

# 5<sup>th</sup> Generation IMP Updates



## Stakeholder Meetings

March 24<sup>th</sup> and 25<sup>th</sup>, 2021

Imperial, McCook, and Alma, Nebraska

Jesse Bradley, Assistant Director

Nebraska Department of Natural Resources



# Agenda

Welcome and Introductions

Background and Meeting Overview

- Why Are We Updating These IMPs?

- What to Expect During Today's Meeting

Proposed IMP Revisions

Discussion

Next Steps/Timeline

# Agenda

Welcome and Introductions

## **Background and Meeting Overview**

**Why Are We Updating These IMPs?**

**What to Expect During Today's Meeting**

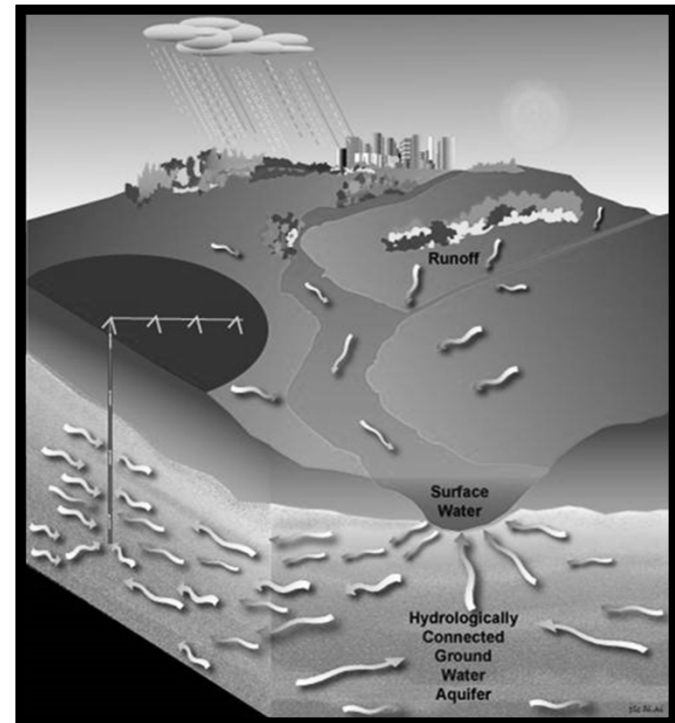
Proposed IMP Revisions

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# Integrated Management Plans (IMPs)

- Required for fully appropriated areas (*Neb. Rev. Stat. § 46-715*)
- Jointly developed by NeDNR and an NRD for integrated surface water and groundwater management



# IMP Purposes (Neb. Rev. Stat. § 46-715)

## ➤ Goals and objectives:

- Sustain a balance between water uses and water supplies so that economic vitality, social and environmental health, safety, and welfare can be achieved and maintained for both the near term and the long term

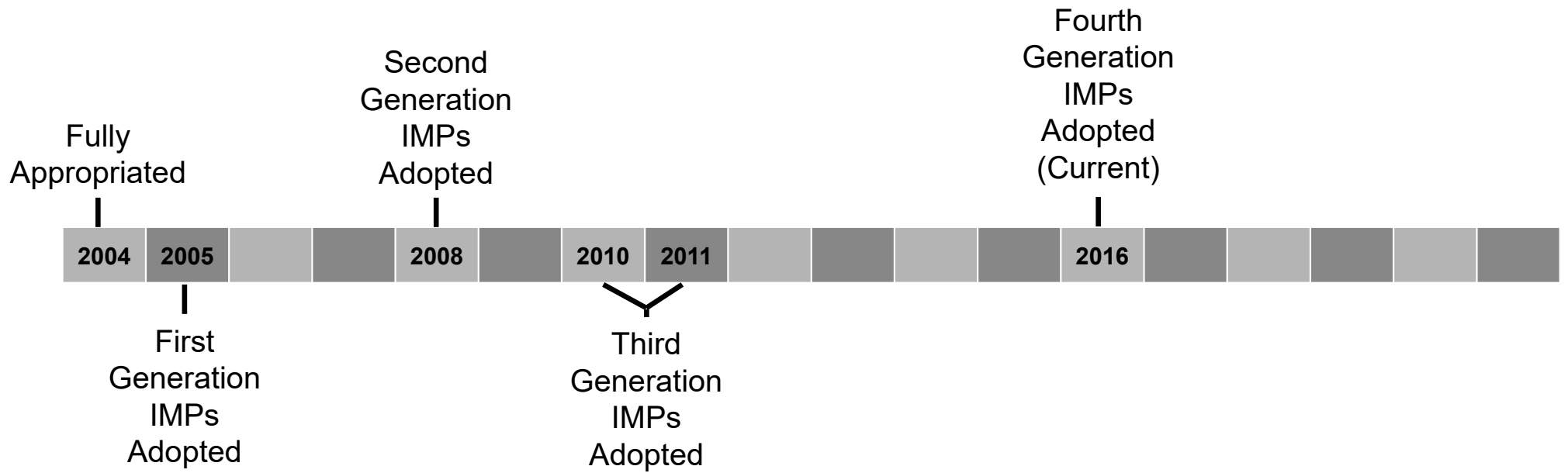
## ➤ Surface water and groundwater controls:

- Be consistent with the goals and objectives of the plan
- Ensure compliance with state and federal laws and applicable interstate compacts
- Protect existing groundwater and surface water users from new uses begun after the fully appropriated designation

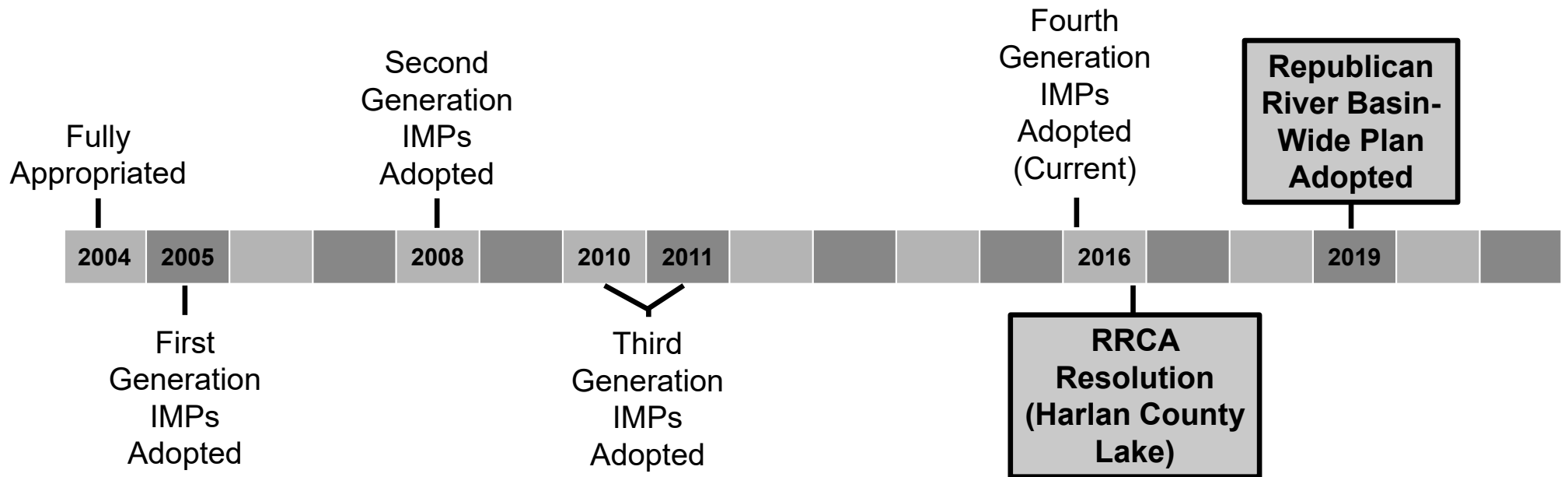
## Additional Specific Purposes of Republican River Basin IMPs

- Ensure Compliance with the Republican River Compact
  - Forecast and Compact Call Year Determination procedures
  - Controls and Compliance Standards
  - Monitoring and Reporting requirements
  - Division of Nebraska's Water Supply and Compact compliance obligations among the three NRDs

# History of Republican IMPs



# Why Are We Updating These IMPs Now?





# Stakeholder Process/Today's Meeting

- 3 Meetings, 1 in each NRD
  - Same content covered at all meetings
  
- Meeting Objectives
  - Inform you about anticipated plan changes
  - Answer your questions
  - Listen to your feedback

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# Proposed IMP Revisions

- What isn't changing?
- What is proposed to change?

## What isn't changing

- IMP Compliance Standards
- Controls
- Forecast procedures and ensuring the best available data is used
- Communications on forecast and management actions
- Ensuring existing uses are protected

## Categories of Revisions

- Changes to make the plans easier to read and understand
- Changes to in-state accounting methods (NRD distribution methods)
- Changes related to the basin-wide plan
- Changes related to changes in RRCA procedures
- Changes to ensure updates remain consistent with deadlines

## Changes to Make the Plans Easier to Read and Understand (Examples)

- Updated formatting
- Reorganized content
- Reviewed terms for consistent use throughout
- Clarified and alphabetized definitions
- Added new Abbreviations and Background Sections, tables of contents, more transitional and explanatory language
- Added details on figures and in Information Considered section
- Removed legacy language (i.e., leftover language from previous versions that is no longer applicable and/or necessary)

# Changes to In-State Accounting (NRD Compliance)

## ➤ Current (4<sup>th</sup> Generation) IMPs:

- $\text{\_RNRD Remaining Shortfall} = [(\text{Compact Compliance Volume} - \text{All NRD management actions}) * \text{Baseline Depletion Percentage}] + \text{\_RNRD management actions}$

## ➤ Proposed (5<sup>th</sup> Generation) IMPs:

- $\text{\_RNRD Annual Balance} = \text{\_RNRD Allocation} - \text{\_RNRD GwCBCU} + \text{\_RNRD Management Actions}$

## Results in:

- NRD calculations assumed constant distribution in NRD baseline depletions
- NRD calculations vary based on updated allocations and GwCBCU
- Ensures all management actions are reflected in each NRD's balance

# Changes Related to the Basin-Wide Plan

- Information about basin-wide plan in Background section
- New Goal 1 added to IMP
- Align IMPs' Compliance Standards with MHOs A & B

## Republican River Basin-Wide Plan

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Jointly developed by the Upper Republican, Middle Republican, Lower-Republican, and Tri-Basin Natural Resources Districts and the Nebraska Department of Natural Resources

2019





## Changes Related to the Basin-Wide Plan

# New Goal 1

### Goal 2 of Basin-Wide Plan

- Maximize Nebraska's efficient and beneficial consumptive use of its portion of the water supply, increase certainty for long-range planning of water supplies to reduce the need for regulatory actions, and increase collaborative efforts among water management entities and stakeholders across the Basin

### Proposed New Goal 1 of IMPs

- Maximize \_RNRD's efficient and beneficial consumptive use of the available water supply, increase certainty for long-range planning of water supplies, and increase collaboration among all water users in \_RNRD.

## Changes Related to the Basin-Wide Plan

# Alignment of Long-Term Compliance Standard with MHO B

### MHO B (Basin-Wide Plan)

➤ **Limit groundwater depletions to streamflow to a relatively constant level over the long-term both across the basin as a whole and within each NRD**

- Procedures specified in *Supplement to the Republican River Basin-Wide Plan: Methodology for MHO B (2020)*

CF8

### Proposed Compliance Standard i. (IMPs)

➤ To assist with ensuring long-term Compact compliance, provide for a twenty percent (20%) reduction in pumping from URNRD's Baseline Pumping Volume, using a combination of regulation and supplemental programs, so that the average annual groundwater pumping volume is no greater than 433,926 acre-feet over the long term.

The objective of this standard is to maintain groundwater depletions at a relatively constant level over the long-term. NeDNR and URNRD will evaluate the trends in long-term groundwater depletions over typically wet and dry cycles and jointly assess whether additional management actions are necessary to accomplish this objective. This standard will be assessed every five years using the methodology established for MHO B of the basin-wide plan.

## Slide 18

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**CF8** 2 slides for this. Slide 1, the lines and blue colors show the parts that are alike. The next slide highlights what specifically is changing.  
Carol F, 3/10/2021

## Changes Related to the Basin-Wide Plan

# Alignment of Short-Term Compliance Standard with MHO A

### MHO A (Basin-Wide Plan)

- **MHO: Maintain each NRD's net groundwater depletions to streamflow within its portion of Nebraska's allowable groundwater depletions to streamflow**
- **Assessment: For the previous Compact averaging period (2 or 5 years, as determined by Compact accounting procedures), has each NRD's groundwater net depletions to streamflow for the RRCA model area, remained within its portion of Nebraska's allowable groundwater depletions to streamflow, as specified in the IMPs?**

### Proposed Compliance Standard ii. (IMPs)

- **The Net Groundwater Depletions for URNRD shall be no greater than the Allowable Groundwater Depletions for URNRD (applying URNRD's Two-Year Averaging or Five-Year Averaging Baseline Depletion Percentage as appropriate). If the Net Groundwater Depletions for URNRD exceed the Allowable Groundwater Depletions for URNRD, management actions will be required in the amount the Net Groundwater Depletions for URNRD exceeded the Allowable Groundwater Depletions for URNRD. This standard will be evaluated annually.**

Changes Related to the Basin-Wide Plan

## Summary of Links between the Basin-Wide Plan and IMPs

- Proposed new Goal 1 is based on the basin-wide plan's Goal 2
- The IMPs' long-term Compliance Standard (i.) is equivalent to MHO B from the basin-wide plan
- The IMPs' short-term Compliance Standard (ii.) is equivalent to MHO A from the basin-wide plan

## Changes Related to Changes in RRCA Procedures

- Removal of language related to a 40,000 af trigger that appeared only in a previous one-year RRCA resolution
- Updated Compact Call Year evaluation
- Incorporation of RCCV concept
- Technical Memorandum

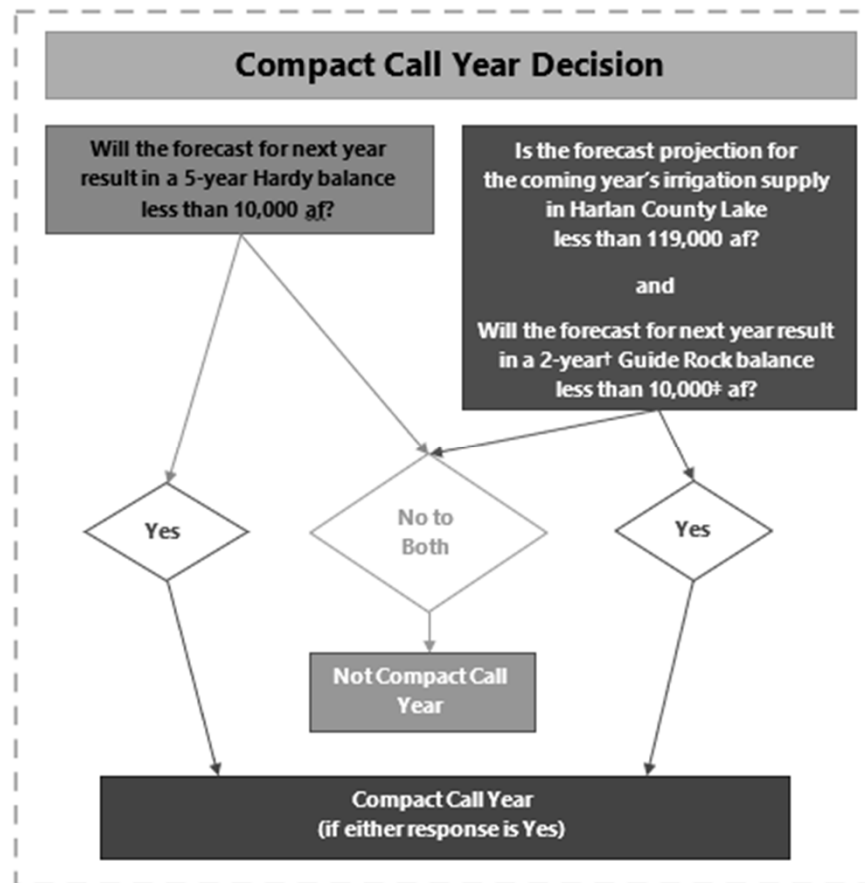
Changes Related to Changes in RRCA Procedures

## Removal of 40,000 af Trigger

- This language in the current IMPs was based on a provision in a past, one-year RRCA resolution. It is no longer relevant and will be removed from the IMPs:
  - “...augmentation pumping may be suspended once the Kansas Bostwick Irrigation District’s (KBID) total storage water supply (water not under Warren Act Contract) in Harlan County Lake has reached 40,000 acre-feet, as long as the total sum of the basin NRDs remaining management actions is less than 20,000 acre-feet by June 1st of that Compact Call Year.”

## Changes Related to Changes in RRCA Procedures

# Simplification of Compact Call Year Determination



†Or 3-Year, if Alternative Water-Short Year Provisions apply.

‡ In the second consecutive Compact Call Year, the 10,000 af threshold for the Guide Rock test will be reduced to 5,000 af. For the third and subsequent consecutive Compact Call Years, this value will be reduced to zero.



Changes Related to Changes in RRCA Procedures

## Technical Memorandum – What Is It?

- A companion document to the IMPs, containing technical methodology for calculating:
  - The Forecast and Compact Call Year Determination
  - Compact Compliance Actions (NRD Balances and Management Actions Requirements)

Changes Related to Changes in RRCA Procedures

## Technical Memorandum – Purposes

- Making sure we can use the best available science and information in our management decisions
- Ensuring that any future resolutions or accounting changes made by the RRCA can be efficiently implemented

## Changes to Ensure Updates Remain Consistent with Deadlines

- Replacement of some specific dates, deadlines and triggers with a process for updating estimates of Compact obligations when needed throughout the year
- When estimates need to be updated will be determined by:
  - Best available science and information
  - Considering RRCA resolutions and accounting procedures

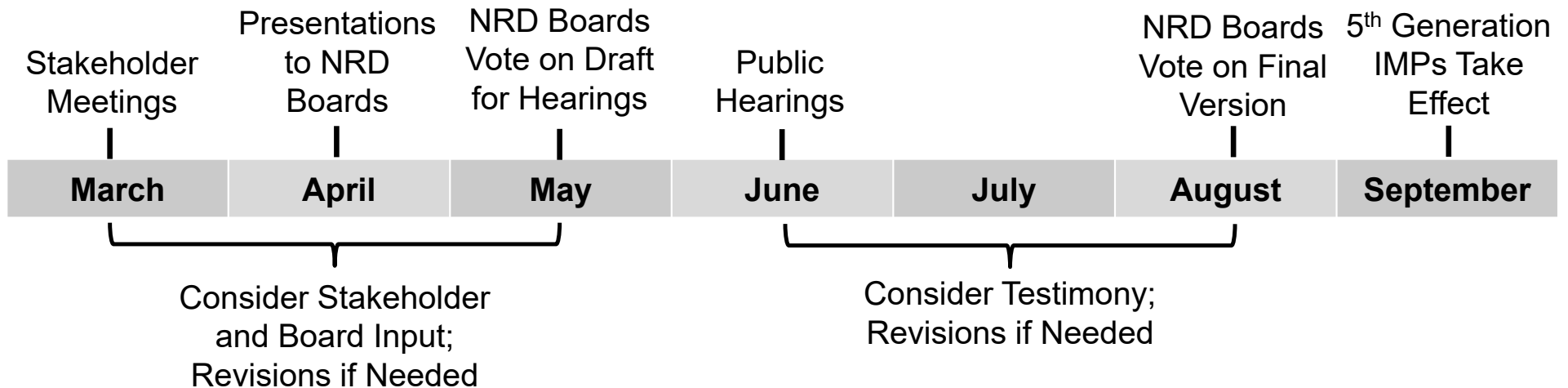


Questions

## Next Steps/Timeline

- Completing these IMPs  
(Upper, Middle, and Lower Republican NRDs)
- Updating IMP for the Republican Basin portion of Tri-Basin NRD

# Tentative Timeline for Completing 5<sup>th</sup> Generation IMPs



## What if I Have Additional Questions or Comments?

- Contact Carol Flaute, NeDNR  
[carol.flaute@nebraska.gov](mailto:carol.flaute@nebraska.gov),  
402-471-1114

OR

- Contact your NRD office

# IMP for Republican portion of Tri-Basin NRD

- Comprehensive review beginning this fall to determine revisions needed
  - Consistency with RRCA Resolution
  - Consistency with Republican River Basin-Wide Plan
  - Requirements specific to the first 10 years of the IMP





# THANK YOU

Nebraska DNR, Upper Republican NRD,  
Middle Republican NRD, and Lower Republican NRD

[dnr.nebraska.gov](http://dnr.nebraska.gov)  