

# Economics of Playa Wetland Conservation Programs: A Case Study

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U.S. DEPARTMENT OF AGRICULTURE



# Farm field with a playa wetland



# Adjacent field with gravity irrigation



Photo: Fred Knapp, NETNews



Photo: Tamra Jackson-Ziems, Nebraska Extension

# Crop condition



# Playa wetland in 2020





# Solution to the problem?

**WREP Sign-Up: Application cut-off date has been set for November 1, 2022**  
 These options provide landowners a financial incentive to restore, protect, and enhance wetlands in exchange for placing marginal land into a conservation easement.

### 7 Values Of Wetlands

Wetlands provide fish and wildlife habitat, improve water quality, reduce flooding, recharge the aquifer, and provide opportunities for educational, scientific, and recreational activities.

### 85% Cost-Share

The Rainwater Basin Joint Venture can provide up to 85% cost-share to support restoration costs, pivot modification, and establishment of grazing infrastructure.

### 2 Enrollment Options

The program offers 2 enrollment options: Permanent Easement and 30-Year Easement.

Landowners are:

- eligible if the wetlands are playas located in the Rainwater Basin or Loess Hills (Central Table Playas) Complex.
- compensated based on appraised land value.

## FAQ

**Will I Still Own The Land?** Yes, the landowner still owns the land and pays taxes on it, but they need to acquire permission from NRCS before implementing any uses (grazing, haying, spraying, etc.) on the site.

**Will I Pay For Management Costs?** Management is usually completed at no expense to the landowner.

**What Are We Managing For?** Sites are enrolled so that a wetland restoration can be completed AND maintained. Landowners can expect management like grazing, prescribed fire, herbicide treatments, and mechanical removal of trees on their easements to help promote desirable wetland species.

**Will This Affect My Row Crop Operation?** WREP is evolving to integrate agricultural practices into wetland management. WREP also allows for pivots to cross through wetlands. Funding is even available to implement pivot modifications and help with variable rate irrigation.

**Will I Lose Upland Acres?** Upland acres are necessary to complete the initial restoration work AND to avoid health problems in cattle. Upland management can also be conducted at no cost to the landowner.

[Learn More](#)



**Landowner Agreement No: NE-64850-21-11**

**CFDA: 15.631**

## **PARTNERS FOR FISH AND WILDLIFE PROGRAM LANDOWNER AGREEMENT**

This Landowner Agreement (Agreement), dated October 1, 2020, between [REDACTED] (Landowner)(s), Precision Agronomy Solutions®, Nebraska Community Foundation (NCF) for its affiliated fund the Rainwater Basin Joint Venture (RWBJV), Nebraska Game and Parks Commission (NGPC) and the U.S. Fish and Wildlife Service (USFWS) is entered into pursuant to authority contained in the Partners for Fish and Wildlife Act (P.L. 109-294), the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-j), as amended. **This project was selected for funding because the Landowner(s) share(s) a common objective with the RWBJV, NGPC, USFWS, and the other cooperating partners identified above, to enhance habitat for the benefit of Federal trust species on private lands.** The project supports priority actions identified in the Regional Partners for Fish and Wildlife (Partners) Program Strategic Plan.

[REDACTED], hereby agrees to participate with the RWBJV, NGPC, and the USFWS in conducting certain wildlife management practices on lands owned or managed by them in Hall County, State of Nebraska, described as follows: all of, or within, [REDACTED]  
[REDACTED]

# Landowner rights and expectations

- The Landowner, with authority over land management decisions, warrants that there are no outstanding rights that interfere with this Landowner Agreement.
- The Landowner retains all rights to control trespass and retains all responsibility for taxes, insurance, assessments, and damage claims.
- The Landowner agrees to allow the Project to occur on the property.
- The Landowner agrees to provide partial funding for the Project as outlined in this Agreement.
- The Landowner will notify the RWBJV of pending changes in ownership. A change of ownership of the property shall be subject to the terms of this Agreement. The Agreement shall be in effect on the described land for the term of the Agreement.
- During the habitat retention period, the Landowner(s) agree(s) to maintain the habitat restored under this award per Exhibit A and allow the habitat restored under this award to remain in place.
- At the end of the habitat retention period, the habitat improvement project will become the sole property and complete responsibility of the Landowner(s). There shall be no obligation to the RWBJV, NGPC and USFWS after the term of the Agreement has expired.



# Removal of impoundment



# Completed project



58 acres – 18 acres upland, 40 acres wetland

# New pivot to replace gravity irrigation



# Pivot pipeline, VRI upgrade, sprinklers, moisture probe



# Pivot fence crossing ramps installed



# New fence, livestock well and tanks installed



# Playa Wetland in 2024



# Cattle grazing allowed on easement





# Crops grown to edge of easement



Photo: HUM Images / Universal Images Group via Getty Images



# NEBRASKA CROP BUDGETS

2025



# Nebraska Crop Budgets

**2025 Budget 31-Corn, SmartStax RIB Complete, No Till, Continuous, 250 bushel Yield  
Pivot Irrigated Electric, 800 GPM 35 PSI, 9 acre/inches**

Field Operations		Times or Qty	Unit	Labor @ \$25.00 /Hr	Fuel @ \$1.50 and Lube	Repairs		Ownership^		Total	Your Estimate
						Power	Imp.	Power	Imp.		
1	Spray Burndown Herbicide	0.5		0.51	0.13	0.01	0.55	0.66	1.01	2.87	
2	Spray Herbicide	1		1.02	0.26	0.03	1.11	1.31	2.02	5.75	
3	Plant No-Till	1		3.24	1.08	0.08	6.97	4.33	6.61	22.31	
4	Spray Herbicide	1		1.02	0.26	0.03	1.11	1.31	2.02	5.75	
5	Spray Insecticide	Custom									
6	Spray Fungicide	Custom									
7	Pivot E 125' Lift w/fertigation	9	ai	11.25	19.11	5.02	8.00	5.00	14.24	62.62	
8	Combine Irr Corn (corn head)	220		5.27	5.96	9.16	2.36	22.05	9.81	54.60	
9	Cart	250	bu	2.25	0.73	0.06	1.38	3.28	2.76	10.46	
10	Truck	Custom									
11	Dry Grain	Custom									
<b>Total for Field Operations</b>				24.56	27.53	14.39	21.48	37.94	38.47	164.36	

Materials & Services	Operation Index	Percent Acres Applied	Application Rate Unit	Applied Price	Total	Your Estimate
2,4-D Ester LV4	Herbicide	1	50%	1 pint	2.50	1.25
Glyphosate 5# w/Surfactant	Herbicide	1	50%	32 ounce	0.13	2.13
2,4-D Ester LV4	Herbicide	1	50%	1 pint	2.50	1.25

# ***NEBRASKA FARM CUSTOM RATES***

2024



# Nebraska Farm Custom Rates

**Table 1 STATE SUMMARY OF THE MOST POPULAR MACHINERY OPERATIONS**

<b>LAND TILLAGE OPERATIONS</b>	<b>Average Rate</b>	<b>Most Common</b>	<b>Range</b>	<b>Number Reporting</b>
Disk Harrowing, Primary (heavy), rate per acre	19.93	18.00	10.00-55.00	38
Disk Harrowing, Finishing (light), rate per acre	18.54	16.00	10.00-48.00	39
Moldboard Plow, rate per acre	23.71	25.00	10.00-35.00	7
Harrowing, Spike or Spring Tooth, rate per acre	13.00	15.00	5.00-20.00	8
Chisel Plow for Primary Tillage, rate per acre	20.40	25.00	13.00-25.00	10
Deep Chisel, rate per acre	24.17	25.00	13.00-34.00	12
Subsoil or Rip, rate per acre	27.86	25.00	13.00-55.00	18
Field Cultivator, rate per acre	19.07	20.00	8.50-48.00	22
Vertical or Turbo Tillage, rate per acre	18.78	18.00	10.00-28.00	25
Combination Tillage Operations, Primary, rate per acre	30.17	-	20.00-40.00	6
Combination Tillage Operations, Finishing, rate per acre	25.31	30.00	13.00-48.00	13
Strip Tilling, rate per acre	23.14	25.00	17.00-30.00	14
Strip Tilling with Fertilizer Application, rate per acre	28.50	25.00	17.00-50.00	17
Stalk Shredder PTO Driven, rate per acre	12.29	15.00	9.00-15.00	7
Rolling Stalk Chopper Not PTO Driven, rate per acre	12.43	12.00	11.00-15.00	7
Cultivation Tillage, Rotary Hoe, rate per acre	9.83	6.00	6.00-15.00	6
Cultivation Tillage, conventional, rate per acre	19.26	15.00	10.00-55.00	17
Cultivation Tillage, handling residue, rate per acre	15.94	15.00	12.00-20.00	12
Cultivation Tillage, hill or ditch, rate per acre	14.75	15.00	8.00-24.00	17
<b>PLANTING AND POST PLANTING OPERATIONS</b>	<b>Average Rate</b>	<b>Most Common</b>	<b>Range</b>	<b>Number Reporting</b>
<b>DRILLING</b>				
- Small Grains, conventional drill, rate per acre	18.85	15.00	15.00-27.00	20