

Report on 2021 Basin-Wide Activities Plan for Joint Integrated Water Resources Management of
Overappropriated Portions of the Upper Platte River Basin

&

Upper Platte Drought Contingency Plan Drought Task Force Meeting and Kickoff Meeting

July 21, 2022

Ryan Kelly, Integrated Water Management Coordinator
Caitlin Kingsley, Environmental Specialist II

NEBRASKA

Good Life. Great Water.

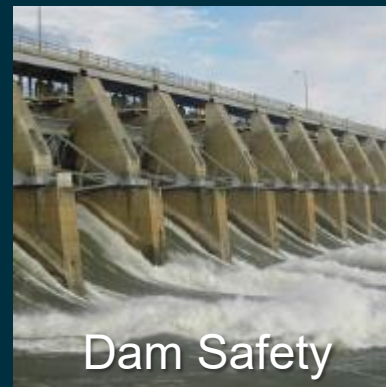
DEPT. OF NATURAL RESOURCES

NEBRASKA

Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

Providing the sound science and support for managing Nebraska's most precious resource



NEBRASKA

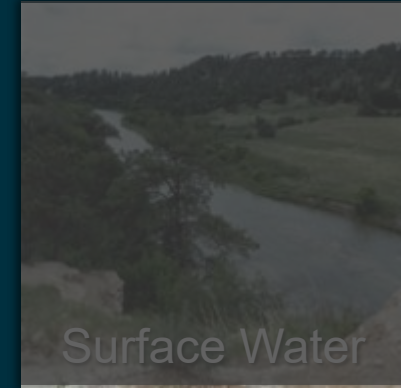
Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

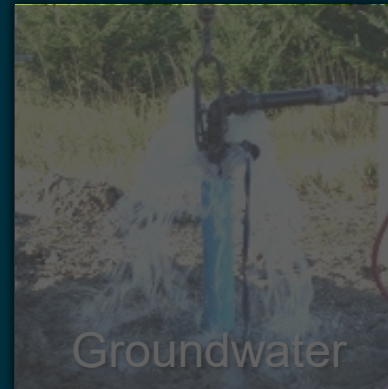
Providing the sound science
and support for managing
Nebraska's most precious
resource



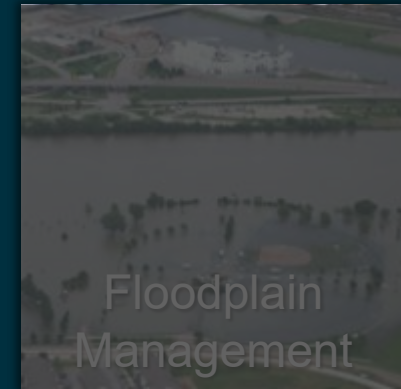
Water Planning
and Integrated
Management



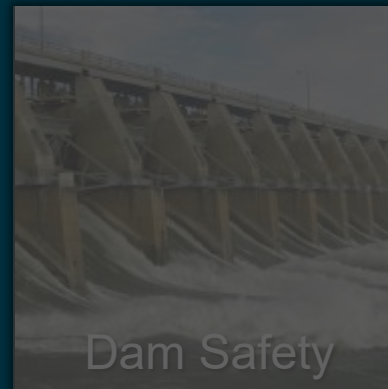
Surface Water



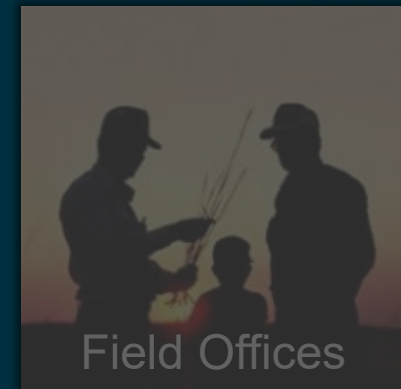
Groundwater



Floodplain
Management

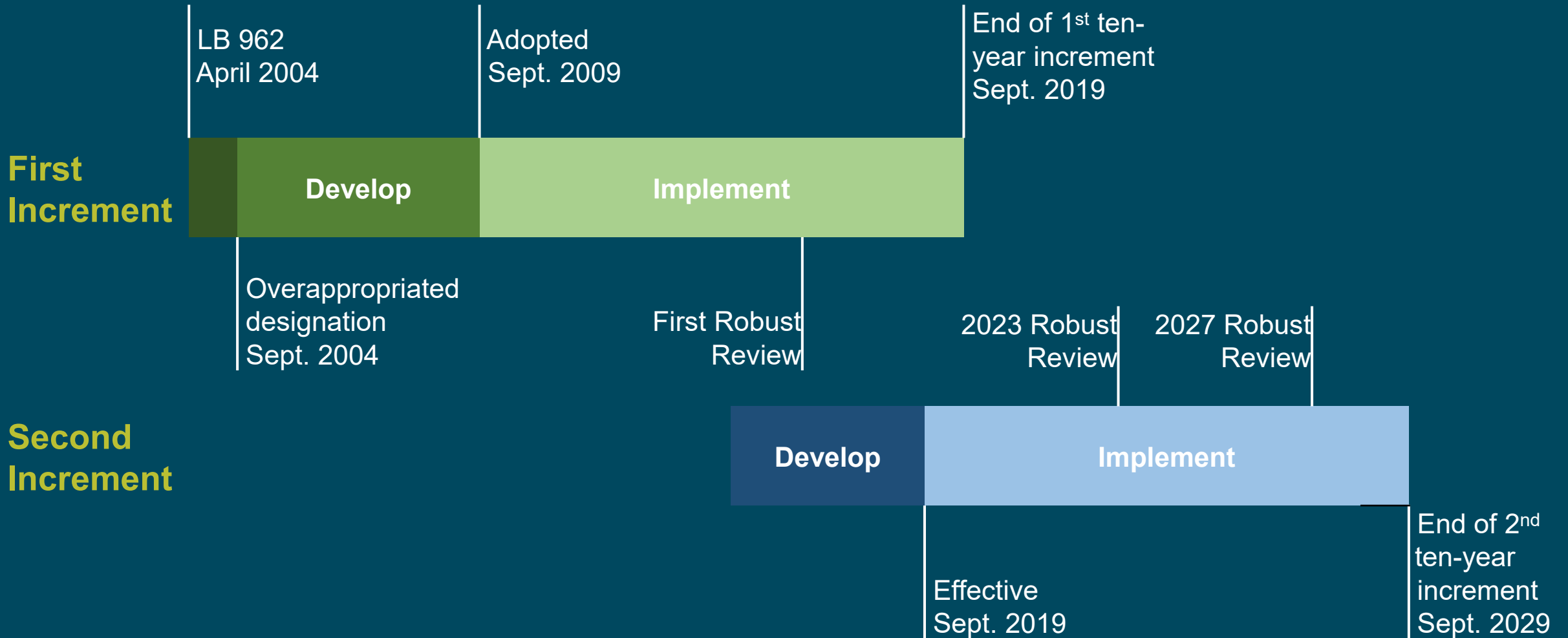


Dam Safety



Field Offices

Upper Platte Basin-Wide Plan Timeline



Robust Review

➤ Purpose:

1. An evaluation of the impact of pre- and post-July 1, 1997, development, and progress towards Plan goals/objectives/action items

1. Outcomes:

1. A 50-year estimate of the **streamflow depletions** associated with pre- and post-1997 levels of water use development within the hydrologically connected area of the overappropriated basin within each NRD and within the entirety of each NRD.
2. A 50-year estimate of **streamflow accretions** associated with management actions implemented by each NRD and NeDNR within the hydrologically connected area of the overappropriated basin within each NRD and within the entirety of the NRD.
3. A summary of the net streamflow depletions within the overappropriated basin resulting from groundwater pumping within each NRD.

Drought Plan Development in the Basin

- Action Item 1.3.4: Develop a Basin drought contingency plan for management of supplies during times of shortage.
 - Basin-wide Drought Contingency Plan to be completed within the first 3 to 5 years of 2nd increment and address conditions under a basin-wide or regional drought condition.
 - The Basin-wide Drought Contingency plan will serve as a guide for plans to be developed by individual Upper Platte NRDs as part of this action item.



Summary of Activities in 2021 within the Upper Platte Basin

- Ten (10) new surface water permits
 - 8 temporary recharge permits
 - 2 temporary manufacturing permits
- One (1) new dam construction approval
- No new net depletions to the basin

Surface Water Permits Approved in 2021

Appropriation Number	Approval Date	S-T-R W	Source or Canal	Use	Grant in CFS	Grant in AF	Surface Water or Groundwater Mitigation	Associated Variance
A-19747	3/9/2021	19-12-26 W	Gothenburg Canal	Temporary RC – Recharge	100.0		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9261
A-19748	3/9/2021	18-10-23 W	Dawson County Diversion Dam	Temporary RC – Recharge	100.00		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9262
A-19770	5/13/2021	14-12-43 W	Western Canal	Temporary RC – Recharge	176.26		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9378
A-19771	5/19/2021	18-14-33 W	Paxton Hershey Canal	Temporary RC – Recharge	102.78		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9374
A-19772	5/19/2021	18-14-36 W	Keith-Lincoln Canal	Temporary RC – Recharge	80.56		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9375
A-19773	5/19/2021	13-14-34 W	North Platte Canal	Temporary RC – Recharge	201.00		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9377
A-19774	5/19/2021	12-14-33 W	Suburban Canal	Temporary RC – Recharge	77.47		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9376
A-19797	11/30/2021	8-13-29 W	Tri-County Supply Canal, E65 Canal, and Phelps Canal	Temporary RC – Recharge	950.00		Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.03	VAR-9465
A-19799	12/21/2021	3-14-38 W	Kingsley Reservoir via Phelps Canal	Temporary MF – Manufacturing		2000	Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.04	VAR-9453
A-19790	9/8/2021	24-13-40 W	South Platte River	Temporary MF – Manufacturing	0.16	10	Variance granted pursuant to 457 Neb. Admin. Code Ch. 23 § 001.06	VAR-9429

Dam Safety Permit Approved in 2021

- Smart Soil Compost Dam
 - Solid waste compost holding pond

Plan Number	Order Date	Dam Status	S-T-R W	Project Name	Source	Use
P-20552	1/8/2021	Approved	19-11-12 W	Smart Soil Compost Dam	Platte River	Industrial Waste Lagoon

2021 Depletions and Accretions

	CPNRD (189 Permits)			NPNRD (No Permits)			SPNRD (No Permits)			TBNRD (14 Permits)			TPNRD (38 Permits)			All NRDs
Year	Depletion	Mitigation	Net Effect	Depletion	Mitigation	Net Effect	Depletion	Mitigation	Net Effect	Depletion	Mitigation	Net Effect	Depletion	Mitigation	Net Effect	Total Net Effect
2021	-17.60	20.37	2.77	0.00	0.00	0.00	0.00	0.00	0.00	-9.16	19.45	10.29	-17.48	48.95	31.46	44.53
2022	-38.59	40.73	2.14	0.00	0.00	0.00	0.00	0.00	0.00	-17.22	28.42	11.19	-31.67	101.26	69.58	82.91
2023	-56.10	57.41	1.30	0.00	0.00	0.00	0.00	0.00	0.00	-22.89	33.66	10.76	-38.89	138.81	99.92	111.99
2024	-70.45	71.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	-27.11	37.25	10.13	-43.79	165.09	121.30	131.99
2025	-82.49	82.41	-0.08	0.00	0.00	0.00	0.00	0.00	0.00	-30.41	39.92	9.50	-47.62	184.78	137.15	146.58
2026	-92.84	92.22	-0.61	0.00	0.00	0.00	0.00	0.00	0.00	-33.09	42.01	8.92	-50.85	200.24	149.38	157.69
2027	-101.89	100.82	-1.07	0.00	0.00	0.00	0.00	0.00	0.00	-35.31	43.71	8.39	-53.72	212.82	159.09	166.41
2028	-109.91	108.45	-1.46	0.00	0.00	0.00	0.00	0.00	0.00	-37.21	45.12	7.91	-56.35	223.31	166.95	173.40
2029	-117.10	115.30	-1.80	0.00	0.00	0.00	0.00	0.00	0.00	-38.84	46.33	7.48	-58.83	232.25	173.42	179.10
2030	-123.59	121.49	-2.10	0.00	0.00	0.00	0.00	0.00	0.00	-40.28	47.37	7.09	-61.20	239.99	178.78	183.78

NEBRASKA

Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

THANK YOU

Ryan Kelly, NeDNR Integrated Water Management Coordinator

Caitlin Kingsley, Environmental Specialist II

dnr.nebraska.gov  