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

Nebraska's Natural Resources Districts

In 1969, the Nebraska Legislature passed LB 1357 which merged 154 special purpose districts into Natural Resources Districts (NRDs). The NRD would begin operation on July 1, 1972 with the boundaries of each district being based on delineated river basins. NRDs would provide local regulation and management of the resources through a locally elected board of directors. NRDs are involved in a wide variety of projects and programs to conserve and protect the state's natural resources. NRDs are charged under state law with 12 areas of responsibility including flood control, soil erosion, ground water management and many others. On July 6, 1972 the Upper Niobrara White NRD held its first board meeting.

Water Law in Nebraska

Surface water quantity is monitored, administered and regulated by the Nebraska Department of Natural Resources (DNR) and follows the doctrine of prior appropriation or more commonly stated: first in time – first in right. In times of shortage the DNR will require those with junior (younger) appropriation to cease diversion or storage to allow senior (older) right holders to receive water.

Ground water quantity is monitored and regulated by the state's 23 natural resources districts (NRDs). Ground water quantity follows the doctrine of correlative rights or share and share alike. When shortages occur each land owner may be entitled to an equal share regardless of when a well was drilled, registered or began operation.

While the NRDs do regulate ground water, each must do so under the laws set forth by the Ground Water Management and Protection Act (Act). For example, all NRDs are required to develop and maintain a ground water management plans (GWMPs) that are approved by state. GWMPs provide the direction for management of the ground water resource within an individual district.

Prior to 1996, surface and ground water were managed separately. This changed with the passage of LB108. The bill restructured the Ground Water Management and Protection Act by recognizing in statute the connection between surface and ground water. This allowed for integrated management of the water resources of the state to commence on a voluntary basis.

In 2004 the legislature passed LB 962 which was a significant step forward in allowing the state and the NRDs to manage hydrologically connected waters. The law required that DNR review each river basin's supply and use of water and determine if the two were in balance. In situations where use exceeded the supply or the supply and demand were in a current state of balance, the basins or sub-basins were to be declared over appropriated or fully appropriated, respectively. Each NRD that has a basin or sub-basin identified as fully or over appropriated must develop and integrated management plan (IMP) in conjunction with DNR. IMPs are utilized to mitigate and/or avoid conflict between surface and ground water users. Currently, nine NRDs have at least a portion of the district considered fully or over appropriated. Many tools known as best management practices are available for use in managing the ground water supply including: well moratoriums, well spacing limitations, limiting the expansion of irrigated acres, and allocations.

Upper Niobrara-White NRD Ground Water Management

Portions of the UNWNRD have experienced declining static water levels prior to the formation of the NRDs. In Box Butte County there are areas of decline greater than 80 feet. In response to the concerns over continued ground and surface water declines, the UNWNRD Board of Directors imposed a moratorium on new high capacity (>50 gallons per minute) wells and initiated the development of a Joint Action Plan with DNR to manage hydrologically connected water in the district in 2003. A citizen's advisory committee (CAC) was convened to assist with the project.

Following the passage of LB962, the Hat Creek Basin, the White River Basin, the Niobrara River Basin above the Mirage Flats Diversion Dam, the Box Butte Creek Subbasin and the Snake Creek subbasin were designated as fully appropriated by DNR. As a result of this designation, the UNWNRD and the DNR initiated the development of an IMP in lieu of the Joint Action Plan. The CAC's role changed to be consistent with the requirements of the law.

Over the course of several meetings the DNR, CAC and the board of directors discussed various management options that would be considered for the IMP, ground water management plans and rules and regulations. Actions via the rules and regulations taken to date include:

- Moratorium on high capacity wells district wide
- Identification of six ground water management sub-areas
- Flow meters are required on all high capacity regulated (>50 gallon per minute) wells
- Ground water banking
- Certification of irrigated acres
- Variance and ground water transfer rules
- Identification of ground water management triggers

Once the acre certification process was completed there were 251,017 acres considered ground water irrigated 96,400 acres surface water irrigated and approximately 18,500 co-mingled acres.

For ground water sub areas four and six the ground water decline has reached the Phase III management triggers which result in:

- No increase in certified irrigated acres
- 2007-2010 allocation of 64 inches (16 inches annualized)
- 2011-2014 allocation of 54 inches (13.5 inches annualized)
- 2015-2019 allocation of 65 inches (13 inches annualized)

Ground water declines in sub area II have met the Phase II trigger level which has resulted in:

- No increase in certified irrigated acres

The ground water management and integrated management rules and regulations can be found at the UNWNRD's website – www.unwnrd.org

Future Planning

Moving forward, the UNWNRD Board of directors and the DNR have invested in the development of an integrated computer model that will use existing data to make predictions about future conditions. The integrated model consists of a watershed/land use model, surface water operations model and a ground water model. The models have been calibrated to match crop types within the district and actual water use obtained from the meter data. The purpose of the model moving forward will be to evaluate various management schemes that can be used to establish future policy. One of the roles of the CAC will be to recommend scenarios to be evaluated.