## UPPER PLATTE BASIN-WIDE PLAN & TPNRD INTEGRATED MANAGEMENT PLAN

Pre-Hearing Information Session July 16, 2019



# HOW DID WE GET HERE?

**Statutory Authority** 

# INTEGRATED MANAGEMENT AND BASIN-WIDE PLANNING

- Legislative Bill 962 (2004)
  - Required development and implementation of IMPs & BWPs
  - Plans developed in collaboration and consultation with water users
- Nebraska Groundwater Management and Protection Act
  - Nebraska Revised Statutes 46-715 46-719 referenced in this presentation



#### STATUTORY REQUIREMENTS § 46-715(2)(a)

#### Integrated Management Plan and Basin-Wide Plan

The plan shall include, "<u>Clear goals and objectives</u> with a purpose of sustaining a <u>balance</u>

between water uses and water supplies so that the economic viability, social and

environmental health, safety, and welfare of the basin can be achieved and maintained for both

the <u>near term</u> and the <u>long term</u>."

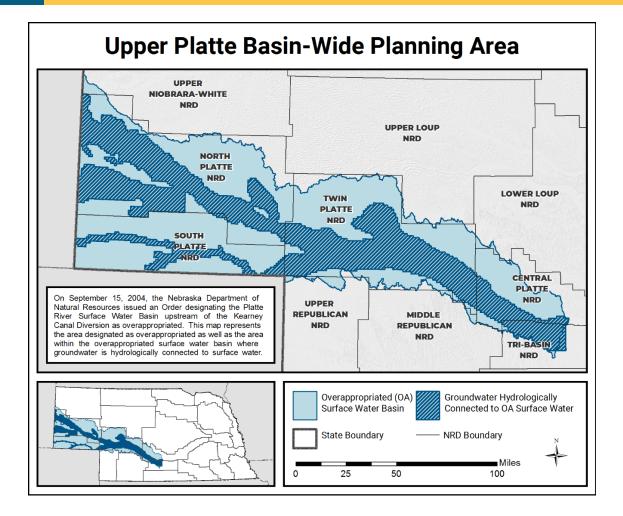
#### **BASIN-WIDE & INTEGRATED MANAGEMENT PLANS**

#### **Basin-Wide Plan**

- All basin NRDs & NeDNR
- Overappropriated Area
- Goals & objectives
  - Focused on regional, cross-boundary issues and opportunities
  - Consistency and collaboration among basin NRDs
  - A broad framework

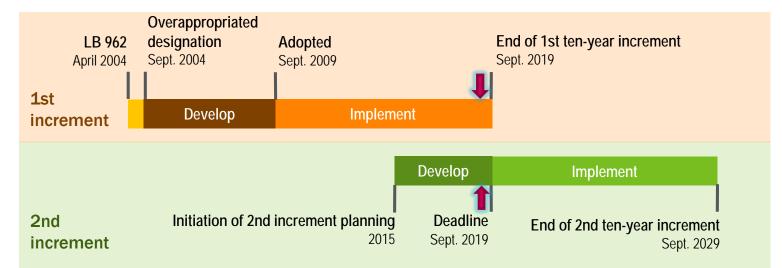
#### Integrated Management Plan

- 1 NRD & NeDNR
- Overappropriated and fully appropriated areas
- Goals, objectives, & controls
  - Specific to one NRD
  - Tailored to local issues and opportunities
  - Specific targets and actions
- Required to include:
  - Map of area subject to IMP
  - Groundwater & surface water control
  - Monitoring plan



## Plans are collaborative, incremental, and adaptive





# PROPOSED UPPER PLATTE BASIN-WIDE PLAN

Goals & Objectives

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

#### Objective 1.1 Maintain previous increment mitigation progress

- Objective 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
- Objective 1.3 Make progress toward a fully appropriated condition
- Objective 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
- Objective 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 Objective 1.6 Update and continue implementing IMPs in each Platte River Basin NRD

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

Objective 1.3 Make progress toward a fully appropriated condition

- 1.3.1: Understand the economic impacts of supply variability on water users
- 1.3.2: Assess short- and long- term basin water supply and demand
- 1.3.3: Explore and implement potential measures to mitigate impacts (hydrologic and economic) of basin supply variability due to human-made depletions on surface water and groundwater users
- 1.3.4: Develop a basin drought contingency plan for management of supplies during times of shortage

**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

Objective 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

- Objective 3.1 Continue to collect data on water use and existing conservation plans of municipalities and industries within the basin
- Objective 3.2 Invite municipalities and industries to the annual meetings
- Objective 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

Objective 4.1 Identify disputes between groundwater users and surface water appropriators Objective 4.2 Investigate and address issues between groundwater users and surface water appropriators, based on investigation results

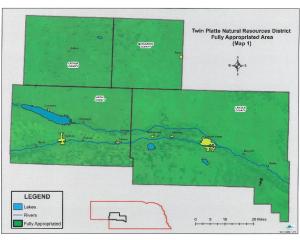
## **Goal 5:** Keep the Upper Platte River Basin-Wide Plan current and keep stakeholders informed

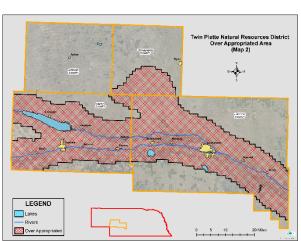
 Objective 5.1 Meet at least annually to review progress toward achieving the goals and objectives of this Upper Platte River Basin-Wide Plan and those portions of the individual NRD IMPs that implement this plan
Objective 5.2 Improve information sharing with interested stakeholders
Objective 5.3 Conduct planning for subsequent increments of the plan, as necessary



## PROPOSED TPNRD IMP

- 1. EFFECTIVE DATE
- 2. AUTHORITY
- 3. BACKGROUND
- 4. MAPS AND MANAGEMENT AREA BOUNDARIES





Overappropriated Surface Water Area in the Twin Platte NRD

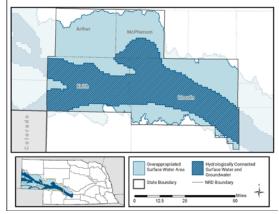


Figure 1

- 5. VISION STATEMENT
- 6. FUNDING
- 7. SCIENCE AND METHODS
  - 7.1 First Increment
  - 7.2 Second Increment
  - 7.3 Information Considered in Developing this IMP

- 8. FIRST INCREMENT ACCOMPLISHMENTS
  - 8.1 Studies Conducted and Information Obtained
  - 8.2 Summary of Management Actions
  - 8.3 Assessment of the First Increment (2019 Robust Review)
  - 8.4 Assessment of Fully Appropriated
  - 8.5 Basin-Wide Coordination

#### Goal 1: Reach and Maintain a Fully Appropriated Condition

To incrementally achieve and sustain a fully appropriated condition while maintaining economic viability, social and environmental health, safety, and welfare of the basin.

Objective 1.1 Within this increment of this IMP, implement measures to 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.

Objective 1.2 Maintain previous increment mitigation progress.

| TPNRD Annual Short-Term Offset Targets |                    |                    |                  |  |  |  |  |  |  |
|--|--------------------|--------------------|------------------|--|--|--|--|--|--|
| Year                                   | South Platte River | North Platte River | Below Confluence |  |  |  |  |  |  |
|  | (AF)               | (AF)               | (AF)             |  |  |  |  |  |  |
| 2019                                   | -5,900             | -6,900             | -10,100          |  |  |  |  |  |  |
| 2020                                   | -6,000             | -7,000             | -10,100          |  |  |  |  |  |  |
| 2021                                   | -6,200             | -7,000             | -10,200          |  |  |  |  |  |  |
| 2022                                   | -6,300             | -7,100             | -10,200          |  |  |  |  |  |  |
| 2023                                   | -6,500             | -7,100             | -10,300          |  |  |  |  |  |  |
| 2024                                   | -6,600             | -7,100             | -10,300          |  |  |  |  |  |  |
| 2025                                   | -6,800             | -7,200             | -10,400          |  |  |  |  |  |  |
| 2026                                   | -6,900             | -7,200             | -10,400          |  |  |  |  |  |  |
| 2027                                   | -7,100             | -7,300             | -10,400          |  |  |  |  |  |  |
| 2028                                   | -7,200             | -7,300             | -10,500          |  |  |  |  |  |  |
| 2029                                   | -7,400             | -7,300             | -10,500          |  |  |  |  |  |  |

| TPNRD Annual Long-Term Offset Targets |      |              |              |                 |  |  |  |  |  |  |
|---------------------------------------|------|--------------|--------------|-----------------|--|--|--|--|--|--|
| Year                                  |      | South Platte | North Platte | Below           |  |  |  |  |  |  |
| rear                                  | rear | River (AF)   | River (AF)   | Confluence (AF) |  |  |  |  |  |  |
| 2059-                                 |      |              |              |                 |  |  |  |  |  |  |
| 2063                                  |      | -12,100      | -8,600       | -12,000         |  |  |  |  |  |  |
| average                               | e    |              |              |                 |  |  |  |  |  |  |

Goal 1: Reach and Maintain a Fully Appropriated Condition

To incrementally achieve and sustain a fully appropriated condition while maintaining economic viability, social and environmental health, safety, and welfare of the basin.

Objective 1.3 Make progress toward a fully appropriated condition.

Objective 1.4 Review the implementation of this IMP to ensure that the IMP provisions are adequate to sustain progress toward and/or maintain a fully appropriated condition.

Objective 1.5 Once a fully appropriated condition is achieved, maintain such condition through the implementation of the IMP.

Goal 2: Interstate Compliance

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

- Objective 2.1 Ensure that no act or omission of the TPNRD or the NeDNR would cause noncompliance by Nebraska with the NNDP included within PRRIP, for as long as PRRIP exists.
- Objective 2.2 Ensure that the groundwater and surface water controls adopted in the TPNRD IMP are sufficient to ensure that the state will remain in compliance with the NNDP.
- Objective 2.3 Collectively, as defined in the NNDP, offset the new depletions caused by new uses within the Upper Platte River Basin NRDs.
- Objective 2.4 Ensure that for post-1997 new or expanded uses, including irrigation, municipal, industrial, rural domestic and other new water related activities are assessed and offset for compliance with the NNDP. This assessment will be part of the Robust Review, explained in Section 10.7.3.2 of this plan.

Goal 3: Consistency, Communication, and Updates

Keep the IMP current, maintain consistency with the Basin-Wide Plan, and keep water users informed.

Objective 3.1 Amend this IMP as needed to remain consistent with the Basin-Wide Plan.

Objective 3.2 Participate in basin-wide planning activities.

- Objective 3.3 Improve information sharing with interested parties.
- Objective 3.4 Conduct planning for subsequent increments of the IMP, as necessary.

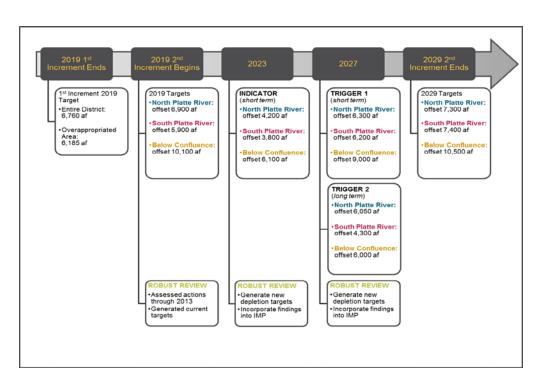
Objective 3.5 If appropriate and necessary, follow the dispute resolution process in the Basin-Wide Plan.

#### 10. ACTION ITEMS

- 10.1 Information and Education Programs
- 10.2 Incentive Programs
- 10.3 Water Banking
- 10.4 Conjunctive Management
- 10.5 Drought Planning
- 10.6 Controls and Triggers
  - 10.6.1 Ground Water Regulatory Actions (Controls)
    - Mandatory Education
    - Mandatory Data Collection

#### 10. ACTION ITEMS (continued)

- 10.6 Controls and Triggers (continued)
  - 10.6.2 Triggers
  - 10.6.3 Surface Water Regulatory Actions
    - Expanded data collection on SW uses
    - Education on SW data



#### 10. ACTION ITEMS (continued)

- 10.7 Monitoring and Evaluation
  - 10.7.1 Data and Tracking of Water Use Activities
  - 10.7.2 Reporting
  - 10.7.3 Evaluation: Measuring the Success of Meeting the Goals and Objectives of this IMP
  - 10.7.4 Evaluation: Measuring the Success of Reaching a Fully Appropriated Condition
  - 10.7.5 Evaluation: Measuring the Success of Maintaining a Fully Appropriated Condition
  - 10.7.6 Evaluating the Need for a Subsequent Increment
- 10.8 Studies to be Completed in the Current Increment
- 10.9 Review of and Modification of the IMP



# NEXT STEPS





#### **TPNRD** Plan Adoption Schedule

| DATE:  | July 15 – July 19<br>All NRD Hearings<br>July 16 TPNRD |     | Following the<br>hearings | Aug 8       | Aug 8     | Aug 12   | Aug 12 –<br>Sep 1  | September 3  |
|--|--|-----|---------------------------|-------------|-----------|--|--------------------|--|
| Basin-Wide<br>Plan<br>Integrated<br>Management<br>Plan | Info<br>Session:                                       | IMP | consider<br>testimony     | Final Board | NRD/NeDNR | Final draft<br>of BWP and<br>IMP<br>available to<br>public | Notice of<br>Order | BWP Effective and<br>Second Increment<br>Begins<br>IMP Effective and<br>Second Increment<br>Begins |



# THANK YOU

