Welcome!

Thank you for joining us for the Republican River Basin Annual Meeting.

Please sign in:

- In-person attendees: The sign-in sheet is located on the table near the entrance.
- Virtual attendees: Please make sure your name and affiliation are set as your screen name.

Republican River Basin-Wide Plan
Eighth Annual Meeting

November 17, 2026

Lower Republican Natural Resources District Office, Alma, NE

UPPER REPUBLICAN NRD

Middle Republican Natural Resources District

Lower Republican Natural Resources District

Tri Basin Natural Resources District

NEBRASKA
DEPT. OF WATER, ENERGY, AND ENVIRONMENT

Nebraska Open Meetings Act

- Location of:
  - Open Meetings Act
  - Sign-in Sheets

- Where meeting was noticed:
  - Harlan County Journal
  - North Platte Telegraph
  - McCook Gazette
  - Holdrege Daily Citizen
  - Imperial Republican
  - Grant Tribune
  - Benkelman Post
  - *lrnrd.org*
  - *urnrd.org*
  - *dwee.nebraska.gov*
  - *tbnrd.org*

Meeting Agenda

Link to Annual Report: rrbwp.nebraska.gov

Eighth Annual Meeting
Republican River Basin-Wide Plan

Tuesday, November 17, 2026
1:00 pm Central Time (12:00 pm Mountain Time)

Lower Republican Natural Resources District Office
30 S John Street, Alma, NE
Virtual participation option via Zoom
https://us02web.zoom.us/meeting/register/Ugir0-3-QniqQNX9KbHUzQ

Agenda

1. Welcome and introductions
    a. Nebraska Open Meetings Act requirements
    b. Review agenda and meeting objectives
    c. Introductions
2. Plan implementation progress
    a. Annual Report: Plan Implementation Progress 2025
        i. Water supplies and uses in the basin
        ii. Progress toward goals and objectives of the plan
            1. Management activities
            2. Measurable Hydrologic Objectives (MHOs)
    b. Feasibility and potential impacts of planned projects
    c. Drought plan update
3. Collaboration
    a. Existing and potential new water conservation programs
    b. Information sharing about water user management practice improvements
        i. Future opportunities to encourage and support water users to share information about management practice improvements
4. Conflicts Resulting from Implementation of the Plan, if any
    a. None submitted for consideration
5. Public comment

Introductions

Plan Implementation Progress

Water Supplies, Uses, and Management Actions in the Basin

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Water Supplies 4
Precipitation 5
Streamflow 6
Groundwater 8
Reservoir Storage and Evaporation 10
Water Use 12
Irrigated Acres 12
Allocation and Computed Beneficial Consumptive Use (CBCU) 13
Surface Water Municipal and Industrial CBCU 13
Annual Groundwater Use for Irrigation 14
Management Actions 15
Current Groundwater Allocations 15
Curtailment of Groundwater Pumping for Compact Compliance 21
Conservation and Irrigation Decertification Programs 21
Surface Water Administration for Compact Compliance 23
Qualitative Evaluation of Net Effect of Management Actions for Compact Compliance 23
Augmentation Pumping 23
N-CORPE and Rock Creek Augmentation Projects 24
Turkey Creek Augmentation Well 25

Water Supplies, Uses and Management Actions

Water Supplies

- Precipitation
- Streamflow
- Groundwater
- Reservoir Storage and Evaporation

Water Use

- Irrigated Acres
- Allocation and Computed Beneficial Consumptive Use (CBCU)
- Surface Water Municipal and Industrial CBCU
- Annual Groundwater Use for Irrigation

Management Actions

- Current Groundwater Allocations
- Curtailment of Groundwater Pumping for Compact Compliance
- Conservation and Irrigation Decertification Programs
- Surface Water Administration for Compact Compliance
- Qualitative Evaluation of Net Effect of Management Actions for Compact Compliance
- Augmentation Pumping – N-CORPE, Rock Creek and Turkey Creek

Qualitative Evaluation of Effects of Management Actions for Compact Compliance on Water Users (p. 23)

- In 2025, surface water was administered for Compact compliance.
  - Occurred outside of irrigation season
- Effects of 2025 actions to help with future compliance:

Action	Effect
Enroll or re-enroll landowners in temporary or permanent irrigation decertification programs	Reduce consumptive use of water
Allocations on groundwater use	Reduce consumptive use of water
Water Conservation Incentive Program (TBNRD voluntary allocation program)	Reduce consumptive use of water
Support NBID to automate canal gates/headgates and diversion project	Increase reliability of surface water supplies, allow more water to be stored in Swanson and Harlan County Lake Reservoirs

Progress toward Goals and Objectives

Progress toward Goals, Objectives, and Action Items 26
Management Activities 26
Progress Snapshot 28
Progress Summaries 34
Assessment of Measurable Hydrologic Objectives (MHOs) 60
MHO A Evaluation 60
MHO B Evaluation 64
MHO C Evaluation 65
MHO D Evaluation 65
MHO E Evaluation 66

Progress Towards Plan Goals and Objective
NRD Updates

- URNRD
- MRNRD
- LRNRD
- TBNRD

Progress Toward Plan Goals and Objectives Update DWEE

- Management Activities
  - WRCF funding for projects
    - Telemetry meters and soil moisture probes
    - Irrigation decertifications
    - NBID Superior Canal Diversion
- Measurable Hydrologic Objectives (MHOs)

5 Measurable Hydrologic Objectives (MHOs)

Measurable Hydrologic Objective (MHO)	Evaluation Frequency
MHO A: Maintain each NRD's net groundwater depletions to streamflow within its portion of Nebraska's allowable groundwater depletions to streamflow	Annually
MHO B: 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	Every 5 years, beginning in 2023
MHO C: Ensure there is always enough groundwater for all groundwater uses within the timeframe of this plan, either by stabilizing groundwater levels or managing declining groundwater levels	Every 5 years, beginning in 2023
MHO D: Continue existing and initiate new actions that reduce the need for special regulations in the Rapid Response Area for Compact compliance	Annually
MHO E: Continue existing and initiate new actions that reduce the need for administration of surface water use for Compact compliance	Annually

MHO A

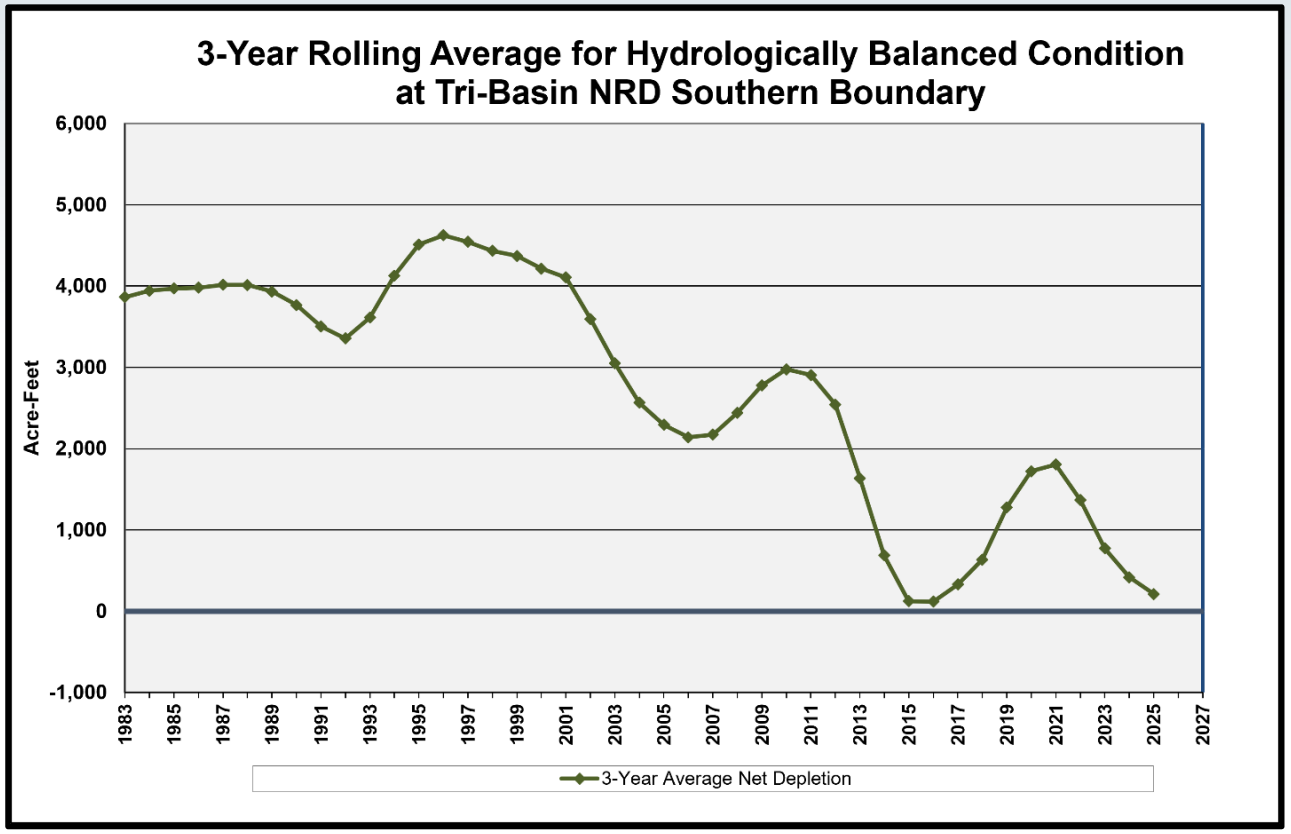
- One NRD's depletions exceeding their allowable depletions does not put Nebraska out of compliance with the Compact and is not a requirement for Compact compliance.
- BWP states if one or more of the MHO is not being achieved, the NRDs and DWEE will determine what actions to take to achieve the MHO in the future.
- DWEE, LRNRD, and other basin NRDs have begun and will continue to discuss future actions.

Key to Possible Test Results	🟢 MHO is being achieved. NRD's actual depletions were within its allowable depletions. No further discussion is needed. 🚫 MHO is not being achieved. NRD's actual depletions exceeded its allowable depletions. Discussion of next steps is required.		
NRD	**Upper Republican**	**Middle Republican**	**Lower Republican**
NRD's Results for 2025	🟢	🟢	🚫

Difference between allowable depletions and actual groundwater net depletions (acre-feet)			
Year	**Lower Republican NRD**	**Middle Republican NRD**	**Upper Republican NRD**
2021	2,229	12,180	12,577
2022	-6,947	2,063	-7,059
2023	-9,364	-2,802	-5,702
2024	-8,489	-2,687	-4,807
2025	8,855	6,292	8,824
5-year average (2021–2025)	**-2,743**	**3,009**	**767**
5-year average positive?	**No**	**Yes**	**Yes**

Difference between allowable depletions and actual groundwater net depletions (acre-feet)			
Year	**Lower Republican NRD**	**Middle Republican NRD**	**Upper Republican NRD**
2024	-7,688	-3,043	-5,203
2025	7,918	4,276	6,064
2-year average (2024 & 2025)	**115**	**616**	**430**
2-year average positive?	**Yes**	**Yes**	**Yes**

MHO A, TBNRD



Key to Possible Test Results	In compliance with IMP. On a three-year rolling average basis, depletions from groundwater pumping did not exceed accretions from the mound. Also, sufficient management actions were taken in 2025 to offset net depletions from previous year's test, if any. No further discussion is needed. Caution. On a three-year rolling average basis, depletions from groundwater pumping exceeded accretions from the mound. Under the terms of the IMP, management actions are required to maintain a hydrologically balanced condition. Discussion of next steps is required. Insufficient management actions were taken in 2025 to offset net depletions from previous year's assessment. Discussion of next steps is required.
Tri-Basin NRD's Results for 2025	

MHO D

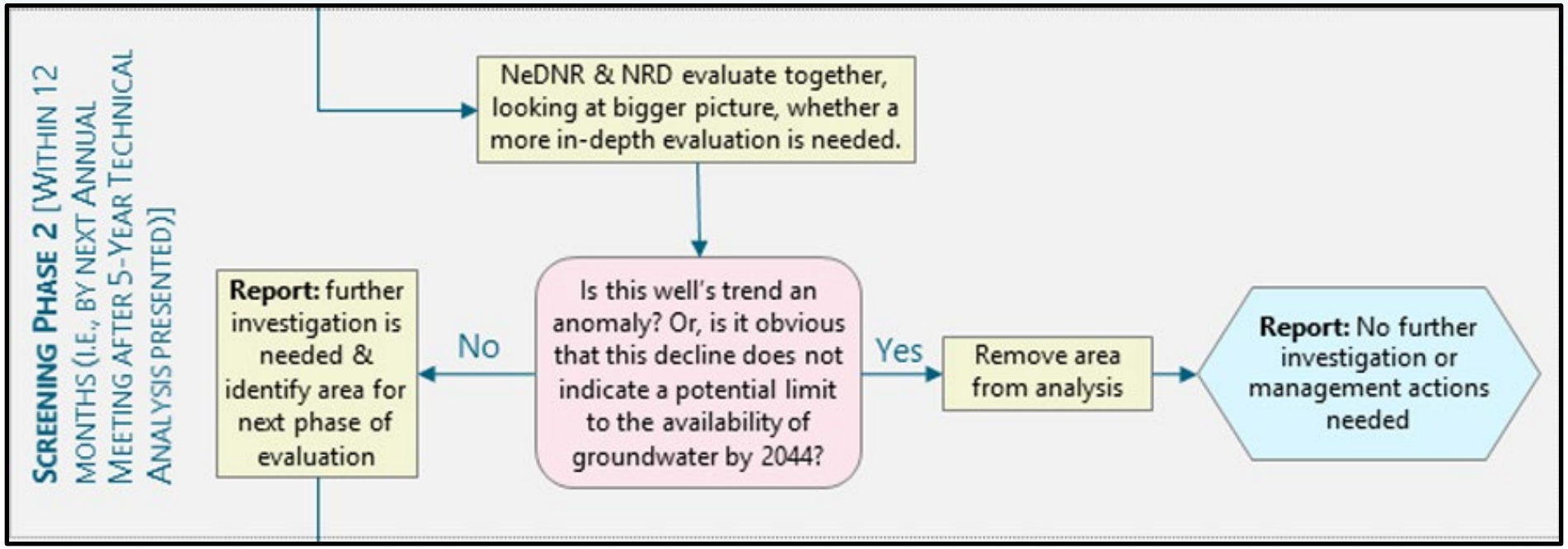
Key to Possible Test Results	MHO is being achieved. NRD did not curtail groundwater pumping within the Rapid Response Area to ensure Compact compliance. No further discussion needed. MHO is not being achieved. NRD curtailed groundwater pumping within the Rapid Response Area to ensure Compact Compliance. Discussion of next steps is required.		
NRD	**Upper Republican**	**Middle Republican**	**Lower Republican**
NRD's Results for 2025			

MHO E

Key to Possible Test Results	MHO is being achieved. DWEE did not administer surface water to ensure Compact compliance, except as required under the FSS. No further discussion needed. MHO is not being achieved. DWEE administered surface water to ensure Compact Compliance. Discussion of next steps is required.
Results for 2025	

MHO C, Phase II – Next Steps

- While reviewing the provided dataset, each NRD will determine if:
  - Any of the well observations should be removed from the analysis because a well's trend is an anomaly
  - It is obvious that the decline does not indicate a potential limit to the availability of groundwater by 2044.



MHO C, Phase II – Next Steps (cont'd)

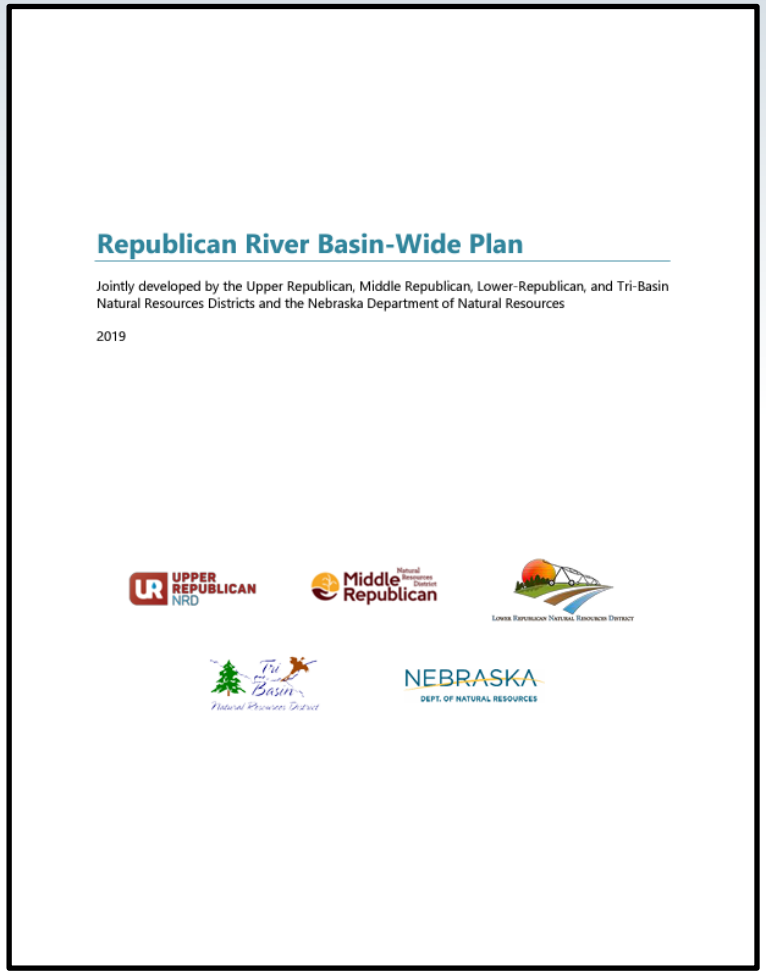
- Republican NRDs and DWEE need to decide on:
  - Information NRDs will provide to remove well observations from analysis
  - Confirm groundwater declines do not indicate a potential limit to the availability of groundwater by 2044 (e.g., list of wells, reasoning for NRD decisions, report, etc.)
  - Area(s) to move to MHO-C screening Phase III
  - Deadline to complete MHO Screening Phase II.

Feasibility & Potential Impacts of Planned Projects

- Platte Republican Diversion Application – LRNRD & TBNRD
- NBID Superior Canal Project – NBID
- NRCS Watershed Grants & Flag Creek Project – LRNRD

Drought Plan Update

Basin-Wide Plan Action Item 2.8.1



Republican River Basin-Wide Plan

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

2019

Action Item 2.8.1 Organize and participate in a basin-wide drought planning exercise

NeDNR and the NRDs will organize and participate in a drought planning exercise for the Basin. A drought planning exercise is a workshop or other activity that brings together parties with expertise in various aspects of droughts to plan and prepare for managing drought. Some areas of focus for this exercise will be:

- Increasing understanding of the needs for and logistics of storing water for use during a drought,
- Evaluating existing and potential new management actions to determine the long-term availability trends that provide carry-over storage to meet crop-water needs during drought, and
- Developing metrics that could be used to evaluate whether conservation of water for future use during a drought is successful.

For the purposes of this action item, "storage" includes both surface water storage and aquifer storage. This exercise will support the evaluation of whether Plan revisions related to conserving water for a drought are needed (Action Item 2.8.2).

Drought Contingency Plan

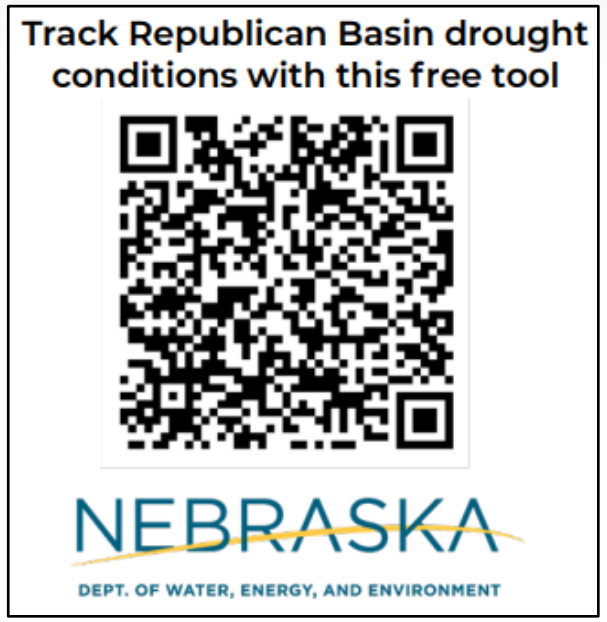
- 2022 Drought Exercise identified the need for Drought Contingency Plan in the Basin
- Structure based on previous basin drought plans – Lower and Upper Platte
- NRDs provided input and feedback during drafting
- Current Components:
  - Written Plan
  - Drought Dashboard
  - Basin StoryMaps

Drought Contingency Plan - Written Plan

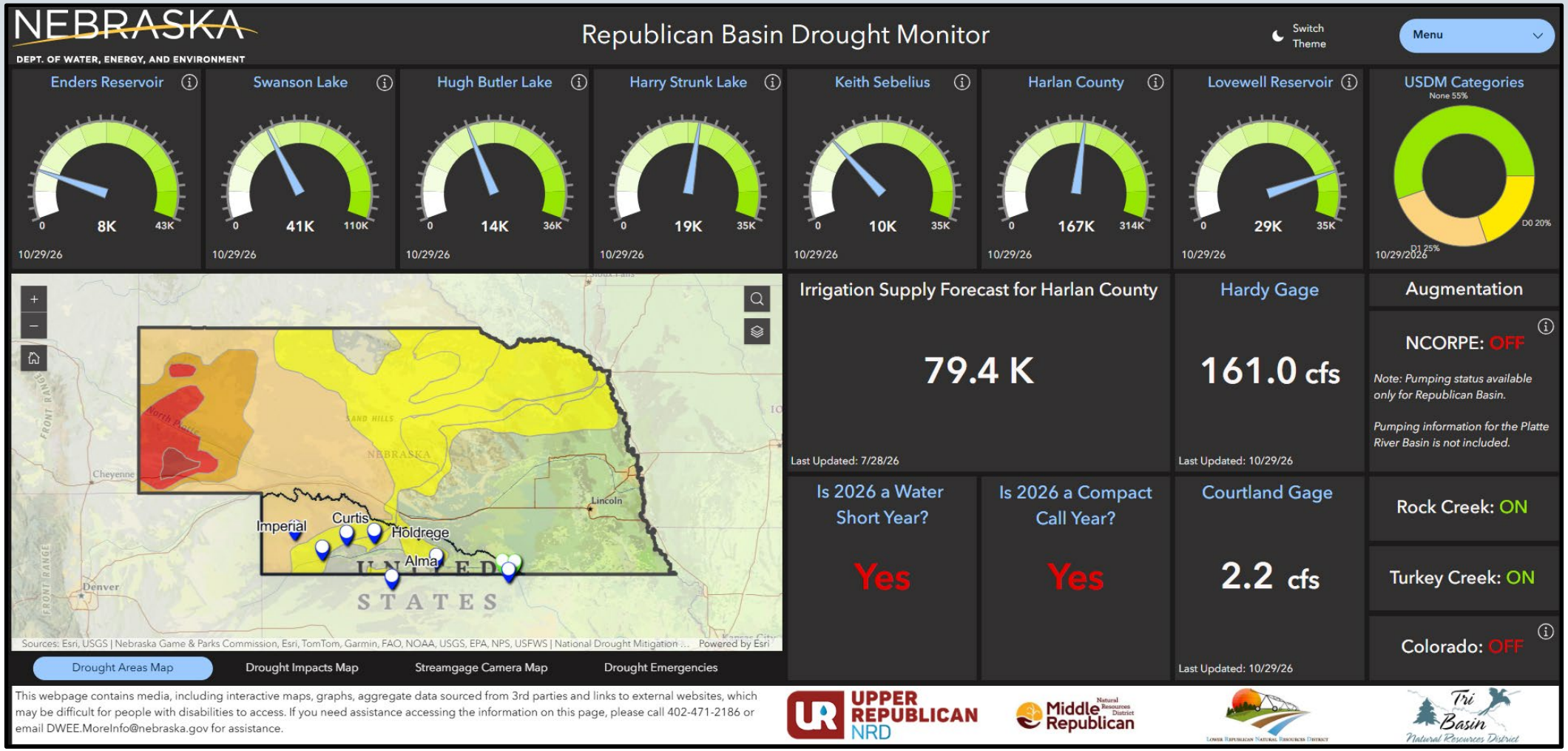
- Written Plan Draft
  - Contents:
    - Description of Basin
    - Drought Vulnerability Assessment
    - Drought Monitoring Components
    - Drought Mitigation and Response Actions
    - Drought Communications Plan
  - Plan is drafted and is currently being reviewed
  - Stakeholders will review before adoption

Drought Contingency Plan - Dashboard

- Drought Monitor Dashboard
  - Reservoir Contents
  - Drought Monitor Map
  - Compact Call Year and Water-Short Year Indicators
  - Augmentation Indicators
  - Forecasted Supply for Harlan County Lake
  - Drought Impact Reporting Mechanism
  - Streamgage Cameras
- Mobile Version



Drought Monitor Dashboard



Drought Contingency Plan – StoryMaps

- Basin StoryMap Drafts
  - ESRI interactive map product
  - Two being drafted:
    - RRCA Accounting
    - History of Basin (Floods, Droughts, Water Management)
  - Includes visual and interactive maps, written narrative
  - Intended for public audience
  - Project is on hold until IT resources become more available

Drought Contingency Plan – Next Steps

1. Internal Review
   a. Written plan draft
2. Stakeholder Review
3. Finalization and Publication

Existing and Potential New Water Conservation Programs

Republican River NRD Irrigated Permanent Decertifications

NRD	Groundwater Acres	Surface Water Acres	Comingled Acres
Upper Republican NRD	3,378	0	70.9
Middle Republican NRD	524	124.5	60

- Total Decertified (2019 – 2025)

NRD/WRCF = Permanent irrigation buyout program jointly funded by the NRD and Water Resources Cash Fund (DWEE)

Republican River NRD acres that are purchased or leased and can no longer be irrigated, 2025 *

NRD	CREP * Acres	NRCS EQIP Acres	WCIP Acres (TBNRD Program)
Upper Republican NRD	8,248	N/A	N/A
Middle Republican NRD	14,087	N/A	N/A
Lower Republican NRD	6,565	2,583	N/A
Tri-Basin NRD	1,626	66.4	875.25

CREP * = Cooperative Reserve Enhancement Program (as of 9/30/2025)

NRD/WRCF = Permanent irrigation buyout program jointly funded by the NRD and Water Resources Cash Fund (DWEE)

Irrigation District Updates

- NBID
- FCID
- FVID
- Pioneer

Discussion:

Future opportunities to encourage & support water users to share information about management practices.

Conflicts Resulting from Plan Implementation

- Appendix E: Procedures for Addressing Conflicts Resulting from Implementation of the Republican River Basin-Wide Plan

- No conflicts submitted for consideration.

Public Comment

NEBRASKA

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DEPT. OF WATER, ENERGY, AND ENVIRONMENT

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