

Minutes

Project: Upper Platte River Basin Water Management Plan – Single Planning Group

Subject: Meeting #8

Date: Wednesday, September 20, 2017 from 10:30 a.m. to 3:00 p.m.

Location: Holiday Inn Express & Suites, North Platte, NE

NOTE: A complete set of slides and handouts can be found online at: upbwp.nebraska.gov

I. Administration (Stephanie White)

1. Today's meeting will offer a working lunch
2. This is an Open Meeting
3. Review of Decision-Making Process
 - This group is here to give guidance and thoughtful stewardship to the plan
4. July Meeting Recap
 - Explore existing economic indicators (Jennifer Schellpeper)
 - At the this point, economists and the department haven't found an already existing economic package
 - There have been past studies and reports – NeDNR will start to compile that data together and continue research to determine good economic indicators related to water supplies and water uses
 - Once NeDNR has determined potential economic indicators, they will bring back to SPG
 - July Discussion Summary (John Engel)

II. Path Forward Discussion (Stephanie White)

1. Roadmap for Today and next 3 meetings
 - Today's focus will be on defining social and environmental health, safety and welfare of the river basin
 - November
 - Redefining possible new Goals & Objectives based on today's discussion
 - Identify 2nd Increment Intent – discuss target
 - January
 - Review & discuss Annotated 1st Increment and identify additional missing elements
 - Set the roadmap for March, May, & July of 2018
2. Statute 46-715 interpretation, discussion, and how it relates to our planning process:

Nebraska Revised Statute 46-715 (2) In developing an integrated management plan, the effects of existing and potential new water uses on existing surface water appropriators and ground water users shall be considered. An integrated management plan shall include the following:

a) Clear goals and objectives with a purpose of sustaining a balance between water uses and water supplies so that the 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

- Interpretation (Jennifer Schellpeper & Jesse Bradley)
 - Since LB 962 was passed in 2004, there have been many different interpretations
 - How NeDNR interprets:
 - *Supply and Use* will always be in balance (cannot use more water than is available)
 - The economic viability, social and environmental health, safety, and welfare of the basin will help determine how we want to achieve that balance; from using all of the supply to using none of the supply
 - NeDNR doesn't have that answer – seeking input from the stakeholders
 - This conversation also helps link the Goals & Objectives in the plan to the surface water & ground water controls in the individual NRD IMPs
 - Statute states that controls are chosen based on consistency with the Goals & Objectives in the plan
 - Spectrum between using none of the water in the system and using all was presented – economic implications exist on either end
 - The SPG has already discussed economic viability – today we will look at the rest of the statute which includes social and environmental health, safety, and welfare
 - Interpretation of FA (fully appropriated) / OA (overappropriated) distinctions:
 - For both OA and FA basins, IMPs require some similar standards – protecting existing users; a process for new development; and requirements for at least one ground water control and one surface water control
 - With an FA basin, you can be done at that point, although we (NRDs and NeDNR) have typically taken it further
 - But in an OA basin, we will need to address post-1997 use depletions; identify where we are in relation to FA / OA; develop Goals & Objectives that NeDNR & individual NRDs

- incorporate into IMPs; and continue plans in subsequent increments until reaching FA status.
 - As we move forward to the Second Increment can address these Goals & Objectives through:
 - Projects / Incentives
 - Regulation
 - (Important to understand that next increment doesn't exclusively mean regulation will apply to ground water users. First increment primarily focused on GW because very few post-1997 new SW uses.)
 - Costs are likely to continue increasing – ongoing operational & maintenance costs, willing seller / willing buyer platforms, competition for water, etc.
 - Big picture – Process will include stakeholder's input in a finalized Goals & Objectives which will go to individual NRDs to include in IMPs
- Related to our planning process (Stephanie White)
 - Results of March 2017 SPG survey on Second Increment Plan
 - Overall Intent – majority (18/27) agreed that the overall intent of the second increment is to maintain what has already been done and make more progress toward fully appropriated conditions
 - Reasonable target for additional progress during the second increment – 14/25 said that no additional progress needs to be made, while 11/25 said the target should be anywhere from 10,000 – 150,000
 - The big question for the November 2017 meeting is: what is our target goal?
- Discussion
 - Stakeholders discussed the need for a definition of the amount of supply
 - Determining a definition for how much we want to use is part of this process
 - Stakeholders discussed the need of a definition between Overappropriated and Fully
 - SPG conversed about the 1997 depletions and the projected increasing total depletion in the future
 - IMPs have established projects through 2019 to minimize depletion growth and offset post-1997 use depletions
 - Group reviewed 'Growth in Depletions' handout
 - Although water supplies might be abundant at times, because of continued use, the basin is still facing depletions
 - Darcy's Law & Law of Conservation of Mass

- Stream flow might be increasing but is not increasing as much as it would have had there been no pumping at all
 - There is a difference between depletion and an observed reduction in stream flow (can have ground water depletions but see no difference in the gage, in fact you can have increasing flows and ground water elevations and still have depletions because the flow/GW elevations would have been greater had ground water not been pumped.)
 - The robust review that is being completed as part of the first increment will show the benefits of first increment activities.
 - Although an obligation to resetting pre-'97 depletions is not specifically called out in the statute, the group discussed this possibility and determined that a later conversation in regards to resetting the pre-'97 depletions may be necessary.
 - Models incorporate baseline conditions – changes in consumptive use are reflected in the model
 - The models have a variability of land uses represented in order to accurately capture the fluctuations in use for varying types of land / grasses / etc.
 - Changes in climate are captured, assuming that crop is intended to be fully irrigated, more pumping during dryer periods to provide full supply to crop.
 - Concerns and comments over views of consumptive use vs. reusable use
 - Based on geographic perspective and hydrogeologic conditions in each area
 - Where is this balance? What is enough and what is sustainable?
- Stakeholders recognize that the level of success achieved in the first increment might be much more expensive to achieve in the second
 - What do we want to spend and what kind of regulations might we want to put into place?
 - Stakeholders pointed out that they would like to see first increment activities in terms of costs and benefits
 - ACTION ITEM: Team will work to compile this data and bring back to stakeholder group
- Stakeholders discussed the need to be mindful of economic impacts on communities and producers
 - Changes in land valuations and tax increases may result with impacts to producers and also surrounding communities.
 - Challenge in consideration of incentive programs of the economic burden it places on producers and land owners

when valuations (and taxes) are increased, but production does not or is reduced.

- Regulations may help to make a difference without placing as heavy of a tax burden on land owners – however production may be impacted.
- 90% of NRD funding in first increment came from district occupation and property taxes
- Producers don't have the resources to overspend
 - Some agreement from group that residents in the cities should be taxed in order to spread out costs and ease the burden on producers
- Stakeholders focused on drought
 - Reminded the group of harm experienced by irrigators between 2000 – 2007
 - Warning that the SPG needs to recognize this and remember throughout this planning process
 - Storage may be a solution that could work for everyone
- Stakeholder comment that the western NRDs keeps very good records of their water use and that it would be helpful for the rest of the state to follow suit
- Stakeholders recognized credit for some drought mitigation steps that have been taken already
- Stakeholder comment that maybe next increment will not focus on average offset of depletions, but on making system more resilient during drought periods.
- Spectrum of projects we invest in that can be directed at droughts – focused incrementally, there is a range of things that can be done that can make a difference
- Stakeholder comment that future SPG meetings should focus on conjunctive management as a solution to many of these challenges – changes in current system operations may address many of the basin issues and shortages.

III. Continued Work on Definitions for Additional Elements

1. Social and Environmental Health

- *When is the social & environmental health of the basin vulnerable?*
 - *There is not enough flow necessary to:*
 - *Maintain water quality for human consumption and ecosystem health*
 - *Serve agricultural, municipal, and industrial needs*
 - *Provide recreational opportunities*
 - *Maintain water quality*
- SPG feedback:

- Agreed that nothing was missing from this definition
 - Combine the two bullet points that say: *“Serve agricultural, municipal, and industrial needs”* & *“Provide recreational opportunities”*
 - Can remove the last bullet reiterating water quality
2. Safety
- *When is the safety of the basin vulnerable?*
 - *When there is not enough flow necessary:*
 - *For fire suppression*
 - *To maintain water quality that supports public health*
 - Stakeholder feedback:
 - Add flood control
 - Broaden safety to include environmental, economic, etc. in addition to physical
 - As it relates to personal and property, economic and environmental safety captured in those definitions
 - Safety, as it relates to power, is important to include - *defined by “protecting critical infrastructure / using infrastructure to mitigate for floods”*
 - Example using canals to relieve during times of flooding
 - Dam safety from a shortage standpoint
 - Incorporate a component of food security
3. Welfare
- *When is the welfare of the basin vulnerable?*
 - *When water shortage causes a decline in Ag production such that the basin cannot maintain its population*
 - Stakeholder feedback:
 - Importance of maintaining agricultural base in this state’s economy
 - Identify that there is more than one sector of economic viability, shouldn’t be exclusive to agriculture
 - Agricultural trends of large farms has actually decreased population in many ways, it is important to keep this in mind – maintaining population may not be good signal of welfare of basin.
 - This definition is directly tied to the economic viability of the basin
 - Possibly remove ‘ag production’ altogether
 - Possibly replace “its population” with “quality of life”
 - However, a metric is necessary for measuring this – the reason for population
 - Quality of Life cannot be measured

- Decrease in population does not necessarily come from water shortages
 - Much of the welfare items are captured from previous discussion of economic viability.

IV. Next Steps

- SPG identified priorities to discuss at future meetings:
 - Drought
 - Conjunctive Management
 - Storage
 - Economic data and scenario planning/costs
 - Dollars spent by district
 - Dollars required to continue by district
 - Cost of regulation in terms of cost of production and benefits
 - Do nothing alternative
 - Economic return per acre foot
 - ACTION ITEM: Team to compile this data and bring back to stakeholder group
- Team will look into cost-benefit research done by Thompson at UNL.
 - ACTION ITEM: Team to compile this data and bring back to stakeholder group

V. Public Comment

- Member of the public stated that it was an excellent conversation, and asked that one aspect to be explicitly incorporated is the river in regards to who gets shorted. He said that in response to 'maintain water quality for human consumption and ecosystem health,' it would be good to consider adding that quantity is also important to include with quality. He also asked that environmental and ecosystem needs are explicitly addressed in the goal: 'serve agricultural, municipal, and industrial needs.'

Next Meeting: November 15, 2017

*Note that the January meeting will be held in the Best Western.