Minutes

Project:	Upper Platte River Basin Water Management Plan – Single Planning Group
Subject:	Meeting #9
Date:	Wednesday, January 17, 2018 from 10:30 a.m. to 3:00 p.m.
Location:	Best Western Plus, 3201 S. Jeffers St., North Platte, NE

I. Administration

1. **Today's meeting will offer a working lunch**
2. **This is an Open Meeting**
   - Dave Fisher (Scotts Bluff) presented to group about an IMP proposal to end "offsets", deregulate, and add storage
   - If any SPG members had further questions, Dave encouraged them to contact him
   - Stephanie pointed out that conjunctive management will be a topic of conversation in the next meeting
3. **Review of Decision-Making Process – role of primary vs. delegate**
4. **September Meeting Recap**
   i. Meeting minutes
   ii. Key discussion / decisions
   iii. Follow-up items
   iv. Glossary of Terms
   v. Annotated First Increment
   - Progress made towards a full document through the assistance of the SPG can be seen in track changes of the document
5. **Roadmap through spring 2018**
6. **Lodgepole Creek (Rod Horn – South Platte NRD)**
   - Proposal: treat Lodgepole Creek subbasin differently from the rest of the Platte River Basin Overappropriated area
   - SPNRD and NeDNR have begun conversations to assess this possibility and would like stakeholder input
   - Lodgepole Creek is a tributary of the South Platte River – flows east from Laramie into SPNRD – then meets South Platte River east of Ovid, NE
     - Has historically always been an intermediate creek
     - Gains through groundwater
   - Accounts for about 3 – 4% of overappropriated area in the basin and about 72% of overappropriated area in the South Platte NRD
   - 2002 – SPNRD moved towards a moratorium of Lodgepole Creek
   - Complex area

- Lodgepole Creek flows southeast through NRD and meets South Platte River
- Hydrologic connectivity (surface water and groundwater) is not significant to the flows that would impact the wildlife target flows or the instream flows downstream

- Don't think the connection is significant enough that it's contributing to Platte River flows in Nebraska – flows are unprotected in Colorado and the state of Colorado likely picks up any significant amount of flows contributed by Lodgepole Creek.
- Feedback on this proposal:
  - Stakeholders discussed whether snowmelt contributes to the NE system on Lodgepole Creek – doesn't generally cross state lines
  - Stakeholders asked for clarification on how this proposal will work and what changes SPNRD will want to see
    - NeDNR explained that the first step is recognition of the hydrologic disconnection, that it is not having a downstream impact to NE users, and getting input from stakeholders
  - Stakeholders discussed diversions in Colorado – that they have irrigation season diversions in addition to efforts to capture during non-irrigation seasons
  - Rod reiterated for the group that SPNRD has met their Post '97 obligations on Lodgepole Creek substantially (using monitoring, flow meter system, retirements, etc.)
  - Stakeholders agreed that Lodgepole Creek is unique because of its interaction with Colorado, and the possibility of different treatment is reasonable
    - Generally they support different treatment but do not know enough about the proposal for a different treatment.
    - Some concern about setting a precedent of carving special sections from the plan area.
  - Western Canal and Lodgepole Creek are both dealt with in South Platte Compact – incorporated in Colorado's administrative system
  - Stakeholders not asked to agree on the exact treatment at this meeting, but NeDNR and SPNRD wanted their initial thoughts and will bring back more specifics for conversation in March meeting
    - NeDNR/SPNRD ACTION item

II. Draft Post '97 Analysis (slides 15 - 61 in Power Point presented)

- Looking at some preliminary results of our robust review – assessing First Increment targets that were laid out in Basin-wide plan and IMPs
- NeDNR has been speaking with NRD managers and each individual board about the numbers that will be presented
- This data is determined with the COHYST model and WWUMM
  - Many limitations present in the COHYST model in First Increment have been addressed
- Numbers do not reflect the management actions that have taken place in First Increment (with the exception of groundwater-irrigated acreage retirements).

- In NPNRD and SPNRD, data reflect the impact of allocations.
- Many changes have been largely driven by land use change
    - The focus of this data is groundwater irrigated acre land use change
- Models / Set-up used
    - Western Water Use Management Model (WWUMM) has been updated annually for the last several years
        - Land use data sets updated
        - Model starts in 1953 and projects through 2063 (*based on 2013 land use)
        - Climate used for model scenario is a repeat of 1989 – 2013 (representative of wet and dry cycles)
        - Surface water and commingled acres were the same in the baseline and change runs, which canceled out any effects that changes in surface water or commingled acres would have had on streamflow since 1997
        - 1950 – 2063
        - Uses same climate period as WWUMM
        - Isolate changes in groundwater only irrigated acres
        - Based on 2010 land use data
- Model areas
    - Map can be found on slide 19
    - Data will be district-wide changes (acres, pumping changes, etc.) for each NRD in addition to changes in just overappropriated area
- Results for each district – change in acreage and crop typing change, net in acres translates to pumping change, and the overall effect on the river

1. **North Platte NRD**
    - Data can be found slides 23 – 30
    - Total depletions NPNRD – slide 54
        - Address efficiency to a degree in models
        - Producers are adapting – irrigating less acres/different crops and NRD working with producers on incentives and to buy back more acres
        - Acre reductions captured in land use changes
    - Benefits estimated from the allocation analysis are based on the assumption that producers will pump full allocation. Metered data is showing a further reduction in pumping than predicted by the allocation analysis.
2. **South Platte NRD**
    - Data can be found slides 31 – 36
    - Total depletions SPNRD – slide 55
    - Looking at 3 areas – Lodgepole Creek, North Platte River, and South Platte River.
    - Allocations are set at different amounts in different SPNRD subareas.
3. **Twin Platte NRD**
    - Data can be found slides 37 – 41
    - Total depletions TPNRD – slide 56
    - District-wide increase in depletions
4. **Central Platte NRD**

- Slides 42 – 46
- Total depletions CPNRD – slide 57
- District wide increase in depletions
- Stream depletions – impacts to OA basin (upstream of Elm Creek) and the program reach (stream between Elm Creek and Chapman)
  - Program reach – increased in stream flow
  - Redistribution of land use accounts for transfers and other water management activities NRD has done in that area
- The data are based on a projected baseline based on a lot of work COHYST did to calibrate the models (cannot be representative of each individual producer, but reflective as a whole)

5. Tri-Basin NRD

- Slides 47 – 51
- Total depletions TBNRD – slide 58
- Summary – slide 52
- Total Depletions Basin-Wide upstream of Elm Creek – slide 59

- Summary
  - NPNRD and SPNRD are meeting and exceeding their allocations – assuming activities in 2013 remain in effect moving forward
  - Changes in results
    - Modeling analysis did more robust job
    - WWUM eliminated land use changes that did not occur
    - COHYST acreage didn't change much but new version has done a better job of representing precipitation impacts, and full exchange of recharge and pumping
    - Primary changes to results was driven by a net extraction model change
  - NeDNR will post these slides to the website and if stakeholders are interested, can send a summary of how these estimates compare with the depletion estimates in the 1st increment IMPs
    - NeDNR ACTION item
- Stakeholder discussion
  - Raised concern for the growing population and the increase in food demand (and subsequent more water use) – these numbers do not include food demands
  - Some suggest that if streamflow increases are meeting obligations, then the requirement for mitigation beyond Post-'97 is less pertinent
  - Depletions are measured by looking at the streamflow as though there were no pumping – can have increase in streamflow, but it may not be as much as would have occurred without pumping. Models are required to determine depletions.
- General Stakeholder sentiments:

- We have done a lot and may have even accomplished more in the 1st Increment than we thought – this should help in the development of the 2nd Increment
- By law, we have to meet Post-'97 obligations, but we need to determine targets/offsets beyond just our legal obligations we'd like to reach
  - FA is somewhere at or above that line
- In Gothenburg, economic development currently constrained because of water issues
- We need to continue collecting data to increase the accuracy of our information, with more accurate data we can continue to reach more conclusive decisions
- We are in a much better position today because of the steps taken 10 years ago – this shows the benefits of metering and technology and the importance of continuing these efforts
- The modeling is limited - it does not/ cannot include everything that has been done
- Concern over the cost it will take to continue and build upon 1st Increment targets – how will we do this?
- The NRDs/boards/managers that have exceeded their allocations deserve recognition for all they've done
- Have to be nimble to meet the goal once the goal is identified
- Have a new reality to move forward on

III. First Increment Activities Cost & Benefits

1. Costs Incurred for 1st Increment Activities

- Includes projects, retirements (both permanent and temporary), studies (including model development), and administrative costs (includes NRD costs for regulation)
- Department costs include NET funds, Water Resources Cash Fund, Program 19, general funds (CREP not included)
- Slides 62-63

2. Cost of Regulation in terms of Production

- Committed dollars (from NeDNR and the NRDs) are also included in the cost calculations, some have not been spent so in theory could be used towards second increment – NeDNR to clarify in the table that these are not all expended dollars
  - NeDNR ACTION item
- Slide 64

3. Benefits of First Increment Activities

- Berge said there has been overvaluation of property taking place in each district, and since property taxes have been such a significant source, when they re-center themselves, could be very damaging
- Each NRD has its own funding sources
- Much less certainty of funding sources – we have to anticipate this from a strategic planning standpoint
  - Stakeholders asked if this is something that warrants legislative action

- Current farming economy and local economies in towns/communities provide a lot of uncertainty as far as budget is concerned
- Many NRDs experiencing budget cuts in the coming years
  - NET Grant may discontinue – Water Sustainability Fund may also be cut
- Slide 65

IV. Second Increment Intent

- 43.6k AF is estimate (high end at 126k AF) of yield of 1st increment activities at the end of the second increment.
- Minimum - 33,800 AF requirement by statute (post-1997 use depletions at end of second increment)
- Slides 69 – 71
- Jesse Bradley pointed out that it doesn't necessarily have to be a hydrologic solution/answer
  - There are other options for creating improved water certainty in the basin (including addressing vulnerability to drought, etc.) rather than just focusing on hydrologic numbers
  - The hydrologic minimums will always be part of the plan, but we are not limited to the numbers
- Stakeholder discussion on Second Increment Intent
  - We're working with the ideal environment for water storage and recharging – something we should take advantage of
  - Need to gauge the appetite for the taxpayer to spend enough on funding again
  - Drought planning and mitigation is very important to this group and something we know we need to be working towards – build resiliency/drought mitigation practices into the plan
    - Agreement that drought planning is important for the Second Increment Intent
  - Possibility of understanding from groups that are harmed from many of these activities what it would take to offset this harm – should we consider compensating them
  - Second Increment may be about improving efficiency and investments
  - Conjunctive Management needs to be one facet
  - Partnerships among surface and groundwater will be essential
  - Build resiliency into the IMPs
  - Would like to see the robust review results – however, we need to produce the plan before the robust review is complete
  - NCORPE has tools that might be beneficial for drought mitigation
  - Timing and location is critical
  - Spend wisely but keep spending to improve the system
  - Need to contemplate what we have available to each district to help meet whatever goal is identified
  - Call for education on efforts that have been done and continuing

V. Next Steps

- NeDNR will look into a presentation from the Drought Mitigation Center at the March meeting
  - NeDNR ACTION item
- Stakeholders interested in understanding the significance of crop-type changes on water usage in the system, and the sensitivity of the system to crop types throughout the river basin
  - Updated crop type and land use data will be included in the upcoming robust review analysis, for which work is already underway.
- NeDNR (ACTION item) will send the following questions for consideration prior to March meeting
  - From a drought perspective, where are you at risk?
  - What would it take to be more resilient?
- Consider the balance of numerical goals and other components of Second Increment Plan (i.e. drought management) and the possibility of determining such lofty goals that do not require regulatory backstops (like the post-1997 use offset required by statute that has regulatory backstop).
- Continue relationships between water users - give thoughts on how to create and maintain these relationships

VI. Public Comment

- Member of the public reemphasized that the secret is addressing drought mitigation

Next Meeting: March 21, 2017 at the Holiday Inn Express