

North Platte Natural Resources District

ANNUAL REPORT OF 2018 WATER USE ACTIVITIES IN THE
NORTH PLATTE NRD



TO MEET THE REQUIREMENTS OF THE INTEGRATED MANAGEMENT PLAN
FOR THE 2019 BASIN-WIDE MEETING

Meeting Date: July 17, 2019



NORTH PLATTE

Natural Resources District

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I. INTRODUCTION

This report is intended to satisfy the North Platte Natural Resources District tracking and reporting requirements as described by the Monitoring and Studies section of the North Platte Natural Resources District Integrated Management Plan (IMP).

This report contains information on those activities required to be tracked for the period January 1, 2018, to December 31, 2018.

II. CERTIFICATIONS

No new acres were certified between January 1, 2018, and December 31, 2018.

III. APPROVED TRANSFERS

No transfers were sought or granted in calendar year 2018.

IV. VARIANCES

No variances from NRD rules and regulations were granted in calendar year 2018.

V. OTHER PERMITS

No other permits were approved between January 1, 2018, and December 31, 2018.

VI. WELL CONSTRUCTION PERMITS

The following table lists the well construction permits that were approved, cancelled, or denied between January 1, 2018, and December 31, 2018:

NRD Permit Number	Legal Description	Use	Status	Replacement	DNR Registration Number
NPRP 18001	27-17-42	Irrigation	Approved	Yes*	G-083033
NPSG 18002	20-24-57	Irrigation	Approved	Yes*	G-057502
NPNP 18003	10-23-56	Aquaculture	Approved	No	G-187148
NPRP 18004	10-22-55	Irrigation	Approved	Yes*	Well not drilled, Application withdrawn
NPRP 18005	8-16-42	Irrigation	Approved	Yes*	G-020864
NPRP 18006	18-23-57	Irrigation	Approved	Yes	G-007905
NPSG 18007	30-23-57	Irrigation	Approved	No	G-186616
NPSG 18008	30-21-53	Irrigation	Approved	Yes*	G-187150

*This is a Special Circumstance Replacement Well, as per NPNRD Rules.

VII. IRRIGATION WELL FLOW METER DATA

The ending flow meter readings for Water Year 2018 were collected during October and November 2018. The preliminary amount of ground water withdrawn for irrigation purposes in the overappropriated area (including the Pumpkin Creek Basin Ground Water Management Subarea) for Water Year 2018 was 103,391 acre-feet on 167,966 certified irrigated acres, for an average withdrawal of 7.4 acre-inches per acre. The above numbers do not include withdrawal amounts that have not yet been calculated by some other means, for users whose data could not be directly obtained from a flow meter because of, e.g., a failed flow meter.

VIII. RETIRED ACRES AND OTHER STREAMFLOW ACCRETION ACTIVITIES

Between January 1, 2018, and December 31, 2018, two hundred nine (209) groundwater-certified irrigated acres were contracted through the District for permanent retirement.

The District entered into one surface water lease with landowners holding appropriations with Blue Creek Irrigation District. The total surface water leased under these agreements, equivalent to 74.5 acres of surface-water-irrigated land, will be returned directly to the North Platte River for depletions offsets, once the requisite transfer application is approved.

In February of 2018 the North Platte NRD received applications from District Producers interested in selling all or a portion of their yearly base allocation through our EPIC program. In crop year 2018, the District purchased 10,240 acre inches of ground water that would have been consumptively used in growing crops. By purchasing the allocation, the District was able to gain consumptive use credit that will be applied towards our Platte River obligations. In June of 2018 the District paid participating producers a total of \$204,812.00. In 2018, 1,147 acres were enrolled in the EPIC program.

IX. OTHER WATER BANKING ACTIVITIES

No water banking activities were conducted between January 1, 2018, and December 31, 2018.

X. MUNICIPAL AND INDUSTRIAL ACCOUNTING

The following table lists the information gathered for the municipal accounting requirement:

City	Baseline (gallons)*	2018 Use (gallons)*	2018 Population**	2018 gallons per capita per day
Bayard	151,783,533	183,070,900	1208	415.2
Bridgeport	237,176,000	49,889,390	1530	89.3
Broadwater	45,668,104	4,996,700	128	107
Gering	891,820,400	738,946,664	8500	238.2
Minatare	61,311,333	44,925,781	806	153
Mitchell	173,323,000	164,405,517	1702	264.2
Oshkosh	125,128,333	99,799,000	884	309.3
Scottsbluff	960,551,017	726,634,781	14,874	133.8
Terrytown	147,433,847	105,503,000	2144	134.8
WNJWB (includes Lyman, Henry, Morrill)	327,391,371	132,354,100	1368	265.1

*This includes pumping and, if applicable, discharge volumes.

**Population numbers were supplied by the municipality.

The following table lists the information gathered for the industrial accounting requirement:

Name	Location	Well Reg. #	Baseline 2001-2006 (Acres or Gallons)	2018 Use (Acres/Gallons)
Courthouse and Jail Rock Golf Club	Sec. 29, T19N, R50W	G-096426, G-056581	35.21 acres	35.21 acres
Riverview Golf and Country Club	Sec. 17 and 20, T22N, R55W	G-083316, G-083317	67 acres	67 acres
Scottsbluff Country Club	Sec. 10, T22N, R55W	G-147117, G-147118, G-147119	106 acres	106 acres
Chimney Rock Golf Course	Sec. 22, T21N, R52W	G-072722	81.25 acres	81.25 acres
Rolling Green Golf Course	Sec. 15, T23N, R57W	G-029114	46.3 acres	46.3 acres
Scenic Knolls Golf Course	Sec. 9 and 16, T23N, R56W	G-120401	63.3 acres	63.3 acres
Oshkosh Country Club	Sec. 10, T16N, R44W	G-131367	33.2 acres	33.2 acres
Western Sugar Cooperative	Sec. 30, T22N, R54W	G-074421, G-074422, G-074423, G-005567	1,125,000,000 gallons	641,386,169 gallons
Bridgeport Ethanol LLC	Sec. 03, T19N, R50W	G-117573, G-152360	130,665,048 gallons*	214,555,702 gallons

*Baseline determined by 2009-2013 usage.

XI. OTHER DATA ACQUISITION

Beginning in the spring of 2016, the District deployed 290 telemetry units in two separate phases. Phase 1 was implemented in June and consisted of 240 installations. Phase 1.5 began in September and consisted of 50 installations. In December, the District discovered that some units had an issue with interrupted cellular connectivity. The District, in coordination with AMCI, the unit manufacturer, developed a solution to this problem, which was deployed in March 2017.

The North Platte NRD expanded its telemetry program by 458 units in 2018.

The North Platte NRD in combination with the Nebraska Soil and Water Conservation Program provided cost-share in the amount of \$56,192.45 for irrigation improvements through the NC-17 practice. Improvements included conversion nozzles, system renovations, drop nozzles and precision irrigation systems.

The North Platte NRD, to emphasize the use of climate and precipitation data to better manage irrigation water, has invested in two Mesonet weather stations in partnership with the Nebraska Climatologist's Office at a cost of \$17,500. The District further established an endowed fund to ensure operations and maintenance costs were accommodated annually. This investment cost \$5,200. This brings the number of official weather stations in our District to seven.

The North Platte NRD has purchased subscriptions for 400 flowmeters to be enrolled in Mammoth Trading Company's TAPP H2O project. This project is an application for smartphones where the landowner/producer monitors their flowmeter and Mammoth then provides analysis on their water use. The cost of this project was \$17,000.