TPNRD IMP

Meeting 3

TODAY'S AGENDA

- Welcome
- Current IMP Goals and Objectives
  - Fully Appropriated Portion of the IMP
  - Overappropriated Area and Nebraska New Depletion Plan
- Basin-Wide Plan – New Goals and Objectives
- 2nd Increment Topics
  - Municipal & Industrial Statute
    - 2026 Offsets
    - Basin-Wide Plan – Municipal & Industrial
    - Example in the TPNRD – NPPD GGS Wellfield
  - Drought Planning
  - 2nd Increment Target
- Next Steps
- Public Comment

Text in blue indicates agenda items that will be open discussion

WELCOME

- Open Meeting Notice
- Safety & Logistics
- Previous meeting recap

CURRENT IMP GOALS & OBJECTIVES

Fully Appropriated Portion of the IMP
Overappropriated Area and Nebraska New Depletion Plan

CURRENT IMP GOALS & OBJECTIVES

FULLY APPROPRIATED PORTION OF THE IMP

Goals

1. Protect to the extent possible existing users, local economy, environmental health, and recreational uses
2. Manage total water supply in the TPNRD to achieve sustainability of supply and use while allowing for growth and changes in use
3. Recognize there are multiple causes of streamflow depletion and, to the extent possible, distribute mitigation responsibilities appropriately

Objectives

1. Provide for educational programs related to integrated water management for the TPNRD
2. Allow for water banking and transfers
3. Explore new sources of water and currently used water for offsets, such as unappropriated river flows and transfers of existing water appropriations or certified groundwater uses
4. Ensure that no act or omission of the TPNRD will cause the state to be in noncompliance with applicable state and federal laws and with any applicable interstate water compact or decree or other formal state contract or agreement pertaining to surface water or groundwater use or supplies

CURRENT IMP GOALS & OBJECTIVES

OVERAPPROPRIATED AREA AND NEBRASKA NEW DEPLETION PLAN

Goal 1

To incrementally achieve and sustain a fully appropriated condition

(a) Within the first ten (10) year increment of this IMP, address impacts of streamflow depletions to surface water appropriations and water wells constructed in aquifers dependent upon recharge from streamflow to the extent those depletions are due to water use initiated after July 1, 1997.

Objectives:

(a) Implement measures within the first ten (10) year increment to offset an average annual depletion rate of seven-thousand seven-hundred (7,700) acre-feet to the river for the period 2043-2048. This rate is the current best estimate and is subject to change based upon new data and information.

(b) Conduct a technical analysis as described in Neb. Rev. Stat. § 46-715(4)(d)(iii) for this IMP after it has been in effect for six (6) years, to determine whether the measures adopted in this IMP are sufficient to offset depletions due to post-July 1, 1997, water uses.

Goal 1

To incrementally achieve and sustain a fully appropriated condition

(b) Impacts of streamflow depletions to surface water appropriations and water wells constructed in aquifers dependent upon recharge from streamflow to the extent those depletions are due to water use initiated prior to July 1, 1997, may be addressed prior to a subsequent increment with the intent of achieving a fully appropriated condition.

Objectives:

(a) Continue to refine the estimation methodology used to calculate the difference between the current and fully appropriated levels of development.

(b) Use available funds to offset depletions that are identified as part of the overall difference between current and fully appropriated levels of development.

Goal 1

To incrementally achieve and sustain a fully appropriated condition

(c) Once a fully appropriated condition is achieved, maintain such condition through the implementation of the IMP.

Objectives:

(a) Develop and maintain data and analytical tools, such as the Cooperative Hydrology Study (COHYST) and other programs and projects needed to implement this IMP.

(b) Review the provisions of this IMP to ensure they are adequate to sustain progress toward a fully appropriated condition.

(c) Review the provisions of this IMP to ensure that they are adequate to maintain a fully appropriated condition.

Goal 2

To ensure that no act or emission of the TPNRD would cause noncompliance by Nebraska with any interstate decree, compact, or other formal state contract or agreement

(a) To ensure that no act or omission of the TPNRD would cause noncompliance by Nebraska with the NDP included within PRRIP, for as long as PRRIP exists

Objectives:

(a) To the extent it is required in order to maintain compliance with Section IV, bullet #2 of the NDP, provide accretions to the river equal to or exceeding the annual depletion amount, taking into account appropriate timing and location, for the first ten (10) year increment as shown in table 1. The data shown in table 1 represent the current best estimate of stream depletions to the river due to changes in ground water irrigated acres between 1997 and 2005 and are subject to change based upon new data and information. At this time, the compliance test indicates that controls will only be required based upon the indicators and triggers described in Chapter 6, Section II.B.3.

Goal 2

To ensure that no act or emission of the TPNRD would cause noncompliance by Nebraska with any interstate decree, compact, or other formal state contract or agreement

(a) To ensure that no act or omission of the TPNRD would cause noncompliance by Nebraska with the NDP included within PRRIP, for as long as PRRIP exists

Objectives:

(b) As required by the NDP, the TPNRD will submit reports to the Department as necessary to assist Nebraska in maintaining compliance with PRRIP

Goal 3

Maintain consistency with the Basin-Wide Plan

Objectives

(a) Amend this IMP as needed to remain consistent with the Basin-Wide Plan.

(b) Participate in basin-wide planning activities.

(c) If appropriate and necessary, follow the dispute resolution process in the Basin-Wide Plan.

BASIN-WIDE PLAN

New Goals & Objectives

Basin-wide Plan Goals and Objectives (Draft)

Goals

1. Incrementally achieve and sustain a fully appropriated condition, while maintaining economic viability, social and environment health, safety, and welfare of the basin
2. Prevent or mitigate human-induced reductions in the flow of a river of stream that would cause non-compliance with an interstate compact or decree or other formal state contract or agreement
3. Partner with municipalities and industries to maximize conservation and water use efficiency
4. Work cooperatively to identify and investigate disputes between groundwater users and surface water appropriators and, if determined appropriate, implement management solutions to address such issues
5. Keep the Upper Platte River Basin-Wide Plan current and keep stakeholders informed

Goal 1: Incrementally achieve and sustain a fully appropriated condition, while maintaining economic viability, social and environment health, safety, and welfare of the basin

1.1 Maintain previous increment mitigation efforts

1.2 Offset impacts of streamflow depletion to (A) surface water appropriations and (B) water wells constructed in aquifers dependent on recharge from streamflow to the extent those depletions are due to water use initiated after July 1, 1997

1.3 Make progress toward a fully appropriated condition

1.4 Conduct technical analyses to support and evaluate effectiveness of plan and adequacy in sustaining progress toward a fully appropriated level of water use

1.5 Use available funds and actively pursue new funding opportunities to offset depletions, as well as to develop, maintain and update data and analytical tools needed to implement this plan

1.6 Update and continue implementing IMPs in each Platte River Basin NRD

Goal 2: Prevent or mitigate human-induced reductions in the flow of a river or stream that would cause non-compliance with an interstate compact or decree or other formal state contract or agreement

2.1 Prevent human-induced streamflow depletions that would cause non-compliance by Nebraska with the Nebraska New Depletion Plan included within the Platte River Recovery Implementation Program, for as long as the Program exists

Goal 3: Partner with municipalities and industries to maximize conservation and water use efficiency

3.1 Continue to collect data on water use and existing conservation plans of municipalities and industries within the basin

3.2 Invite municipalities and industries to the annual meetings

3.3 Establish baseline water use levels for each municipal and industrial user by January 1, 2026

Goal 4: Work cooperatively to identify and investigate disputes between groundwater users and surface water appropriators and, if determined appropriate, implement management solutions to address such issues

4.1 Identify disputes between groundwater users and surface water appropriators

4.2 Investigate and address issues between groundwater users and surface water appropriators, based on investigation results

Goal 5: Keep the Upper Platte River Basin-Wide Plan current and keep stakeholders informed

5.1 Meet at least annually to review progress toward achieving the goals and objectives of this Upper Platte River Basin-Wide Plan and those portions of the individual NRD IMPs that implement this plan

5.2 Improve information sharing with interested stakeholders

5.3 Conduct planning for subsequent increments of the plan, as necessary

2ND INCREMENT TOPICS

Municipal and Industrial Statute - 2026 Offsets and BWP Municipal & Industrial

Drought Planning

2nd Increment Target

2ND INCREMENT TOPICS

MUNICIPAL AND INDUSTRIAL STATUTE

2026 OFFSETS

BWP MUNICIPAL & INDUSTRIAL
NPPD GGS

NEBRASKA
DEPT. OF NATURAL RESOURCES

MUNICIPAL & INDUSTRIAL STATUTE

Summary of current statute language

- Neb. Rev. Stat. § 46-740 states that an IMP, rule, or order cannot limit the use of groundwater by a municipality or non-municipal commercial/industrial use within a designated fully or overappropriated area until January 1, 2026.

- Prior to 2026,NRDs are responsible for offsetting any new industrial or expanded consumptive use up to 25 million gallons/year

MUNICIPAL (M) ACCOUNTING:

CURRENT

- Accounting Year:

  August 1st to July 31st/per capita

- Baseline:

  2001-2006 Average

  (Pumping minus discharge)

AFTER 2026

- Accounting Year:

  January 1st to December 31st

- Baseline:

  ????-2026

  (Pumping minus discharge)

Reason: Estimates in the beginning – more accurate data – reflects any changes or updates in efficiency since original baselines were determined

MUNICIPAL (M) ACCOUNTING:

CURRENT

- In the TPNRD any municipal growth into irrigated agriculture goes to the NRD for credit for the city/village that is growing.

AFTER 2026

- In the TPNRD this change will have little to no impact as cities and villages will grow into irrigated agriculture that can be used for offset.

MUNICIPAL (M) ACCOUNTING EXCEPTION:

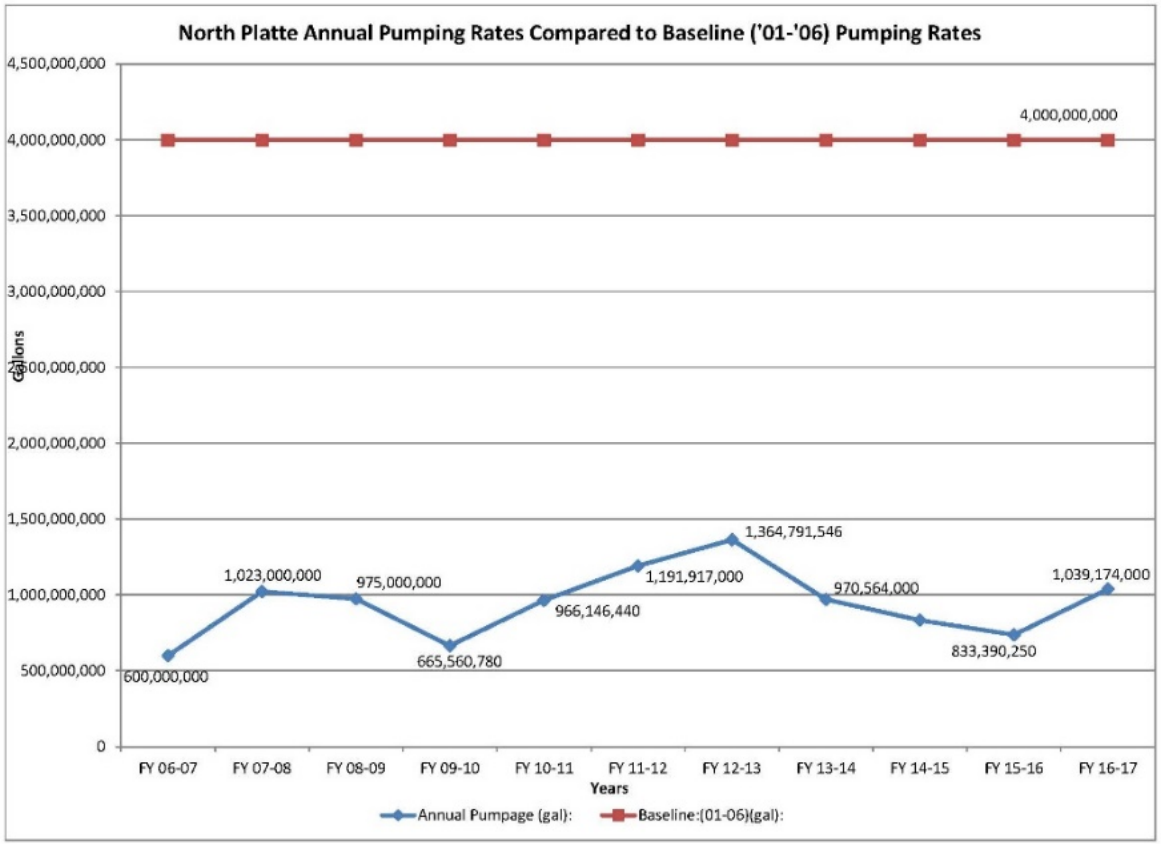
North Platte

- Has a Municipal permit from DNR which gives North Platte a baseline of 4 million gallons/year, which is much higher than the actual use of ~ 2 million gallons/year.

Ogallala, Brule, Paxton, Sutherland, Hershey, Maxwell, Brady

- For their baseline, we consider the actual use from 2001 – 2006.

46-740 3(b)(i) For any municipality that has not received an allocation as of November 1, 2005, the minimum annual allocation may be the greater of either the amount of groundwater authorized by a permit issued pursuant to the Municipal and Rural Domestic Ground Water Transfers Permit Act or the governmental, commercial, and industrial uses of the municipality plus a per capita allowance. Water for commercial and industrial uses may be limited as specified in subdivision (b)(iii) of this subsection.


North Platte Annual Pumping Rates Compared to Baseline ('01-'06) Pumping Rates
4,500,000,000
4,000,000,000
3,500,000,000
3,000,000,000
2,500,000,000
2,000,000,000
1,500,000,000
1,000,000,000
500,000,000
0
Gallons
4,000,000,000
600,000,000
1,023,000,000
975,000,000
665,560,780
966,146,440
1,191,917,000
1,364,791,546
970,564,000
833,390,250
1,039,174,000
FY 06-07
FY 07-08
FY 08-09
FY 09-10
FY 10-11
FY 11-12
FY 12-13
FY 13-14
FY 14-15
FY 15-16
FY 16-17
Years
Annual Pumpage (gal):
Baseline:(01-06)(gal):

MUNICIPAL (M)
Example:

CURRENT

- If the Village of Brady grows into 100 acres of irrigated corn, then the consumptive use of that corn crop will go to the NRD for a Village of Brady account to help offset for the expansion.

AFTER 2026

- If the Village of Brady grows into 100 acres of irrigated corn, then the consumptive use of that corn crop will go to the Village of Brady. This will be tracked in TPNRD's annual reporting.

NON-MUNICIPAL INDUSTRIAL (I) ACCOUNTING:

CURRENT

- Accounting Year:
  - August 1st to July 31st
- Baseline:
  - 2001-2006 Average
  - (Pumping minus discharge)

AFTER 2026

- Accounting Year:
  - January 1st to December 31st
- Baseline:
  - ????-2025
  - (Pumping minus discharge)

Reason: Variety of Industries – some industries do not pump annually, where others pump sporadically – a longer time frame allows for a more realistic number

NON-MUNICIPAL INDUSTRIAL (I) NEW WATER USERS:

CURRENT

- Offset:
  - NRD is responsible for new uses up to 25 million gallons
  - If new use is more than 25 million gallons, the user offsets the entire amount

AFTER 2026

- Offset:
  - User is responsible for ALL new or expanded uses

NON-MUNICIPAL INDUSTRIAL(I)

Example – New Use:

CURRENT

- If a chicken facility wants to develop a new operation in the TPNRD and the consumptive use is 15 million gallons, then the NRD is required to provide offset for the expansion.
- It the new operation is 30 million gallons, then the chicken facility is required to provide all offset

AFTER 2026

- If a chicken facility wants to develop a new operation in the TPNRD and the consumptive use is 15 million gallons, then the chicken facility is required to provide all offset for the new use.

25 million gallon rule still applies

NON-MUNICIPAL INDUSTRIAL (I)
EXISTING WATER USERS WITH A BASELINE:

CURRENT

- Offset:
  - NRD offsets new or expanded uses if baseline is exceeded and then only up to 25 million gallons

AFTER 2026

- Offset:
  - Industrial user is responsible for any uses over the baseline

STAKEHOLDER FEEDBACK

- Stakeholder input
  - Comments on post 2026 municipal and industrial users?
  - When is best to report during the calendar year?
  - How to calculate the baseline?
    - Average of use vs. Highest use (1 year)

GGS WELLFIELD OVERVIEW

Example in TPNRD

Background

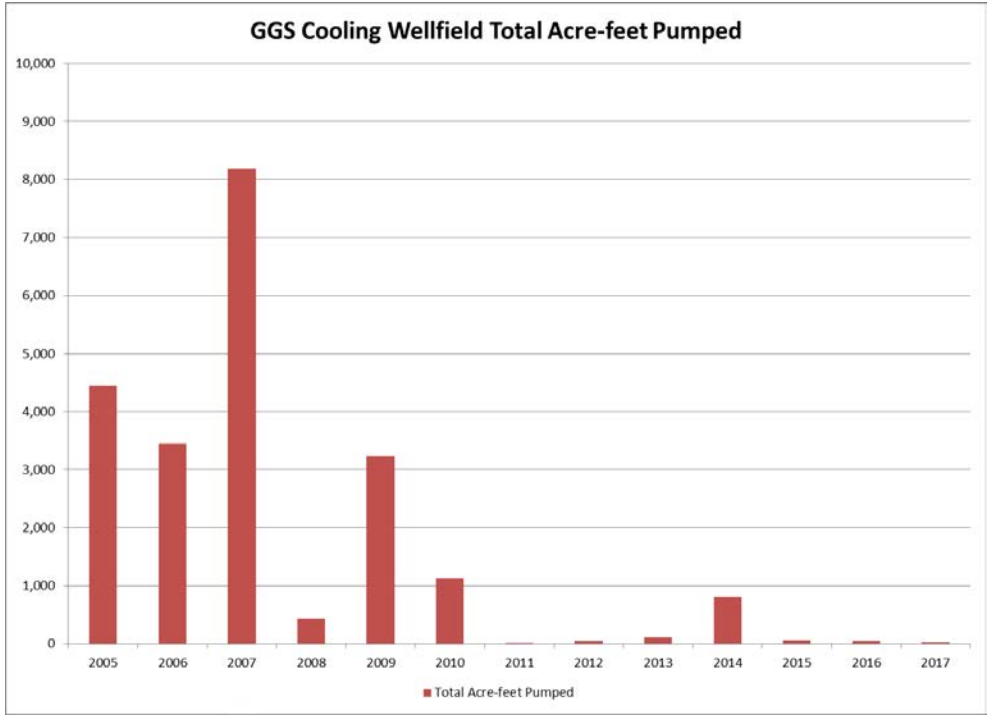
- The Gerald Gentleman Station (GGS) cooling wellfield was developed in 2004 due in response to serious drought issues facing Lake McConaughy and the Platte River Basin.

Purpose

- The GGS cooling wellfield has two functions
  - Sustain water levels in Sutherland Reservoir
  - Help GGS comply with discharge water temperature regulations

Location Map

Historical Operations



2ND INCREMENT TOPICS

DROUGHT PLANNING

NEBRASKA
DEPT. OF NATURAL RESOURCES

BWP Drought Planning Goals

- Action Item 1.3.4 : Develop a basin drought contingency plan for management of supplies during times of shortage.
  - Action Item 1.3.4.1: Develop a basin drought monitoring protocol for defining and determining drought conditions.
  - Action Item 1.3.4.2: Identify potential basin-wide mitigation and response actions to drought conditions and opportunities for cooperation across the basin (management of storage water).
  - Action Item 1.3.4.3: Conduct a drought simulation workshop with NeDNR, NRDs, and water users to assist in developing and testing of protocols during a drought.
  - Action Item 1.3.4.4: Identify roles for administering and implementing basin drought contingency plan.

Stakeholder Feedback

- What problems do you face in drought?
- What is a drought plan to you?
- Would you be interested in participating in a drought workshop?

2ND INCREMENT TOPICS

2ND INCREMENT TARGET

NEBRASKA
DEPT. OF NATURAL RESOURCES

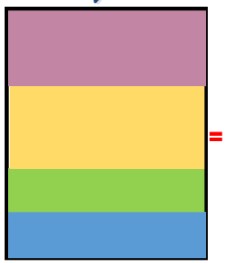
2nd Increment Target

Twin Platte IMP

GOALS:

1st Increment

Goal: 7,700 ac-ft



= $30-$40 Million

2nd Increment Goal:

NEXT STEPS

MEETING DATES

- November 13, 2018
- January 15, 2019

PUBLIC COMMENT

Thank you