MINUTES OF THE 2013
ANNUAL BASIN-WIDE MEETING
FOR JOINT INTEGRATED WATER RESOURCES MANAGEMENT
OF OVERAPPROPRIATED PORTIONS OF THE PLATTE RIVER BASIN
June 20, 2013
South Platte Natural Resources District, Sidney, Nebraska

Attendance

Kevin Boyd	CNPPID	Jeff Shafer	NPPD
Jesse Mintken	CPNRD	Jerry Kenny	PRRIP
Lyndon Vogt	CPNRD	Travis Glanz	SPNRD
Duane Woodward	CPNRD	Bill Halligan	SPNRD
Jesse Bradley	NDNR	Rod Horn	SPNRD
Amy Wright	NDNR	Jim Johnson	SPNRD
Dustin Wilcox	NARD	Ryan Reisdorff	SPNRD
Frank Albrecht	NGPC	John Thorburn	TBNRD
Ron Cacek	NPNRD	Kent Miller	TPNRD
Tina Kurtz	NPNRD	Doug Hallum	UNL-CSD
David Wolf	NPNRD	Roric Paulman	Producer
		Kevin (?)	Producer

1. Introductions

Rod Horn, Manager of the South Platte Natural Resources District (SPNRD), began the meeting with introductions. He said copies of the agenda, NRD, and DNR reports were on the back table.

2. Review Agenda

Horn asked if there were any additions to the agenda and none were suggested.

3. Monitoring & Management Actions – Report of annual activities last year

a. NDNR Report (Jesse Bradley)

The NDNR report accounts for permitted activities from January 1st through December 31st, 2012

- Five new surface water permits were issued for 2012: one for storage, one for temporary construction, and three for temporary recharge.
- Five new dam safety permits were issued.
- Two municipal/industrial groundwater permits were issued in conjunction with the NRDs' variance processes.
- There were nineteen cancellations of permits. All but one cancellation was associated with the one year temporary recharge permits granted for the 2011 intentional recharge project.
- A temporary construction permit was the only activity during the year that resulted in a net effect, which was a depletion of 2.5 acre-feet.
- The net effect of permitted activities for the year was a depletion of two and a half acre-feet, resulting from one temporary construction permit.
- The 2011 recharge activities resulted in accretion benefits.

Questions about the NDNR report.

- A question was raised about whether there actual storage permits were associated with the dam safety permits that were granted.
  - Bradley answered dam safety permits have their own set of criteria which sometimes are not aligned with the requirements for the need for a storage permit. If more information about a specific permit is needed, we can consult with the NDNR permitting staff.
- Another question was raised about whether the depletions/accretions (net effects) listed in the report represented all flows or just target flows.
  - Bradley answered that the accretions/depletions represented all flows and that the NDNR didn't try to assign those to specific shortages.

b. NRD Reports

i. CPNRD (Duane Woodward)

- Certified acres
  - These increase a little each year as people come in and finalize acre certifications.
  - There are over one million certified acres in CPNRD at this point
- Transfers
  - CPNRD had 184 transfers last year which affected 3,458 acres. Of those, there were 146 ground water acre retirements and 52 other retirements in the overappropriated area.
  - There were 21 acres in surface water retirements.
  - 1,183 acres are parts of other offsets and 2,106 are "transferred to" acres.
- Well permits
  - 397 well permits were issued
  - Of those, 183 wells were supplemental wells on existing certified acres
  - 176 were replacement wells. This high number was due to the drought which exposed the fact that many older wells needed replacing.
- Municipal and industrial
  - In 2010, when census data came out, the CPNRD made some pretty good estimates of changes in municipal growth and effects on the river. There has not been any better data released by city/town since then, so there are no updates to the 2010 estimates.
  - CPNRD also looks at data regarding new growth and how much of that growth is going into agricultural land, but are still working on that assessment
- New activities
  - The Board of Directors opened up some new development in the habitat reach area below Chapman, NE within CPNRD. The area was and is fully appropriated so applicants had to meet certain requirements to be certified.
    - Applicants are responsible for offsetting these new acres if and when it is required
    - The Board set a limit of 2,500 acres. The goal was to keep depletions at or below 250 acre-feet.
    - CPNRD received 117 applications requesting 3,000 acres. Of that, 108 applications were approved resulting in 2,433 acres. The long term depletion is estimated at 168 acre-feet.
- Water bank
  - To date, CPNRD has added 2,454 acre-feet of water rights to their water bank in the overappropriated area.
  - Much of this is the result of the CPNRD's buyout efforts in the Elm Creek overappropriated area. This water is banked in an effort to attain 1997 water levels.

- In other activities:
  - An update on the CPNRD's canal system work will be provided later in the meeting.
  - CPNRD has continued to work with several irrigation districts and NRDs on the conjunctive management study; however, it is on hold right now as CPNRD staff wait for COHYST data.

There were no questions about the CPNRD report.

ii. NPNRD (Ron Cacek presenting)

- Certified acres
  - No new acres were certified in 2012
  - Two transfers of certified acres were approved and these included changes in the point of withdrawal.
  - All variances were approved.
- Well permits
  - Eleven well construction permits were approved.
  - Two of these were for municipalities, one was for an industrial well, and eight were for irrigation
  - One of the irrigation permits was later cancelled, so there was a total of seven permitted irrigation wells
- Water use
  - All of the groundwater used in the overappropriated area in NPNRD is metered except for domestic and range livestock uses.
  - The total amount of water used in 2012 was 201,270 acre-feet on 171,931 certified irrigated acres, resulting in an average use of 14 inches per acre.
  - Of note, some of the meters failed and estimates using power records had to be made. Not all of the estimates are complete.
- Municipal and industrial accounting
  - Shown in table in report

There were no questions about the NPNRD report.

iii. **SPNRD (Ryan Reisdorff)**

- Reporting period for SPNRD
  - SPNRD elected to report irrigation data for the 2012 irrigation season, and industrial and municipal data for the August 1, 2011 through July 31, 2012 period
- Transfers
  - SPNRD had a total of 11 transfers
  - Two were gravity or side well systems converted to center pivots
  - Five were industrial transfer permits
  - Four for the oil/gas industry
  - One for a sand/gravel mining operation
  - One transfer involved moving several small tracts of flood irrigated acres to a new location to put up a new center pivot
  - Two transfers involved moving allocated acre-inches from one tract to another
  - One transfer was for the UNL Ag-lab to add 25 new acres to an existing 15 acre tract, in exchange for a reduced allocation that they gave to another producer; there was no net increase in allocated inches.
- Well permits

    - There were no new supplemental, temporary, or "other" wells
    - Six replacement well permits were issued in 2012: five for irrigation and one municipal.
    - Two were to allow pooling of irrigated tracts before the end of an allocation period
- The Board approved 3 variances
    - One was for the UNL Ag-lab addition of 25 acres mentioned previously
- Municipal and Industrial
    - SPNRD has three main scenarios for industrial accounting
        - Twenty-three non-baseline certifications (existing industrial wells that were not pumped during the 2001-2006 baseline period) - of these, five have now become active and are getting all of their offsets from existing irrigation allocations.
        - Seven established industries that didn't have sufficient records to establish a baseline. The Board approved variances for them to measure what is pumped for three years to establish a baseline. We will see the first of those come online at the end of 2013.
        - Eight active industries with baselines shown in report (feedlot, sand/gravel, oil/gas, etc.)
    - Municipal accounting
        - Ten new municipalities have established baselines
        - The total baseline for the combined municipalities is 1.5 million gallons
        - For last year's time frame, the use for the combined municipalities was 1.2 million gallons.
- Certified acres/Water use
    - SPNRD has a total of 132,892 certified irrigated acres
    - Flow meters data showed that about 178,000 acre-feet of water was pumped, resulting in approximately 17 inches per acre applied.
    - Corn accounted for 53% of total crops; small grains accounted for 13% of crops.
    - Sixth year for allocations in the Lodgepole Creek area, and fourth year in the fully appropriated areas of the South Platte River.
    - Allocations for 2013 – 2014 growing seasons have been set and are in the report.
- Acre retirements/streamflow accretions
    - No acres were retired in 2012.
    - Up to this point, however, 1,877 acres have been retired, mainly in the Lodgepole Creek area, resulting in accretions of 548 acre-feet.
- Other activities
    - Other activities that the SPNRD has worked on over the past year are summarized in the written report.

Questions about the SPNRD report.

- The report has 110 inches listed as the high amount for inches pumped, is this right?
    - Reisdorff answered that there was one producer who actually applied 110 inches per acre in 2009.

iv. TBNRD (John Thorburn)

- TBNRD's report includes the fully appropriated portions of the Platte, Republican, and Little Blue River basins.
- Transfers
    - There were 13 certified irrigated acre transfers in the Platte Basin
    - 194 acres approved for transfer from origin resulted in only 188.4 acres total transferred (due to higher depletion effect at destination, which TBNRD adjusts for).

- One groundwater transfer permit (to pump water from one property to another) was issued in the Platte Basin
- Well permits
  - 55 replacement irrigation well permits were issued due to last year's dry conditions.
  - No new irrigation well permits were granted in 2012.
  - 14 conditional replacement wells (additional wells serving the same established certified acres), seven were groundwater, and seven were surface water
- Corrections to certified acres are detailed in report
- Municipal water use
  - Use was higher last year than in previous years - this was expected.
- Mitigation activities
  - Worked with CPPID on a 2011-12 recharge project that diverted flows from the Platte River.
    - Accretion benefits were estimated at 21 acre-feet by 2012, and 911 acre-feet by 2021.
  - Augmentation pumping (one 1,250 gallon well) on the North Dry Creek, a tributary of the Platte River.
    - 374 acre-feet was pumped into the creek (about half of anticipated well capabilities for a full season)
    - Contributions to Platte River target flows were estimated at 273 acre-feet net contribution Secondary benefit of this project was the increase of forage fish population in North Dry Creek
  - TBNRD estimates that approximately 150,000 acres in the Platte Basin area are under no-till or other conservation tillage systems.
  - TBNRD is in planning stages for a 2nd augmentation well in the North Dry Creek.
  - TBNRD has committed to participate in the J-2 Reregulation Reservoir Project (part of PRRIP)
    - Potential for 2,000 acre-feet/year in depletion offset credits.
    - Project is still pending agreement from the PRRIP and CNPPID.

There were no questions about the TBNRD report.

v. TPNRD (Kent Miller)

- Certified acres
  - TPNRD currently has 318,975 certified irrigated acres, which increased by 603 acres in 2012 (increases due to lands coming out of CRP program, corrections to certifications)
  - TPNRD's Board approved to take revisions to their Rules and Regulations concerning no more corrections to certifications, to public hearing in July. Will be effective August 8th.
- Transfers
  - TPNRD approved 41 transfers
  - Involved no net increase in stream depletions.
- Water bank
  - There were 154 acres placed into TPNRD's water bank. Most of these do not stay in the water bank for more than a year.
- Well permits
  - Twenty-five replacement well permits were issued and seventeen new well permits were issued for existing certified irrigated acres.
  - No new depletions
- Municipal and Industrial
  - All municipal wells in the TPNRD are metered and report their use annually.

- All industrial wells are now metered. TPNRD is now developing a baseline for these wells.

- Mitigation Activities
  - TPNRD involvement in N-CORPE project. This is the largest streamflow enhancement project in the State and collaboration is going well.
  - Litigation has delayed financing for construction of the project, but the project still ongoing.
  - It is expected that the well field will be developed in late 2013.
  - It is hoped that the pipeline will be in place prior to the end of accounting year 2013.
  - It is hoped that water will be flowing into the Republican River Basin by the end of 2013.
  - Construction of the North Platte line is planned to occur in summer of 2014.
  - Was delayed a bit due to American Burying Beetle. This will not stop construction, but may cause a delay if it happens that the beetles will need to be moved.
- Other report details
  - Page 15 of the TPNRD report shows a map of the District's irrigated acres.
  - Page 16 shows a map of the transfer limitations designed to prevent depletions in the Platte River.

There were no questions about the TPNRD report.

c. New Data and Information/Studies

i. Progress Toward Increment Goals (measuring success of the IMPs)

1. NDNR annual technical evaluation (Jesse Bradley)

- NDNR has performed a technical evaluation (supplemental report available on NDNR website) to assess the net impact of new and expanded post-2005 NRD permitted activities. The evaluation was based on a guidance document jointly developed by the Basin-Wide group (available on the NDNR website).
  - This year's report (Table 1) gives a rough cut estimate of the total depletions, mitigations, and net effect of all summed NRD permitted activities. The net effect is a positive number which indicates there is mitigation beyond what is strictly necessary. A more fine-tuned analysis will be performed during the next robust review.
  - A supplemental table (Table 2) is provided that shows the effect when the area downstream of Chapman is included. These resulted in a negative number, which was likely due to the particular methodology that was used for this area.
  - The NDNR will summarize this type of information and provide it to the PRRIP Governance Committee at the end of the year.

Questions

A question was raised about the depletion effects when the area downstream of Chapman was included in the analysis. Bradley answered that the PRRIP area ends at Chapman and that it was an in-state decision to evaluate the area downstream of Chapman. It was looked at relative to and in a consistent manner with the rest of the Lower Platte Basin area. That area has certain limits, such as limiting the number of newly developed irrigated acres per year to 2,500. As such, the same limit was applied to the area downstream of Chapman. There are also controls on the new water users: in the event that we find their depletion effects are causing a negative consequence on downstream users, the new users are potentially responsible for mitigating those effects.

2. Robust Review – COHYST and WWUM (Jesse Bradley, Duane Woodward, Ron Cacek)

a. Guidance Document for Annual and Robust Analysis

Technical work has been ongoing within the basin. The COHYST and WWUM models are continuing to make progress. The models will soon be ready to be used for evaluating some of these projects, permitted activities, and to look at other management alternatives.

It is required that the NDNR and the NRD's evaluate progress through each increment and how information gained through that evaluation will help set the next incremental goals of 2019. There are three main components to this evaluation:

1) Effects of conservation practices on stream flow – The Flatwater Group and staff at UNL are currently developing a study to guide this part of the process.
2) Robust review – Over the next 2-3 years, NDNR and the NRDs will be performing a new assessment to look at the effects of new permitted activities and ongoing mitigation efforts on streamflow. The results of this will help us understand what remains to be addressed in the first increment and will help us set new goals for the next increment.
3) Identify the difference between overappropriated and fully appropriated – since 2009, the NDNR and NRDs here have been looking at new methodologies to perform the fully appropriated basin evaluation. NDNR recently released the final report from the consultants who helped work on the new methodology, as well as proposed new rules. NDNR then held several public meetings across the State to get feedback on the proposed new rules. NDNR is continuing to work forward in getting the proposed new rules promulgated. The new rules would act as guidelines to conduct the technical analysis to identify the difference between over- and fully appropriated basins.

The goal is to have the three studies completed by early 2016, so there will be three years before the first increment ends. The outcome of the three studies together will help assess where we are at in this increment and what we need to look at for the next incremental goals.

Woodward provided a short update on the COHYST model. There is now a calibrated model that we are moving ahead with. The model report is almost complete and is currently in an internal review. It should be ready to hand to sponsors and begin peer review on July 12th. There are some upgrades/changes that the developers would like to see as the work progresses (e.g. increase temporal resolution from annual to monthly).

Cacek said the WWU model is coming along very well. They are waiting for some additional information from a consultant to finish things up. It will be updated with any new water use information or changes to certified acres that have occurred in the last 2-3 years, so the model will have the most current information.

3. Projects

a. Cozad, Thirty Mile, and Orchard Alfalfa Canal Projects

Woodward gave a presentation on the canal projects that CPNRD has initiated in Dawson County for the Thirty Mile, Cozad, and Orchard-Alfalfa Canals. For each canal, CPNRD has worked out a lease management agreement with the appropriate canal company and each of these agreements was a little different. Essentially, the canal companies are leasing part of their natural flow water right and the use of their canal systems to CPNRD, and in exchange, CPNRD is rehabilitating the canal systems so that water is delivered more efficiently and so that more recharge occurs when there are excess flows in the Platte River. Operation and maintenance costs and other responsibilities have been worked out with each canal company.

Construction and improvement work on the canals is occurring in phases along segments of the canals. Some of the improvements include cleaning out the ditches, taking out trees, repairing old structures and putting in new ones, putting in new gate controls and railings.

Pre- and post-irrigation excess streamflows will be diverted through the rehabilitated canals. In September 2011, the NRD filed for a diversion right for excess flows of 100 cfs on both Cozad and Thirty Mile Canals and for 75 cfs on Southside. The 2011 pilot recharge project involving excess flows has helped the NRD staff in their accounting of how this excess flow water will be returned to the Platte. 30,000 to 42,000 cfs is the maximum excess flow amount that these canals would be likely to divert and then retime back to the river.

As far as accounting and tracking, the intent is to better understand how the excess flows go into the canals and then recharges. The hope is to build this into the CPNRD's water bank. Analysis of the flows will utilize the COHYST model in the development of return flow functions. Seepage studies done in 2008 allow for an analysis of loss rate on different segments of the canals. The NRD has also been collaborating with USGS to find more refined ways to evaluate seepage loss by section.

Woodward showed examples of diversions, estimated seepage, and the amount and pattern by which the water will return to the river from specific canal systems.

The NRD is also working on transfer permits and will file these with NDNR, hopefully in the fall. There are a number of irrigators along the canal system that would like to use groundwater instead of surface water. The NRD is installing return flow channels with measuring devices. There are lands that have transferred their water back to instream use; this water will be put back into the return flow channel and will be measured. This will help us track the water right transfers on a yearly basis.

The NRD is also putting in a lease agreement with the PRRIP. CPNRD should be able to demonstrate that these projects could contribute up to 20,000 acre-feet at $35.00/acre-foot of annual return through the end of the first increment. If we could get 20,000 acre-feet back to the river each year, CPNRD would get reimbursed. The contract specifies that 50% of that would go to the PPRIP and could fund other uses.

ii. Evaluating the Need for a Subsequent Increment

a. Identify the Difference between Over and Fully Appropriated

i. Conservation Measures Study

Addressed by Jesse Bradley in "Robust Review" presentation

ii. New FAB Evaluation Methodology

Addressed by Jesse Bradley in "Robust Review" presentation

4. Review and Revisions to the Basin-Wide Plan or to Individual IMPs

There were no proposed changes to the Basin-Wide Plan.

a. NPNRD

Ron Cacek reported that NPNRD made a couple of revisions to their IMP:

1) The original allocation period was extended from 56 inches within 4 years to 70 inches within 5 years. Both arrangements allow for 14 inches per year.

2) The IMP now provides the NPNRD with the authority to use an occupation tax.

3) The remaining changes were general "housekeeping" revisions.

Cacek was asked if these revisions had been approved. Cacek reported that the changes had been approved by the NPNRD Board of Directors and NDNR.

Cacek was asked what the reasoning behind extending the allocation period was. Cacek said that the extension will allow time for their model to be finalized and provide the information that they need for review.

b. TPNRD

Kent Miller reported that the only TPNRD IMP revision was specifically for the occupation tax, which was discussed earlier.

5. Written Requests for Revisions to the Basin-Wide Plan or to Individual IMPs or Disputes

Kevin Boyd from CNPPID reported that he had a written request from Don Kraus, also from CNPPID, for NDNR Director, Brian Dunnigan.

There were no other written requests.

Horn explained that the procedure for responding to written requests was amended last year and now requires a response within 60 to 90 days. The next scheduled POAC meeting is August 6th and the one after that is scheduled for October 1st. Because the October 1st meeting will be outside of the 60-90 day response time frame, discussion of Mr. Kraus's letter will be put on the August 6th POAC meeting agenda. The letter will be posted on the NDNR's website.

6. Public Comment Period

- Roric Paulman began by mentioning that he appreciates that the stakeholders are given notice about the meetings and have the opportunity to provide comments. He has been working with producers in the NRDs on water conservation and will be hosting a Producer Driven Outcomes meeting tentatively scheduled for August 20th, 2013. If the NRD representatives know of any producers who are interested in water conservation activities, this would be good information to provide them. We have also partnered with the Northeast Energy Efficiency Alliance and are working on developing good methods of providing real-time data concerning conservation activities. This could be very helpful to producers and NRD staff. This information is posted on nebraskawaterbalance.com. There is also a webcam showing a live feed from of one of Paulman's corn fields. This will be time-lapsed to show growing stages as well as the pumping and ET data. This will hopefully be updated weekly.

  Paulman also had a question for Jesse Bradley about his conservation study. Will there be recommendations for the type of conservation activities that should be employed in different areas? Bradley reported that the NDNR is addressing this issue with two approaches: 1) a matrix of different conservation practices is being put together based on a literature review and information assessment to see what is available, and to quantify the effects of those practices, 2) the practices will be rated from high to low in terms of effectiveness, as well as budgetary and man power resources. As this process moves forward it will be determined how best to break this information down and present it, e.g. by NRD or by basin. Updates on this and other ongoing studies will be presented at the POAC meetings which are held approximately every two months. Reports on this and other studies will be posted on NDNR's website as they are completed.

  Paulman reported that there appears to be an opportunity over the next couple of weeks to do some studies along the Platte River Corridor in terms of irrigation practices. More information on this will be coming soon.

  Paulman was asked if rainfall this year has yet exceed that of the 1.7 inches that was reported for last year. Paulman responded by saying so far, for 2013, they have not exceeded last year's reported rainfall because many

of the precipitation producing weather systems have missed their area. There is a bit of angst in the Republican due to the hard cap on irrigation and no rainfall in that area.

Paulman was also asked about the live webcam on his farm. The camera is attached to an arm of a center pivot so that viewers are able to see different views of the same crop as the pivot moves. At the end of the year they will time lapse the footage and correlate that back to nitrogen application in order to help develop more efficient methods applying nitrogen.

- Kevin, a producer said that property taxes are up 13.5% across the board, but water allocations are down 50%. It is difficult to correlate the land value when the two are going opposite directions. Paulman added that his property taxes were 22% higher, which equates to over $100,000/quarter due to increased property tax valuations. This was not due to the occupational tax.

7. Meeting Summary

a. Action Items

The only action item was to respond to the CNPPID written request from Don Kraus.

b. Schedule Next Annual Meeting

The next meeting was set for June 19th, 2014 at the TBNRD office at 1:00 PM CDT. Notice will be given in advance through the NDNR and NRD websites. Stakeholders will be notified through email. Formal public notice of this meeting is not required.

The meeting adjourned at 2:46 p.m.