



SCHANEMAN RECHARGE  
PROJECT ON ENTERPRISE  
IRRIGATION DISTRICT



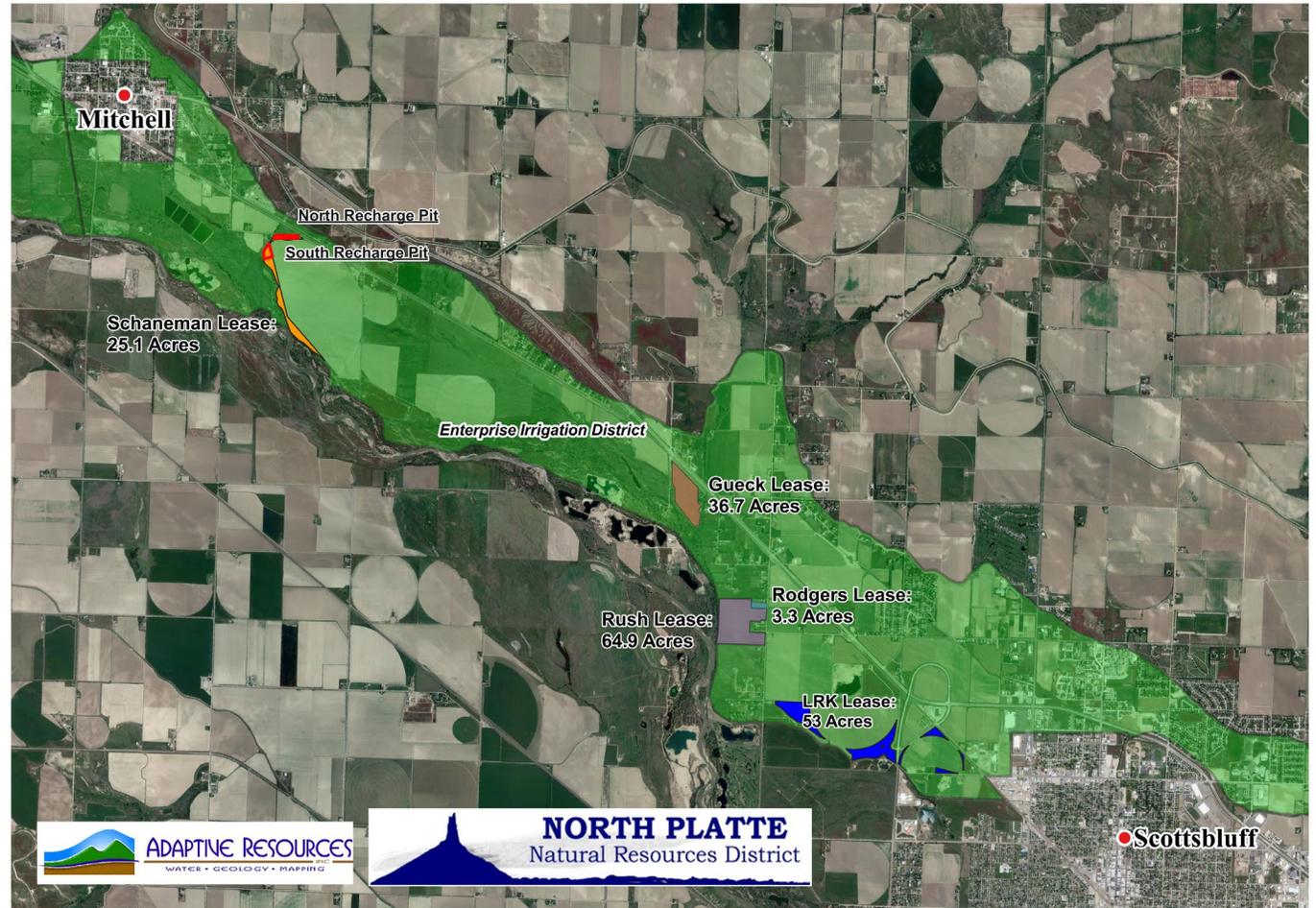
# Project Description

- Irrigated Parcels from 4 farms was identified in the Enterprise Canal irrigated and leased by NPNRD and used for recharge and offset credits.
- Parcels had good history of irrigation and in suitable locations for consideration
- Canal was cooperative of the NPNRD activities and moving Farm turnout delivery to new locations.
- NPNRD constructed two recharge sites that would receive the surface water and recharge into the aquifer



# MAP OF PARCELS AND FACILITY

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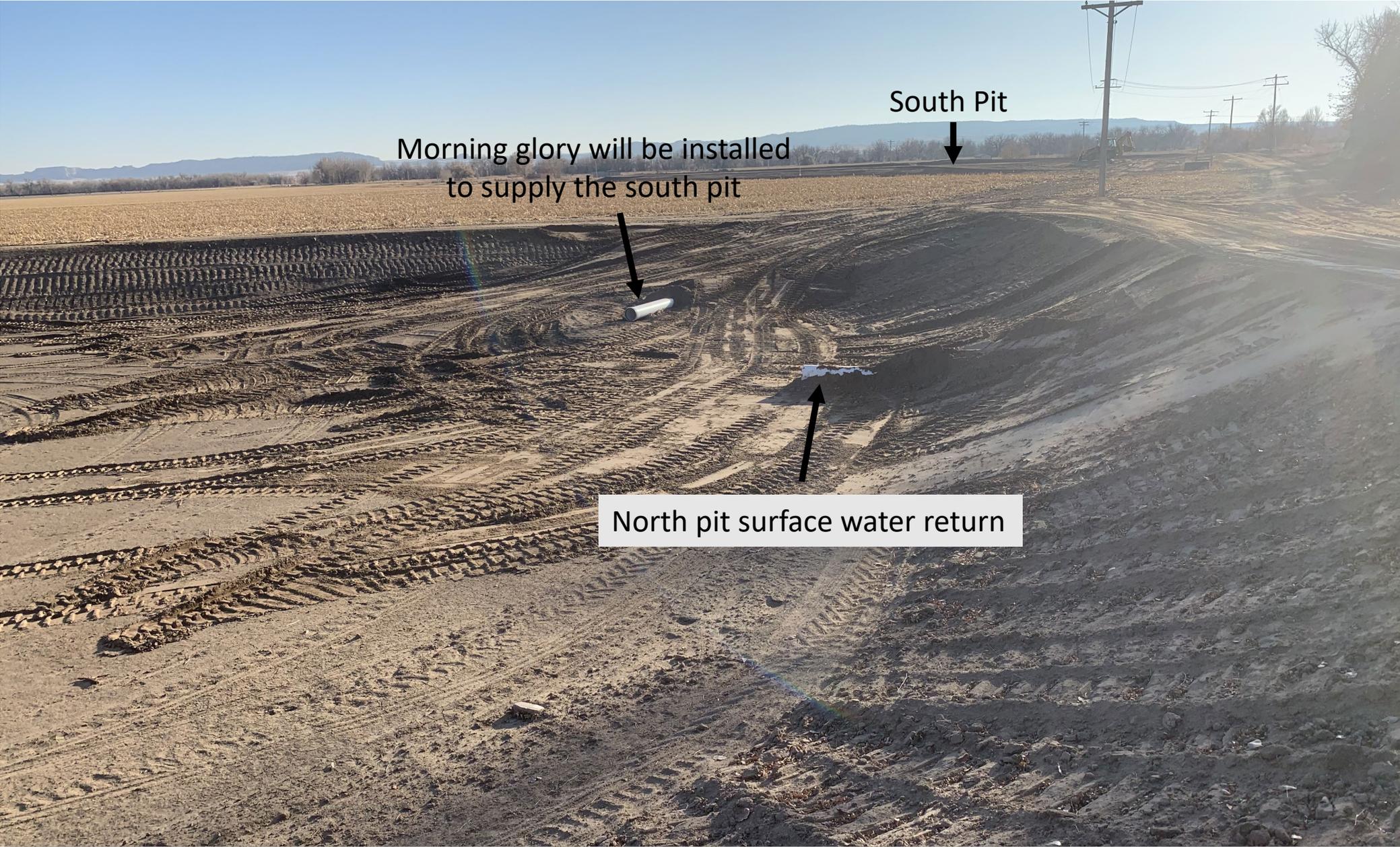


# Picture of the North Pit – 2.4 Acres – Looking East



9 Acre-Feet of Holding Capacity

# Picture of the North Pit – 2.4 Acres – Looking South



# Picture of the South Pit – 3.5 Acres – Looking Southeast



Good Gravel Material in the Pit



South pit surface water return



14.25 Acre-Feet of Holding Capacity

# Analysis and Approval

- Final Leases of parcels were obtained; analysis was completed for each parcel.
- Met with the DNR Permit Section staff to discuss permit forms, analyses, and analysis procedures in 2019. Revised analysis and forms from discussions with staff.
- Made application to NeDNR in 2020 for the approval of the transfer from irrigation to recharge and return to the river.
- Approval was granted by NeDNR in May of 2022
- Water Started Flowing into the sites in May 2022

# Analysis of Historic Consumptive Use

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- Used Historical Records of crops, irrigation practices, and farming practices from the producers
- Obtained diversion records for the canal and discussed turnout delivery with the canal operators
- Used local climate data and soils data for each parcel
- Calculated HCU using the Rootzone Water Quality Model 2 (RZWQM2) from USDA ARS
- Compared results to the regional WWUMM for assurance of analysis

# AVERAGE ANNUAL AND MAXIMUM TRANSFERABLE CONSUMPTIVE USE

<b>LEASE</b>	<b>Acres Transferred to New Use (Ac)</b>	<b>AVERAGE ANNUAL CONSUMPTIVE USE (AF)</b>	<b>MAXIMUM ANNUAL TRANSFERABLE CONSUMPTIVE USE (AF)</b>	<b>Instantaneous Diversion (CFS)</b>
Rush Farm	64.9	138	163	1.5
LRK Farm	52.9	90	109	1.22
Schaneman Farm	25.1	42	54.75	0.58
<b>Total</b>	<b>142.9</b>	<b>270</b>	<b>326.75</b>	<b>3.30</b>

# OPERATIONAL PLAN SUMMARY

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- Project monitoring is done with a combination of flow meters and staff gauges
  - Three flow meters
    - Main inlet
    - One flow meter on each of the surface water returns
  - Two staff gauges, one in each pond
- Daily inspections of infrastructure to ensure proper function by NPNRD
- Daily recordings of information using Flowmeters



Surface water return  
flowmeter will be installed.



Operations in 2022