

# Resources

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## NPNRD Reminders...

### NPNRD Meetings

Regular NPNRD board meetings are open to the public and held the second Thursday of each month at the NRD conference room, 100547 Airport Road, Scottsbluff unless otherwise announced. Winter meetings are held in the afternoon. Our next monthly meetings will be **January 8, February 12, and March 12, 2:30 p.m.** Newly elected director Daniel Weinreis of Minatare, replacing John Maser, will begin his duties in January.

### Win FREE Conservation Trees

NPNRD tree program coordinators Roy Lyles and Craig Uhrig will be at the annual Bean Day Expo on Jan. 13 in Mitchell and the Farm and Ranch Day expo at the Oshkosh auditorium January 21. They will be available to answer all of your conservation tree planting questions, and will be raffling trees.

### Be a Weather Watcher in 2009

Become a weather watcher in 2009. Residents of Banner, Garden, Morrill, Scotts Bluff and southern Sioux counties are invited to become volunteer weather watchers. The Nebraska Rainfall Assessment and Information Network (NeRain) is in search of volunteers to check backyard rain gauges and report rainfall on a daily basis. Learn more at [www.dnrdata.dnr.state.ne.us/NeRAIN/index.asp](http://www.dnrdata.dnr.state.ne.us/NeRAIN/index.asp) or call Resources Coordinator Greg Jackson at 308-632-2749.

### Send a Kid to Range Camp 09

We want to send students to State Range Youth Camp! The 46th Annual Range Youth Camp will be held in June 2009, at the State 4-H Camp in Halsey. All youth at least 14 but not over 18 by October 1, can attend. As part of their commitment to the management and care of natural resources, the North Platte NRD will pay the full camp fee of \$275 for four students who reside in Scotts Bluff, Banner, Morrill, Garden, or southern Sioux counties. The camp fee covers meals, lodging, recreation, books, and camp insurance. Scholarship application deadline is May 1, but it's not too early to make summer plans now. For more information, contact Kay Grote at (308) 632-2749 or go to <http://www.npnrd.org/camp.htm>

## Understanding Allocations for 2009

Two sets of rules and regulations for the allocation of ground water have been passed by the North Platte NRD Board of Directors. The allocation of ground water for the overappropriated area of the District is set at 18 inches per acre per water year. The allocation of ground water for the Pumpkin Creek Basin sub-area has been lowered from 14 inches to 12 inches per acre per water year. These allocation rules are effective January 12, 2009. Full text of allocation rules for both the OA area and Pumpkin Creek are available at the District office in Scottsbluff and posted on the NRD website at [www.npnrd.org](http://www.npnrd.org).

The Board's decision to use allocation as a resource management tool comes after several years of reviewing ground water levels data throughout the District. Due to the onset in 2000 and subsequent continuation of a severe drought, which has adversely affected all portions of the District, the Board and NRD staff determined it necessary and in the District's best interest to quantify the use of ground water. The first steps in quantifying ground water uses was the certification of all ground water uses in 2007-08 and the installation and use of flow meters on all regulated wells in 2008.

The move also complies with provision of LB962, requiring natural resources districts to collaborate with the

### Pumpkin Creek Allocation reduced to 12 acre inches

This is the sixth year for allocation in the Pumpkin Creek Basin sub-area. The first allocation was set in May 2003 at 15 inches. The use of allocation as a management tool has been proven successful, as producers in the sub-area have consistently used good management and stewardship of resources to reduce their irrigation water uses.

According to an ongoing limited irrigation study conducted by UN-L soils specialist Dr. Gary Hergert in Pumpkin Creek basin, the average irrigation used in 2004 was 9.9 inches; 2005 was 8.1 inches; 2006 was 11.4 inches; and 2007 was 10.6 inches. Testimony provided by Central Nebraska Public Power and Irrigation District at a public hearing October 16, 2008 in Harrisburg called for the PCB allocation to be set at three inches.

Following review of this testimony, the Board concluded that the use of ground water for irrigation in the Pumpkin Creek Basin is

See *PCB ALLOCATIONS*, page 2

state's Department of Natural Resources and surface water users in developing an effective integrated management plan (IMP) for ground and surface water. The District is currently working with the DNR to finalize the development of the IMP. This plan will include the allocation of ground water as part of its management plan.

### OA Area allocation is set at 18 inches

This is the first year for allocation of ground water in the overappropriated (OA) area of the District, a move that could not be made until the certification and metering was completed.

The OA area, as designated by the state's Department of Natural Resources in July 2004, includes all areas adjacent to the North Platte River Valley from the state line to the District line east of Lewellen. A copy of the OA map is posted at <http://www.npnrd.org/OA.pdf.pdf>.

The base allocation for the OA area has been set at 18 inches per acre per water for Water Year 2009, effective immediately. NRD staff will begin taking initial readings on flow meters in January to establish the base use on wells for the 2009 allocations. This allocation will be reviewed annually by the Board and NRD staff and adjusted according to ground water levels, use demands, and climatic conditions.



Flow meters will become a valuable tool in 2009 as the NRD begins to enforce its new allocation rules for ground water use.

## Plan Now for Tree Season 2009

Orders are now being taken for 2009 conservation trees. But hurry, trees are sold on a first-come, first-served basis.

The NPNRD has 28 varieties of two-year-old bare-root conifer and deciduous trees and shrubs and eight varieties of potted trees available. Trees are sold in bundles of 50 at 75 cents each for conservation purposes only. The district does not sell trees for landscaping purposes.

Supplies of potted Eastern red cedar and potted Rocky Mountain juniper trees are limited. NPNRD tree program coordinator Roy Lyles said those interested in ordering potted stock should stop by the NRD office in Scottsbluff.

The NPNRD also offers landowners several services to help get conservation trees established and improve survival rates. These include tree planting at 65 cents per tree and chemical weed control for 15 cents.

"We can go out, as a service, and take measurements and help with site selections," Lyles said. "We can make

recommendations for site selections as far as soil types, conditions and slope. We don't charge extra, that's included in our planting fee."

Tree planting in the district has increased from 184,860 trees in 1990 to 274,870 in 2005.

Trees ordered through the NRD are shipped from the nursery and stored at the district's tree coolers until planting time, which begins April 1. Customers can either pick up the trees themselves and plant them, or take advantage of the NRDs tree planting services.

Tree order and tree planting/spraying request forms are available at the NPNRD office in Scottsbluff or can be viewed at and printed from our website <http://www.npnrd.org/trees.htm> and mailed in.

**For a chance to win free conservation trees and visit about your tree planting needs, stop by the NPNRD Booths at the NDBGA Bean Day in Mitchell Jan. 13 and the Farm and Ranch Day in Oshkosh Jan. 21.**

## LOL annual reports are due Jan. 12

Producers in the Lisco-Oshkosh-Lewellen (LOL) ground water management sub-area of the North Platte Natural Resources District are reminded to submit their season end crop reports by the January 12, 2009 deadline.

This year, the LOL annual report fill-in form is available on our website at [www.npnrd.org](http://www.npnrd.org). Simply fill in the form on your computer, print, sign, and either mail or drop off the reports, along with any required attachments,

to the NRD/NRCS office. (Sorry, these reports can not be electronically submitted).

NRD staff will be available at the Oshkosh NRCS office to assist producers who have not yet submitted their reports. Contact Marilyn Howerter at the Oshkosh office at (308) 772-3953 ext. 3 or Greg Jackson at the NRD District office in Scottsbluff at (308) 632-2749.

## HEM Survey provides important data

Raw data from the Helicopter Electro Magnetic (HEM) survey conducted in June throughout the North Platte and South Platte Natural Resources Districts has already been provided. Within two weeks of the final flight of a sensor-carrying Canadian helicopter over western Nebraska cropland, maps showing preliminary data have been produced and presented to the NRDs. It will now be up to geologists and hydrologists to further study and interpret the data, which will eventually be produced into three-dimensional maps of the region's geological formations.

Hydrologist Jim Cannia with the United States Geological Survey and HEM project chief was very pleased with the quality and accuracy of the raw data that was collected during the preliminary flights conducted in June and October.

"This was an excellent quality raw data set," Cannia said of the series of maps showing the conductivity levels of geophysical data. "This is real interpretable data that will greatly enhance our ability to understand the ground water holding capacities of our aquifer."

The maps of the North Platte and South Platte River valleys, with concentrated surveys taken in the Dutch Flats area north of Morrill and Mitchell in Scotts Bluff County and the Sidney draw and Lodgepole Creek in Cheyenne County, were shown with layers of colors that indicated thick-

nesses and geological characteristics in tiers of between six and 300 feet deep. Resistive matter, such as sands and gravels that have the highest water holding capacities showed up on the maps as red, while conductive matter such as clay and shale showed up as blue.

University of Nebraska-Lincoln ground water geologist Steven Sibray, who will assist Cannia with the raw data interpretation and the further development of high density mapping, said this data set will help "refine the geological understanding of the North Platte Valley" and greatly enhance the geophysical data that is already used in ground water management.



## PCB allocations

*Continued from pg 1*

essential to the economic prosperity of Morrill and Banner counties, neighboring counties and rural communities in western Nebraska. Immediate cessation of the use of ground water for irrigation purposes within the subarea would have an "immediate, significant and depressing economic impact upon the western Nebraska residents" caused by the "loss of tax revenues and land valuations for the counties and school districts, a decrease in land values and loss of agriculture revenue."

The 12-inch ground water allocation will continue under the NRD's current allocation rules for Pumpkin Creek. Carry over for the 2007 irrigation season will be based on the 14-inch allocation. Subsequent three years the carry over will be a maximum of 50 percent of the 12-inch allocation.



*Through a cooperative effort with the United States Geological Survey (USGS), the North Platte NRD is gaining a better understanding of the underground aquifer by using electromagnetic currents from a helicopter-borne sensor (above and left). The data collected from this device is replacing the traditional method of drilling test holes and wells to locate water-bearing materials in the aquifer. This method is far less costly, in both money and time. Data can be collected and analyzed in months now, rather than years.*

# North Platte NRD: A look back at 2008

*Three new sets of rules and regulations to protect local natural resources -- Two new programs to promote outdoor education and resources stewardship for homeowners -- Two new partnerships to promote watershed and soil stewardship -- The continuation of science-based studies aimed at providing better management decisions for resources -- Continuing the tree-planting tradition for all landowners*

Sometimes progress comes at what seems a snail's pace and sometimes obstacles seem to stymie any progress that might come at all. But 2008 proved to be a year marked by continuous momentum for the North Platte NRD.

The board of directors, with assistance from both surface and ground water managers and irrigators, community leaders, and the NRD staff, solidified its commitment to protect natural resources, specifically ground water resources, in western Nebraska. The decisions did not come lightly, nor will the required actions to carry out those decisions come painlessly--progress is rarely painless. But the North Platte NRD remains committed to helping those who depend upon natural resources for their livelihood with sound, well-thought out management decisions.

**January** – A monthly series of promotional messages co-sponsored by the NPNRD entitled "Water: Precious & Protected" began showing on local television Channel 4; the water resources subcommittee work with surface water managers and local attorney Steve Smith to fine tune the concepts and language for rules for the transfer of commingled (surface and ground) water used for irrigation; the board approved two new programs, the outdoor classroom grant to help schools establish outdoor learning environments, and the buffalograss seed reimbursement program which assists homeowners in converting their established lawns to buffalograss; Fall 2007 water levels data showed an overall average decline in water levels in the Dutch Flats and Garden County areas.

**February** – Staff and delegates attend the annual Legislative Conference in Lincoln; a preliminary COHYST model report suggests that annual depletions in the North Platte NRD are around 5,500 acre feet of water per year and will increase to 8,000 acre feet annually by the year 2048; the Stakeholders' group continues to meet to discuss concepts to be included in the Integrated Management Plan and a small work-group is formed to target specific issues.

**March** – New employees Scott Schaneman and Preston Hilyard are hired as water resources technician and flow meter technician respectively; work continues on the draft of rules and regulations for the Transfer of Commingled Water; the Board approves a 50/50 cost share agreement with the Bureau of Reclamation which will provide for \$150,000 to be used for cost share on flow meters; Department of Natural Resources Ann Bleed resigns and is replaced by acting director Brian Dunnigan.

**April** – NRD staff begin locating and taking initial readings on flow meters throughout the District using new GPS technology; the certification of all ground water uses and the installation of flow meters on all regulated irrigation wells continues; the NRDs application to the Nebraska Environmental Trust for the Aerial Geophysical Study to be conducted by the United States Geological

Survey USGS was approved and will be awarded an \$800,000 grant for two years; the Board approved a Memorandum of Understanding providing staff assistance to the newly formed High Plains Weed Management Association; the District hosts a tree pruning workshop attended by 40; NRD staff assisted with the annual Water Wonders educational day held in Mitchell.

**May** – The NRD co-sponsored the three-day Invasive Species Summit held in Scottsbluff; a public hearing for the Transfer of Commingled Water rule is held May 15; the Board approves a proposal by Department of Natural Resources acting director Brian Dunnigan to extend the deadline for the completion of the Integrated Management Plans to Sept. 15, 2009; the District hosts a buffalograss planting workshop to kick off its new buffalograss program; tree planting district wide continues.

See 2008, page 4

## FY 2009 Tax Request and Levy Rates

In September, the Board held its annual Budget and Final Tax Request hearings for fiscal year 2009.

The Board approved a \$4,374, 975.47 annual budget. This was a \$133,256 increase over the 2008 budget. Noted increases included special projects, ongoing studies for canal leakage and optimization projects, the helicopter electromagnetic imaging work on aquifers, and continuing work on recorder wells.

Other anticipated expenses will be technical assistance for reading flow meters and a data-base person to enter and maintain flow meter data.

The property tax request for FY 2009 is \$1,725,611.12. This is down from the 2007-2008 Property Tax Request of \$2,186,550.00. The Proposed 2009 Tax Rate for the NRD is 5.7 cents per \$100 valuation compared to the 2008 levy of 7.8 cents per \$100 valuation.

### Resources

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## No Till Partnership brings new ideas



In June of 2008 the North Platte NRD joined forces with the local Natural Resources Conservation Service (NRCS), the South Platte NRD, the Upper Niobrara-White NRD, and the Panhandle RC&D to form the Panhandle No-Till Partnership. This partnership, along with other great sponsors, hosted the annual Winter No Till Conference in Gering in November. Here, agronomist Will Eitzman of Panhandle Co-op talks about fertilizer requirements for successful no till production. The partnership will also bring additional workshop and field days to area producers.

## 2008: NRD year in review *Continued from pg 1*

**June** – The Board addressed critical comments made about the value and validity of the COHYST model and agreed to accept COHYST as the best science available to the District at the present time and continue to rely on chief modeler Dick Luckey's interpretation of the model; representatives from Central Public Power and Irrigation District of Holdrege presented information on Resolution 08-02, which calls for a 6.7-inch ground water allocation for the North Platte NRD; Jim Cannia with the United States Geological Survey reported on a new study funded with Nebraska Environmental Trust Funds to map aquifer and ground water surface water relationship using airborne method of helicopter electromagnetics (HEM) with flights conducted in mid-June; NRD staff assists with the second annual High Plains Science Camp.

**July** – Progress continues with the IMP small work group, developing concepts for transfer and allocation of ground water and addressing concerns with conflicts between surface and ground water users; the NRD staff continues work on chemigation inspections, locating installed flow meters, sealing and recording meter serial numbers; Order No. NPNRD-14 adopting Rule 5-7.9.3 Transfer of Commingled water is approved; the Board issues a response to CNPPID's Resolution 08-02 stating that a 6.7 inch ground water allocation is not in the district's best economic interest and that the District's resources and energies will focus on completing the Integrated Management Plan process as required by state law.

**August** - Preliminary data received from the June HEM flights over the Panhandle indicate an amazing correlation between the existing geophysical data and is providing very detailed images of the different sections of the subsurface; Spring '08 ground water levels data shows declines in the Dutch Flats, Pumpkin Creek, and Morrill County areas and slight increases in the Lawrence Fork area of Pumpkin Creek basin; the water resources subcommittee continues analysis of data and discussion on dropping the ground water allocation from 14 inches in Pumpkin Creek basin.

**September** – Representatives from CNPPID released to the public a commissioned study on the Pumpkin

Creek basin allocation stating that the allocation needed to be lowered to a level of about three inches to be effective; after extensive review of levels data, the board agrees to proceed through the hearing process on the proposed Pumpkin Creek basin allocation at 12 inches for three years; the board adopted the budget for FY 2008, which includes a property tax request \$1,725,611.12, and levy of 5.7 cents per \$100.

**October** – The proposed final draft of rules for the allocation of ground water in the overappropriated basin was rejected by the board so language could be added to protect surface water appropriations in the cases of commingled water; the board approved funding for the continuing canal leakage study by the USGS in the amount of \$644,132,



which will help determine the optimum locations for intentional ground water recharge projects; the public hearing for proposed allocations in Pumpkin Creek basin was held.

**November** – The district hosted the 2008 Nebraska



*Above, the North Platte NRD hosted the annual State Land Judging contest in Banner County in November. Local team Bayard FFA, coached by Justin Rafferty, placed 11th overall.*

*Below, director Jerry Dillman, left, presents retiring Board Chairman John Maser with a commemorative gavel in December. Maser served as Chairman from 2005 to 2008.*

State Land Judging contest in which 77 students competed. Franklin won the contest and local teams Bayard and Kimball placed 11th and 13th respectively; a hearing to increase the Harrisburg Water System rates was held in Harrisburg; the NRD co-sponsored the annual Winter No-Till Conference in Gering with approximately 150 attending; the proposed draft of allocation rules was approved to proceed through the hearing process.

**December** – Brian Dunnigan was appointed director of the Department of Natural Resources; the public hearing for 18-inch allocation for the overappropriated area was held with no opposition expressed for the plan; the board approved Order No. NPNRD-15 adopting Chapter 6 Allocation of Ground Water, effective January 12, 2009; the board approved Order No. NPNRD-16 adopting the Pumpkin Creek allocation of 12 inches, effective January 12, 2009; the board approves the hiring of an additional flow meter technician and a data-entry person to assist with the flow meter and allocation management for 2009; outgoing Board Chairman John Maser, director since 2001, was presented a gavel commemorating his years of service to the NRD.



## 2009 Master Conservationist nominations sought

Nominations are now open for the 2009 Master Conservationist Awards. These awards, recognizing excellence in soil and water conservation, are presented annually at the Nebraska Association of Resources District state convention in September. **Deadline for local nominations is May 1, 2009.**

Awards are available in the areas of production agriculture, residential, community, and youth. Five production agriculture awards are given, one each from five Master Conservationist District areas. District A, the western Nebraska district, consists of the Upper

Niobrara-White, North Platte, and South Platte NRDs. In 2006, the state District A winner was the Laux family farms of Bridgeport, and Youth Group was Cedar Canyon School of Gering for development of an outdoor schoolyard habitat.

We'd like to repeat that success in 2009. We also encourage landowners, residents, community officials and youth groups to begin developing practices, programs and projects now that could become Master Conservationist award winners in the future.

In the production agriculture division, nominees must be Nebraska farmers or ranchers who have demonstrated excellent conservation practices for at least a five-year period on Nebraska farms or ranches.

In the residential, community and youth divisions, nominees must have carried out the conservation program a minimum of two years at the site. Residential entries can include a typical home yard or small acreage. Community and youth entries can include groups or an individual. The statewide awards are sponsored by the Omaha World-Herald and the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources.

For details on the requirements for Master Conservationist awards, go to Omaha World Herald <http://www.owh.com/inside-page.php?id=conservation> or call Kay Grote at (308) 632-2749.