



Date: March 14, 2025

To: Governance Committee (GC) of the Platte River Recovery Implementation Program (PRRIP)

From: Brandon Gebhart State of Wyoming's Representative to the GC,
Wyoming State Engineer
Jason Mead Director, Wyoming Water Development Office
Michelle Hubbard State Coordinator, Wyoming Depletions Plan

Re: Wyoming Depletions Report – Water Year 2024

This Report is provided pursuant to the PRRIP Water Plan, as outlined in Attachment 5, Section 7, of the PRRIP and Paragraph II.B. of Wyoming's Depletions Plan, approved by the GC on October 24, 2006 and subsequently revised on April 10, 2007, December 12, 2007, and August 11, 2009. This report summarizes any new depletions that commenced during Water Year 2024 (October 1, 2023 to September 30, 2024) and no mitigation is required.

Baseline No. 1

The State of Wyoming (Wyoming) complied with the Modified North Platte Decree intentionally irrigated acreage limitations for the 2024 irrigation season. On February 26, 2025, the Wyoming State Engineer's Office (SEO) submitted the intentionally irrigated acreage and reservoir storage accruals compliance report to the North Platte Decree Committee (NPDC).

Baseline No. 2

The SEO collected all the pertinent water use information to compare Water Year 2024 (WY 2024) water uses to the benchmarks under the existing Baseline No. 2 in Wyoming's Depletions Plan. In WY 2024, Wyoming's total water uses are less than Baseline No. 2. The underruns, translated to the state line, are 54,419 acre-feet for the irrigation season and 5,304 acre-feet for the non-irrigation season.

Baseline No. 3

The development of post-1997 storage in the South Platte River basin is 100.82 acre-feet.

Attachments 1 and 2 contain the detailed WY 2024 water use data and the reporting of new depletions.

Attachment 1
Wyoming Depletions Report – Water Year 2024

1. Existing Water Related Activities – Baseline No. 1

1.1. Compliance with the Modified North Platte Decree

Wyoming complied with the Modified North Platte Decree intentionally irrigated acres limitations and reported this to the NPDC on February 26, 2025. The intentionally irrigated acreage was 202,228 acres for the sub-basin above Guernsey Reservoir. Wyoming reports consumptive use (CU) of irrigation water in the Above Guernsey Reservoir sub-basin to the NPDC by May 15 of each year.

Irrigation water use in the Benchmark No. 1 Above Guernsey sub-basin appears in *Attachment 2 – Table 2.1*.

1.2. Kendrick Project

Wyoming complied with the Kendrick Project acreage limitation of 24,249 acres. The Wyoming Area Office of the Bureau of Reclamation (BOR) verified by email on February 6, 2025, that 24,249 acres were irrigated under the Kendrick Project in WY 2024.

Irrigation water use in the Benchmark No. 1 Above Guernsey sub-basin appears in *Attachment 2 – Table 2.1*.

1.3. Mitigation

No mitigation is required.

2. Existing Water Related Activities – Baseline No. 2

2.1. Annual Water Use versus Benchmarks

Irrigation water use in the Benchmark No. 2 sub-basins appears in *Attachment 2 – Table 2.2*. Since Horse Creek sub-basin irrigation has no effect on depletions at the State Line during the irrigation season, irrigated acres in this sub-basin were not counted in WY 2024.

Attachment 2 – Table 2.4 compares the WY 2024 water use with the benchmarks. The irrigation, municipal, industrial, rural domestic, retired/mitigation uses, and post-1997 new water uses are included in each respective row.

The sources of the rural domestic and municipal population data are from the State of Wyoming Department of Administration and Information and the U.S. Census Bureau 2020 Report.

Attachment 2 – Table 2.4 Column 5 includes water right abandonments derived from searching the Wyoming Board of Control records for permanently retired irrigation

Attachment 1
Wyoming Depletions Report – Water Year 2024

water uses between 2005–2008. In the Pathfinder to Guernsey sub-basin, the records were searched back to 1998. These numbers are updated as new abandonments occur. In WY 2024 0.46 acres were abandoned in the Lower Laramie sub-basin.

Additionally in *Table 2.4 Column 5*, the non-irrigation season overruns from municipalities, industries, and rural domestic above Guernsey Dam have been offset by the agriculture underruns tabulated from Guernsey Dam to the state line. Due to the intervening reservoirs on the North Platte River, the effects of the depletions resulting from the basins above Guernsey Dam in both the irrigation and non-irrigation seasons arrive at the Guernsey to State Line reach during the irrigation season. Therefore, any municipal and industrial overruns above Guernsey Dam can be offset by agriculture underruns in the Guernsey Dam to State Line portion of the North Platte River basin (*Wyoming Depletions Plan – Attachment No. I, page 4, October 24, 2006*).

2.2. Mitigation

After the overruns and underruns are translated to the state line, the net effect is an underrun for both the irrigation season and the non-irrigation season. No mitigation is required.

3. South Platte River Basin – Baseline No. 3

For WY 2024, the reported acre-feet of storage in the South Platte Basin in Wyoming is 100.82 acre-feet. The cumulative effect of these facilities does not affect flows at the Wyoming/Colorado state line during a large runoff event.

4. Proposed Changes to Benchmarks

At this point in time, Wyoming has no plans to propose changes to the benchmarks.

5. New Water Related Activities

5.1. In *Attachment 2 – Table 2.3*, Wyoming reports by sub-basin the new water related activities commencing during WY 2024 that are covered by existing water related Baseline No. 2 in Wyoming’s Depletions Plan. *Table 2.3* also includes the total number of new water related activities implemented since 1997. This post-1997 total is integrated into Column 6 of *Table 2.4* and contributes to the overruns / underruns that occur.

6. Non-hydrologically Connected Groundwater Wells

During WY 2024, there were no new groundwater well applications seeking the non-hydrologically connected status submitted to the SEO which require the approval of the Groundwater Wells Subcommittee (GWSC) of the NPDC.

Attachment 2
Wyoming Depletions Report – Water Year 2024

Table 2.1

Exiting Water Related Baseline No. 1

Decree Category	Benchmark Acreage	2024	Difference in Acreage
Irrigated Acreage - Above Guernsey	226,000	202,228	23,772
Irrigated Acreage - Kendrick	24,249	24,249	0

Table 2.2

Existing Water Related Baseline No. 2 – Irrigation Water Use

Sub-basin	Acreage Benchmark	2024	Overruns (Underruns)	Unit C.U.	Overruns (Underruns)
	(acres)	(acres)	(acres)	(af/acre)	(acre-feet)
Guernsey-State Line	106,221	82,283	-23,938	1.32	-31,598.16
Horse Creek	41,179	*		1.16	
Upper Laramie	91,255	80,996	-10,259	0.79	-8,104.61
Lower Laramie	85,711	57,832	-27,879	1.31	-36,521.49
Total	324,366	221,111	-62,076		-76,224.26
* The Horse Ck. sub-basin depletions have no effect on depletions at the State Line during the irrigation season irrigated acres and were not counted in WY 2024.					

Table 2.3

Total Depletions from New Water Activities – Post 1997

Sub-basin	Irrigation Season			Non-Irrigation Season		
	97 to 23	WY 2024	Total	97 to 23	WY 2024	Total
	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)
Above Pathfinder	160.32	0.00	160.32	73.12	0.40	73.52
Pathfinder to Guernsey	301.55	0.00	301.55	255.56	0.50	256.06
Guernsey to State Line	58.67	0.00	58.67	41.34	0.90	42.24
Horse Creek	40.12	0.00	40.12	34.91	0.00	34.91
Upper Laramie	53.41	13.32	66.73	37.89	8.86	46.75
Lower Laramie	119.51	0.00	119.51	56.22	0.00	56.22
Total	733.58	13.32	746.90	499.04	10.66	509.70

Attachment 2
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Table 2.4
Water Year 2024 Overruns / Underruns

Sub-basin	Table 2.4 - Irrigation Season - Overruns / Underruns AF							Tracking Factors Table I	Effects State Line (AF)
	Irrigation Use	Municipal Use	Industrial Use	Rural Domestic	Retired / Mitigation	Post 1997 Activities	Total		
	1	2	3	4	5	6	7	8	9
Above Pathfinder	-----	-848.88	275.16	-98.60	-1.29	160.32	-513.29	0.90	-461.96
Pathfinder to Guernsey	-----	530.41	-3,280.67	51.67	-40.90	301.55	-2,437.94	0.98	-2,377.00
Guernsey to State Line	-31,598.16	-480.57	-29.01	7.40	881.62	58.67	-31,160.05	1.00	-31,160.05
Horse Creek	-----	32.65	0.00	32.47	-1.95	40.12	103.29	0.00	0.00
Upper Laramie	-8,104.61	-688.42	0.00	122.93	-0.79	66.73	-8,604.16	0.25	-2,151.04
Lower Laramie	-36,521.49	-97.29	0.00	-27.53	-1.08	119.51	-36,527.88	0.50	-18,263.94
WY 2024 Total	-76,224.26	-1,552.10	-3,034.52	88.33	835.61	746.90	-79,140.03		-54,413.98

Sub-basin	Table 2.4 - Non-Irrigation Season - Overruns / Underruns AF							Tracking Factors Table II	Effects State Line (AF)
	Irrigation Use	Municipal Use	Industrial Use	Rural Domestic	Retired / Mitigation	Post 1997 Activities	Total		
	1	2	3	4	5	6	7	8	9
Above Pathfinder	-----	93.98	466.09	-49.30	-1,022.43	73.52	-438.14	0.93	-407.47
Pathfinder to Guernsey	-----	-158.27	-3,406.53	25.83	-26.23	256.06	-3,309.14	1.00	-3,309.14
Guernsey to State Line	-----	-352.21	-1,136.32	8.70	0.00	42.24	-1,437.59	1.00	-1,437.59
Horse Creek	-----	-31.38	0.00	16.23	0.00	34.91	19.76	1.00	19.76
Upper Laramie	-----	-246.61	0.00	66.47	0.00	46.75	-133.39	0.50	-66.70
Lower Laramie	-----	-132.24	0.00	-13.77	0.00	56.22	-89.79	1.00	-89.79
WY 2024 Total	-----	-826.73	-4,076.76	54.17	-1,048.66	509.70	-5,388.28		-5,290.91