

Integrated Management Plan Stakeholders Meeting

Twin Platte Natural Resources District

August 15, 2005

Stakeholders present: Phil Armstrong, Don Colvin, Burdette Cooley, Jim Hawks, Steve Krajewski, Marion Kroeker, Tina Kurtz, Frank Kwapnioski, Jim Meismer, Dudley Oltmans, Roric Paulman, Robert Petersen, Page Peterson, Dennis Schilz, Kenneth Schilz, Jerry Steinke, Mike Svoboda, Steve Van Boening, Joe Wahlgren, Jerry Weaver, Mike Wheeler.

Stakeholders absent: Jim Goeke, John Kilpatrick, Todd Kramer, Doug Teaford, Robert Wiseman.

Resource People: Brian Barels, Jim Cannia, Ann Dimmitt, Kent Miller

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

Educational Presentation:

NPPD and Nebraska's Water Resources – Brian Barels (Water Resources Manager, Nebraska Public Power District)

Nebraska Public Power District (NPPD), formed in 1970, is Nebraska's largest electric utility serving 91 of the state's 93 counties. Nebraska is the only state served entirely by public-owned electric utilities. Rates are consistently below national average. NPPD is a public corporation and political subdivision of the state of Nebraska and is governed by an elected 11-member Board of Directors. NPPD is authorized to generate, transmit and distribute electricity, produce and generate ethanol, own and operate irrigation works, sell or lease dark fiber and own or operate certain energy equipment for commercial and industrial customers. Most power is sold wholesale to public power districts or municipalities for resale to consumers. The largest source of power generation is coal powered plants, followed by nuclear, hydro, oil and gas, wind production and energy purchases. Generating plants use water from the Platte and Missouri rivers and groundwater for cooling and hydroelectric power production. Canal and lake systems developed to provide the needed water provide secondary benefits in recreation opportunities and compliance with endangered species requirements.

The NPPD system includes the following generating plants:

1. Cooper Nuclear Station at Brownville (constructed 1974): Capacity 800 MW. Uses surface water from the Missouri River for cooling of the steam cycle.
2. Sheldon Station at Hallam: (constructed 1958-1963) Converted from nuclear to coal and gas fired boiler in 1964. Capacity 225MW. Uses groundwater for cooling plus cooling towers. Recycles water in the cooling towers but total consumptive use is higher than once through cooling used at Cooper, GGS or the Canaday plants.
3. Beatrice Power Station: (constructed 2005) Capacity 250 MW. Uses natural gas in the combustion turbines Uses groundwater for cooling.
4. Gerald Gentleman Station, Sutherland: (Constructed 1979 and 1982) Capacity Unit 1: 665 MW, Unit 2: 700 MW. This plant produces 50% of NPPD's energy and more than 1/3 of the electricity consumed in Nebraska. Primarily uses surface water from North and South Platte Rivers, Lake McConaughy and Sutherland Reservoir for cooling. Recently added wells to provide groundwater to maintain the level of Sutherland Reservoir for cooling water supply in times of drought and to cool water from the plant being returned to Sutherland Reservoir. These wells were used some this past year when the plant had discharge temperature violations which were related to less water released from Lake McConaughy and warmer temperatures of water in the canal system.
5. Canady Station, Lexington: (Built 1958, purchased by NPPD in 1995 & restarted in 1998) Capacity: 119 MW. Uses water from the Platte River and Lake McConaughy for cooling.
6. Hydro Facilities at North Platte, Kearney and Spencer: Capacity 24 MW, 1.5 MW and 3 MW.

7. Wind Generation at Springview and Ainsworth: The new wind field at Ainsworth will add 60 MW of production from 36 turbines. It began operation this month.

The North and South Platte River Basins supply water for NPPD in this region of the state. NPPD and CNPPID water projects divert water from the rivers through a system of canals and lakes and hydro power plants. The Keystone Diversion Dam at Ogallala is the origin of the North Platte supply canal. Seven irrigation canals from Gothenburg to Kearney (NPPD owns and operates 3 of the canals) receive from natural flow in the river and supplemental storage water from NPPD. Sutherland reservoir was built to supplement this natural flow in years of drought.

Platte River Generation: Gerald Gentleman produces 1365 MW, which will serve 900,000 residential customers, and Canaday produces 120 MW will serve 80,000 residential customers. Platte River hydro plant generation varies. In a wet year they can serve up to 75,000 customers. In drought years like 2004 energy production was reduced to a level, which would serve 15,000 customers. Impacts from drought conditions include: increased cost to NPPD customers of up to \$30 million, significant water shortages for irrigators and \$12 million spent to install well fields to mitigate impacts to GGS.

NPPD has been studying the hydrologic connection between surface water and groundwater to determine short and long term effects of groundwater pumping and the role of precipitation trends in water supply. They have used regional COHYST models to develop an area model for the well development at Gerald Gentleman Station and to evaluate long term viability in terms of likely draw downs of water levels outside property boundaries over time.

Integrated management plans will need to consider natural flow requirements for irrigation, cooling, hydro and storage reservoirs. The amount of natural flow available directly affects the amount of storage water that will be used for NPPD irrigation customers and how to meet new FERC license requirements to address threatened and endangered species in the Platte River system.

Questions:

1. *Why not put more money into wind turbines instead of relying so much on water for power?*

NPPD will continue to add renewable energy sources as they can and still maintain low power rates for customers. As load growth continues they will have to have additional energy sources but will still need the generating capability from other facilities for times of low wind.

2. *What is the most efficient generating plant?*

Gerald Gentleman is the most efficient plant in the system from a cost standpoint. In 3 of the last 4 years it has been among the lowest cost generators in the nation. This is due in large part to the close proximity to the coalfields. Cooper is making great strides and as NPPD faces greater controls in the future it may be even more cost effective. Note: From energy efficiency perspective hydropower generation is the most efficient generating plant

Educational Presentation:

Understanding LB 962 – Tina Kurtz (Integrated Management Planning Coordinator, Nebraska Department of Natural Resources)

Please refer to actual statutes for complete information about this law. Below is summary information about specific sections of the statutes, which Tina reviewed and clarified:

46-715 River basin, subbasin, or reach; integrated management plan; considerations; contents; amendment; technical analysis

- (1) Several NRD's have already been determined to be fully appropriated and/or designated as overappropriated and integrated management plans (IMPs) for these basins are to be developed within 3 years of July 16, 2004, (September 15, 2004, for the overappropriated basin) with a possible extension of 2 additional years.

- (2) Integrated management plans should include:
 - a. Clear goals and objectives with a purpose of sustaining a balance between water uses and water supplies. Statutes describe generally what this means but each district can be more specific to identify the unique needs of that district.
 - b. A map of the area subject to the management plan
 - c. One or more ground water controls to be adopted by natural resource districts
 - d. One or more surface water controls to be adopted by the Department of Natural Resources.
- (3) Controls that are proposed for adoption when considered with any incentive programs must be:
 - 1) consistent with stated goals and objectives in the plan; 2) comply with state and federal laws and interstate water compacts; and 3) protect existing ground water users and surface water appropriators from new uses begun after the fully appropriated determination or overappropriated designation.
- (4) This section deals with the overappropriated basin IMPs for both the districts and the entire basin. The individual district plans must not be contrary to the basin-wide plan. District and basin-wide plans must be developed concurrently to meet statute deadlines.

46-716 Integrated management plan; surface water controls

- (1) Surface water controls that may be included in IMPs are: increased monitoring and enforcement, prohibition or limitation of additional appropriations, required conservation measures and other reasonable restrictions.
- (2) If conservation measures are required, users will be given time to get these implemented.

46-717 Integrated management plan: scientific data and other information; department; natural resource district; duties

- (1) During development of IMPs, the best scientific data and other information available must be used and existing rules and regulations in effect must be considered. The Department, with input from affected natural resource districts, will specify by rule and regulation the types of data and information that will be considered. This will be similar to what is used in the development of ground water management plans.
- (2) This section provides the rationale behind setting up Stakeholder Groups – to consult with representative stakeholders and actively solicit public comments and opinions when preparing IMPs for fully appropriated river basins.

46-718 Integrated management plan; hearings; implementation order; dispute; procedure.

This section of the statutes sets timelines for public hearings of proposed management plans, specifies how implementation will occur, and what will happen if a plan is not agreed upon in a timely manner. If this happens the matter will be decided by the Interrelated Water Review Board (IWRB). Details of the IWRB are found in 46-719.

46-739 Management area; controls authorized; procedure.

- (1) This is a summary of ground water controls that natural resources districts can use to implement either and integrated or ground water management plans. These controls include currently used tools to manage water (allocations, rotation of use, flow meters, reduction of irrigated acres, limitation of expansion of consumptive uses, required use of best management practices, soil analysis, mandatory education, water quality monitoring, etc.) and as part of LB962, new practices such as permitting authority for physical transfers of water or transfers of allocations, requirements that new or replacement wells be drilled to a level less likely to be affected by seasonal water level declines, moratoriums on issuance of additional permits, etc.).
- (4) It is understood that different controls may be required for different areas due to variations in climatic, hydrologic, geologic or soil conditions.
- (5) Different allocations may be established for gravity vs. pivot systems

Questions

1. How can we proceed with a plan for the fully appropriated areas without also working on the plan for the overappropriated area?

In the North Platte NRD and South Platte NRD Stakeholder groups they are currently working primarily on the fully appropriated IMP since the basin-wide group has just started working on the overappropriated basin-wide IMP. Both the fully appropriated IMP and the overappropriated IMP may have the same overall goals but the objectives may be different. The objective for the overappropriated basin is to get the system back to a fully appropriated status. Basically in the overappropriated basin, we need to “back up the train” to 1997 uses that result in streamflow depletions within the first 10 year increment and eventually to a point where the basin is fully appropriated. Since the purpose of an IMP is to sustain the balance between supply and use of water, any new uses of water without retirement, transfer of existing rights, or other offset may impact existing users. While other stakeholder groups may be focusing on the fully appropriated portion of the IMP, the TPNRD group could certainly look at the overappropriated portion of the IMP first if they want their opinions to be shared with the basin-wide group as they make their deliberations.

2. When was it decided that the new depletions plan would form the basis for the basin-wide plan?

This has not been decided yet but if the Cooperative Agreement is signed the new depletions plan (NDP) may form a good basis for a basin-wide plan. If the Cooperative Agreement is not approved the basin-wide group will have to build the basin-wide IMP from scratch. The general understanding at this point is that if the Legislature funds the process, the Department of Natural Resources will be allocated the funds to implement the NDP through incentives and/or other means.

3. Is the 28% in 40 years criteria for the hydrologically connected area to the overappropriated basin final?

Yes. The stream depletion factor of 28% in 40 years is the basis for determining the hydrologically connected area to the overappropriated basin and the designation will not change.

Stakeholder Discussion - Goals

The facilitator thanked Tina for providing the framework for future discussions. These statutes provide the boundaries this group must operate within. While we may disagree with certain statutes or water agreements it is not the purpose of this group to discuss these issues. Rather we need to help form recommendations for an IMP that fits within the stated boundaries of statutes.

The role of stakeholders is to represent the myriad of interests in this particular district and make recommendations that will help protect the best interests of all citizens. Completing this process will entail four key steps:

1. GOALS STATEMENT: What do we want this district to look like in 30 years?

This is our vision for this district and it may be very different from other districts. This statement needs to fulfill the statute’s requirement for a “purpose of sustaining a balance between water uses and waters supplies so that economic viability, social and environmental health, safety and welfare of the river basin, subbasin or reach can be achieved and maintained for both the near term and the long term.”

2. OBJECTIVES: What general things must we do to reach our goals?

This might include things like collecting data, implementing conservation measures, educating users, clarifying processes, etc.

3. CONTROLS: What specific steps will we recommend?

These are the tools we would like to see used to manage surface and ground water use.

4. RULES: What controls will be implemented by TPNRD and DNR?

This final step will be completed by TPNRD and DNR. If the stakeholder group does a good job, the recommendations made by this group could streamline the final rule-making process. It should be noted that the stakeholders are advisory only and final decisions may or may not fully incorporate recommendations by this group.

The group was asked to individually answer these questions: What 3 things would you like to see in this district in 30 years? What is most important to YOU? They then discussed their priorities in small groups and finally shared their conclusions with the larger group:

- Maintain the existing ag base
- Plan for smart growth in agriculture and a thriving ag economy in the future.
- Maintain strong economic development and growth
- Maintain water quality
- Maintain water supply
- Be able to compete at all levels (having the resources to be competitive with other areas)
- Continue to improve quality of life – including quality of rural life
- Sustainable surface water flows and ground water levels
- Maintain Lake McConaughy at a specified level
- Aqua-nomic diversification (economically diversify to take advantage of opportunities that utilize the aquifer differently)
- Increase efficiency in use and consumptions
- A fair and workable physically-based management system
- Keep or bring back young people in our communities
- Maintain current irrigation without using allocations

Future Meetings

In future meetings half of the time will be spent in further education and half in stakeholder discussions. Kent Miller discussed options with the group for upcoming speakers and the group approved of his approach. We will continue to meet on the third Monday of the month through November and not meet in December.

The next Stakeholders Meeting will be held **Monday, September 19 at the Holiday Inn Express in North Platte from 6:30 to 9:30 p.m. CDT**

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