

NOTES AND ACTION ITEMS

UPPER NIOBRARA WHITE NRD IMP ANNUAL MEETING

October 6, 2017, 8:30 a.m. Mountain Time
Upper Niobrara White Natural Resources District
430 East Second Street, Chadron, Nebraska

Attendees (Attachment A):

UNWNRD:

Haley Anders
Pat O'Brien
Lynn Webster
Dave Carlson

NeDNR:

Carrie Wiese
Melissa Mosier

Public:

None

Agenda Items:

1. Introductions
 - a. Wiese provided an overview of which NeDNR coordinators were responsible for each river basin in the state.
2. Review of agenda (Attachment B) & meeting purpose (Attachment C)
3. Monitoring & management actions
 - a. NeDNR report
 - i. No new surface water permits were approved in the UNWNRD IMP area in 2016. Six variances for temporary permits for road construction were issued.
 - ii. UNWNRD asked about the status of canal diversion gage automation within the basin. NeDNR will report back on this question.
 - iii. Future NeDNR annual reports may provide a link to their interactive streamgage website (<https://nednr.nebraska.gov/RealTime/>), rather than providing annual gage data within tables in the paper report.
 - iv. UNWNRD asked about current publication and access to hydrographic reports. NeDNR will send report access information to UNWNRD.
 - v. Wiese summarized a report from Tom Hayden (NeDNR) on the Water Year 2017 administration and streamflow conditions for the UNWNRD IMP area (see Attachment D)
 1. The group discussed the U.S. Bureau of Reclamation's current draw down of Box Butte Reservoir, which began in May 2017, and the timeline for toe drain repairs.
 - b. UNWNRD report
 - i. There was no net increase in acres within the UNWNRD area in 2016.
 - ii. 2016 municipal data shows lower than average groundwater consumed/person/day within the UNWNRD IMP area.
 - c. Discussion and evaluation of data and studies
 - i. WaterSMART
 1. Finalization of the report is still pending as final review remains to be completed by the U.S. Bureau of Reclamation.

2. NeDNR will make sure that UNWNRD has a copy of the current version of the report.
- ii. CSD Aquifer Absent Study
 1. A draft contract to extend the aquifer absent study to December 31, 2017, is with UNL CSD and ready for their signature. Only a few mapping tasks remain to complete the project.
 2. Once the study is complete, NeDNR intends to consider application of the methodology, as appropriate, to other areas throughout the state in order to provide a better representation of hydrologically connected areas.
 - a. NeDNR will ask CSD if their staff throughout the state are aware of the new methodology and how it may impact data available in their regions of expertise.
- iii. Conjunctive Use Studies
 1. Nothing to report.
- iv. Niobrara National Scenic River Model
 1. NeDNR sent out reports that were referenced in the August 2017 meeting with NeDNR, USGS, and NPS. NeDNR will make sure that these reports were sent to UNWNRD.
- d. Information and education
 - i. In 2016, NeDNR had booths at the State Fair, Husker Harvest Days, and the Sandhills Ranch Expo. NeDNR plans to attend these events again in the future.
4. Other IMP topics
 - a. Voluntary UNWNRD IMP
 - i. UNWNRD's Water Committee will recommend that the Board move forward with beginning a voluntary IMP process for the area currently outside of the required IMP area. If the Board approves the Water Committee's recommendation, UNWNRD will follow-up with a letter of notification sent to NeDNR. The UNWNRD's Citizens Advisory Committee (CAC) will make-up the majority of stakeholder group for the planning process.
5. Discussion of Upper Niobrara River Compact
 - a. The next Compact meeting is scheduled for November 7, 2017, at 3:00 PM in Torrington, WY.
6. Public Comment
 - a. Webster reported on behalf of Bill Wilson:
 - i. There is concern about cattails causing streamflow issues within the IMP area. Collaboration between county superintendents, environmental groups (e.g., Prairie Plains Resource Institute, Nature Conservancy), and other interest groups within the region (e.g., Agate Fossil Beds National Monument), will be necessary to address this problem. A feedlot once located on Duck Creek, WY, may have contributed to the initial establishment of the unwanted vegetation.
7. Meeting Summary
 - a. Schedule next annual meeting
 - i. The next annual meeting will be scheduled to take place after October 1, 2018.

Place/Room: UNWNRD Office, Chadron, NE

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AGENDA

UPPER NIOBRARA WHITE NRD IMP ANNUAL MEETING

October 6, 2017

8:30 a.m. (MT)

Upper Niobrara White Natural Resources District,
430 East Second Street, Chadron, Nebraska

AGENDA ITEMS:

1. Introductions
2. Review of agenda & meeting purpose
3. Monitoring & management actions
 - a. NeDNR report
 - b. UNWNRD report
 - c. Discussion and evaluation of data and studies
 - i. WaterSMART
 - ii. CSD Aquifer Absent Study
 - iii. Conjunctive Use Studies
 - iv. Niobrara National Scenic River Model
 - d. Information and education
4. Other IMP topics
 - a. Voluntary UNWNRD IMP
5. Discussion of Upper Niobrara River Compact
6. Public Comment
7. Meeting summary
 - a. Action items
 - b. Schedule next annual meeting

**PUBLIC NOTICE OF MEETING RELATED TO THE
UPPER NIOBRARA WHITE NATURAL RESOURCES DISTRICT
AND DEPARTMENT OF NATURAL RESOURCES
JOINTLY DEVELOPED INTEGRATED WATER MANAGEMENT PLAN**

The Upper Niobrara White Natural Resources District (UNWNRD) and the Nebraska Department of Natural Resources (Department) hereby provide notice that a public meeting related to the jointly developed Integrated Management Plan (IMP) for the UNWNRD will be held on Friday, October 6, 2017, at 8:30 AM Mountain Time at the UNWNRD office (430 East Second Street, Chadron, Nebraska). According to the IMP, the UNWNRD and the Department will annually discuss the progress being made toward achieving the goals and objectives of the IMP and exchange information on water diversions and streamflow measurements, cancellation of surface water rights, variances granted, and changes in certified acres. Modifications or amendments to the IMP may be discussed and considered at the meeting. The Upper Niobrara River Compact will also be discussed.

An agenda for the meeting will be made available beginning Tuesday, October 3, 2017, during normal business hours at the offices of UNWNRD and the Department, and on the Department's website at dnr.nebraska.gov

Individuals with disabilities may request auxiliary aids and services necessary for participation by contacting Kathy Benson at the Department, 301 Centennial Mall South, P.O. Box 94676, Lincoln, Nebraska , 68509-4676, telephone number (402) 471-2363, or email: kathy.benson@nebraska.gov

Niobrara River 2017 Water Year Accounting

Start of Water Year the flow at:

Wy-Neb State line	4.20 cfs	
33 Ranch	6.00 cfs	
Agate	22 cfs	
Above Box Butte Res	26 cfs	
Hay Springs	24 cfs	
Gordon	150 cfs	
Box Butte Res was around	3993.55	11,831 AF Oct 1 2016
	3994.86	13,146 AF Nov 14 2016
	3995.79	14,131 AF Dec 12 2016
	3996.30	14,689 AF Dec 29 2016
	3996.86	15,316 AF Jan 23 2017
	3997.69	16,274 AF Feb 15 2017
	3999.59	18,593 AF Mar 16 2017
	4001.13	20,597 AF Apr 12 2017
	4002.25	22,116 AF May 11 2017
	3999.96	19,065 AF June 30 2017
	3993.19	11,484 AF July 29 2017
	3985.70	5,705 AF Aug 31 2017
		Sept 2017

Events on May 12 2017 because of a late snow melt run off plus rain increased the flow into the Box Butte Res up to 35 cfs. The Mirage Flats ID's received over 2 inches of rain. They were going up to start releasing water out the Box Butte Res but because of the rain are going to hold off releasing at this time until next Sunday the 20th.

The Box Butte Res is experiencing toe drain problems. The Bureau has noticed this problems since 1979. This season the Res was releasing water out of the Res so construction can start in late fall.

On May 23rd water started being released. Res elevation @ that time was @ elevation 4002.84 & AF was @ 22,923 AF. Their plan was to have the Res elevation at 3979.0 or at 2,392 AF by Oct 2017.

At same time of evacuating water Mirage Flats ID was also using water for irrigation.

It was a slow process of evacuating the water out of Res.

The problems they encountered were rain events throughout the months. On May the 20th inflow increased, from 25 cfs to 64 cfs & remained at that cfs until May 30th. On the 30th river dropped back down to in the high 20 cfs. & continued on down to 10 cfs. Max. release out of Res was around 130 cfs.

Administration

On June 15 2017 issued closing notices to 80 appropriator's above the Spencer's Power Plant junior to 10\30\1923 Approp # A-1725

Then we turned around & opened up 22 appropriator's that have purchased Sub agreements with NPPD.

Also, I was notified by Mirage Flats about their start up on May 23rd. & at that time I ask Mirage Flat's Mgr, if they were going to ask for administration above their div dam & he answered no since the toe drain situation, they will not be making any administration requests this season. The request would have been to protect their 1937 priority.

River flows this yr. have been lower then the last several yrs. Of Course it's been dryer.

This season has been tough on the crops because of the hail received in spots.

Mirage Flats ID did not receive any hail so their crops should be good.

It looks to me like the water yr is going to end with the flowing flows:

Niobrara River Flow @

Wy-Ne State Line	3.0 cfs
33 Ranch	4.0 cfs
Agate	8.0 cfs
Above Box Butte Res	12.0 cfs
Below Box Butte Res	60.0 cfs
Hay Springs	13.0 cfs
Gordon	84.0 cfs

Canal diversion

14 Canals located in the compact section diverted water this yr

Total water diverted at this time has not been calculated.

Subordination Agreements

Currently from Marsland east to Gordon there are a total of 14 farmers which total 25 appropriations that have subordination agreement's with NPPD.

Mirage Flat's ID has two approp's with a total of 166 cfs of natural flow

Others 12 total 27.2 cfs of natural flow

All total 14 farmers diverted water this season

All approp's from the Wy-Ne State Line to just below Agate were inspected weekly & all approp's just below Agate were inspected 3 times this water season to Gordon.

The basin received fair rain fall

Mirage Flats ,with them evacuating water out of the Box Butte Res., had plenty of water for irrigation.

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Areas that received lots of hail this yr was Box Butte Co. especially around the Hemingford & Alliance areas.

Niobrara River Gage At the Wy-Ne State Line ended the water yr with an average mean flow at 3.49 cfs with the max of 7.0 cfs

Niobrara River At Agate ended the water yr with an average mean of 12.0 cfs with a max flow of 24 cfs

The monitoring groundwater well located at the Wy-Ne State line is hanging in there around where it was at in 1961 34.84ft

Today , 9\03\17, the well is reading 34.84 ft

There was period in the 70's to 80's were the well got down to 36.9 ft than started increasing to where it is today 34.84 ft

Historic High is 33.20 ft

Historic Average is 34.24 ft

Historic Low is 37.5 ft

Just for comparison

On 7\29\2008 well was at 35.80 ft &

On 10\11\2015 well was at 35.05 ft

On 09\03\2017 well is at 34.84 ft