

SPRINKLES & SPLASHES

SUMMER 2007

THE QUARTERLY NEWSLETTER OF THE MIDDLE REPUBLICAN NATURAL RESOURCES DISTRICT

VOL. 17 NO. 3

Turtles, small electronic devices sitting inside of about 20 different electronic panels in irrigated fields are sending very 'quiet' and very slow signals or pulses to

Turtles are Talking to the to the SWPP District

the SWPP District substation in Palisade for the first time this summer. The turtles, however, like our native reptiles, will soon be going dormant for the season as irrigation and water pumping comes to a halt for the year.

In March 2006, a Conservation Innovative Grant was written for the Natural Resources Conservation Service to pilot test a technology that is not new to the Power District but is being applied in a new ~~inst~~ead of getting water use information from the water meter, the turtle

sends a pulse each time the electric meter on the electric panel meter clicks away (as the well pump uses electricity), sending the pulses to the SWPPD where each

pulse is converted to Acre/feet or Acre/inches, depending on the meter. The advantages? If the well water meter and electric use numbers are comparable to each other, then, this could exclude the need for water meters. Also, customers could eventually check their own water usage by going to a website and logging in to access their own data. And, so far, the numbers are very comparable. Tri-City meter 'retrofitted' the water meters earlier this Spring and our technicians re-installed the meters at

the participating wells in Hayes Center, Wilcox, Palisade, Wauneta, Culbertson, Eustis, Farnam and Moorefield. Afterwards, technicians from SWPPD and McCook Power District installed the turtles to the electric panels and connected the water meters.

By the way, the signal is so slow (3-5hz) that it takes 27 hours to reach the SWPPD substation. Still faster than a box turtle.

The next phase of this project is to provide online access to water usage for the 20 to 24 volunteer customers that are participating in this project. ♠



12th Annual Conservation Craze September 19th

Nearly 100 5th graders in Hayes Center, Maywood, Medicine Valley, Southwest and Wauneta Palisade Elementary Schools will converge on the Curtis, NE City Park on September 19 for the 12th Annual 5th Grade Conservation Craze.

The Middle Republican Natural Resources District (NRD) hosts this free outdoor education day for 5th

grade students. The event, formerly known as the Frontier County Area 5th Grade Outdoor Education Day, is celebrating it's 12th year. Schools in the NRD's portions of Frontier, Red Willow, Hayes, Hitchcock and Lincoln Counties are invited to attend .

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Conservation Craze...

The students will spend the day at six stations learning many aspects of conservation: students become water molecules and take an extraordinary journey; become CSI wildlife detectives to interpret wildlife signs; watch demonstrations about wells and groundwater; get down and dirty with hands-on mud activities to learn about land treatment and soils; and take a walk around the "Fantastic River Fun". Students will also hear a special presentation by biologists from the Nebraska Game and Parks Commission out of North Platte. TJ Walker, District Manager, will talk about the wildlife of the Loess Hills and how he live traps a local endangered species as part of an ongoing study.

Judging Contests Challenge Students' Range and Soil Knowledge

This year's Range Judging Contest is September

More than 1,100 students have attended the event since its inception in 1996. Presenters are drawn from a variety of local, state and federal



Land Treatment Activity

agencies including the Frontier Co. NRCS, the Upper and Lower NRD's and the Upper Big Blue NRD.

The event is sponsored and presented by the Middle Republican Natural Resources District, in partnership with the Natural Resources Conservation Service (NRCS). ♦

27th at the Nebraska Technical Agriculture College in Curtis.

Rain or shine, about 150 high school students will be on a ranch near Curtis, working in teams, identifying range plants and classifying range conditions. Winners of the Area III contest will go on to the State Competition scheduled for October 10th in Alma.

Nebraska is divided up into 6 contest regions (see map below). Area III consists of the four Natural Resource Districts that fall along the Republican River Basin: Upper, Middle, Lower and Tri Basin Districts.

The competition is further divided up into divisions. The Junior and Senior categories make up the Youth Division followed by the Adult and Professional Divisions.

The three highest scoring Nebraska teams at the state range judging contest, regardless of age division, are eligible for a partial travel scholarship.



Helping with this year's contest are the staff of the Middle Republican NRD, educators from the Upper and Lower Republican NRDs' and the Upper Big Blue NRD, soil scientists and staff from the NRCS offices in the Middle Republican District and North Platte, and the Nebraska Game and Parks Commission Office in North Platte.

The Southwest Area Land Judging contest takes place in Red Willow Co. this year on October 10th and is open to the entire southwest area of Nebraska.

The contest covers many topics that fall under soil science and landscape such as erosion, soil texture, permeability, flooding, ponding, fertilizer and soil amendments and compatible soil uses with different soil types.

Together, both of these contests can be an effective learning tool for students, adults, beginners and professionals. ♦

Meet Stacie Owens

Stacie Owens (Strawn) joined us in June, 2007 as our new Office Supervisor and Board Secretary.

Owens is a 1989 Graduate of Medicine Valley High School and lives with her husband, Kevin Owens and their children, Tyler, Anna and Maggie just West of Curtis.

Owens was previously employed by Curtis Telephone Company as their Office and Accounting Manager until its merger with Consolidated Companies in March 2007.

Now she's managing all of our water data including meter readings, well locations, CRP and EQP acres. She is currently providing landowner certified acres data to the County Assessors Offices within our District.

She enjoys the outdoors, reading and spending time with family and friends. Welcome aboard Stacie! ♦



Invasive Plant Project to Increase River Flow to Kansas

As part of the ongoing efforts to be in compliance with the Republican River Nebraska-Kansas Compact, the Southwest Nebraska Weed Management Task Force wrote and received a grant for \$814,000.00 to increase surface water flows in the Republican by controlling and removing invasive plant species. The Nebraska Department of Agriculture is funding this and other similar grants

supported by the LB701, which allows for "management of vegetation within the banks of a natural stream or within one hundred feet of banks of the channel of any natural stream...to improve stream flow."

The Southwest Nebraska Weed Management Task Force has used the grant to map the distribution of invasive plant species such as salt cedar, Russian olive, red cedar and phragmites using aerial photography and

GPS along the river in the following counties: Furnas, Red Willow, Hitchcock and Dundy. Tim Smith of Benkelman has been hired as project coordinator to manage the many plant removal projects along the river.

The success of this project will depend on landowner education and cooperation. Four informational meetings were held for landowners in July.

The goal of this project is to increase the flow of the Republican River into Kansas through the removal of the thirsty invasive plant species

that grow along the banks and riparian zone of the Republican. Salt Cedar or Tamarisk (*Tamarix* spp.) can use 200 gallons per day. Bob Wilson of the Panhandle Research and Extension Center at Scottsbluff has reported that "one acre of infested river bank can use 9 acre feet of water per year". However, Roger Stockton of the SW RC & D notes that these figures may be high for our region. Native vegetation will be left behind to benefit wildlife and serve as a buffer for river water quality.

The Task Force consists of representatives from

the Southwest Resource Conservation and Development Office, NRD offices within the Republican River Basin and the local weed management authorities in the listed counties. Also serving on the task force in advisory positions only are the NRCS offices out of Red Willow, Hitchcock and Chase Counties, Nebraska Game and Parks Commission Office and the Nebraska Division of Forestry Office both in North Platte. The Chairman of the Task Force is Rich Hedke of Hitchcock County Weed Management District. ♣

Republican River Basin Pocket Irrigation Guide Needs Your Feedback

The Nebraska Environmental Trust funded Pocket Irrigation Guides were mailed out to every irrigator who has an active and certified well within the Middle Republican NRD this Spring. We hope everyone took advantage of the information and tools within the guide this summer.

This guide was designed to assist the producer with making informed decisions about when to irrigate and how much to irrigate throughout the season. On page two, irrigation scheduling is discussed and demonstrated with tables illustrating suggested root depth for a variety of crops. In addition, techniques to determine and manage soil moisture were included.

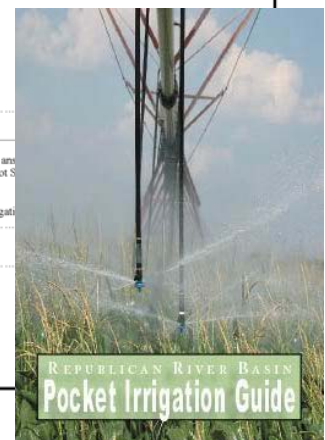
As part of the grant agreement with NETF, we are evaluating the effectiveness of the Pocket Irrigation Guide. One of the evaluation methods we are using is a survey form designed for the producer to easily complete in 5 minutes or less. Our challenge is getting the surveys to the producer. We've managed to reach some producers at the UNL Field Days scheduled in August. There is a link to the survey form on the home page of our website. Just print, complete and mail to our office. The NRCS Offices in each county also have copies of the survey form. We don't need forms from everyone, but a 10% return would be fantastic. Would you consider being that 10 percent? ♣

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Republican River Basin Pocket Irrigation Guide Evaluation

- Did you receive the Pocket Irrigation Guide? If no, please indicate so and return this evaluation form.
 Yes No
- How did you receive your Pocket Irrigation Guide?
 In the mail with my water usage report
 Picked up at a Conference or Meeting
 Picked up at an NRCS, FSA, NRD or Extension Office (Circle which office if this applies to you)
 Given to you by a friend, family member, or neighbor
 Other _____
- Are you using the Pocket Guide?
 Yes No
- If so, how often? (Select the answer that best matches your frequency of use)
 Once a week
 Once or twice a month
 Once or twice this season
- Is this guide easy to use?
 Definitely Yes..... Definitely Not
 (Circle a number) 1 2 3 4 5 6
 Comment: _____
- How are you using the Guide? (Check all that apply)
 Reference Guide to Soil Moisture
 Irrigation Scheduling
 Worksheets
 Chemigation Information
 Pumping Plant Efficiency
 Conversions, Definitions & Formulas
 Resources and Contacts
 Other _____
- Did you learn anything from the guide?
 Definitely Yes.....
 (Circle a number) 1 2 3 4 5
 Comment: _____
- Are you saving any water by using the Guide? (Check only one answer)
 Definitely Yes Yes, I might be Not Saving
 Too soon to tell I might in a drier year
- Was soil moisture management a concern for you during the irrigation season?
 Definitely Yes.....
 (Circle a number) 1 2 3 4 5
- Is soil moisture management a concern for you this year?
 Definitely Yes.....
 (Circle a number) 1 2 3 4 5
- Your comments or suggestions.....

www.mnrnd.org



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Calendar of Events

Visit:

www.mrnrd.org/calendar

September...	11	Board of Directors Meeting
	11- 13	Husker Harvest Days
	19	5 th Grade Conservation Craze
	23-25	NARD Annual Conference
	27	Range Judging Contest
October....	8	Columbus Day – Office Closed
	9	Board of Directors Meeting
	10	Land Judging Contest
November...	13	Board of Directors Meeting
	22	Thanksgiving Day
December...	11	Board of Directors Meeting
	25	Christmas Day

Visit us on the web at:

<http://www.mrnrd.org>

Board of Directors: Joseph Anderjaska, Hayes Center; Kevin Fornoff, Hayes Center; Josh Friesen, Wallace; Gayle Haag, Bartley; Ben Loomis, Maywood; Stanley Moore, Bartley; Jerry Mustion, Culbertson; Dan Nelson, Moorefield; Brad Randel, Indianola; Marty Schurr, Maywood; and Rick Spencer, Culbertson

MRNRD Office: General Manager, Daniel Smith; Assistant Manager, Robert Merrigan; Office Supervisor, Stacie Owens; Secretary / Receptionist, Mary Tidyman; Information & Education Coordinator, Roger Lawson; Technical Supervisor, Rich Karre; Technicians, Tom Hansen and Dennis Peterson

NRCS Field Office Clerks: Frontier County, Doris Burke; Hayes County, Kathy Barger; Hitchcock County, Carol Lashley; Lincoln County, Kathy Clark; Red Willow County, Betty Fritsch

Irrigators, NRD technicians will be in the field checking water meters beginning the last week of Septmeber.

SPRINKLES & SPLASHES is the official publication of the Middle Republican Natural Resources District. It is published quarterly by the MRNRD, 220 Center Av., PO BOX 81, Curtis, NE 69025. We can be reached at 800-873-5613 (toll free within Nebraska), 308-367-4281, Email: office@mrnrd.org or www.mrnrd.org .

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