

Serving Box Butte, Dawes, Sheridan and Sioux Counties

430 East Second Street * Chadron, Nebraska 69337 * Phone (308) 432-6190
Fax (308) 432-6187 * www.unwnrd.org

September 12, 2014

Brian Dunnigan, Director
Nebraska Department of Natural Resources
301 Centennial Mall South
Lincoln, NE68509-4676

RECEIVED

SEP 15 2014

DEPARTMENT OF
NATURAL RESOURCES

RE: 2014-2015 Long Range Plan

Dear Mr. Dunnigan:

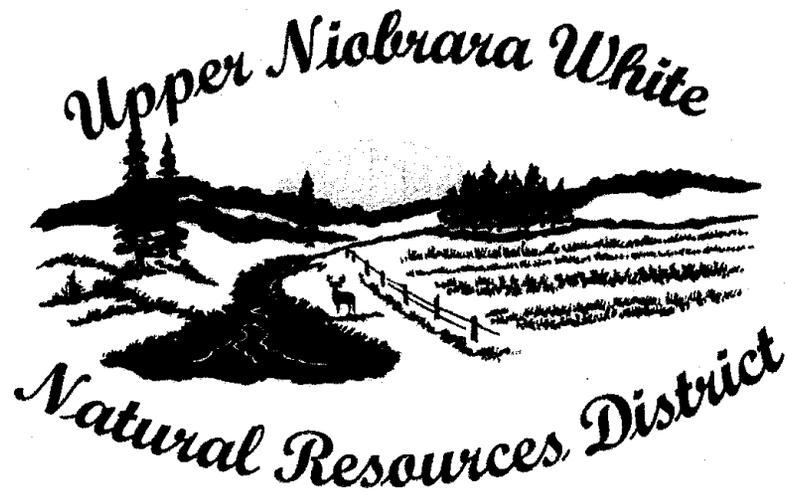
Included with this letter is the Upper Niobrara White NRD's Long Range Plan for 2014-2015. The board of directors voted to accept the plan at the September 11, 2014 meeting. The UNWNRD looks forward to working with the Department and other state agencies in implementing this plan.

Please let me know if you have any questions or need more information.

Sincerely,

Patrick O'Brien
General Manager

Cc: Pat Rice, NDEQ



Long Range Plan of Operation

FY2014-2015

Approved September 11, 2014

FY ~~2013~~—~~2014~~2014-2015
MISSION STATEMENT

The Upper Niobrara White Natural Resources District's mission is to: Prevent and control erosion, flood water, pollution and sediment damage; Promote soil, water, fish and wildlife conservation; Develop, manage and preserve for beneficial use, our surface and ground water supply; our fish and wildlife habitat, our forest and range resources, and our recreational and park facilities for present and future generations.

To accomplish this mission and to maximize our effectiveness, the District works with a network of partners and cooperators (including State, Federal and local agencies, other interested groups and individuals) to provide technical and financial assistance to the people of northwest Nebraska.

LONG RANGE PLAN OF OPERATION

Manage Ground Water and Surface Water

Prevent Excessive Soil Erosion from Wind and Water

Protect and Improve the Productivity of Rangeland

Protect and Improve the Productivity of Forest Lands

Encourage Wildlife Management

Promote Outdoor Recreation

Encourage Proper Waste Management

Inform and Educate the Public about Natural Resource Issues

Manage Ground Water and Surface Water

- ❖ Recognize that ground water is one of the state's most valuable resources and local control of ground water management is in the best interest of the public.
- ❖ Manage hydrologically connected ground water and surface water supplies within the UNWNRD so existing levels of domestic, agricultural, environmental, urban, rural, commercial and industrial activities are sustained for both the short and long term.
- ❖ Continue to implement and refine 'Ground Water Management Area' rules and regulations District wide.
- ❖ Implement the Ground Water Management Plan [GWMP] to address areas of ground water decline and quality concerns.
- ❖ Work with Nebraska Department of Natural Resources [DNR] to implement and update the Integrated Management Plan [IMP] for the Fully Appropriated Area.
- ❖ Work with cooperating agencies on Integrated Management Studies and Modeling efforts, to obtain the best information for water management decisions. Continue to update and refine ground water and surface water modeling projects.
- ❖ Administer Natural Resources Water Quality Fund cost share program.
 1. Low Pressure Drop Nozzles
 2. Ground Water Quality Domestic Well Program
 3. Water Mark Sensors and ET Gauges
- ❖ Administer Nebraska Soil & Water Conservation Program [NSWCP].

Ground Water Quality Management

- A. Implement GWMP plan to adequately address ground water quality concerns within the district.
- B. Utilize baseline ground water quality parameters to monitor trends.

- √ Continue to sample at least 500 wells annually. A ground water analysis for nitrate/nitrogen [N-NO₃] content in all active wells pumping greater than 50 gallons per minute for irrigation of crops must be accomplished once every four years. Landowner/Operator must allow the sample to be collected and analyzed using approved methods. Information from the analysis will be provided to the well owner and will give the operator knowledge of any usable nitrogen already present in the ground water.
- √ Continue to collect Global Positioning System [GPS] location coordinates for the wells sampled and integrate into Geographic Information System [GIS] database.
- √ Explore opportunities to sample the unsaturated zone to determine extent of N-NO₃ contamination below the root zone and above the water table.
- √ Utilize meteorological data to make management decisions that protect water quality.
- √ Provide water analysis for nitrates and coliform bacteria for domestic and other groundwater users
- √ Administer the Chemigation Act.

1. Complete the annual Chemigation Report for the Nebraska Department of Environmental Quality [NDEQ].
2. Work closely with local fertilizer dealers to ensure that all systems applying chemicals through an irrigation system have a current Chemigation permit.
3. Carry out a chemigation system routine inspection program with the goal of each system being inspected biannually.

C. Wellhead Protection Area Management Assistance [WHAMA]

- √ Assist with Wellhead Protection Area [WHPA] delineation, contaminant source inventories and development of WHPA management plans for public water supplies within the UNWNRD and neighboring communities.
- √ Provide advanced, focused assistance to communities within the UNWNRD and concentrating on communities which have established WHPA's and a commitment to ongoing management with the WHPAs;
- √ Provide technical assistance to communities by gathering, interpreting and delivering technical information required for WHPA activities.
- √ Coordinate and enhance assistance for protecting community drinking water supplies under various programs such as Nebraska's Non-point Source Management Program, Source Water Assessment and Protection, the Nebraska Environmental Partnership and related efforts.

- √ Implement possible Water Quality Management Area requirements within and around WHPA's if source of contamination is due to agricultural practices.
 - √ Assist in protection of water quality in and around WHPA's through the use of current UNWNRD programs such as water well decommissioning, shallow soil sampling, vadose zone sampling, water sample analysis, GIS and GPS mapping capabilities, well registration updating, chemigation, monitoring well construction, etc.
- D. Identify non-point source contamination and develop plans for management.
- √ Encourage producers to take soil samples to check for residual nitrogen after harvest and also in spring.
 - √ Refine Information and Education program efforts incorporating ground water quality data as it is collected towards solutions to contamination problems.
 - √ Identify and Encourage Best Management Practices [BMPs] for irrigation and nutrient management.
 - √ Continue Well Decommissioning Program
 - √ Continue Ground Water Model and Monitoring well design and development.
 - √ Install additional monitoring wells with dedicated equipment as needed to improve data collection in areas where there are water quality concerns or information is lacking and desired
 - √ Develop Ground Water Management Plan alternatives for Board of Directors' consideration.
- E. Review animal feeding operation draft permits, nutrient management plans and other documents and make recommendations to NDEQ if necessary.

Ground Water Quantity Management

- A. Promote and manage efficient use of water.
- √ Monitor existing observation/monitoring wells
 - √ Continue moratorium on the issuance of water well construction permits, but allow consideration of certain permits based on statutory requirements.
 - ❖ New well permits for Municipal and Industrial uses will be considered, only after review of the Water Committee. Offsets may be required.
 - ❖ Replacement wells will continue to be permitted and can be drilled after permit approval.

- ❖ Any person intending to construct a regulated water well on land he/she owns, leases or controls in any manner at any location within the UNWNRD ground water management area shall before commencing construction apply for a permit, on forms provided by the District, with the following exemptions:
 1. No permit shall be required for test holes or dewatering wells with an intended use of 90 days or less
 2. No permit shall be required for water wells designed and constructed to pump 50 gallons per minute [gpm] or less, but multiple wells individually pumping less than 50 gpm will be considered a single well for purposes of this rule if they are connected together or otherwise serve a single purpose
- ❖ March 20, 2003 the UNWNRD Board of Directors voted to impose a Temporary Suspension on the drilling of certain new wells within the District. The District wide temporary suspension will be effective for a three-year period, which can be extended by state statute two additional years [one year at a time].
- ❖ July 16, 2004, the DNR preliminarily determined that the UNWNRD was fully appropriated in its entirety. This determination repealed the temporary suspension on the issuance of well permits imposed by the NRD and implemented stays on the issuance of well permits and on the increase of irrigated acres in the entire UNWNRD. Under provisions of the law, DNR was required to hold a hearing and make a final determination by November 14, 2004, on which river basins, subbasins or reaches in the UNWNRD were fully appropriated. DNR held public information meetings and public hearings in October 2004 and released its conclusions on October 14, 2004, in the form of a report entitled: "Report on Hydrologically Connected Groundwater and Surface Water in the Upper Niobrara White Natural Resources District."
- ❖ In accordance with the law, on November 3, 2004, the DNR released its final determination that the Hat Creek Basin, the White River Basin, the portion of the Niobrara River Basin above the Mirage Flats Diversion Dam, the Box Butte Creek Subbasin and the Snake Creek Subbasin were fully appropriated. Since the UNWNRD and the DNR had not finished the joint action plan prior to the implementation of LB 962, completion of the integrated management plan proceeded under the new law.

- ❖ October 28, 2004, the UNWNRD voted to change the Rules and Regulations of the Districts GWMP to impose a stay on the issuance of well permits District wide.
- ❖ October 17, 2008, the DNR made a preliminary determination that a portion of the Lower Niobrara River Basin was fully appropriated. This preliminary determination included lands within the UNWNRD in Box Butte, Dawes, and Sheridan counties which were not previously determined to be fully appropriated in 2004. Due to this preliminary determination, stays on issuance of well construction permits and on additional irrigated acres went into effect in this portion of the District. Since the UNWNRD already had a moratorium on well construction permits in place district-wide, the effective additional restriction on District producers was the stay on increase in irrigated acres. On January 25, 2008, the Department made a final determination that the area preliminarily determined to be fully appropriated in Box Butte, Dawes, and Sheridan counties was fully appropriated.
- ❖ In June 2011, the Nebraska Supreme Court issued a ruling that the Department's 2008 fully appropriated determination for the Lower Niobrara River Basin was invalid and the Court reversed and vacated the director's order affirming that determination.
- √ Install additional monitoring wells equipped with data loggers as needed in areas where additional quantity information is desired to enhance or develop modeling projects.
- √ Continue to collect and incorporate meteorological data into program decisions, recommendations for the Board to consider; and education.
- √ Make ground water display models available for educational purposes.
- √ Maintain a certified irrigated acres inventory.
- √ Maintain a computerized mailing list of water level cooperators.
- √ Continue to review the accuracy of the saturated thickness map in cooperation with Conservation and Survey Division [CSD].
- √ Administer irrigation runoff rules and regulations under the Ground Water Management and Protection Act.
- √ Provide irrigation scheduling assistance at producer request.
- √ Refine Information and Education efforts incorporating ground water quantity data as it is collected.

B. Provide assistance for managing flood control areas.

- √ Assist other agencies/entities with flood control projects by request.
- √ Inspect watershed dams and road structures annually.

Prevent Excessive Soil Erosion from Wind and Water

- A. Maximize effectiveness of cost/share programs.
 - √ Administer Nebraska Soil & Water Conservation Program.
 - √ Cooperate with other agencies.
 - √ Attend United States Department of Agriculture Farm Service Agency [FSA] / Natural Resource Conservation Service [NRCS] development meetings.

- B. Continue active membership in the Panhandle No-till Partnership [PNTTP].

- C. Improve effectiveness of sediment and erosion control program.
 - √ Identify areas of excessive erosion.
 - √ Contact landowners with excessive erosion and inform them of the sediment and erosion control program.
 - √ Sponsor the District Land Judging Contest every three years.
 - √ Focus Information and Education effort for wind erosion in the district.

- D. Provide a District tree/shrub planting and distribution program.
 - √ Contract with 'Trees Are Us' to furnish equipment and manpower to machine plant seedlings.
 - √ Distribute seedlings for cooperator planting.
 - √ Provide seedlings to groups if they provide follow-up maintenance and conduct an annual assessment of effectiveness.
 - √ Provide weed barrier fabric, fabric squares and staples for resale.
 - √ Work to promote living snow fences.
 - √ Provide trees, planting and fabric installation to counties for living snow fences along county roads.
 - √ Provide a slat house for potted trees.
 - √ Provide cold storage for bare root trees.
 - √ Provide tree planters and weed barrier installation machines for cooperators to rent, if they desire to complete their own tree plantings.
 - √ Provide tree tubes for resale.
 - √ Provide District funds for tree/shrub planting cost-share.
 - √ Provide technical assistance to cooperators for tree/shrub plantings.

Protect and Improve the Productivity of Rangeland

- A. Improve interagency cooperation.
 - √ Meet with other agencies and discuss primary concerns.
 - √ Improve staff education and knowledge on range improvement practices periodically.

- √ Participate in coordinated resource management planning and implementation.
 - √ Continue participation with other agencies at monthly Range Rendezvous meetings.
- B. Maximize effectiveness of cost/share programs
- √ Administer Nebraska Soil & Water Conservation Program.
 - √ Attend annual FSA / NRCS development meetings.
 - √ Provide no-till drill for inter seeding.
- C. Work with county weed control districts to identify and reduce invasive weeds.
- √ Provide information and support for invasive weed control.
 - √ Encourage leafy spurge mapping in all counties infested.
 - √ Support and assist in development of annual weed meeting.
 - √ Meet annually with county weed control districts and state supervisors to urge enforcement of noxious weed control.
 - √ Continue Memorandum of Understanding with Panhandle Research Integration for Discovery Education [PRIDE] and have appropriate staff or Director serve as a Board Member.
 - √ Provide office space for PRIDE.
- D. Support education efforts for proper range management.
- √ Budget \$1,100 to Provide Nebraska Range Camp Scholarships.
 - √ Provide Family Range Camp Scholarships as requested.
 - √ Sponsor the area range judging contest every three years.

Protect and Improve the Productivity of Forest Lands

- A. Improve interagency cooperation through wildlife professional groups and landowners.
- B. Tour forest management practices.
- C. Participate in coordinated resources management planning and implementation.
- D. Assist in coordinated efforts to re-establish and enhance forest lands impacted by wildfire and other natural disasters.
- E. Make office space available to the Nebraska Forest Service to house a State forester and a Western Nebraska Fire Specialist to serve the pine ridge area.

Encourage Wildlife Management

- A. Improve interagency cooperation through wildlife professional groups and landowners.
- B. Cooperatively fund and administer the private lands wildlife habitat program.
√ Participate in WILD Nebraska
- C. Provide the UNWNRD conference room for meetings of all wildlife organizations.
- D. Implement Wildlife Habitat Plan to maximize effectiveness of NSWCP, WHIP and WILD Nebraska.
- E. Participate in coordinated resources management planning and implementation.
- F. Provide office space to the Nebraska Game and Parks Commission to house a full time employee in the District office.
- G. Assist the NG&PC in implementation of the Nebraska Natural Legacy Project.

Promote Outdoor Recreation

- A. Cooperate with other agencies and landowners.
- B. Provide technical and engineering assistance for development or protection of outdoor recreation facilities.
- C. Encourage outdoor recreation development to improve tourism, economic development and a better quality of life.
√ Continue to support the development of parks and recreational trails.

Encourage Proper Waste Management

- A. Cooperate with other agencies.

- B. Serve as a clearinghouse for information.
 - √ Provide public files to NDEQ and DNR.
- C. Review and make recommendations on waste water treatment facilities permits to NDEQ.
- D. Review and make recommendations on animal feeding operation permits to NDEQ.
- E. Make office space available to NDEQ to house employees to serve the District.

Inform and Educate the Public about Natural Resource Issues

- A. Continue to implement Natural Resource Information and Education [I&E] programs.
 - √ Distribute two or more District wide newsletters annually.
 - √ Organize and conduct the Northwest Nebraska Conservation Festival.
 - √ Work with Solid Waste Agency of Northwest Nebraska [SWANN] to continue a yearly tree and recycling program for schools.
 - √ Send a letter to all District schools offering our I & E services.
 - √ Deliver water conservation & groundwater protection education programs to District schools.
 - √ Participate in the state and local range and land judging and Envirothon competitions.
 - √ Continue to prepare and distribute press releases and radio public service announcements on various projects and programs.
 - √ Update the UNWNRD website. Including adding information on all UNWNRD projects and programs, press releases and ground water quality/quantity data.
 - √ Work with local agencies on promotion of prescribed burning and encourage the use of NRD equipment.
 - √ Distribute District Conservation Awards at area fairs and events and accept nominations for following year awards.
 - √ Develop ideas on how we can cooperate more with the County Commissioners.
 - √ Participated in radio talk shows with area cooperators about District programs.
 - √ Organize a District Fall Tour for the Board of Directors and Staff.
 - √ Stock UNWNRD vehicles with program brochures to be available to the public.
 - √ Promote no-till systems through information dissemination and public meetings.

- √ Develop and implement a focused program on integrated water management and ground water conservation.
- √ Develop timely news releases on pertinent natural resource issues.
- √ Continue to be an active member of the PNTP in the education and promotion of no-till cropping practices.
- √ Prepare and distribute the weekly crop water use report, to promote irrigation efficiency.



UNITED STATES POSTAGE

 PITNEY BOWES
 02 1P \$ 001.40⁰
 0001708354 SEP 12 2014
 MAILED FROM ZIP CODE 69337

*Upper Niobrara White NRD
 430 East Second Street
 Chadron, Nebraska 69337*

First Class Mail
First Class Mail

Department of Natural Resources
 310 Centennial Mall, South
 PO Box 94676
 Lincoln, NE 68509

RECEIVED
 SEP 15 2014
 DEPARTMENT OF
 NATURAL RESOURCES

ATTN: Brian Dunnigan