staff to assist you with gathering the information needed for completion of the form(s). NOTE: There are NO PENALTIES to the well owner for registering a well late. Registering your well helps to protect it from encroachment of other proposed high capacity wells.

Chemigation Applications

• This year the District received 103 permit applications and inspected 83 systems for safety equipment compliance.

• Applicator certification is required prior to chemigating. Training sessions are held throughout the state each winter, and the NRD will host a session at the District office later this winter.

High Capacity Flow Meter Cost-Share Program

• The District applied for and received funding for the next two years from the Nebraska Environmental Trust Fund to establish a cost-share program for flow meters for water wells pumping greater than 50 gpm within the District.

• The program covers 50% of the cost of a new flow meter up to a maximum of \$500. Approval is required prior to purchase. Contact the office for more information, or log-on to our website and download the application.

----- Fiscal Year 2009-2010 Projections -----

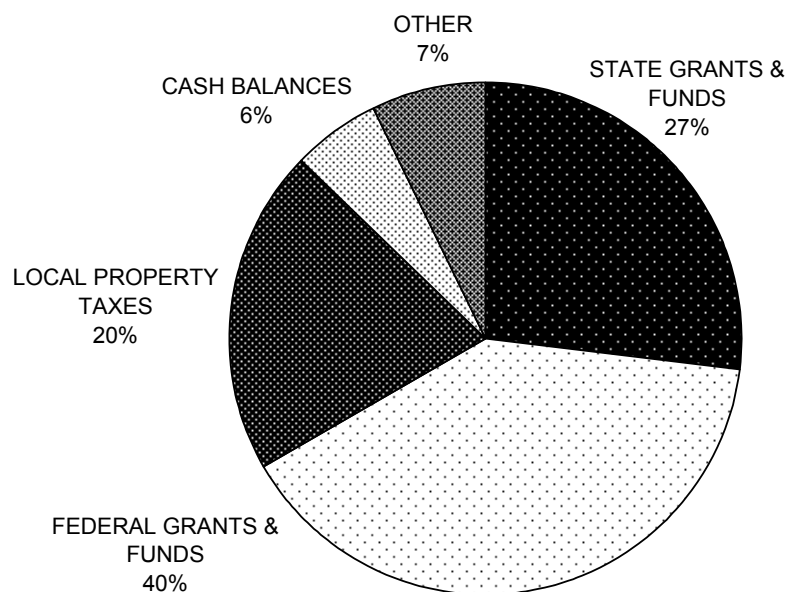
What's In the Numbers

This year the Nemaha NRD board of directors was faced with the daunting task of how to fund all the projects included in the FY09-10 budget. Before submitting a final budget for public review, the board first mandated at least \$40,000 of cuts within the budget. With so many projects underway, however, it became apparent the only way to proceed forward was to increase the tax levy to the limit of 4.5 cents per \$100 valuation. Though this required an increase in the tax requirement, property taxes only comprise about 1/5 of the total budgeted revenues. Three dollars of state or federal grant funds will supplement every dollar of local taxes collected in this budget.

Here's a brief description of the major items included in this year's budget:

REVENUE

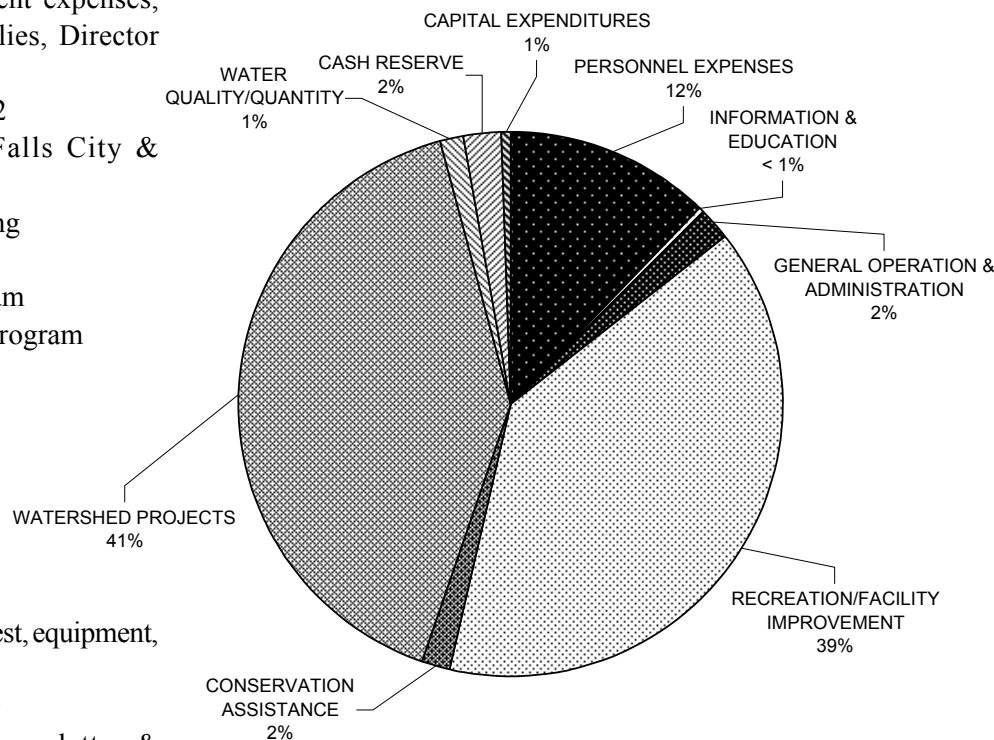
- Federal Grants & Funds: \$3,376,340
 - Buck & Duck Creek Watershed Projects
 - Iron Horse Renovation
 - Hazard Mitigation Planning
- State Grants & Funds: \$2,274,296
 - Iron Horse Renovation
 - Muddy Creek Watershed Project
 - Buck & Duck Creek Watershed Projects
- Local Property Taxes: \$1,726,538
- Beginning Cash Balances: \$478,154
- Other: \$608,779
 - Landowner Share of Project Costs
 - Tree sales & planting services
 - Park Permits & Electrical Hookup Fees



Fiscal Year 2010 Projected Revenue

EXPENDITURES

- Watershed Projects: \$3,409,413
 - Buck Creek & Duck Creek Watershed Flood Control Structures
 - Buck & Duck Creek Watershed Management Program (landowner cost-share assistance)
 - Muddy Creek Watershed (build one road structure and four grade control structures)
 - Small Dams (build two dams and assist Camp Cornhusker lake renovation)
 - Watershed Repair & Maintenance
- Recreation & Facility Improvements: \$3,317,250
 - Iron Horse Trail Lake Renovation (sediment removal & control, fisheries enhancement, angler access improvement)
 - Parks & Trail Maintenance
- Personnel Expenses: \$1,045,711
- General Operation & Administration: \$165,834
 - Utilities, vehicle & equipment expenses, property maintenance, supplies, Director expenses
- Conservation Assistance: \$156,952
 - Urban Special Projects: Falls City & Sterling
 - Tree Planting & Grass Drilling
 - Wildlife Programs
 - Nebraska Buffer Strip Program
 - Soil & Water Conservation Program
- Water Quality/Quantity: \$106,874
 - Groundwater Monitoring
 - Well Abandonment
 - Surface Water Monitoring
 - Chemigation
 - Flow Meter Cost-Share
- Capital Expenditures: \$42,614
 - Building loan payment & interest, equipment, and property improvements
- Information & Education: \$19,459
 - Awards, youth programs, newsletter & website, advertising, volunteer programs, promotions, outdoor classrooms



Fiscal Year 2010 Projected Expenditures

NEMAHA NRD STAFF

- Bob Hilske, Manager
- Scott Nelson, Assistant Manager
- Jane Kuhl, Administrative Assistant
- Allison Caspers, Administrative Assistant
- Lisa Bartels, Secretary
- Chuck Wingert, Water Resources Manager
- Charlie Pierce, Water Resources Technician
- Steve Bartels, Field Representative
- Mark McDonald, Field Representative
- Vernon Speers, Jr., Field Representative
- Aaron Stalder, Resources Specialist
- Tomas Chalé Aké, Projects Crew Leader
- Shawn Kreienhop, Resources Specialist

NRD STAFF IN NRCS OFFICES

- Deb Kreienhop, Auburn
- Glenda Bates, Tecumseh
- Jim Masters, Syracuse
- Amanda Hartman, Falls City
- Kathy Harlow, Pawnee City
- Tyler Weishahn, Auburn
- Craig Willoughby, Tecumseh

BOARD OF DIRECTORS

- John Albrecht, Nebraska City
- Lisa Beethe, Elk Creek (**Vice-Chair**)
- Rob Bohling, Johnson (**Secretary-Treasurer**)
- Charles Duryea, Humboldt
- Orval Gigstad, Syracuse
- Ted Godemann, Falls City
- Wayne Goering, Nebraska City
- Lynn Heng, Nebraska City
- Ron Hesket, Nemaha
- Scott Kudrna, Auburn (**Chair**)
- Jim Rush, Tecumseh
- Don Siske, Table Rock
- Mike Speece, Auburn
- J. Duane Sugden, Sterling
- Steve Sugden, Douglas
- William Umland, Palmyra
- Bruce Walker, Falls City
- Dan Watermeier, Syracuse
- Paul Weber, Firth
- Tom White, Falls City
- Jim Wirth, Nebraska City

NEMAHA NRD OFFICE:



62161 Hwy 136
 Tecumseh, NE 68450
 Phone: (402) 335-3325
 Fax: (402) 335-3265
www.nemahanrd.org

The Nemaha NRD's *Insight* is a publication of the Nemaha Natural Resources District. Requests to be placed upon the *Insight* mailing list and/or comments regarding information in this publication should be directed to Jane Kuhl, Administrative Assistant, at the above address.

For more detailed explanations of specific budget items, please contact the Nemaha NRD (402) 335-3325.