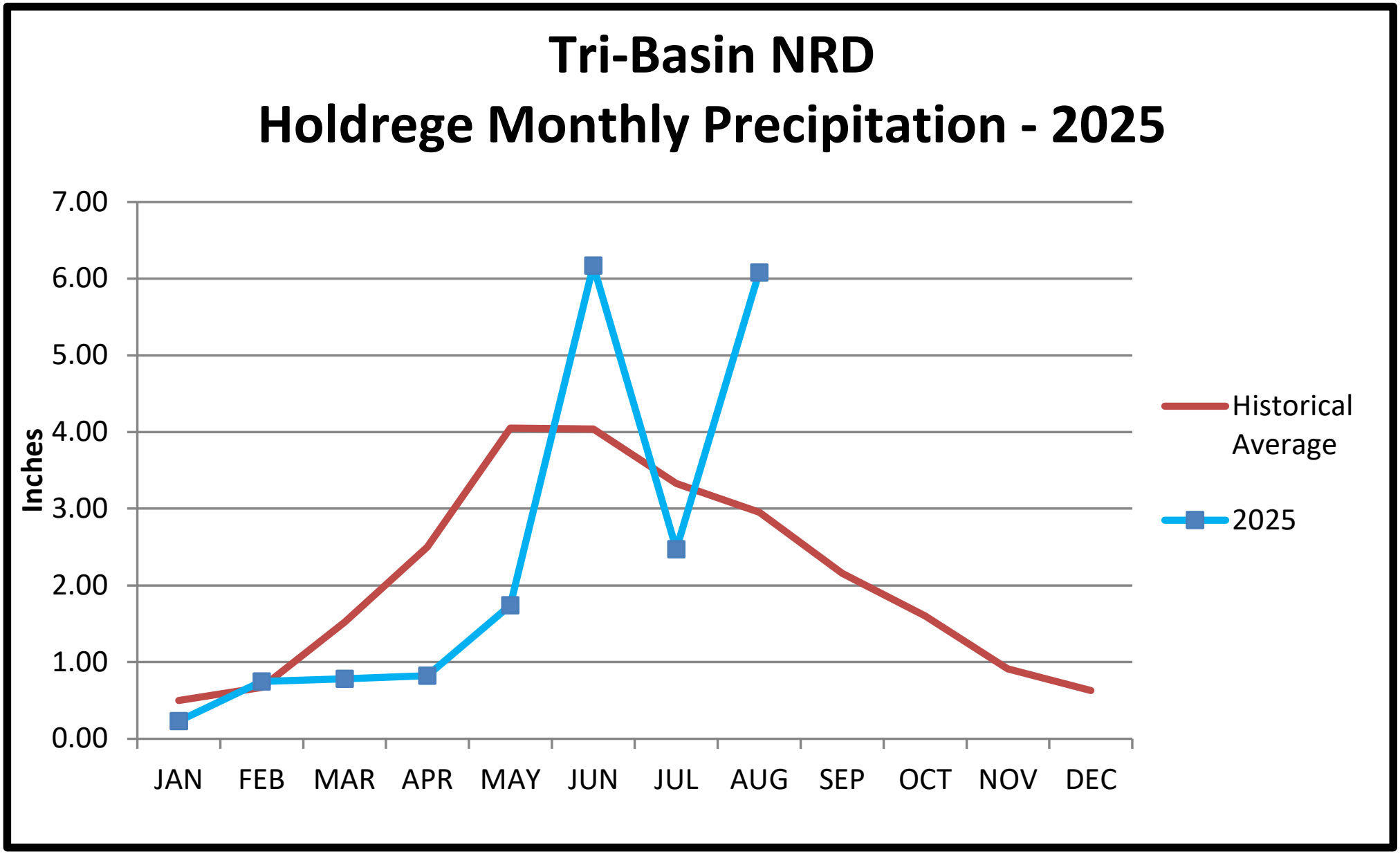
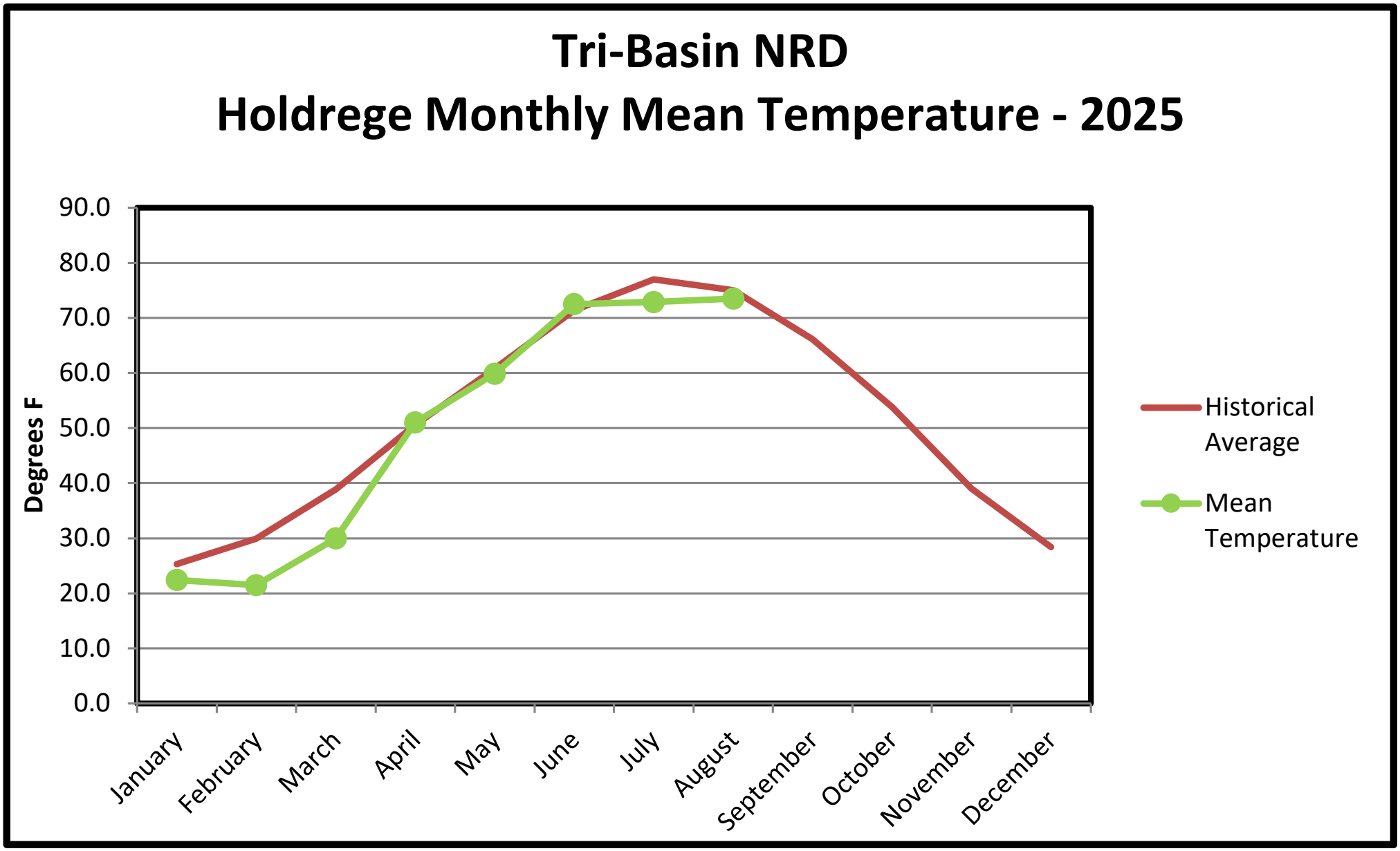

Tri-Basin NRD
Holdrege Monthly Precipitation - 2025
Inches
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Historical Average
2025

Tri-Basin NRD
Holdrege Monthly Mean Temperature - 2025



Tri-Basin NRD
1723 Burlington
Holdrege, NE 68949

Phone: (308) 995-6688
Fax: (308) 995-6992
Email: tribasin@tribasinnrd.org

Tri Basin
Natural Resources District

August 2025 - Holdrege

Temperature: (°F)

* High 95° (Recorded August 17 & 18)
* Low: 55° (Recorded August 26)

* Mean: 73.5° (Normal for August 75.5")
  Mean High: 83.4° (Normal: 89.°)
  Mean Low: 63.6° (Normal: 62°)

NOTES:

Precipitation for August 2025: 6.08"
(Normal for August: 2.78")
Precipitation for the year through August: 20.61"
(Normal for the year through August: 18.85")

NOTES: Rain noted 9 days
Thunder noted 2 days
Fog noted 4 days
Damaging Winds noted 2 days

August 2024

Temperature:

High: 98°
Low: 47°
Mean: 72.6°

Precipitation:

For the month: 3.31"
For the year: 22.79"

Aug | 2025

(03-09)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

STATE	COUNTY	RIVER
NE	Phelps	

TIME (local) OF OBSERVATION RIVER	TEMPERATURE	PRECIPITATION	STANDARD TIME IN USE
	08:00	08:00	

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

Draw a straight line (——) through hours precipitation was observed, and a wavy line (~~~~) through hours precipitation probably occurred unobserved. WEATHER (Observation Day): Mark 'X' for all types occurring each day.

DATE	TEMPERATURE 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION 24 HR AMOUNTS Rain, melted snow, etc. (In and hundredths)	Snow, ice pellets, hail (ins. and tenths)	AT OB Snow, ice pellets, hail, ice on ground (in)	Hours (A.M. 1–11, NOON, P.M. 1–11)	Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	78	63	63	0.00	0.0	0												
2	72	59	60	0.16	0.0	0												
3	79	59	62	0.00	0.0	0												
4	81	61	63	0.00	0.0	0												
5	83	63	66	0.00	0.0	0												
6	86	65	69	0.00	0.0	0												
7	89	67	68	0.00	0.0	0		X										
8	89	68	73	0.00	0.0	0												
9	94	65	69	0.20	0.0	0												
10	85	65	65	0.10	0.0	0							X					
11	83	64	65	0.02	0.0	0	P.M. 10 ~ 11 ~						X					
12	76	60	61	1.60	0.0	0	A.M. ~1 ~2 ~3 ~4 ~5 ~6 ~7 8 9 10 11; P.M. 1 2 3 4 5 6 7 8 9 10 11	X										
13	85	60	68	0.00	0.0	0												
14	87	68	70	0.00	0.0	0												
15	94	70	74	0.00	0.0	0												
16	94	71	71	0.00	0.0	0												
17	95	71	72	0.00	0.0	0												
18	95	70	71	0.00	0.0	0												
19	91	68	70	0.00	0.0	0		X										
20	91	66	69	0.00	0.0	0												
21	88	68	70	0.00	0.0	0												
22	91	66	69	0.00	0.0	0	A.M. 1 2 3 4 5 6 7 8 9 10 11; P.M. 1 2 3 4 5 6 7 8 9 10 11											
23	89	63	63	0.00	0.0	0												
24	78	60	60	0.00	0.0	0	A.M. 11 —; P.M. 10 —											
25	70	56	57	1.14	0.0	0	~				X							
26	71	55	59	0.00	0.0	0		X										
27	75	56	57	0.00	0.0	0												
28	70	57	62	0.03	0.0	0												
29	69	62	64	0.00	0.0	0												
30	78	63	65	2.58	0.0	0					X							
31	78	62	63	0.90	0.0	0												
	83.4	63.6	SUM	6.73			CHECK BAR (for wire weight) NORMAL CHECK BAR	Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

Handwritten margin notes: High 95°; mean High 83.4; mean; mean Low 63.6; Low 55°

CONDITION OF RIVER AT GAGE

READING	DATE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
GID Hastings

STATION INDEX NO.
25-3910-08

Jul 2025

(03-09)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

	COUNTY Kearney		RIVER
cal) OF OBSERVATION RIVER	TEMPERATURE 08:30	PRECIPITATION 08:30	STANDARD TIME IN USE
F RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

TEMPERATURE		PRECIPITATION				WEATHER (Observation Day)							RIVER STAGE			
S ENDING AT ERVATION		24 HR AMOUNTS		AT OB	Draw a straight line (——) through hours precipitation was observed, and a wavy line (~~~) through hours precipitation probably occurred unobserved	Mark 'X' for all types occurring each day										
MIN	AT OBSN	Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins. and tenths)	Snow, ice pellets, hail ice on ground (in)	A.M. 1 2 3 4 5 6 7 8 9 10 11 NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
56	71	0.00	0.0	0												
63	65	0.00	0.0	0												
65	M	0.00	0.0	0												
67	M	0.00	0.0	0												
67	71	0.32	0.0	0	~ ~ ~											
66	M	0.00	0.0	0												
63	72	0.00	0.0	0												
59	68	0.00	0.0	0												
68	M	0.00	0.0	0												
68	75	0.00	0.0	0												
64	66	1.35	0.0	0					X							
60	61	0.33	0.0	0	~ ~											
60	M	0.00	0.0	0												
64	71	0.00	0.0	0												
67	69	0.00	0.0	0	~ ~											
62	64	0.68	0.0	0	~											
58	64	0.00	0.0	0												
58	71	0.00	0.0	0												
67	71	0.00	0.0	0												
65	72	0.10	0.0	0												
72	74	0.00	0.0	0		X										
64	M	0.00	0.0	0												
63	73	0.00	0.0	0												
62	65	0.00	0.0	0												
64	69	0.00	0.0	0												
64	71	0.00	0.0	0												
69	70	0.00	0.0	0		X										
70	78	0.00	0.0	0												
67	78	0.00	0.0	0												
66	66	0.80	0.0	0												currently raining
64	66	0.08	0.0	0												
64.3	SUM	3.66		X	CHECK BAR (for wire weight) NORMAL CHECK BAR	Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

N OF RIVER AT GAGE

READING	DATE

OBSERVER

SUPERVISING OFFICE
GID Hastings

STATION INDEX NO.
25-5565-08

ucted by rough ice
n, but open at gage
surface smooth ice
rge above gage

E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

	COUNTY Gosper		RIVER
:al) OF OBSERVATION RIVER	TEMPERATURE 08:00	PRECIPITATION 08:00	STANDARD TIME IN USE
RIVER GAGE	ELEVATION OF RIVER GAGE ZERO	FLOOD STAGE	NORMAL POOL STAGE

EMPERATURE		PRECIPITATION				WEATHER (Observation Day)							RIVER STAGE			
S ENDING AT RVATION		24 HR AMOUNTS		AT OB	Draw a straight line (——) through hours precipitation was observed, and a wavy line (~~~~) through hours precipitation probably occurred unobserved	Mark 'X' for all types occurring each day										
MIN	AT OBSN	Rain, melted snow, etc. (In and hundredths)	Snow, ice pellets, hail (Ins.and tenths)	Snow, ice pellets, hail Ice on ground (In)	A.M. NOON P.M. 1 2 3 4 5 6 7 8 9 10 11 | 1 2 3 4 5 6 7 8 9 10 11	Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurence If different from above	Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
		0.00	0.0	0												
		0.00	0.0	0												
		0.00	0.0	0												
		0.00	0.0	0	— — — — — — — — — —											
		0.65	0.0	0	~ ~ ~ ~				X							
		0.00	0.0	0	— — ~											
		1.39	0.0	0					X							
		T	0.0	0	~				X							FAR OFF THUNDER & LIGHTNING IN THE SOUTHWEST ABO
		0.00	0.0	0												
		0.00	0.0	0												
		0.00	0.0	0												CLOUD COVER, CALM.
		0.64	0.0	0	1 2 ~ ~ ~ ~ 7 8 9 10 11 | 1 2 3 4 5 6 7 8 9 10 11				X							
		0.00	0.0	0												
		0.00	0.0	0												
		0.00	0.0	0	— —											
		0.20	0.0	0					X							
		0.00	0.0	0												A COOL, MOSTLY CLOUD COVERED PERIOD.
		0.00	0.0	0												VERY HIGH HUMIDITY AT 8:00 A.M.
		0.00	0.0	0	— — —											
		0.65	0.0	0					X							WIND GUESSTIMATE OF 40 MPH.
		0.00	0.0	0		X										CLOUD COVER @ 8 A.M. HIGH HUMIDITY. TEPM REACHE
		T	0.0	0	1 2 3 4 5 6 7 8 9 10 11 | 1 2 3 4 5 6 7 8 9 10 11				X							
		0.00	0.0	0	— — — — — —				X							NOT PRECIPITATION BUT LOTS OF THUNDER & LIGHTNIN
		0.28	0.0	0					X							
		0.00	0.0	0		X										
		0.00	0.0	0												
		0.00	0.0	0												
		0.00	0.0	0												73 degrees @ 8 A.M. High od 98 degrees yesterday
		0.00	0.0	0	— — — — —											
		0.73	0.0	0	~ ~ ~ ~ ~ ~ — — — — — — — —											
		0.03	0.0	0												The rain reported today fell softly from 8 A.M u
	SUM	4.57			CHECK BAR (for wire weight) NORMAL CHECK BAR	Fog	Ice pel	Glaze	Thund	Hall	Dam winds					
OF RIVER AT GAGE					READING / DATE											

cted by rough ice
, but open at gage
surface smooth ice
ge above gage

E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER
Closed by Charlene Nott (ELWN1) on 01 Aug 2025 08:51AM

SUPERVISING OFFICE
GID Hastings

STATION INDEX NO.
25-2690-08

Third Quarter 2025 Grand Island Stream Gauge Data

	July Act	July Tar	Well Run	Aug Act	Aug Tar	Well Run	Sept Act	Sept Tar	Well Run
1	2860	800		551	800		212	800	
2	1970	800		516	800		533	800	
3	1360	800		450	800		711	800	
4	M	800		1010	800		829	800	
5	M	800		771	800		829	800	
6	M	800		660	800		867	800	
7	M	800		587	800		378	800	
8	M	800		435	800		606	800	
9	M	800		390	800		625	800	
10	M	800		362	800			800	
11	M	800		362	800			800	
12	M	800		390	800			800	
13	M	800		405	800			800	
14	M	800		376	800			800	
15	M	800		310	800			800	
16	678	800		298	800			600	
17	1200	800		264	800			600	
18	1070	800		362	800			600	
19	989	800		286	800			600	
20	927	800		232	800			600	
21	733	800		221	800			600	
22	600	800		175	800			600	
23	606	800		M	800			600	
24	714	800		M	800			600	
25	696	800		M	800			600	
26	733	800		M	800			600	
27	625	800		351	800			600	
28	482	800		35.1	800			600	
29	405	800		25.6	800			600	
30	420	800		48.7	800			600	
31	569	800		115	800				

Third Quarter 2025 Overton Stream Gauge Data

	July Act	July Tar	Well Run	Aug Act	Aug Tar	Well Run	Sept Act	Sept Tar	Well Run
1	1710	800		687	800		1870	800	
2	1640	800		1670	800		1780	800	
3	892	800		1430	800		1790	800	
4	M	800		1260	800		1790	800	
5	M	800		609	800		359	800	
6	M	800		49.5	800		1720	800	
7	M	800		128	800		751	800	
8	M	800		132	800		315	800	
9	M	800		118	800		1870	800	
10	M	800		123	800			800	
11	M	800		194	800			800	
12	M	800		167	800			800	
13	M	800		709	800			800	
14	M	800		693	800			800	
15	M	800		1400	800			800	
16	929	800		148	800			600	
17	904	800		110	800			600	
18	904	800		91.3	800			600	
19	879	800		105	800			600	
20	892	800		83.1	800			600	
21	929	800		M	800			600	
22	965	800		M	800			600	
23	769	800		M	800			600	
24	703	800		M	800			600	
25	257	800		M	800			600	
26	474	800		M	800			600	
27	326	800		128	800			600	
28	831	800		248	800			600	
29	191	800		157	800			600	
30	609	800		1360	800			600	
31	867	800		1910	800				

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

NRCS Updates

For NRD General Managers

NRCS Program Updates

EQIP, RCPP and CSP funds are fully obligated for the year.

In FY25, Nebraska NRCS received a total EQIP allocation of $36,056,287 and a total CSP allocation of $31,787,000.

In FY25, 30 new RCPP producer contracts were obligated, enrolling 4,535 acres into conservation practices and providing $1,295,416.00 in financial assistance.

RCPP 1966 (Resilient Futures for Nebraska Soils) had 8 contracts obligated on 1,805 acres, providing $494,092.00 in financial assistance.

RCPP 2271 (Ogallala Aquifer & Platte River Recovery) had 10 contracts obligated on 444 acres, providing $496,956.00 in financial assistance.

RCPP 2135 (Cropland Cover for Soil Health and Wildlife) had 12 contracts obligated on 2,286 acres, providing $304,368.00 in financial assistance.

FY25 is the final year of new producer contracts for RCPP 2135. Over the 5-year project, the full financial assistance budget of $557,507.00 was obligated into 35 contracts on 7,649 acres (surpassing the project goal of 7,000 acres). This has been a very successful project, thanks to a strong partnership with the Nebraska Game and Parks Commission and the dedication of our field offices.

Field Offices continue to manage and make payments on these new and prior year contracts, as well as continuing to work on new CRP and CRP Grasslands contracts.

State Technical Advisory Committee Meeting

The upcoming meeting Thursday, Sept. 4 at 1p.m., will be hosted at the NRCS State Office: 1121 Lincoln Mall, Room 352a (Tundra Room).

Participants will be able to join virtually via MS Teams as well.

The next State Technical Advisory Committee Meeting will be held Thursday, December 4, at the same time / location.

If you need the meeting agenda and information about how to remotely access the Teams meeting or have general questions, please contact Amy Miller at amy.miller2@usda.gov or 402.437.4010.

Watershed Protection and Flood Prevention Operations (WFPO) Updates

The Chief of NRCS authorized four NE watershed plans for financial assistance in FY25:

- Maple Creek Watershed Plan (Lower Elkhorn NRD) authorized in April
- Indian Creek Watershed Plan (Lower Big Blue NRD) authorized in June
- Mira Creek Watershed Plan (Lower Loup NRD) authorized in June
- Little Salt Creek Watershed Plan (Lower Platte South NRD) authorized in July

The NE NRCS State Office is in the process of requesting funding for the design phase for these projects. Program funding is not currently available, and future WFPO funding is dependent on the federal budget. As WFPO funds are made available, the Watershed Programs Branch is prioritizing projects ready for construction first, then design fund requests, followed by requests for new watershed plans.

We are on track to complete another 10 watershed and dam rehabilitation plans by the end of December. Thank you very much to our sponsors and their consultants for their hard work and patience.

Easement Updates

NRCS received approximately 45 applications for conservation easements under ACEP-WRE, ACEP-WREP, ACEP-ALE, and ACEP-IRA in FY25. Seven of those applications were eligible for the program and will be obligated.

Program	NRD	County	Acres
ACEP-WRE	Lower Loup	Garfield	1,683.46
ACEP-WRE	Lower Elkhorn	Dodge	4.0
ACEP-WRE	Little Blue	Fillmore	83.00
ACEP-WRE-WREP	Central Platte	Hall	32.25
ACEP-WRE-WREP	Little Blue	Fillmore	40.0
ACEP-WRE-WREP	Upper Big Blue	Hamilton	30.0
ACEP-ALE-GSS	Upper Niobrara-White	Dawes	1,461.26

Maximizing Watershed Structure Management and Outreach via DamWatch

Originating in 2012, the USDA - Natural Resources Conservation Service (NRCS) partnered with USEngineering Solutions Corporation to launch DamWatch—a secure, web-based monitoring and decision-support platform which has become an essential asset for watershed dam owners, NRCS staff, emergency managers, and state dam safety officials. DamWatch integrates real-time meteorological and hydrological data from trusted sources such as the National Weather Service (NWS), the U.S. Geological Survey (USGS), and the NRCS Snow Telemetry (SNOTEL) network.

By continuously comparing incoming weather data against site-specific rainfall design thresholds, DamWatch automatically alerts users when forecasted or actual conditions are likely to exceed these thresholds—potentially triggering auxiliary spillway flows. This enables a rapid and targeted response to those areas with the greatest risk of damage.

Currently, approximately 11,845 USDA-assisted dams nationwide are monitored through DamWatch, including 740 dams in Nebraska. Over the years, enhancements to DamWatch have expanded its capabilities, most notably with the addition of a Benefits Model. This new feature calculates the monetary value of the benefits each dam provides—whether for an individual structure, an entire watershed project, or aggregated by county, congressional district, state, NRCS region, or nationally.

The Benefits Model can produce results for:

- Year-to-date performance
- Annual benefits from 2005 to present
- User-defined periods (e.g., a 4-day sequence of rain events)

By monetizing the protective services dams provide such as flood damage reduction, road and bridge protection, and erosion control; DamWatch offers stakeholders a powerful way to quantify and communicate the return on investment these structures deliver to their communities. This data-driven approach strengthens outreach, supports funding justifications, and reinforces the strategic value of watershed infrastructure.

Impact in 2025

To date this year, Nebraska's 740 monitored watershed dams have generated approximately $28 million in documented benefits. These figures demonstrate that DamWatch is not merely a monitoring platform, it is a critical storytelling and advocacy tool for stakeholders, translating infrastructure performance into clear, economic terms that resonate with policymakers and the public.

To access DamWatch and its Benefits Model for your NRD-owned or sponsored dams, please contact the NRCS State Engineer, Allen Gehring, at 402.437.4037 or allen.gehring@usda.gov.

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Nebraska State Office
1121 Lincoln Mall
Room 360
Lincoln, NE 68508

August 27, 2025

Tri-Basin NRD
c/o John Thorburn, Manager
1723 Burlington St.
Holdrege, NE 68949

Dear John Thorburn:

Thank you for providing recommendations from the Tri-Basin Natural Resources District Local Work Group. The input including comments, updates, and recommendations provided by your Local Work Group (LWG) were considered and reviewed by NRCS Program and Technical Specialists as well as members of the State Technical Committee and Sub-Committees.

Specifically related to your LWG recommendations:

- Acknowledge the recommendation to have the program application cutoff date in mid-November.
  Action: The application cutoff date announcement for FY 2026 will be forth coming, with anticipated cutoff dates to be mid-November.

- Acknowledge the top 5 Resource Concerns in your local work group district.
  Action: Ranking pools will be reviewed to make sure they address priority resource concerns.

Local Work Group direction and input are vitally important to the natural resource management in the state of Nebraska. Thank you for your time and input on the important work to conserve and protect Nebraska's natural resources.

Sincerely,

Robert D. Lawson

Digitally signed by ROBERT LAWSON
Date: 2025.08.27 10:42:09 -05'00'

ROBERT D. LAWSON
State Conservationist

cc:
Camilla Kerner, District Conservationist, NRCS – Holdrege Field Office
James Huntwork, ASTC-Central, NRCS – Grand Island Area Office
Conor Ward, Acting ASTC-Programs, NRCS – Lincoln State Office

Dave Eigenberg, General Manager
Upper Big Blue Natural Resources District
319 E 25th St
York, NE 68467

Re: Employee Management Protocol

Dear Dave,

As we discussed, it is important for Natural Resources Districts to create an employee management protocol or agreement with NRCS regarding those NRD employees who are housed with NRCS. Creating a mutually agreeable protocol is important to each NRD, NRCS, and ultimately the employee for a variety of legal and practical reasons.

This protocol can be structured in a number of ways and should address key employee management issues such as:

- Who is responsible for setting work schedules,
- Approving leave time,
- Conducting performance reviews,
- Setting standards of behavior,
- Assigning work duties, and
- Determining the appropriate contact person for office-related concerns.

Each NRD may have unique programs or needs that require additional details, but I've attached a simple template to use as a starting point for your discussions with NRCS.

If you choose to use the attached template, please share it with the appropriate NRCS conservationist for their edits or comments. As noted above, this protocol should be helpful and important to NRCS to avoid or limit any employee-related claims.

Once the NRD and NRCS are in agreement with the protocol, it may be executed and incorporated into your employee handbook and provided to your NRD staff who are housed with NRCS. The protocol should be explicitly reviewed with the employee so they understand their role, duties, rights, and obligations under this unique program to cooperatively work with NRCS. I recommend the employee sign an acknowledgment of the protocol.

Please let me know if you have any questions or would like me to review a modified version of this protocol or related document.

Sincerely,

Don Blankenau

Employee Management Protocol

EMPLOYEE MANAGEMENT PROTOCOL

This Employee Management Protocol ("Protocol") is entered into by and between the Upper Big Blue Natural Resources District ("NRD") and the United States Natural Resources Conservation Service ("NRCS") in reference to their existing memorandum of agreement ("MOU") which allows the NRD to provide one of its employees to NRCS.

While remaining an employee of the NRD, the employee operates out of the NRCS office and performs daily activities as assigned by NRCS, but within the scope of authority granted by the NRD.

To ensure the employee is managed in accordance with all applicable laws and to facilitate effective cooperation, the parties agree to the following:

The NRD shall:

- Be responsible to approve or deny leave and work schedule requests made by the employee.
- Conduct all performance reviews of the employee, with input provided by NRCS.
- Establish dates and times for the employee to be present in NRCS's office. The NRD may not establish such requirements without agreement from NRCS.

The NRCS shall:

- Establish the standards of behavior expected of the employee while present in the NRCS office.
- Direct the day-to-day activities of the employee unless otherwise directed by the NRD.
- Unless otherwise agreed upon by NRCS and NRD, NRCS may prohibit the employee from being present in the office during times when the office is closed for federal holidays or for certain hours of operation.

Additional Guidance:

- The employee may contact their supervisor at the NRD at any time to resolve any issue related to work assignments or office access.

Signatures

Nebraska Public Power District
Always there when you need us

emPOWERING
Nebraska's Tomorrow

PLANNED GENERATION KEY FACTS

For more than five decades, Nebraska Public Power District has provided low-cost, reliable electricity to Nebraskans. Because of our success in keeping rates affordable and ensuring reliability is among the best in the nation, our state has become an attractive place to plant roots – not just for individuals, but for businesses, too.

Right now, there are many companies, particularly those in the agriculture industry, that are interested in calling Nebraska home. This presents great opportunities for rural communities to grow and prosper through enhanced job markets, capital investment, and additional revenue.

We are committed to supporting any coming expansion and have already begun preparing to meet the future energy needs of existing and incoming customers by pursuing cost-effective, responsive solutions that will add new generation capacity to our diverse generation mix.

The planned new generation will complement our existing fleet and strengthen our ability to be the affordable, reliable, resilient provider Nebraskans have come to know and trust. As we look toward the Nebraska of tomorrow, we are excited to partner with every customer, from the smallest of families to the largest of businesses, to make their aspirations a reality.

PROJECT INFORMATION

PROJECT	ESTIMATED MW	LOCATION	ESTIMATED TOTAL COST	TARGET IN SERVICE
Reciprocating Internal Combustion Engines (RICE) and Combustion Turbines (CT)	216 MW (RICE) 478 MW (CT)	Princeton Road Station *North of Sheldon Station*	$1,509 Million	June 2029
Combustion Turbines (CT)	717 MW	Beatrice Power Station	$1,052 Million	2031 / 2032 / 2033
Cooper Nuclear Station (CNS) 20 Year License Extension	835 MW	CNS	$115 Million	January 2034

RISKS, CHALLENGES AND SUPPORTING WORK

- Southwest Power Pool (SPP) generator interconnect process
- Changes in SPP resource adequacy requirements
- Negotiation of vendor contracts
- Supply chain impacts on ordering required equipment
- Changes in load growth forecasts
- Economic changes and financing options
- Environmental permitting
- Nebraska Power Review Board approval
- Contract labor availability and quality
- Fuel supply
- Political administration changes
- Nuclear Regulatory Commission approval for subsequent license extension at Cooper Nuclear Station

PLANNED GENERATION FAQ

Why is NPPD building new generation?

- As we prepare for customers' future energy needs, NPPD closely watches potential load growth. We are anticipating a period of unprecedented load growth in the next five to 10 years, which has prompted our internal subject matter experts to evaluate new generation capacity additions.

Why is so much load growth suddenly on the horizon?

- Utilities across the nation are facing the potential for similar load growth influx right now. When we analyze historical data, large growth such as this tends to occur in waves.
- New and growing businesses are being particularly drawn to Nebraska right now in part because of the affordable, reliable power we are so proud to generate and deliver. Additionally, the organizations highly interested in our state tend to be in sectors directly related to or that complement Nebraska's largest industry – agriculture.

What types of business interest are you seeing?

- Our Economic Development team works hand-in-hand with many businesses discerning where they'd like to plant roots that resonate with Nebraska's overall culture and values. Much of the interest we are seeing right now comes from ag-related operations and data centers.
- The introduction of new businesses to rural Nebraska presents some great opportunities the communities served by NPPD and its wholesale partners. Not only will incoming companies create good-paying jobs, but they will also add significant capital investment to the state that could potentially help with property tax relief.

How does NPPD ensure we can reliably serve our customers today and tomorrow?

- Reliability and resiliency have been pillars of public power for generations. In fact, NPPD consistently ranks among the best in the nation in metrics associated with the two. Adding generation capacity resources that will complement our existing diverse generating fleet reaffirms our commitment to these priorities.
- When load growth necessitates additions to our generation portfolio, the choice of which resources to add is evaluated by assessing results of long-range models like our Integrated Resource Plan (IRP), as well as attributes of the possible choices. Different generation types are best suited to different needs and to maintaining a diverse and competitive generation mix overall.

Can NPPD pick and choose the load served?

- Public power was created with an obligation to serve. This means that as long as we have the capacity to serve, we do so fairly, regardless of the type of business or load. This includes our New Load Process—learn more at nppd.com.

What are the benefits of these new generation resources?

- Combustion turbines reliably serve our load when it's at or near peak levels and provide resilience with quick-start ability.
- RICE units are extremely fast-starting, as well as flexible, very efficient resources for balancing out variable or intermittent resources like wind/solar and for responding to changing resource mix within the Southwest Power Pool (SPP).
- Additionally, pursuing a license extension at Cooper Nuclear Station ensures NPPD's largest source of carbon-free energy will continue to reliably serve our customers for decades to come.
- These planned additions maintain and enhance diversity and complement NPPD's overall fleet – an approach that allows us to best serve our customers.

How did NPPD choose these specific types of generation?

- When adding any generation resources, NPPD carefully compares their cost, risk, environmental attributes, operating flexibility, and accredited capacity.
- As these factors are weighed, our experts strive to account for current and projected needs without sacrificing the reliability, resiliency, affordability, and sustainability our customers expect.

Why not just add renewable energy resources or more nuclear?

- One of our strategic priorities is to mitigate our carbon business risk over the coming decades. Because of this, some might ask, "Why not just bring additional renewables on-line?" While renewables play an important role in a diverse energy mix, the relatively short timelines associated with this potential load growth, the amount of capacity needed, and the still-evolving capabilities of carbon-free technologies necessitated an all-options exploration to optimize opportunities.
- Nuclear resources, such as small modular reactors, offer a great deal of potential for the future. Realistically, however, these are not yet a viable and economical generation option in the timeframe required to serve recent load growth, as they are in initial stages of development, research and licensing.

How might this affect NPPD's carbon business risk mitigation goals?

- Our carbon business risk mitigation goals have not changed, but as the board specified, they must be approached strategically in balance with reliability and affordability. A diverse generation mix in the present sets a strong foundation as we look ahead and work to lower emissions in the future.

How will the addition of new generation affect future rates?

- Affordability is and has always been a high priority to NPPD's leadership, as evidenced by our rates continually ranking among the lowest in the nation.
- That said, due to the sheer number of factors at play, there are no definitive figures on how the addition of new generation will affect rates down the road.
- Our team is hard at work examining and calculating numerous potential outcomes, keeping its focus on the options and choices we can make that will minimize the rate impact to customers. We will continue to be flexible and pivot plans should projected load drastically reduce.

Nebraska Public Power District
Always there when you need us

emPOWERING
Nebraska's Tomorrow

OUR MISSION – Safely generate and deliver reliable, low cost, sustainable energy and related services, while providing outstanding customer service.

OUR VISION – We are a premier energy provider bringing the best of public power to Nebraskans, powering everyday life and a brighter future.

ABOUT THE EVENT

The Advanced Nuclear Conference, brought to you by the Advanced Nuclear Coalition, will provide an opportunity for members of the public, policy makers, and the energy industry to learn more about the advancements in nuclear generation. Industry experts will discuss a variety of topics including small modular nuclear, next generation nuclear, micro nuclear generation, fuel management, economic development, nuclear regulation, the Nebraska Small Modular Reactor Siting Study and community education/advocacy.

WHY ATTEND?

As many utilities strive to reduce or eliminate carbon emissions, nuclear energy is poised to provide the foundation for a clean energy future to meet the needs of a rapidly growing demand for electricity by consumers.

REGISTER

Registration goes live on June 16, 2025.
Register online at:
www.advancednuclearcoalition.org

BOOK YOUR HOTEL ROOM

A block of rooms reserved at The Embassy Suites La Vista at 12520 Westport Parkway, La Vista, Nebraska 68128 . Registration link is live at: www.advancednuclearcoalition.org If you book through the link, parking will be complimentary.

Conference Agenda[1]

Wednesday, October 1

10:00 am - 5:30 pm	Pre-Conference Tour of Cooper Nuclear Station and Nuclear 101 Program*
3:00 pm - 5:00 pm	Pre-Conference Nuclear 101 Program* (No tour)
4:15 pm - 7:00 pm	Registration Open
7:00 pm - 9:00 pm	Opening Networking Reception

Thursday, October 2

7:00 am	Registration Open
8:00 am	Welcome/Overview
8:15 am	Opening Keynote—*Gov. Jim Pillen*
9:00 am	State of the Industry—*Nuclear Energy Institute*
10:00 am	30 Minute Networking Break
10:30 am	Panel: Status of Advanced Nuclear Technologies—*OKLO and Terra Power*
12:00 pm	Working Luncheon—*NRC Commissioner Annie Caputo*
1:15 pm	Panel: Status of Advanced Nuclear Technologies—*General Electric and Westinghouse*
2:45 pm	30 Minute Networking Break
3:15 pm	Panel Discussion—*Communities Hosting Nuclear Facilities*
4:15 pm	Panel Discussion—Nuclear Opportunities-Generation and Beyond—*Nucor Steel/NuScale, NE Ethanol Producers, Kiewit Nuclear Division.*
5:15	Adjourn for the Day
5:30 pm - 6:30pm	Networking Reception

-Over for Friday Schedule-

Friday, October 3

8:00 am	Registration Open
8:15 am	Panel Discussion—Workforce Development/Educational Opportunities—*UNL Nuclear Certificate Program, Day & Zimmerman, and Southeast Community College*
9:00 am	Federal Perspectives on Advanced Nuclear Development—*U.S. Senator Pete Ricketts*
10:00 am	Break
10:15 am	CEO Panel: The Future of Nuclear—*Javier Fernandez-OPPD, Tom Kent-NPPD, and Greg Cullen-Energy Northwest (Washington)*
11:15 pm	Used Fuel/Storage Updates *ORANO--fuel reprocessing, OPPD Fort Calhoun Station Decommissioning and fuel storage, and U.S. Department of Energy*
12:15 pm	Working Lunch with Speaker—*U.S. Office of Strategic Command-Project PELE (Transportable micro reactors)*
1:00 pm	Panel: Smal Modular Reactor Siting Study Update—*NPPD, 1898 representative and moderated by KC Belitz NDED*
2:00 pm	Conference Wrap-up—*announcements and end of conference prize drawing*

(1) Agenda is tentative, subject to change

* There is no additional cost for the Cooper Nuclear Station Tour and Nuclear 101 Sessions, but participants must pre-register for these events.

Advanced Nuclear Coalition

For More Information Email:
Info@advancednuclearcoalition.org

Website:
www.advancednuclearcoalition.org

NEXT GENERATION NUCLEAR

SMR SITING STUDY

nextgennuclearne.com

In 2022, Sen. Bruce Bostelman introduced legislation to have the Nebraska Department of Economic Development grant $1 million for the purpose of conducting a feasibility study to assess:

Siting options for new advanced nuclear reactors throughout Nebraska

and

Existing generation facilities based on key compatibility assets for such advanced nuclear reactors

Electrical generation is key to growing Nebraska's economy. Further, a next generation nuclear plant will provide a tremendous economic impact to any community where it's located. As a result, this siting study was a good investment by the State of Nebraska and is an important first step to make wise decisions about where to host this technology in the future.

K.C. Belitz
Director, Nebraska Department of Economic Development

NEXT GENERATION NUCLEAR

FAQ

This is a condensed verision of the FAQ questions. For the full version, please visit nextgennuclearne.com

ABOUT NEBRASKA'S SMR SITING STUDY

What is the goal of the siting study?
A new technology called advanced small modular reactors (SMRs), also referred to as next generation nuclear, has the potential to revolutionize the energy industry, with the benefits of being more scalable than traditional commercial nuclear reactors. This study will not result in the immediate construction of an SMR, but it will provide an in-depth overview of potential areas in the state where this technology could be suitably sited.

Who is conducting the study?
The Nebraska Legislature authorized the Nebraska Department of Economic Development (DED) to distribute funding for the nuclear siting study. DED awarded the funds to Nebraska Public Power District (NPPD) since the District operates the only nuclear plant in Nebraska. NPPD retained a consulting firm, 1898 & Co. to investigate potential locations for an SMR facility to provide clean energy to the state of Nebraska.

How will the findings from the two-phase siting study be shared?
DED and/or NPPD will share results with candidate communities through press releases and other communications. Updates regarding this project are also hosted on nextgennuclearne.com.

Why are we exploring next generation nuclear now?
Although affordable commercial installations of next generation nuclear are likely years away, completing this upfront work could provide pre-planning (up to and including a site licensed by the NRC) to prepare for the successful future commercial operation of an SMR in Nebraska. Though there are no next generation nuclear facilities currently in commercial operation, there are more than a dozen demonstration projects in progress in North America scheduled to come on-line around the end of the decade.

How long is the two-phase siting study process?
The study will be completed throughout the next two years. After the grant ends in 2026, if an identified potential community is interested in being a location for a possible next generation nuclear facility, the process could be extended.

What are the study's basic requirements?
Preliminary sites were selected that minimized barriers to constructing and operating a potential new facility.

SMR COMMUNITY BENEFITS

How could next generation nuclear energy benefit my community?
Advanced nuclear energy offers various benefits to communities, including energy security, economic growth, high-paying jobs, and a dependable, affordable, and carbon-free energy system.

What are some of the economic development benefits of next generation nuclear?
The development of next generation nuclear energy will create high-paying jobs and provide support to local economies.

GENERAL

What is an SMR?
Advanced small modular reactors are a next generation nuclear solution. SMRs are units that potentially have lower initial capital investment, greater scalability, siting flexibility due to its smaller footprint, passive safety systems, and a variety of operational features (such as load following, heat storage, steam for process heat), resulting in highly flexible operations. SMRs can be beneficial for driving economic growth within a community.

What type of footprint does next generation nuclear have?
In relation to most other forms of clean energy, nuclear has a comparatively small footprint. And SMRs have an even smaller footprint than the large, traditional reactor sites in existence around the world. Many of the benefits of SMRs are inherently linked to the nature of their design – small and modular.

Are SMRs safe?
Safety is in the DNA of every U.S. nuclear energy plant. That's one of the benefits of nuclear energy: U.S. plants are among the safest and most secure industrial facilities in the country. The safety of employees and the communities is top priority. Nuclear power plants maintain the highest standard for operational safety, security, cybersecurity and emergency preparedness. The industry's comprehensive safety procedures and stringent federal regulations keep our plants and neighboring communities safe.

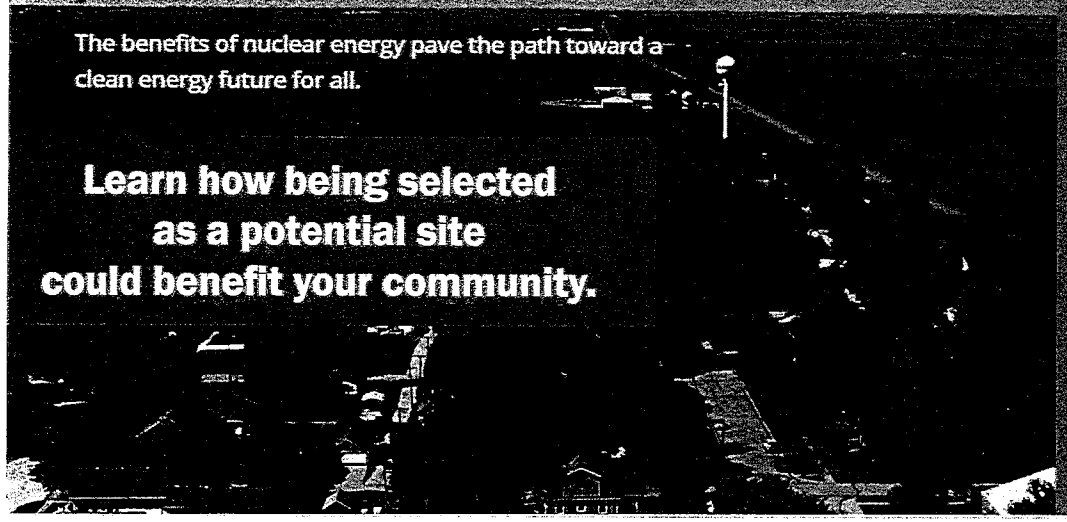
NEXT GENERATION NUCLEAR

INFORMATION

Investing in the Future

The benefits of nuclear energy pave the path toward a clean energy future for all.

Learn how being selected as a potential site could benefit your community.



Benefits of Nuclear Energy

CLEAN

Nuclear facilities produce zero-carbon-emission energy powering small towns, big cities, and everywhere in between.

RELIABLE

24/7, 365 days a year, rain or shine, nuclear powers our homes and businesses.

AFFORDABLE

Nuclear generates new investments, creates high-paying jobs, and provides cost-effective clean energy.

SAFE

Invented, developed, and constructed with American technology, the U.S. can produce nuclear energy independently.

In 2022, the Nebraska Legislature allocated $1 million to the Nebraska Department of Economic Development (DED) to fund the feasibility study. The DED subsequently awarded the funds to Nebraska Public Power District (NPPD), which operates Cooper Nuclear Station near Brownville—the state's only nuclear power generator.

After phase one of the state funded feasibility study, 16 communities were identified as a potential site for a next generation nuclear reactor. Your community is one of the 16 communities identified. Phase two includes community education and involvement, along with a more in-depth technical evaluation. This will narrow the list of communities to two to four locations to be considered as future sites.

Learn more at: nextgennuclearne.com

Water will drop for new ramp at Johnson Lake

Kearney Hub 8/21/2025

Central Nebraska Public Power and Irrigation District will lower the water level at Johnson Lake prior to construction of a replacement boat ramp in Bullhead Point near Medo's Resort.

The water level at Johnson Lake will drop approximately eight feet starting Sept. 2 ahead of the construction work which is scheduled to begin the second week of September.

The contracted boat ramp construction is anticipated to be completed between Sept. 20-27 at time the lake will begin to refill. Lake water levels should return to normal within the first two weeks of October/

While the lake is down, cabin-owners who may wish to perform shoreline maintenance are reminded to contact Central to obtain any necessary permits prior to initiating such projects.

All drawdown plans are subject to change depending on irrigation demand, river flows and rain events.

In addition to the ramp at Johnson Lake, a new boat ramp also is being constructed at Phillips Lake the fall. The current boat ramp will unusable because of low lake levels during the construction and maintenance work that will take place mid-September through mid-October.

Central is working with the Nebraska Game & Parks Commission to complete this project.

Rainwater Basin tour trumpets water, teamwork

Keaney Hub 8/22/2025

Steve Moseley, Rainwater Basin Joint venture

Be the end of a recent daylong bus tour in the Rainwater Basin, the message emerged loud and clear; little on earth is more important – or more in demand- than water.

The tour. At which Nebraska Sens/ Deb Fischer and Pete Ricketts, congressman Don Bacon and Adrian Smith were represented by staff members, reinforced how much more can be accomplished when multiple conservation agencies and private landowners fold their expertise and resources together.

Wetlands, most hiding in plain sight under an unknowing public's nose in Central Nebraska, are crucial in ways obvious and obscure. They recharge the aquifer, improve water quality and create habitat for birds, plants, and animals when they most need them.

Wednesday's Conservation Outcomes Tour, sponsored by the Rainwater Basin Joint Venture headquarters in Grand Island with the support of local natural resource districts, Nebraska Game and Parks, U.S. Fish and Wildlife Service and other Venture partners, visited the Morse Tract Platte Recovery Implementation Program site, made an informative stop of an earlier Tri-Basin Natural Resources District large prescribed fire, saw from ground level how private and public lands were folded together to improve habitat at the Cottonwood Waterfowl Productions Area, inspected the new visitor center at Rowe Sanctuary on the Platte near Gibbon and visited a wetland restoration complex south of Grand Island.

A typical scenario is that over years of time, wetland restoration works across boundaries – some public, some private. For project purposes, that blending create a single, contiguous plot of acres.

For their $50,000 persona; investment, the partners on the wetland restoration complex leveraged nearly $310,000 from a diverse set of agencies and agriculture industry partners to restore a wetland on flood-

prone cropland and upgrade their pivot irrigation systems with Variable Rae Irrigation technology. The project not only provided significant habitat but is also resulted in a return on investment of 48%.

The bus unloaded and its occupants took to the weeds – actually, not weeds at all but lush, robust grass bordered by cornfields – to hear the Happold brothers speak of the outcomes for their crop and livestock business for such an expansive undertaking, to reveal where difficulties arose. Then they answered everyone's questions.

Another tour stop in Gosper County canyon lands south of Lexington within Tri-Basin NRD put the focus on the effectiveness and increased acceptance of prescription burns to eradicate invasive woody vegetation , primarily eastern red cedar trees.

John Thorburn of Tri-Basin led the presentation from a high, flat area above winding canyons where an earlier 1,400-acre prescribed burn converted the choked-with-cedar scene of before into the lush grassland of today. He explained that it required more than 60 people to safely complete the controlled fire.

Local landowner Janice Gengenbach talked about a tract of land nearby they had treated with fire and their enthusiasm for the practice.

It took, she said, 68 people to get the massive job in an actively grazed done, "It was an incredible experience."

Her husband was among the first to use fire to improve ag land. Dennis Gengenbac as proactive in "getting the farmer to see that nothing is forever," she said, and that farming :is not just what you always did."

This met with resistance at first from neighboring landowners, upon viewing the benefits on Gengenbach land across the fence, signed up for burns of their own.

Most pasturelands, she said, are gone, having been broken up" for other uses, which means "those of us who do have pasture have a great deal of responsibility to take care of it."

"Times change, and we have to change with them," she said.

At the Cottonwood Waterfowl Production Area, the presentation was led by Brad Kron of the U.S. Fish and Wildlife Service.

That presentation was made possible only when a tract that contained the remainder of the wetland footprint was purchased. Once the entire wetland was owned by the U.S. Fish and Wildlife Service, restoration could be completed.

When it finally came together, the lush habitat seen on the tour emerged.

One result is that each spring, Krohn said, thousands of migrating wildlife, shorebirds and federally endangered whooping cranes use Cottonwood as they travel north to annual breeding grounds.

Success from teamwork among the multiple partners who shared a common vision is demonstrated in the fact the $1,164630 was leveraged for this one wetland.

Additional stops on the day-long adventure shined the Joint Venture spotlight on other hard science-heavy tactics to help wetlands provide more and better water for humans, livestock and crops, while creating huge tracts of habitat for wild creatures both great and small.

The first contact for and Nebraska ag landowner to learn more about the potential for diverse projects is their local natural resources district offices or county Natural Resources Conservation Service office.

Nebraska appears to have a case against Colorado's use of South Platte water

Todd Von Kampen, North Platte Telegraph 8/8/2025

Where did our water go? Will it matter?

"When the (South) Platte flows past my farm I want it to be as big as the Mississippi, and when it leaves Colorado to enter Nebraska, I want it to be bone-dry." Hans "Potato" Brumbaugh (fictional) 1880, James A Michener, "Centennial"(1974).

One might say Nebraska's belated quest to finish the Perkins County Canal, and now its U.S. Supreme Court lawsuit over South Platte River flows, react to a lingering Colorado attitude behind our latest quote from James A Michener's best-selling historical epic.

Brumbaugh, played by Alex Karras in a 26-hour 1987-79 TV miniseries, stands in for two Boulder Couty vegetable growers who received Colorado's oldest water right for an irrigation ditch off Boulder Creek on Oct. 1, 1859.

His late 1800's ditches are depicted decisive in Colorado's development of its "first -use in time, first in right" water -use doctrine – one it shares with Nebraska.

Wells near the South Platte were much less prevalent then. Wellfields would be unknown for years.

But both in turn have proliferated across the Rockies' eastern slope – especially in the burgeoning surrounding Denver – over nearly 100 years since the 1926 activation of the South Platte River Compact.

The July 16 Nebraska vs. Colorado lawsuit alleges that the Centennial State has fallen short of its warm -weather obligations to supply the 1897 Western Irrigation Canal and is obstructing Nebraska's right to finish the abandoned 1894 Perkins canal to claim another mandate for water in the colder months.

Cornhusker State leaders have their eyes on all those upstream well-thousand of them-that take massive droughts for an underground river Potato Brumbaugh and his real-life counterparts barely knew about.

Key concept: 'Return flows'

It was late August. At the end period of the year, and for miles at a stretch, the riverbed was dry. Not a drop of water.

Then suddenly for 10 or 15 miles it would become a flowing river, after which would go dry again. ...(When the (south) Platte finally reached he exit point, it was carrying exactly the 120 cusecs (Cubic feet per second) which the Supreme Court had directed Colorado to deliver to Nebraska .

-Dr. Lewis Vernor (fictional),November 1973, "Centennial"

"But what even (Brumbaugh) he failed to take into account ...was the water we can't see."- Dr. Harry Welch, (fictional), Oct. 21, 1973, "Centennial"

Though Michner didn't identify the South Platter River Compact by name. both book and miniseries depict the evolution of the "prior appropriation " water policies driving both the compact and Nebraska's' lawsuit.

It also illustrates a pivotal factor in South Platte water management: downstream "return flows" from the aquifer flowing below the river.

Renewed by water percolating down from rain, snowmelt and upstream irrigation, the aquifer spawned seeps, springs and new above-ground streams.

Anthony Schutz, agriculture and water law professor at the University of Nebraska Collage of Law, said the compact's required flows into Nebraska depend on the return-flow phenomenon, described by the 1920s experts such as Colorado state water engineer and compact so-signer Delph Carpenter.

But recorded South Platte flows haven't lived up to the compact 's assumptions – a reality borne out of by partially records since 1902 and

consistent evidence since 1926 of striking low fluctuations at the compact officially gage at Julesburg, Colorado.

As reported in Part 1 of this series, the Western Canal just past the state line has received it promised irrigation- season flow of 120 cubic feet per second on 50.2% of the time.

A dormant 500-cfs minimum of from Oct. 16 to March 31- the one that would feed the Perkins Canal-has been met ~~one~~ 30.75% of the time.

Michener, who spent a year at Colorado researching "Centennial," described the ideal compact scenario in this narrator's quote above,

But Lewis Veror's fight could only have taken place on Aug 25, 1973 – the only day over a month-long period that Julesburg flows me the 120-cfs mandate from April 1 to Oct. 15.

Carpenter "may have ~~has~~ a vision of a continuously flowing stream" that would supply Nebraska's needs, Schutz said.

Had Colorado held it water use steady since 1926, "that maybe there was a better chance (for that). But is didn't do that, and there is no compact language to suggest that it promised to do so.

An insatiable thirst

"We must think of the (South Platte) aquifer as the permanent invisible counterpart of the visible river. Had we left it alone, it would have served us forever, but unfortunately some years ago we began to sink wells into it and now it's in grave danger." - ***Dr. Harry Welch, oct. 21, 1973, "Centennial"***

In addition to Julesburg flow records – a continuing source in our Perkins Canal coverage- the Telegraph dived more deeply into the locations and uses of Colorado's 65,755 South Platte water rights priority dates from 1859 through the end of 1924.

Our analysis cannot measure either the volumes of water used under those rights or the liquid impacts from droughts on river flows. The river's occasional flood surges, by contract, are preserved in Julesburg flow records.

Even so, the patterns in Colorado's water rights since 1926 indicate Nebraska has something to argue about - though it's unclear whether it"s make a difference in the lawsuit's outcome.

When were they granted?

More than three-fourths of Colorado's South Platte water rights since 1859- 50,867 in all – have priority dates after Congress ratified the compact.

That means one-fourth (16,788) are dated to or before 1926. But half (31,480) have priority dates of 1965 or later, and one-fourth (15,415) bear dates after 2000.

It took Colorado 67 years to account for the oldest quarter of current South Platte rights but 39 years for the second quarter, 35 for the third and just 24 for the newest quarter.

Where are they located?

About 94.3% of Colorado's South Platte water rights are in the compact's Upper Division – the 17 counties upstream from the Morgan-Washington county line between Brush and Sterling.

But Nebraska has no power to restrict or shut down those water users under the compact. It does have an active warm-weather water right dated June14, 1897, in the six Lower Division counties – but those account for just 5.7% of all of Colorado's South Platte rights.

Finishing the Perkins canal would trigger a Dec. 17, 1921, Colorado water right to divert water from its 1894 starting point near Ovid.

About 81.6% of the Lower Division's 3,880 water rights would be junior to that canal in fall and winter, compared with 9.7% whose holders are supposed to curtail water use if spring and summer flows to the Western Canal miss the active 120-cfs minimum.

Dennis Schilz, a 25-year Western board member says Colorado has ignored the board's past call for more water when flows run short.

Four Front Range counites bordering Denver- Douglas(11,898 rights) Weld (8,327), Jefferson (6,914) and Adams (4,352) – accounts for 46.5% of basin water rights. The city and County of Denver has just 778, a mere 1.1% of the total.

When are the dated?

New annual rights topped 1,000 for the first time for three straight years from 1954 to 1956, coinciding with a multiyear High Plains drought.

They never fell below 300 a year over the rest of the 1900s. But rights in Denver-area counties took turn surging in the midst of a 466.7%populatin leap from 1940 to 2020 in the eight Upper Division "trunk counties".

Quest to slake Front Range thirst reached their peak after the region's longest drought since the 1930's Dust Bowl period started in 2002.

New annual rights in the basin more than tripled from 551 in 2001 to 1,708 in 2003. After dipping in 1,475 in 2007 before soaring to a record 2,215 in 2008.

Douglass County, which has more than doubled since 2000, accounted to almost 60% of new basin-wide rights with 2008 dates and around three-fourths for both 2003 and 2004.

The suburban county south of Denver also would be the destination of a scheme to pipe South Platte water from near Brush back west to the Parker area.

How are they Used?

A dramatic shift from irrigation ditches to groundwater wellfields testifies to the strain on the South Platte's river below the river.

Ditches were most popular into the 1890s, topping out at 297 rights dated to the final Civil War year of 1865. Eleven years later, Colorado Territory gained statehood in the U.S. centennial year.

Water wells, whether for agriculture or municipal purposes, were hardly unknown: They accounted for 319 South Platte water rights dated to 1888.

But while additional surface-water rights dwindled in early 1900s, rights for the new well didn't gain unstoppable momentum until Depression year of 1932- six years into the South Platt Compact.

They broke their 1888 record with 382 in 1935 and ballooned to a combined 3,039 from 1954 to 1956, including a record of 1,109 in 1955.

Single wells account for nearly 43% of all Upper Division water rights dated through 2024. New rights didn't drop below 100 a year until the millennium year of 2000 – by which time their demands on the South Platte aquifer were dwarfed by multi-wellfields.

Though the basin's oldest wellfield by priority date can be traced to 1934, a mere dozen were in place by 1970.

But they're multiplied twelvefold since 14,232, one-fifth of all basin water rights through 2024. Wellfields accounted for nearly all of the 2000s surge in new rights, totaling 1,083 in 2003, 1,167in 2024 and 2,061 in 2008.

Drying up the river?

As (Paul Garrett inspected the (electrically-driven) model, (Bradly) Finch said, "It shows you the Platte as it is today. But it also shows you what will happen five years from now is we continue to increase the demand for water." ....

(A) Large light bulb representing increased demand by communities of new people was turned on. ...

(B) (Detlev) Schneider said, "But Now let's increase the demand for electricity too... (and) now let's crank in five years of drought... such as we've often had. ...The oscilloscope line vanished: the Platte no longer flowed.

(C) "There you have it." Finch said. If we encourage the population of Colorado to increase, and invite more industry, and continue to deplete the aquifer with agricultural pumps , we shall destroy the state." -Oct 21, 1973, "Centennial"

The South Platte hasn't quite vanished. But the "analog model" demonstration in Michener's book - captured on film in "Centennial"

miniseries' final episode – reflects then-contemporary warnings even in Colorado, that the South Platte could go dry if lengthy droughts collided with unending growth in wells and Front Range populations.

The 21st century opened with the most failures to supply Nebraska's South Platte compact share since the 1930s and mid-1950s; still-unchecked Denver-metro growth: and Colorado's highest demand by far for new water rights since gold and silver rushes lured the first 1850s white settlers.

Neither Colorado water officials nor natural resources experts at three of that state's major universities responded to Telegraph emails seeking comment in time for this series.

David Aoken, an agricultural and water law specialist in the University of Nebraska-Lincoln's agricultural economics department, said in a Thursday webinar that Colorado hasn't truly emerged from the "megadrought" that arrived in the High Plains in 2002.

Despite all the upstream well-drilling, he said, 4,000 South Platte irrigation wells "are basically deep out of commission." Another 1,000 can pump water only two days a week.

"The main source of the replacement water" from precipitation "is no longer available. And it won't be until the rains come back," Aiken said. But it may be permanent" if climate predictions prove accurate.

One indication of Colorado's situation can be seen in The Telegraph's water-rights review/ After a final peak of 57 new water rights dated in 2017. Annual totals pumped in 2023 to last year 114, the lowest since 1931.

Aiken said Denver-area water utilities are seeking to "buy and dry' downstream agricultural water rights – keeping those user's upstream – while pushing to pipe South Platte water west from much closer to Nebraska.

Nebraska's allegations against Colorado "are basically correct," he said in the webinar. But "whether those allegations are compact violations is however, is a legal question... I'm not in a position to answer."

It's evident, however that Colorado "doesn't want to send any more water into Nebraska that it has to," he added. "And so it has not taken any steps to try to protect water rights for Nebraska if Nebraska ever gets around to developing the Perkins County Canal."

Aiken and Schutz said the state's nearly century-long tardiness in the regard could be an obstacle to prevailing in a Supreme Court case that likely will take several years to resolve.

Colorado has until Oct. 15 to respond before justices decide whether to take the case, Aiken said. They typically appoint a special master to find the facts for them in interstate compact disputes.

That was the case in the second of two interstates suites in which Kansas alleged Nebraska wasn't supplying its lawful share of Republican River water.

A 2002 settlement ended the first litigation in 1998, but Kansas sued again in 2007. The high court adopted a special master's findings in Kansas' favor in 2015, after Nebraska set up NCORPE groundwater diversion system in southern Lincoln County to pipe water south from the Platte River basin if Kansas's republican share falls short.

In Nebraska's South Platte Compact challenge, Schutz said, "we are putting Colorado's feet to the fire in the same sense that Kansas put our feet."

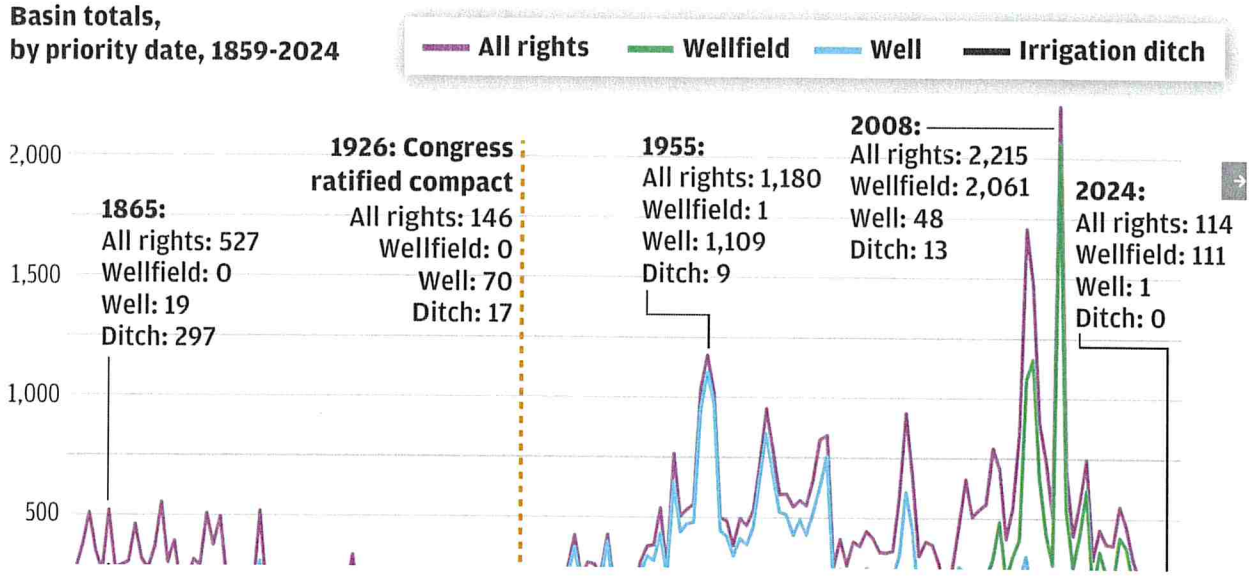
But he said justices also might decline to act given Nebraska's long delay in moving to finish the Perkins canal .

U.S. water law, "broadly speaking, doesn't entertain the idea of having a paper (water) right that isn't perfected within a reasonable time after it's granted, "he said.

it was based on a set of facts that existed over 100 years ago, right? So how disruptive will that be to the expectations and investments that everybody's made in this system over the course of the last 100 years.

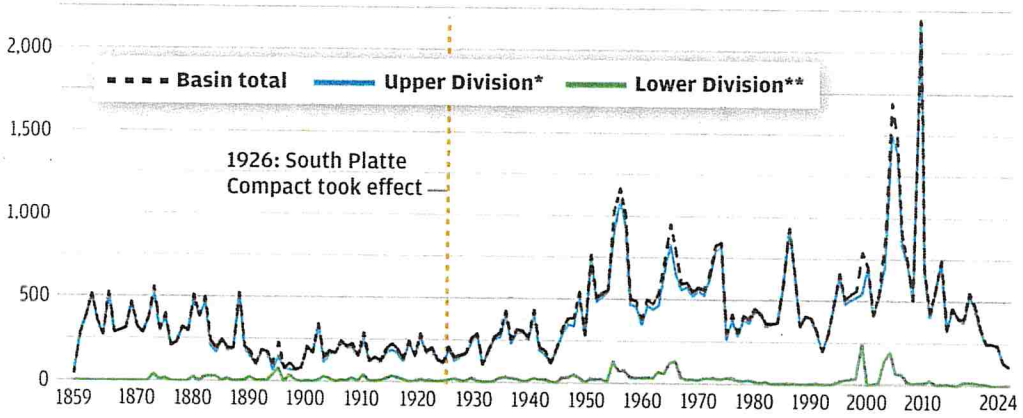
Colorado South Platte water uses

Basin totals,
by priority date, 1859-2024



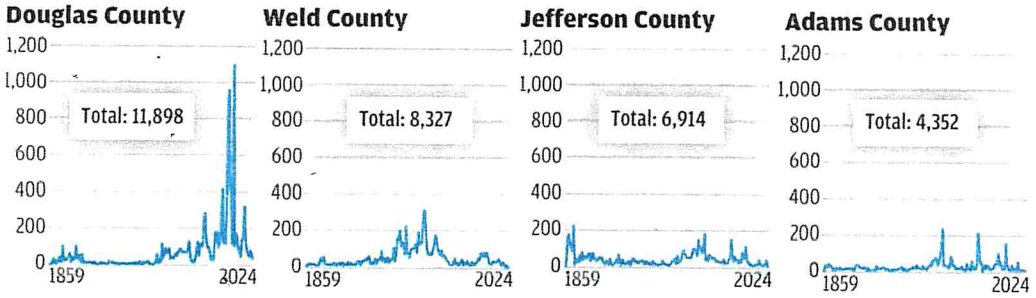
Colorado water rights by county

By dated right, 1859-2024



***Upper Division – main river trunk:** Adams, Broomfield, Denver, Douglas, Jefferson, Morgan, Park, Weld. **Feeder:** Arapahoe, Boulder, Clear Creek, El Paso, Elbert, Gilpin, Larimer, Lincoln, Teller.

****Lower Division – main river trunk:** Logan, Sedgwick, Washington. **Feeder:** Kit Carson, Phillips, Yuma.



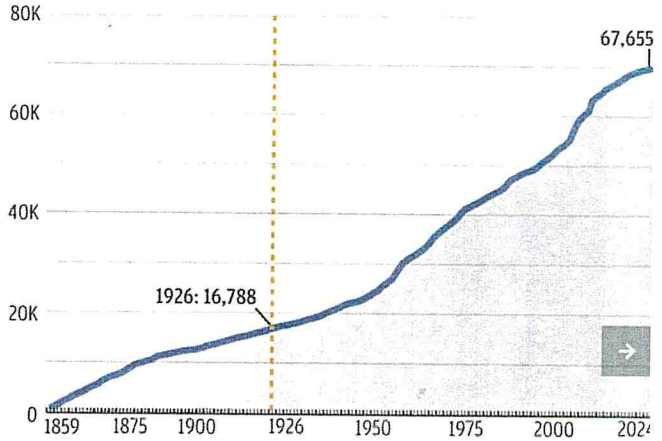
NOTE: County water rights not associated with South Platte surface water or groundwater have been excluded.

Source: Colorado Division of Water Resources, online database

Lee Enterprises graphic

Colorado South Platte water rights growth, 1859-2024

Basin totals, by priority date



NOTE: County water rights not associated with South Platte surface water or groundwater have been excluded.

Source: Colorado Division of Water Resources, online database Lee Enterprises graphi