

Integrated Management Plan Stakeholders Meeting

Twin Platte Natural Resources District

January 9, 2006

Stakeholders present: Phil Armstrong, Don Colvin, Lisa Dominisse, Jim Goeke, Jim Hawks, John Kilpatrick, Tina Kurtz, Frank Kwapnioski, Jim Meisner, Roric Paulman, Robert Petersen, Page Peterson, Dennis Schilz, Jerry Steinke, Mike Svoboda, Steve Van Boening, Joe Wahlgren, Robert Wiseman.

Stakeholders absent: Doug Teaford, Marion Kroeker, Todd Kramer, Dudley Oltmans.

Resource People: Ann Diers, Ann Dimmitt, Kent Miller.

The Stakeholders Meeting was called to order at 6:30 p.m. CDT.

Educational Presentation:

Agricultural Needs – Bruce Dodson (Farm Manager, Agri Affiliates)

Bruce worked with the Republican River Water Conservation and Education Coalition to create W.A.T.E.R. Model (Water Allocation to Economic Recovery) to help producers adapt to water allocations by budgeting their water resource and developing strategies to maximize profitability. Recent drought and declines in ground water levels were additional concerns leading to development of this model. The model uses climatic data, UNL technical data and producer supplied data and assumptions to calculate the most profitable utilization of available water resources. The targeted scope of application for this tool is the Republican and Platte River basins. Key elements of this program include:

- Precipitation Calculation: Average annual precipitation is adjusted for the percentage received during the growing season and the percentage effective in reducing the amount of irrigation required.
- Water Balance by Crop: Crop water requirements, effective rainfall, soil water used and irrigation system efficiencies determine irrigation water needed to balance evapotranspiration (ET) for up to three crops. Water needed to balance ET is compared to available water (through water allocation, carryover and moisture conservation credits) to project whether there is likely to be a positive or negative water balance for that crop. A positive water balance indicates unused inches of water. A negative water balance indicates a shortage of water to meet crop needs.
- Annual Acreage Adjustment: Calculates the maximum number of acres that can be irrigated and remaining non-irrigated acres based on water use or ET. The model also considers using a deficit irrigation plan which calls for irrigation at a lower than optimum level.
- Water Use Plan: Helps users develop a crop plan or rotation and budget irrigation water to balance allotted water with crop water use for the allocation period (3 to 5 years). Two crops can be selected each year in the model.
- Proforma Enterprise Profit and Loss Worksheet: Uses producer income and expense data to determine profitability by enterprise and to evaluate alternatives. Profit and Loss projections can incorporate a variety of assumptions: irrigated, non-irrigated, cash rent, EQIP and CREP.
- Profit and Loss Summary: Reviews the profitability of up to 9 alternatives and multiple combinations of crops and practices within one run. Each run is limited by location, soil type and irrigation method. With multiple runs, users discover new ways to maximize profitability while complying with user's water allocation.

This program is in an Excel spreadsheet available as a free download from www.agwaterbudget.com.

Questions/Comments

What happened in 2005?

In 2005, some producers in the Republican River basin rented out their allotments for \$5/acre and planted non-irrigated crops. High input costs in 2006 may reduce the number of people willing to pay \$5/acre for this option.

Does this model include plant populations and expected yields?

No attempts were made at yield projections. The model just uses the producer supplied input information.

You said that most of the producers in the Republican River valley used less than their allocation for 2005. Why did this happen?

The rainfall amount was average but it was quite timely and better than in the past years

Comment: Last year Swanson Reservoir had the 3rd highest precipitation levels in history and the lowest inflows. This is a surface water issue. At Cambridge there has been no water in the ditches for 3 years yet they are still paying assessments. This is a real problem for many people

Educational Presentation:

Agricultural Needs in the Platte River Basin– Roric Paulman (Producer and President of West Central Nebraska Water Users Coalition)

The West Central Nebraska Water Users Coalition is a cooperative entity of 75 to 100 agricultural and business people which was organized in response to the fully and over appropriated designation for this basin. The purpose of the group is to get information required to make intelligent decisions about water resources in our region. A wide variety of viewpoints and opinions have been expressed. Roric challenged this group of Stakeholders to consider the following questions and perspectives:

- What drives the economic engine in Nebraska? Agriculture is a big player and is quite protective of its piece of the economic pie. Irrigation has added stability to the rural community. Changes in water uses may create unexpected impacts on the economy in this area. Major players that could be impacted include:
 - Implement Dealerships – Are they more or less likely to locate in our region if there are structured water plans in effect?
 - Ethanol Plants – Will they expand in this area? Can we maintain or expand our corn production to meet their needs if they do?
 - Railroad – Will they continue to service small or shrinking markets?
 - NPPD and Rural Electric Coops – How will changes in water use impact their large investment in irrigation?
 - Seed Companies – They are in Nebraska because of the good quality seed produced here. Will this be impacted by changes in water plans?
 - Education – 70% of real estate taxes go to support our public schools. Don McCabe, in Nebraska Farmer, claims that irrigators pump \$4.5 billion into the state. If irrigated land goes back to non-irrigated, the impact on tax revenue will be significant. The result is that the tax burden will shift to others, through sales taxes or other types of taxes.
- We need to understand the “Ripple Effect” of the recommendations we will make as Stakeholders. Everyone talks about “backing up the train”. This likely does not mean backing up water use. Rather it means refocusing use to protect water and economies here. When producers must cut back on water use, the businesses that cater primarily to these agricultural customers will be impacted. One company in the Republican River basin reduced their staff by 40 employees, closed a satellite office and expanded their trade area. This big drop in payroll dollars impacted local banks, stores and communities.
- As producers face drought and an uncertain future for water supplies they are responding by improving efficiencies in their operation through the use of such things as crop consultants, soil testing, satellite imagery, infra red, GPS, GIS monitors, non-traditional and traditional rotations, new types of seed, improved record-keeping, etc.
- The moratorium on well drilling is probably a good idea right now. There needs to be a “time-out” to sort out these issues. But this moratorium is effectively handcuffing the economic development of agriculture in this state.

- Advocates of more value-added products fail to understand that this is risky and difficult to transition to and most producers do not have a lot of available funds to do so.
- There are many questions about the basis for returning to a fully appropriated state. Is COHYST the best vehicle? In a recent report card of this tool over half of the elements evaluated were graded a “C” or average, yet this is the flagship for determining what this information is telling us and impacts on our district
- Conservation: There is a need for combining human stewardship with technological advances. This has never been more important. Yet we need to understand the impacts of conservation on water supplies. Summer fallow used to return more water to ground water reservoirs. As acres have been planted back to trees or grass for wildlife we are seeing less water returning to ground water aquifers.
- Perils: Implementing sustainable ground and surface water practices depend on values and knowledge. We can’t value what we don’t understand and we won’t preserve what we don’t value. We need to be concerned about the future – where we and our children will spend our life.

Questions/Comments

From a non-producer perspective, it seems that even though farm output has increased the population of southwest Nebraska continues to decline. Will this continue irrespective of anything we do? We can conserve water but at the same time diminish other’s quality of life. If surface water disappears this will impact power production and quality of life.

Collaboration is important. It seems we are either uninformed or learn information too late.

Stakeholder Discussion – Goals

The group continued to work on a goals statement. Each Stakeholder was asked to express his/her opinion about the goals statements drafted at the last meeting. Then together the group worked to craft a final statement.

Two similar goals statements evolved out of the conversation:

Manage water resources in the Twin Platte Natural Resources District in a manner to balance water use and water supply, optimizing economic, social and environmental benefits, for the near and long term.

Manage water resources in the Twin Platte Natural Resources District to reach fully appropriated status and balance water use and water supply to optimize economic, social and environmental benefits, for the near and long term.

The group did not reach full consensus at this meeting, so members were asked to review both statements with the goal of finalizing this goals statement at the next meeting.

Future Meetings

Monday, February 13, 2006 at the Holiday Inn Express in North Platte from 6:30 to 9:30 p.m. CDT

- Finalize Goals Statement and begin discussion of Objectives for the TPNRD Integrated Management Plan.

Upcoming meetings: March 20, April 24, May 15

The meeting was adjourned at 9:35 p.m. CDT.