

***Wetland Reserve Plan of Operations (WRPO)***  
***Version 1.0***

**Roberts County, SD**  
**Perpetual Easement**  
**Reserved Grazing Rights**  
**Wetlands America Trust, INC**  
**5467401701MJJ**  
**105.21 acres**

**Prepared by:**  
**Cody Warner, ESS**  
**April 16<sup>th</sup>, 2019**



**An Equal Opportunity Provider and Employer**

## **TABLE OF CONTENTS**

<b>1.0 Introduction</b>	
<b>1.1 Reservation of Grazing Rights</b>	
<b>2.0 Baseline Resource Inventory</b>	
<b>2.1 Landuse/cover</b>	
<b>2.2 Soils</b>	
<b>2.3 Hydrology</b>	
<b>2.4 Vegetation</b>	
<b>2.5 Fish &amp; Wildlife</b>	
<b>2.6 Rare, Threatened, Endangered and at Risk Species</b>	
<b>2.7 Cultural Resources</b>	
<b>3.0 Restoration Plans</b>	
<b>3.1 Habitat types restored</b>	
<b>3.2 Habitat needs for wetland dependent wildlife</b>	
<b>3.3 Restoration Goals &amp; objectives</b>	
<b>3.4 Partner Input</b>	
<b>3.5 Conservation Plan Schedule of Operations</b>	
<b>3.6 Costs</b>	
<b>3.7 Clearance &amp; Permits</b>	
<b>3.8 Operations and Maintenance O&amp;M</b>	
<b>3.8.1 Vegetative O&amp;M</b>	
<b>3.8.2 Structural O&amp;M</b>	
<b>4.0 Management Plan</b>	
<b>4.1 Anticipated activities</b>	
<b>4.2 Vegetative activates</b>	
<b>4.2.1 Residue Control/Plant Vigor &amp; Habitat Cover</b>	
<b>4.3 Noxious Weed &amp; Pest Control Strategies</b>	
<b>4.4 Maintaining Easement Boundaries</b>	
<b>4.5 Monitoring the terms &amp; conditions of the deed</b>	
<b>5.0 Monitoring Plan</b>	
<b>5.1 Monitoring Protocol</b>	
<b>5.2 Photo point monitoring</b>	
<b>Attachment A: Grazing Plan Map</b>	
<b>Attachment B: 2 Year Grazing Plan</b>	
<b>Attachment C: Ecological Site Description</b>	

## SECTION 1

### 1.0 INTRODUCTION

For all lands enrolled in the Agricultural Conservation Easement Program (ACEP) - Wetland Reserve Easements (WRE) and its predecessor programs (WRP, etc.), the NRCS must develop a Wetland Reserve Program Plan of Operations (WRPO), requesting input from the landowner and partners. **The WRPO does not supersede or modify the rights acquired by the United States via the NRCS under the terms of the warranty easement deed.** The WRPO addresses the property on which a conservation easement is acquired.

The purposes of this WRPO are to:

- provide an overview of the easement area's pre-restoration resources,
- describe restoration and management objectives,
- describe restoration practices and schedule to restore native vegetation and hydrology,
- describe the management plan including any compatible uses for the easement area,
- describe operation and maintenance requirements of the restoration practices.
- identify the responsibilities of all parties involved in the restoration, management, and maintenance of the easement area,
- summarize costs of activities to restore, maintain, and protect the easement area,
- describe monitoring protocol

This WRPO can be updated and revised over time as requested by the landowner or NRCS to ensure the goals and objectives of the program are fully and effectively achieved. The NRCS state office must approve in writing all changes before they are implemented. The NRCS will meet at least every 3 years with the landowner and other partners, as applicable, to perform site visits and evaluations. The NRCS will work with the landowner and partners to identify specific management practices (e.g., grazing, burning, etc.) that must be completed to maintain wildlife habitat or other wetland functions and values.

The WRPO management activities are outlined in Section 4. Management activities, while described in this WRPO, cannot be implemented without the concurrence of the state conservationist. The landowner must request a Compatible Use Authorization (CUA) for any management activity, including grazing. The CUA, if approved by the NRCS, will describe the details of management practices and activities permitted and reference the WRPO as applicable. If the landowner is unwilling or unable to perform the management activities then the NRCS may enter into an agreement to perform the activities as long as it is necessary to restore, protect, manage, maintain, enhance, and monitor the easement area.

The development of the WRPO, and all associated restoration and management activities of the easement area, is guided by legal documents. First, the warranty easement deed (WED) serves as the legal binding document between the landowner and the USDA-NRCS. Part II of the WED describes all rights reserved by the landowner; Part III of the WED describes the obligations of the landowner including specific prohibited activities and responsibilities on the easement area; Part IV of the WED describes the NRCS's authority to grant the landowner compatible uses. If there are any questions about rights or responsibilities on the easement area consult with your local NRCS Designated Conservationist. Second, the statute, regulations and program policy manual and all related national and state directives guide NRCS's administration of the program. These documents define the responsibilities of each involved party and provide guidance and policy on how to restore, enhance, protect and administer the easement area.

## 1.1 RESERVATION OF GRAZING RIGHTS

This easement includes the "Reservation of Grazing Rights" to the extent allowed by the NRCS as outlined in this WRPO and attachments. The parties hereby agree that the grazing of the easement area is a management tool necessary to achieve the desired wetland functions and values. The easement holder agrees to conduct grazing activity in accordance with the terms and conditions of Exhibit E of the WED and the grazing management plan attached to this WRPO.

The easement holder, and any parties grazing the easement must follow the NRCS approved grazing plan attached to this WRPO. Please refer to Attachment A for the NRCS approved grazing management plan. The grazing management plan must include the location, timing, intensity, frequency, and duration of grazing necessary to achieve the desired wetland functions and values of the easement area. In particular, the grazing management plan will:

- a) contain the provisions necessary to further the identified habitat and species goals and objectives described in the easement and this Exhibit herein;
  - b) be compatible with the identified habitat and species goals and objectives, as described in this WRPO;
  - c) include any livestock watering facilities or fencing. This infrastructure will include considerations for wildlife movement (e.g. no woven wire fence);
  - d) include a plan map depicting grazing units, infrastructure (existing and proposed fence), and livestock watering facilities (existing and proposed locations) and the effects analysis for the infrastructure;
  - e) include criteria to evaluate the effect grazing has on the desired habitat and include the flexibility to make annual adjustments in the location, timing, intensity, frequency, and duration of grazing to account for seasonal climatic factors that result in changes in forage production and subsequent impacts of stocking rates on the desired habitat conditions; and
  - f) include periodic monitoring of the effects of grazing on fish and wildlife functions/services.
- NRCS may require changes to the grazing management plan** to address appropriate habitat features or other factors that were not adequately addressed in the original grazing management plan but are necessary to achieve the goals and objectives of the WRPO and easement.

## **SECTION 2**

### **2.0 BASELINE RESOURCE INVENTORY**

Refer to the NRCS-CPA-52, "Environmental Evaluation", located in Part 5 of the 6-Part folder for resource inventory and findings.

### **2.1 LANDUSE/COVER**

Refer to the SD-CPA-1B, "Land Uses and Soils Information on Your Operating Unit," located in Part 3 of the 6-Part folder, for land use information on the easement area.

### **2.2 SOILS**

Refer to Part 3 of the 6-Part folder for the Web Soil Survey soil maps and legends.

Below is a summary of the Ecological Site Descriptions for the easement area. Plant community restoration will follow the reference plant community for the respective ecologic site to the extent possible. Management of established easements will also follow the ecological site state and transition diagrams. Refer to Section 4 for management activities discussions.

Clayey, Linear Meadow, and Shallow Marsh are the dominant ecological sites. Please refer to Attachment A: Ecological Site Descriptions for a breakdown of acres.

### **2.3 HYDROLOGY**

Refer to Parts 3 of the 6-Part folder for National Wetland Inventory mapping, USGS Topographic mapping, and NRCS wetland mapping. Refer to Part 5 of the 6-Part folder for the Wetland Functional Assessment.

The easement area is located within the Red River watershed. There are 14 basins on the easement, 2 classified as PEMA (Palustrine Emergent Temporary Flooded), 5 PEMC (Palustrine Emergent Seasonally Flooded), 3 classified as PEMCd (Palustrine Emergent Seasonally Flooded drained), 2 classified as PEMAd (Palustrine Emergent Temporary Flooded drained), and 2 classified as PEM/ABF (Palustrine Emergent Semi-permanently Flooded). PEMA basins are characterized by surface water being present for brief periods of time at the beginning of the growing season, with water table well below the soil surface for most of the growing season. PEMC basins are characterized by surface water being present for extended periods, but is absent by the end of the growing season. PEM/ABF basins are semi-permanently flooded depressions vegetated with a matrix of aquatic beds and erect, rooted, herbaceous vegetation. 2 PEMAd and 3 PEMCd basins are to be restored with a ditch plug.

#### Offsite Watershed Alterations

Subsurface and surface drainage alterations through the entire county modifies the historic hydrology regime of the area. However, there has been no significant watershed alterations near the site that affects the wetlands on the tract.

### Onsite Alterations

Six ditches were identified on the preliminary restoration plan. An area Soil Conservationist and the Area Engineer inspected and surveyed the plug locations to determine if they were needed. After this inspection, it was determined that all plugs were needed. These ditch plugs will be installed in 2019. All ditch plugs will function and meet NRCS standards, no further hydrology restoration is needed at this time.

## **2.4 VEGETATION**

Refer to Part 3 of the 6-Part folder for onsite photographs, plants observed in the field, etc. Refer to Part 5 of the 6-Part folder for the Wetland Functional Assessment.

Plant community restoration will follow the reference plant community for the respective ecologic site to the extent possible. Management of established easements will also follow the appropriate ecological site state and transition diagrams. Refer to Section 4 for management activities discussions.

The dominant non-wetland ecological site of the easement is the Clayey ESD. This ESD has a Wheatgrass/Grama/Needlegrass historic (reference) plant community. Based on these descriptions, such non-wetland sites were likely dominated by Slender Wheatgrass, Tall Wheatgrass, Intermediate Wheatgrass, Green Needlegrass, and Blue Grama.

The dominant historic (reference) upland plant community does not exist. Currently, the easement is enrolled in CRP and is comprised of smooth brome and Kentucky bluegrass. Before CRP, the easement was a part of a soybean, corn, and wheat rotational cropping system. The applicable upland acres will be seeded back to a grass mix that mimics as close as possible, the historic grass plant community.

The dominant wetland ecological site of the easement is the Shallow Marsh and Linear Meadow ESD. The Shallow Marsh ESD has a Whitetop/Slough Sedge historic (reference) plant community. Based on these descriptions, such wetland sites were likely dominated by Whitetop, Bottlebrush Sedge, Slough Sedge, Prairie Cordgrass, and American Sloughgrass. The Linear Meadow ESD has a Prairie Cordgrass/Sedge/Reedgrass historic (reference) plant community. Based on these descriptions, such wetland sites were likely dominated by Prairie Cordgrass and Woolly Sedge.

The dominant historic (reference) wetland plant community (or seedbank) partially exists (<40% native plants and >33% narrowleaf/hybrid cattails and/or reed canary grass) and is not recoverable without additional "energy" in the form of prescribed burning, targeted intensive herbicide treatment and/or targeted mowing, vegetation/sediment removal, and/or seeding.

## **2.5 FISH AND WILDLIFE**

Refer to the NRCS-CPA-52, "Environmental Evaluation", located in Part 5 of the 6-Part folder for fish and wildlife information. Refer to Part 5 of the 6-Part folder for the Wetland Functional Assessment. No Wildlife Interpretation for this ESD is available.

## **2.6 RARE, THREATENED, ENDANGERED and AT-RISK SPECIES**

Refer to the NRCS-CPA-52, "Environmental Evaluation", and state T&E Help Sheet, located in Part 5 of the 6-Part folder for Rare, Threatened, Endangered, and at-risk species applicable to this easement.

## **2.7 CULTURAL RESOURCES**

Refer to the NRCS-CPA-52, "Environmental Evaluation", and state Help Sheet, located in Part 5 of the 6-Part folder for Cultural Resources information and compliance applicable to this easement.

## SECTION 3

### 3.0 RESTORATION PLAN

Refer to the Preliminary Restoration Plan located in Part 1 of the 6-part folder and the Conservation Plan in Part 4 of the 6-Part folder and Part 3 of the 6-Part folder for the plan map delineating eligible acres and access associated with the original easement. This final WRPO will contain the restoration plan details of a new WRE.

### 3.1 HABITAT TYPES RESTORED

The table below summarizes the habitat types (being) restored.

<b>Classification</b>	<b>Modifier</b>	<b>Existing Acres</b>	<b>Planned Acres</b>	<b>Restored Acres</b>
PEM	Temporary (A)	.42	1.30	1.72
PEM	Seasonal (C)	2.76	2.53	5.29
PEM	Semi-Permanent (F)	9.30		9.30
Upland	Native Grass/Forb		88.90	88.90
<b>Total Acres</b>		<b>12.48</b>	<b>92.73</b>	<b>105.21</b>

### 3.2 HABITAT NEEDS FOR WETLAND DEPENDENT WILDLIFE

This WRPO will provide habitat for a variety of wetland-dependent species, including upland, ground nesting waterfowl. The table below summarizes the key targets and habitat elements. Due to variation in water levels over seasons or years, wetland complexes are more likely to have at least some wetlands with water and plant regimes favorable to a particular animal, thus ensuring diverse species' representation in an area. Refer to the Habitat Map located in Part 3 of the 6-Part folder for existing, restored/restorable wetland, upland, and/or riparian acres. Refer to Part 5 of the 6-Part folder for the Wetland Functional Assessment.

<b>Targeted Group</b>	<b>Habitat Types</b>	<b>Season of Use</b>	<b>Key Habitat Elements</b>
Shorebirds	PEMA, PEMC, and Uplands	Spring, Summer, and migration	Foraging, loafing primarily; some nesting in upland and wetland
Upland ground-nesting waterfowl	PEMA, PEMC and Uplands	Spring, Summer, and Fall, migration	Nesting (upland), brood rearing, fledging, loafing, and foraging
Wading Birds	PEMA, PEMC, semi-perm/perm, Upland	Spring, Summer, and migration	Nesting, brood rearing, fledging loafing, and foraging
Wetland/Riparian Associated Songbirds (blackbirds, wrens, etc.)	PEMA, PEMC, semi-perm/perm, and Riparian	Spring, Summer, and year-round resident	Nesting, brood rearing, fledging loafing, and foraging
Water birds (Terns, Grebes, Geese)	PEMA, PEMC, & semi-perm/perm	Spring, Summer, and migration	Nesting, brood rearing, fledging loafing, and foraging



### 3.3 RESTORATION GOALS AND OBJECTIVES

The overall restoration goal is to provide a diverse wetland/upland complex that results in abundant habitat and wildlife meeting both the program requirements and landowner objectives. Due to variation in water levels over seasons or years, wetland complexes are more likely to have at least some wetlands with water and plant regimes favorable to a particular animal, thus ensuring diverse species' representation in an area. Therefore, wetlands with specific depths or dimensions may be designed or restoration can utilize the existing wetland features.

**The NRCS does not promise specific water periods** (e.g., permanent water or semi-permanent water). Permanent water areas (even in semi-permanent wetlands) can serve as mink refugia during drought and both landowners and planners should be aware that by creating permanent wetland habitat mink predation during and after drought may increase, potentially leading to severe reductions in duck production

When adjustments to existing wetland topography or existing wetland vegetation are desired/required then the WRPO will follow Biology Technical Note Number 18, "Wetland Topographic Design". The NRCS, landowner, and other partners if applicable, will use the information in Biology Technical Note Number 18 to select the wetland design features based upon the targeted animal group(s) and habitat types found in Section 3.2 above.

Plant community restoration and management will follow the reference plant community for the respective ecologic site to the maximum extent possible (many native grass/grass-like and forb species). Native forbs with a very high monarch butterfly value (from Table 1.0 of SD-FS-96) will be planted to the extent possible.

The dominant historic (reference) upland plant community does not exist. Upland acres will be seeded to native grasses and forbs according to NRCS specifications and standards.

The dominant historic (reference) wetland plant community (or seedbank) partially exists (<40% native plants and >33% narrowleaf/hybrid cattails and/or reed canary grass) and is not recoverable without additional "energy" in the form of prescribed burning, targeted intensive herbicide treatment and/or targeted mowing, vegetation/sediment removal, or seeding.

Active management will be required (see Section 4) on all wetland and upland sites within the easement.

### 3.4 PARTNER INPUT

The US Fish and Wildlife Service and SD Game, Fish and Parks reviewed this WRPO.

### 3.5 CONSERVATION PLAN SCHEDULE OF OPERATIONS

Refer to the Conservation Plan of Operations, located in Part 4 of the 6-Part folder, for practice descriptions, components, implementation timelines, and extent. All appropriate practice job sheets (e.g., seeding plans), practice specifications, and engineering designs are located in Part 5 of the 6-Part folder.

### 3.6 COSTS

Refer to the WRE Preliminary Restoration Plan if WRPO is not final for initial cost projections. Actual payment rates, practice costs, and partner contributions will be listed below during final WRPO preparation. Refer to the restoration contract if the WRPO is final (this should be for WRP active seeding situations only). Payment rates for perpetual easements are 100% of the practice cost. Payment rates for 30-year easements are 75% of the practice cost.

<b>Practice</b>	<b>Major Component Categories (Combined from 1155)</b>	<b>Practice Cost</b>	<b>Partner Contribution</b>
Wetland Restoration	Earthwork and Materials – ditch plug (6)	\$10,200	
Range Planting	Seeding – Operation & seedbed preparation	\$28,448	
Range Planting	Seeding – Upland, Native Grass/Forbs Mix	\$26,670	
Herbaceous Weed Control	Seeding – Mechanical Weed Control	\$5,336	
Fence	Fence – Barbed Wire (11,566 L.F.)	\$37,590	
Watering Facility	Rubber Tire Tank on Earth	\$1,546	
Livestock Pipeline	2" diameter or less (2,250 ft)	\$8,415	
Heavy Use Area Protection	Rock/Gravel base	\$58	
Livestock Pipeline	Rural Water Connection Equipment	\$4,396	
Obstruction Removal	Bury 4 rockpiles (.08 ac each)	\$7,000	
Total		\$129,659	

### 3.7 CLEARANCES AND PERMITS

Refer to any site specific permits required for cultural resources, threatened and endangered species, U.S. Army Corps of Engineers; and state, county, or local permits attached to this WRPO. No permits are required for the planned restoration on this easement.

### 3.8 OPERATION AND MAINTENANCE (O&M)

Operation and Maintenance occurs DURING the useful life of the conservation practice. Management of practices within the easement occurs AFTER the useful life of the conservation practice. The conservation practices installed or used must be maintained for the useful life of the conservation practices, as designated in the specifications and job sheets. In general, management practices have an operational lifespan of one year and vegetative planting/seeding practices have an operational lifespan of 5 years. While engineering practices generally have a 15 to 20 year operational lifespan.

This section will identify whether the landowner has agreed to assume O&M responsibilities or how such responsibilities will be met.

**NRCS Responsibility:** If the landowner or a partner is unable or unwilling to perform necessary O&M activities, restoration practices and extents may need to be reduced to accommodate NRCS's minimal capacity to conduct O&M. The landowner or partners ability to perform the necessary O&M is critical to the success of the WRPO.

The NRCS will provide cost-share assistance for implementing this WRPO to the extent that NRCS determines that it is appropriate and in the public interest, based on the availability of funds. Future O&M

and Management Financial Assistance is not guaranteed; however, the NRCS fully intends to implement the WRPO to the extent practicable.

**Landowner Responsibility:** As identified in the WED, the landowner is responsible for the costs and labor associated with maintaining the easement boundary fence, when present. If damage is due to acts of nature or where damage is not due to landowner negligence or malfeasance, the NRCS may repair, replace or remove the fence at NRCS's cost. In addition, the landowner has the responsibility of controlling noxious weeds and pests as required by federal, state, and local laws. However, a plan to control such species must be approved in writing by the NRCS and be part of this WRPO prior to implementation.

### **3.8.1 Vegetative O&M**

This WRPO includes restoring the upland plant community to the ecological site reference plant community and requires "active" seeding. Therefore, there are O&M costs associated with the seeding and any stand maintenance (e.g., noxious weed control, clipping, etc.) that occurs during the useful practice lifespan (generally 5 years) is the responsibility of the landowner. Refer to Section 4.0 for management of easement for further information.

### **3.8.2 Structural O&M**

Restoration has been designed to minimize structural features that may require O&M. Fences, watering facilities, and pipelines will be installed on the property.

## SECTION 4

### 4.0 MANAGEMENT PLAN

The NRCS may approve changes to the WRPO that do not affect provisions of the easement with input from the landowner and the USWFS. Any changes to the WRPO must meet program objects and must result in equal or greater wildlife benefits, wetland functions and values, and ecological and economic values. Revisions to the final WRPO may result in the addition of new conservation practices or activities required for enhancement, maintenance, management, or repairs to protect the functions and values of the easement that were not included in the original copy of the final WRPO.

Management includes those activities or measures necessary to properly manage wetland functions values (especially wildlife habitat) for which the land was enrolled in the program for the duration of the enrollment. Management requirements may change over time depending on the habitat needs of the enrolled area.

All management activities and measures implemented by the landowner must be pursuant to a compatible use authorization (CUA). However, to the extent possible, these activities should be handled in a comprehensive manner to minimize administrative burden. Therefore, the management plan component of this WRPO may serve as the basis for which a CUA is provided as outlined below.

Only activities that further both the long-term protection and enhancement of the wetland and other natural values of the easement may be authorized as compatible uses through the CUA process. CUAs must not adversely affect habitat for migratory birds, at-risk species, and threatened or endangered species. All CUAs must be signed by the NRCS State Conservationist or designee prior to beginning an activity; implementing activities without the State Conservationist or designee signature is a violation of the terms of the easement. All CUA requests must be in writing and supported by a technical determination, CUAs are not granted verbally. Even if approved, a CUA may be modified or cancelled by the NRCS at any time if deemed necessary to protect the values and functions of the easement.

### 4.1 ANTICIPATED ACTIVITIES

All O&M (see Section 3 regarding O&M) and management actions require a CUA from the NRCS prior to implementing the management or maintenance action identified in this WRPO or requested by the landowner that are prohibited under the terms of the easement. In the event a management or maintenance activity is described as a "prohibited" use in the WED, the WRPO management plan will serve as the basis for CUA, to the extent possible. In other words, a CUA is required any time the landowner carries out an activity that has the potential to affect the hydrology, soil or vegetation of the easement area, even when they are carrying out activities determined necessary by the NRCS.

A landowner who obtains approval to implement a compatible use activity is not under any obligation to implement the activity; however, if the landowner chooses to implement the activity, the landowner must do so in accordance with the terms of the authorization. Since resource conditions change over time, the NRCS (either through this WRPO or a CUA) will not determine that any use is permanently compatible with the easement. Therefore, neither the WRPO nor the CUA will assure any specific level or frequency of such use that extends for more than 10 years at a time.

Compatible use authorizations, in this WRPO or via CUA, must be in writing and supported by a detailed technical determination that clearly documents the basis of activities considered to meet compatibility requirements and guidelines for implementation.

The NRCS considers the management and/or maintenance activities outlined in this WRPO beneficial and compatible with the easement purposes and objectives for which it was established. These activities are indicated below along with a description of their purpose, conditions under which they apply and general criteria for implementation. Site specific specifications for implementation of these activities will follow this WRPO and will be issued to the landowner upon approval of the CUA.

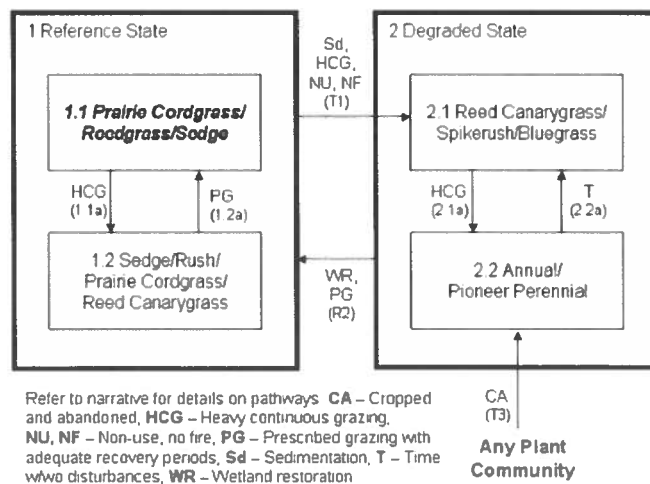
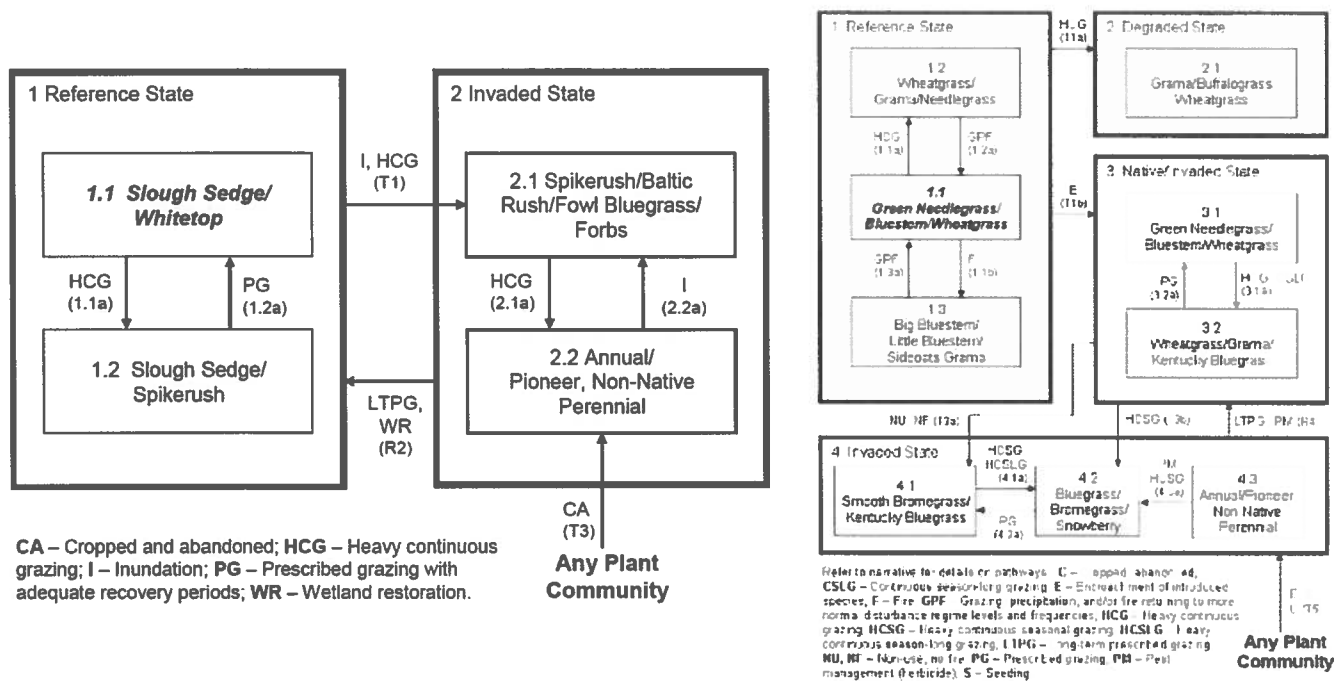
#### **4.2 VEGETATION ACTIVITIES**

Vegetation will be established and/or managed according to any one of the reference phases identified for the respective ecologic site description (e.g., Reference State Phase 1.1 Loamy ESD and 1.1 Clayey ESD). Identification and selection of management tools must be based on the ecological site state and transition diagram. The diagram arrows indicate the direction of transition and the abbreviations indicates the influencing factor of the transition.

Anticipated vegetation management activities and guidelines include spot spraying and grazing on upland acres as needed to control invading introduced grass species. Grazing will initially be conducted following the grazing management plan in Attachment A. This initial grazing plan will be updated to ensure the plant community will remain in the reference state of the respective ecological site (see section 4.2.1) while providing wildlife habitat per this WRPO.

#### 4.2.1 Residue Control/Plant Vigor and Habitat Cover

MLRA 102A Shallow Marsh Ecological Site (top left), Clayey Ecological Site (top right), and Linear Meadow Ecological Site (bottom) Examples:



The frequency, timing, and intensity of cover management and/or maintenance will depend on where the site is on the state and transition diagram and whether or not a "threshold" (the thick black box between different two states) is crossed. The NRCS will determine the phase and state the plant community is in and coordinate cover management activities with the landowner.

This WRPO identifies the upland plant community in the reference state 1.1 after establishment is complete. The state and transition diagram above will be used as a guide for grazing management (see Section 2.4 and 3.3), this easement will be grazed annually under prescription unless habitat conditions warrant a change in management activities.

This activity will help maintain the upland cover and wetland cover in habitats that are appropriate for this region of SD, thereby the greatest wildlife production generally occurs. This activity will also help with noxious weed control efforts. Grazing will be planned so as not to impact nesting birds and to leave enough residual cover in the uplands to still provide good nesting cover.

#### 4.2.2 Weed Control (after practice establishment)

Purpose: Control invasive plants to maintain and enhance native plant communities.

Location: All habitat types on easement. Activity will only occur on a 'spot' basis in areas where invasive or noxious species threaten habitat.

Method of Implementation: Primary methods of weed control will be scouting, and herbicide use. Apply herbicide to targeted weeds only if needed. Activity will follow the Herbaceous Weed Control (315) specification and herbicide label. An aquatic-labeled herbicide is required in areas with high water table and/or standing water.

Frequency, Timing, and Intensity: Activity may be needed on an annual basis in spots depending upon severity. Treatments will normally be applied during the growing season when weeds are most susceptible. Multiple applications of spray may be needed in spots to control weeds.

Effect and Compatibility of Activity: This activity will reduce the spread of weeds that could degrade habitat quality for wildlife. Spraying may reduce vegetation structure and cover in the short term but produce healthier, more resilient native plant communities in the long term. Active weed control is vital to preserving the wetland functions and values of the easement.

### **4.3 NOXIOUS WEED AND PEST CONTROL STRATEGIES**

As per the WED, the landowner is responsible for noxious weed control and emergency control of pests in accordance with all Federal, State and local laws. A plan to control noxious weeds and pests must be approved in writing by the NRCS prior to implementation by the Landowner.

### **4.4 MAINTAINING EASEMENT BOUNDARIES**

The easement boundary must remain clearly marked at all times with permanent markers (e.g., signs) at each corner and approximately every 500 feet of straight run or at minimum distance determined necessary by the NRCS. This will help reduce accidental encroachment or inappropriate use on the easement. Maintaining this marked boundary is the responsibility of the landowner. If additional signs are needed, they should be requested through the NRCS.

#### **4.6 MONITORING THE TERMS AND CONDITIONS OF THE DEED**

The NRCS will ensure that policy and procedures and the terms of the WED are followed, and that enforcement issues are actively resolved to ensure adequate protection of conservation easement functions and values.



## SECTION 5

### 5.0 MONITORING PLAN

Monitoring the easement is necessary to ensure that full wetland functions and values are achieved and maintained. The NRCS and partners knowledgeable about wildlife habitat, wetland restoration, and wetland functions and values will participate in site monitoring. The landowner is encouraged to attend and will at least be contacted by NRCS prior to doing the on-site inventory. The information obtained through the monitoring process will be used to assess the effectiveness of restoration activities, evaluate habitat conditions and the need for management activities, and identify any possible easement violations.

The easement will be visited and a Status Review completed at least once a year during the restoration phase, and/or if there is an active management or O&M agreement. Status reviews will be maintained for the duration of the easement. Reference the case file for the existing status reviews. Once restoration has been completed the site will be visited at least once every three years with aerial monitoring the other two years.

### 5.1 MONITORING PROTOCOL

Monitoring will be completed using the nationally provided Annual Monitoring Worksheet. When the NRCS is scheduling a field visit, the property owners will be notified in advance and provided the opportunity to participate. To the extent practicable, the NRCS will accommodate for the owner's schedule. Monitoring results will be maintained in the case file.

<b><i>Easement Phase</i></b>	<b><i>Monitoring Frequency</i></b>
Restoration Phase or Active Practice Implementation Stage	As often as needed to ensure proper implementation of conservation practices, but at least annually.
Reservation of Grazing Rights Monitoring	Protocol to be developed
Active Compatible Use Authorizations	On-site monitoring for the first two years then on-site monitoring at least once every five years.
Documented Violation	Monitored on-site at least 2 years following the violation.
After a Potentially Damaging Event	Visit the site after significant weather events or other potentially damaging events such as wildfire, floods, major storms, etc.
all other phases	Monitored on-site at least once every three years. The site may be monitored through remote sensing methods the other two years.

## **5.2 PHOTOPPOINT MONITORING**

Points will be established to allow for long-term photo monitoring. Photo points will be compared and analyzed to show habitat trends and conditions, and to assist in making management decisions. Photos will be archived in the Case file.

**PLAN APPROVAL**

At a minimum each plan should be reviewed by persons having expertise in wetland ecology, wildlife management, and engineering.

Plan Approved By:

Boyd Schultz ESS Date: 5/13/19  
Planner and title

\_\_\_\_\_  
NRCS State Office Date: \_\_\_\_\_

I acknowledge that I have received, reviewed and agree to the implementation of this plan.

Boyd Schultz Date: 5/6/19  
Landowner Name

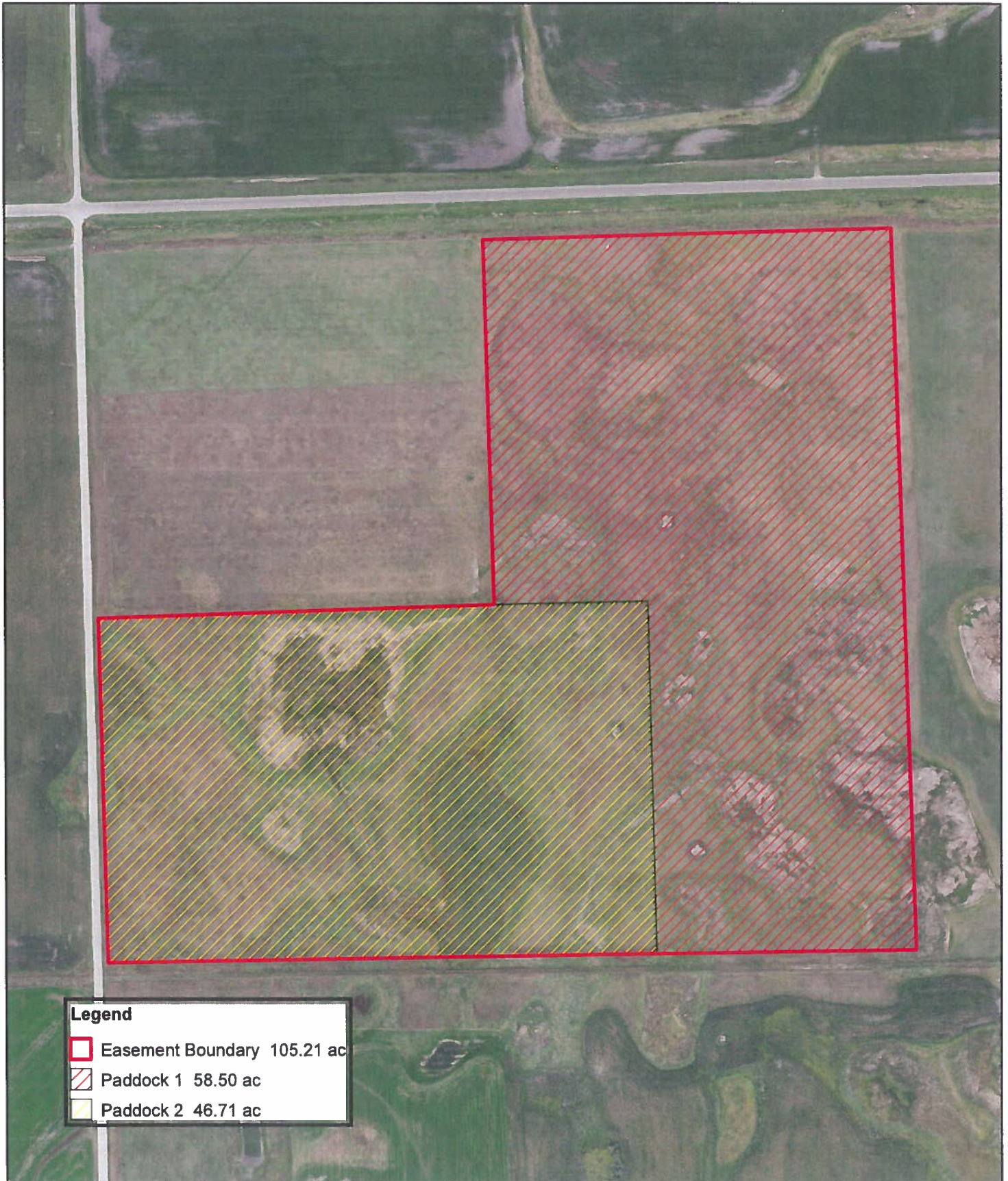
Landowner	NRCS	FWS
Wetlands America Trust, INC One Waterfowl Way Memphis, TN 38120	Brandon Kottke 200 4 <sup>th</sup> street SW room 203 Huron, SD 57350 605-352-1203	Boyd Schultz PO Box 247 Suite 520-B 3 <sup>rd</sup> Ave North Brookings, SD 57006 605-697-2500

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, S.W., Stop 9410, Washington, DC 20250-9410, or call toll-free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.



# Grazing Plan Map

## NW 1/4 19-128-52

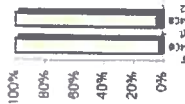




Notes: In accordance with the WRPO, this grazing shall be modified at any time due to current growing conditions, residue heights, and easement program requirements. Grazing may not commence prior to verification of stand establishment by the State Office which is at least 1 full growing season after seeding. If an adequate stand has not established during the first growing season, or if seedlings do not have well developed root systems with advantageous roots above the sown seed, then deferment shall be extended through the second growing season.

Weekly Scheduler

SD-CPA-156  
03/17



□ Total AUM's Available 100%  
■ Percent of Total AUM's Remaining  
Grazing Exceeds Available AUM's

Chart Year

1

Herd

Color

1 2 3 4 5 6

1 2 3 4 5 6

Client

Wetlands America Trust, INC

Conservationist

Date Planned May 22, 2018

## PLANNED GRAZING SYSTEM SCHEDULE

Instructions

Year	Tract-Field/Past No.	Acres	Animal Information	Animal Type	Number	Avail. AUM's	AUM's used
1	T-10408 1	46.7	Cow	1200 lb., 2 yr +	19	31.3	30.6
1	T-10408 2	58.5	Cow	1200 lb., 2 yr +	20	39.2	37.6
2	T-10408 2	58.5	Cow	1200 lb., 2 yr +	20	39.2	37.6
2	T-10408 1	46.7	Cow	1200 lb., 2 yr +	19	31.3	30.6

Primary Growth for Cool Season Plants		Primary Growth for Warm Season Plants		August		September		October		November		December		January		February		March	
April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52								

Group	Percentage
All respondents	85%
Dissatisfied	90%
Satisfied	80%

## Wetlands America Trust, INC.

Conservationist

Date Planned: May 22 2018

May 22 2018

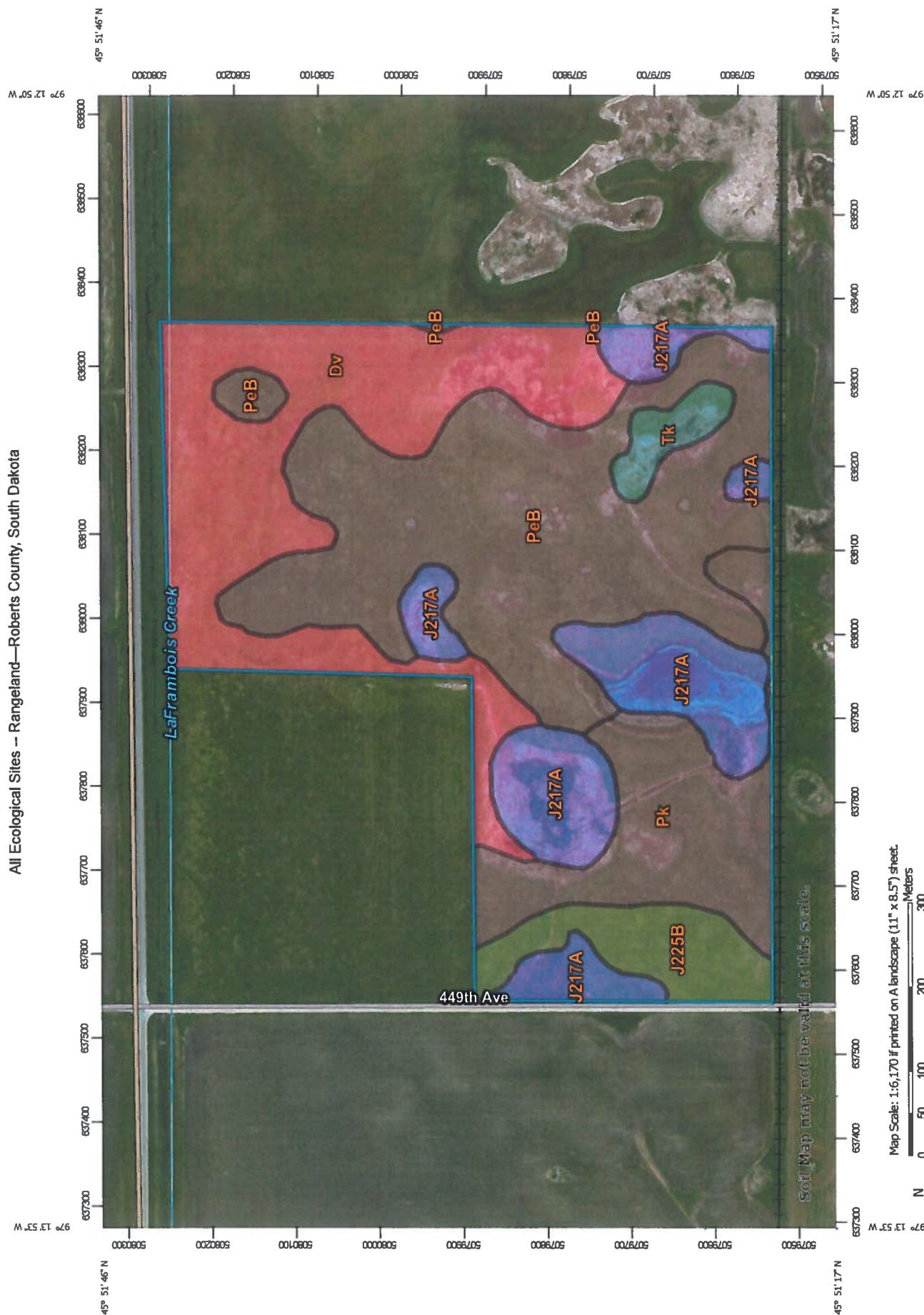
2

6

Wetlands America Trust, INC.

[illegible]

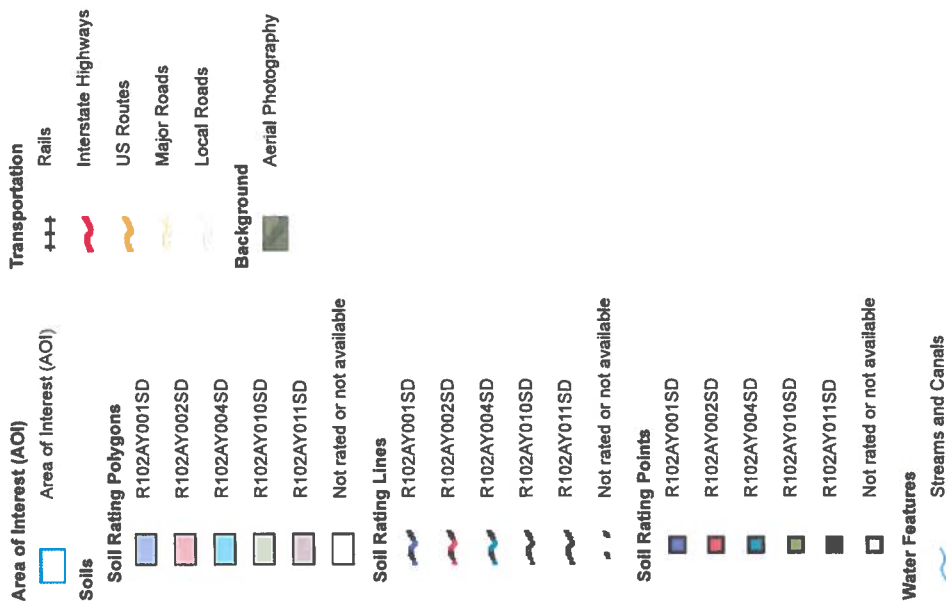
# All Ecological Sites -- Rangeland—Roberts County, South Dakota



Map Scale: 1:6,170 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Roberts County, South Dakota  
Survey Area Data: Version 18, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 9, 2014—Nov 11, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## All Ecological Sites — Rangeland

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
Dv	Castlewood clay	Castlewood, undrained (85%)	R102AY002SD — Linear Meadow	28.6	26.1%
		Bearden (7%)	R102AY006SD — Limy Subirrigated		
		Ludden (5%)	R102AY002SD — Linear Meadow		
		Peever (3%)	R102AY011SD — Clayey		
J217A	Parnell silty clay loam, occasionally ponded, 0 to 1 percent slopes	Parnell, occasionally ponded (65%)	R102AY001SD — Shallow Marsh	18.3	16.7%
		Hamerly (10%)	R102AY006SD — Limy Subirrigated		
		Parnell, frequently ponded (10%)	R102AY001SD — Shallow Marsh		
		Vallers (10%)	R102AY002SD — Linear Meadow		
		Lakepark (5%)	R102AY002SD — Linear Meadow		
J225B	Forman-Aastad complex, 1 to 4 percent slopes	Forman (55%)	R102AY010SD — Loamy	6.5	5.9%
		Aastad (20%)	R102AY020SD — Loamy Overflow		
		Mehurin (12%)	R102AY011SD — Clayey		
		Tonka, occasionally ponded (8%)	R102AY004SD — Wet Meadow		
		Parnell, frequently ponded (3%)	R102AY001SD — Shallow Marsh		
		Vallers (2%)	R102AY002SD — Linear Meadow		
PeB	Peever clay loam, 2 to 6 percent slopes	Peever (85%)	R102AY011SD — Clayey	39.1	35.8%
		Aastad (5%)	R102AY020SD — Loamy Overflow		
		Cavour (5%)	R102AY013SD — Claypan		
		Forman (3%)	R102AY010SD — Loamy		
		Tonka, occasionally ponded (2%)	R102AY004SD — Wet Meadow		

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
Pk	Peever-Tonka complex	Peever (60%)	R102AY011SD — Clayey	14.5	13.3%
		Tonka (30%)	R102AY004SD — Wet Meadow		
		Hamerly (6%)	R102AY006SD — Limy Subirrigated		
		Parnell (2%)	R102AY001SD — Shallow Marsh		
		Forman (1%)	R102AY010SD — Loamy		
		Vallers (1%)	R102AY003SD — Subirrigated		
Tk	Tonka silty clay loam, 0 to 1 percent slopes	Tonka, undrained (90%)	R102AY004SD — Wet Meadow	2.3	2.1%
		Cubden (5%)	R102AY006SD — Limy Subirrigated		
		Hamerly (2%)	R102AY006SD — Limy Subirrigated		
		Vallers (2%)	R102AY003SD — Subirrigated		
		Parnell (1%)	R102AY001SD — Shallow Marsh		
Totals for Area of Interest				109.2	100.0%