

Integrated Management Plan Stakeholders Meeting

Twin Platte Natural Resources District

April 16, 2007

Stakeholders present: Phil Armstrong, Don Colvin, Mike Drain, Jim Goeke, Jim Hawks, Tina Kurtz, Frank Kwapnioski, Jim Meismer, Roric Paulman, Robert Petersen, Page Peterson, Dennis Schilz, Jerry Steinke, Doug Teaford, Steve Van Boening, Joe Wahlgren, T.J. Walker, Robert Wiseman.

Stakeholders absent (excused): Burdette Cooley, Lisa Dominisse, Steve Krajewski, Dudley Oltmans, Kenneth Schilz, Mike Wheeler.

Stakeholders absent (unexcused): Marion Kroeker, Mike Svoboda, Jerry Weaver.

Resource People: Ann Dimmitt, Kent Miller.

The Stakeholders Meeting was called to order at 7:10 p.m. CDT

Announcements and Presentations

Kent Miller reported COHYST sponsors are still considering adding a surface water component. Consultants interviewing for the CPNRD/NPPD study in Dawson County which includes a surface water component will also present a proposal to add the entire COHYST area. If COHYST sponsors decide to not participate then TPNRD will ask CPNRD/NPPD to expand their study in Dawson County to include TPNRD. COHYST and NE DNR continue to work to determine of the 29,000 to 39,000 acre feet depletion post 1997, how much is associated with each NRD in the basin, and what is fully appropriated. In the over appropriated area of the TPNRD there have been no new high capacity wells and no new irrigated acres since 2004. Any new wells installed have all been within guidelines (e.g. replacement wells, improve efficiency, etc.). The district shut down new development of high capacity wells district-wide but there are still opportunities to develop irrigated acres with existing wells outside over appropriated areas. The board has scheduled a hearing for May 17 and by June may have in place a stay on new irrigated acres in the entire district.

A statement from **Mike Drain** mailed to Stakeholders prior to the meeting summarized the position of CNPPID. It detailed all the ways CNPPID uses water and spelled out their expectations for dealing with inequalities in the Integrated Management Plan for this district.

There was a question about incidental recharge which is defined in statutes as a recognized benefit after the project but not intended at the time the project was initiated. CRP is not recognized as incidental recharge under statute. Appropriations to divert water for the purpose of recharging ground water are allowed.

Current pending legislation (LB 701) would give NRDs bonding authority to raise money to use in augmentation plans, invasive species control, buying or leasing surface water or drying up groundwater irrigated acres. This bill ties to rivers with compacts with three or more states (only the Republican River basin at this time) and can't apply to NRDs on the Missouri River. Numerous amendments have been proposed.

Doug Teaford commented on a presentation by Extension Educator Dr. Bob Wilson regarding invasive species with before and after photos of streams. He details potential water savings and species impact. Control is possible but very costly. The group asked Kent to arrange for this presentation to our Stakeholder group. **TJ Walker** told the group about a \$400,000 grant (with matching funds from US Fish and Wildlife and Nebraska Game and Parks) for removal of invasive vegetation (phragmites, cedar and Russian Olive) for a 4 mile stretch of the river. It costs \$125 to \$200 per acre for mechanical clearing. US Fish and Wildlife is considering buying the equipment so they can do major work on the river. TJ suggested that to treat phragmites he would burn it, graze the short growth and then chemically treat it.

Discussion of IMP Management Scenarios

Discussion of possible management scenarios continued. Stakeholders were asked to define the management scenario and then offer pros and cons of this practice.

Crop Rotation: This was defined as a cropping practice to optimize an established amount of water over a given period of time. One example of a 5-year crop rotation: Corn (consumptive use of 23 inches), Dry Edible Beans (15 inches), Wheat (15 inches), Soybeans (21 inches), Corn (23 inches). Total consumptive use over the 5 years is 97 inches but it varies in any one year.

| PROS | CONS of Crop Rotation |
|--|--|
| Allows you to focus on consumptive use | Tied to rotation regardless of market changes |
| Other benefits besides water savings (like controlling pests and weeds) | May be more difficult to verify than metering. Could this logistically be implemented by the district? |
| Potentially encourages alternative crops | A long-term effort – can't change quickly |
| Could potentially avoid need for metering | If there is a crop disaster you can't easily switch to a fall-back crop |
| Lays the risk-reward function on the producer if in response to allocation or acreage reduction | Limits producer control. Difficult to administer if crop rotation is imposed by NRD |
| Encourages or educates producers on potential water savings from various rotation options. May also promote planting of lower water usage crop varieties. | Difficult to manage or regulate very specific rotation options if they vary widely by farm |
| Can be applied to land beyond just irrigated land so it better addresses the total water budget (For example, remove deep rooted alfalfa near the river and replace with a shallow root annual crop) | How do we quantify water savings? Is this a realistic option to apply to the amount of water the district must come up with? |
| | Question if this is within the authority granted by statute |
| | Targets ag producers only |
| | Rotations that work in one part of the district may not work in another |

Irrigation Scheduling: Defined as sub-seasonal allocation of water quantity and timing. Examples of irrigation scheduling include: 1) a certain number of acre inches in a two week period, 2) a timer shutting off irrigation wells during certain times of the day, 3) Scheduling across a growing season according to crop need with more water applied in critical times.

| PROS | CONS of Irrigation Scheduling |
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| Can encourage or educate people to save water through the use of a variety of scheduling tools | Takes away producer's flexibility if imposed |
| Economic benefits from savings in fuel or electricity | May encourage over-usage to use all water scheduled |
| Impact is less if scheduling is spread out over more acres -- can schedule just one day a week | Schedule doesn't always match up with weather or current water needs |
| May reduce evaporation loss by shutting down in the heat of the day. (Corn uses 30 inches per year with 9 of this lost to evaporation) | Not a good tool for limiting consumptive use unless set up for deficit irrigation |
| | May not get the water when needed – at critical times in the growing cycle |
| | Can be very complicated |
| | Targets ag usage only – unless also applied to lawn watering |

Groundwater Metering: A mechanism for measuring ground water pumped from wells – accurate within 2%. Ways to meter include: permanent meters, portable meters, certify hour meter on pivot, electrical providers’ real time readings (available soon).

| PROS | CONS of Groundwater Metering |
|---|--|
| May encourage efficiency as farmers know how much they are pumping | Cost, maintenance and monitoring or regulation required to implement |
| Quantifiable – Can better identify where the usage is occurring | Don’t do it just because everyone else is doing it |
| Easily understood | Doesn’t measure consumptive use, only gross amount pumped |
| Already doing this in municipalities so they can get a better handle on usage – required to meter what is pumped at the wells | Doesn’t save water on its own – must be done in conjunction with other tools |
| Applicable to ag AND non-ag users | So many variables that information on metering alone does not tell the whole story |
| If required, this could facilitate allocations | |
| Value in historical data base generated from meters for the modeling process | |

Future Meetings

We will continue with the process of defining and discussing management scenarios in the order listed below. Stakeholders should be prepared to voice their thoughts and concerns so we can quickly move through the list.

- Acreage reductions
- Well spacing
- Prevent or limit expansion of consumptive use
- Require use of best management practices
- Mandatory education
- Regulate transfers
- Moratorium on well permits
- Conditioning of permits
- Incentive programs (CREP, EQIP)
- Retiming projects
- New storage developments
- Water banking
- Vegetation management
- Pooling

Meeting Schedule

All meeting times are from 7:00 to 9:30 p.m. CDT unless otherwise noted and **all meetings will be held at the Holiday Inn Express**. Future meetings:

- 7:30 p.m.** May 21
- 7:00 p.m. June 18
- 7:00 p.m. July 16
- 7:00 p.m. August 20
- 7:00 p.m. September 17
- 7:00 p.m. October 15
- 7:00 p.m. November 19
- 7:00 p.m. December 17

The meeting was adjourned at 9:25 p.m. CST.

