



## **2015-2019 RESTORATION AND MAINTENANCE PLAN**

For

### **TRACT 2011002**

Prepared for:  
**Platte River Recovery Implementation Program  
Land Advisory Committee**

Completion Date:

**XX/XX/15**



## Table of Contents

I. PROPERTY DESCRIPTION AND BACKGROUND .....	1
A. Purpose .....	1
B. Tract Location and Size .....	1
C. Land Interest .....	1
D. Communication and Coordination .....	1
II. RESPONSIBILITIES .....	2
A. Management Responsibilities .....	2
1. Planning .....	2
2. Implementation of Management Activities .....	2
3. Enforcement .....	2
B. Budget and Invoicing .....	2
C. Plan Authorization and Modifications .....	2
III. EXISTING HABITATS .....	3
A. Complex and Non-Complex Habitat .....	3
1. Associated Complex Habitat .....	3
2. Non-Complex Habitat Acres .....	3
3. Excess Acres .....	3
B. Land Cover .....	3
C. Existing Land Features of Interest .....	4
1. Non-Riverine Surface Water .....	4
2. River Frontage and Active Channel Widths .....	4
3. Contiguous Sand Substrates .....	4
4. Island and Channel Bank Height .....	4
5. Groundwater .....	4
6. Flooding in Non-Wetland Areas .....	4
7. Power/Transmission Lines .....	4
D. Incompatible Uses and Environmental Concerns .....	4
E. Certified Irrigated Acres .....	5
IV. OPERATIONS AND MAINTENANCE .....	6
A. Goals and Objectives .....	6
1. Adaptive Management Goals and Objectives .....	6
2. Species Habitat .....	7
3. Property Maintenance .....	8
4. Land Asset Management .....	11
V. MONITORING AND RESEARCH .....	12
A. Baseline Monitoring .....	12
1. Land Cover Analysis .....	12
2. Channel LiDAR Project .....	12
3. Aerial Photography .....	12
4. In-Channel Geomorphology and Vegetation Monitoring .....	12
5. Least Tern, Piping Plover and Whooping Crane Monitoring .....	12
6. Species of Interest Surveys .....	13
B. Research .....	13
1. LETE and PIPL riverine versus OCSW experiment (Goal 1, Objective 1a) .....	13



VI. ENVIRONMENTAL LAWS, PERMITTING AND COMPLIANCE .....	14
A. Section 7 Consultation.....	14
1. Measures to Minimize or Eliminate Take of Least Tern and Piping Plover .....	14
2. Measures to Minimize or Eliminate Take of Whooping Crane.....	14
3. Measures to Minimize or Eliminate Take of Pallid Sturgeon .....	14
B. Fish and Wildlife Coordination Act and Nebraska Non-game and Endangered Species Conservation Act.....	15
1. Raptors.....	15
2. Northern River Otter.....	15
3. Western Prairie Fringed Orchid.....	15
4. Platte River Caddis Fly.....	15
5. Vegetation Communities of Conservation Importance .....	15
6. Regal Fritillary.....	15
C. Migratory Bird Treaty Act.....	16
D. Bald Eagle Act.....	16
E. United States Army Corps of Engineers Section 404 Permitting and Nebraska Department of Environmental Quality Section 401 Water Quality Certification.....	16
F. National Pollutant Discharge Elimination System Construction Stormwater Discharge Permit .....	16
G. County Floodplain Development Permit.....	16
H. State Historic Preservation Office Clearance .....	16
I. Good Neighbor Policy .....	17
VII. PUBLIC ACCESS.....	17
A. Education.....	17
B. Recreation.....	17
APPENDIX A – FIGURES .....	18



## **I. PROPERTY DESCRIPTION AND BACKGROUND**

### **A. Purpose**

The purpose of this plan is to outline the restoration, operations and maintenance activities, as well as species habitat and adaptive management research and monitoring activities that will occur on Tract 2011002 (Evaluation Tract Number 1019) during the period of 2015-2019.

### **B. Tract Location and Size**

Tract 2011002 is approximately 71 acres in size and is located in portions of Section 30, T-10N, R-10W. Figure A-1 (located in Appendix A) delineates the property boundary. The tract is located in the Alda to Grand Island bridge segment. Figure A-2 shows the parcel location within the bridge segment and its proximity to existing leased and owned conservation lands.

### **C. Land Interest**

A fee simple absolute title is held in trust by the Platte River Recovery Implementation Foundation (PRRIF) on behalf of the Program.

### **D. Communication and Coordination**

The Executive Director's Office (ED Office) is responsible for communication and coordination with neighboring landowners. Neighbors will not be asked to provide formal comment on annual Work Plans but will be notified and consulted regarding specific restoration or management activities that could impact their properties.



## **II. RESPONSIBILITIES**

### **A. Management Responsibilities**

#### ***1. Planning***

Annual Work Plans for this property are to be written by representatives of the ED Office with oversight and input from the Program's Land Advisory Committee (LAC). Program staff will be responsible for conducting, or retaining contractors to conduct, planning, design, and permitting for specific activities carried out under this plan.

#### ***2. Implementation of Management Activities***

Implementation of management activities will be carried out by Program staff or by contractors under the oversight of Program staff.

#### ***3. Enforcement***

Program staff is responsible for establishing controlled access to the property and will notify law enforcement agencies and others of issues as appropriate.

### **B. Budget and Invoicing**

Program staff will be responsible for budgeting and invoicing of activities on this property. No later than March 1 of each year during the term, a report showing income and expenditures for the property during the preceding fiscal (same as calendar) year will be completed and presented to the LAC and Governance Committee (GC) for review.

### **C. Plan Authorization and Modifications**

The LAC and TAC will provide comments on this Plan and the LAC will forward a recommendation to the GC. The GC must authorize this Plan before it can be executed. In addition, the LAC and TAC will provide comments on annual Work Plans and the LAC will forward a recommendation on the annual Work Plans to the GC. The GC must approve the annual Work Plans before they can be executed.

It is anticipated that once every five years, the restoration and management plan will go through a major revision process where the goals, objectives, and activities will be reevaluated. Plan updates will be subject to the same comment and approval process as the original Plan.



### III. EXISTING HABITATS

#### A. Complex and Non-Complex Habitat

The entirety of the tract will be managed as non-complex habitat. The sand pit area of this tract is considered as non-complex habitat in accordance with section II.B.2 and *Table 2. Non-Complex Habitat Guidelines* of the Program Land Plan.

##### 1. *Associated Complex Habitat*

The nearby Shoemaker Island Complex managed habitats can function as associated complex habitats for the purpose of adaptive management paired design experiments.

##### 2. *Non-Complex Habitat Acres*

The entirety of this tract is considered as non-complex habitat.

##### 3. *Excess Acres*

This tract does not contain any excess acres.

#### B. Land Cover

Existing land cover/use on and adjacent to this Tract was evaluated utilizing the updated 2005 land cover overlay developed in cooperation with the Whooping Crane Maintenance Trust Inc. (Crane Trust) and the United States Fish and Wildlife Service (USFWS). The land cover classifications from the overlay were compared to the most recent United States Department of Agriculture (USDA) Farm Service Agency (FSA) and Program aerial photography in order to identify any land use changes that have occurred since the development of that dataset. The 2005 land cover/use for this Tract is summarized in Table 1. Several additional land cover/use related maps are located in Appendix A including:

- Figure A-3 – 2005 Land Cover/Use
- Figure A-4 – National Wetland Inventory
- Figure A-5 – 1938 Aerial Photography
- Figure A-6 – 1998 CIR Aerial Photography
- Figure A-7 – 2015 CIR Aerial Photography

**Table 1 – Tract 2011002 Estimated 2010 Land Cover/Use Summary**

<b>Land Cover Classification</b>	<b>Acres</b>	<b>Percent of Tract</b>
<b>Bare sand</b>	<b>8</b>	<b>11.27%</b>
<b>Water</b>	<b>14</b>	<b>19.72%</b>
<b>Ag</b>	<b>49</b>	<b>69.01%</b>
	<b>71</b>	<b>100%</b>

### **C. Existing Land Features of Interest**

#### ***1. Non-Riverine Surface Water***

This tract contains a sandpit lake covering approximately 14 acres. At the time of the evaluation report, the depth is unknown, but assumed to be greater than 50 feet based on common sand and gravel pumping techniques.

#### ***2. River Frontage and Active Channel Widths***

This tract does not have river frontage..

#### ***3. Contiguous Sand Substrates***

According to June 2011 Program aerial photography, there were approximately 15 acres of contiguous sand substrate. This tract contains approximately 8 acres of contiguous sand substrate, located primarily in and around the active mining operation. Currently, this sand substrate consists of haul roads and material piles and is not considered suitable habitat.

#### ***4. Island and Channel Bank Height***

This tract includes no river channel.

#### ***5. Groundwater***

There is no intent for wet meadow or wetland restoration for this tract.

#### ***6. Flooding in Non-Wetland Areas***

There is no evidence of temporary inundation of non-wetland areas.

#### ***7. Power/Transmission Lines***

There are no above ground power lines on tract 2011002. Location of power lines on this tract is unknown but assumed to be on the western portion of the property along the road and servicing the mining operation.

### **D. Incompatible Uses and Environmental Concerns**

This tract does not currently have land uses that are incompatible with target species habitat. No environmental concerns have been identified.



**E. Certified Irrigated Acres**

Tract 2011002 includes 73.13 NRD certified irrigated acres.





## IV. OPERATIONS AND MAINTENANCE

### A. Goals and Objectives

Goals and objectives will function as the benchmark for evaluation of ongoing land-related actions. Implementation of Program actions to address goals and objectives will be accomplished at both complex and tract-level scales. Associated complex habitat for this non-complex tract is located in the Shoemaker Island Complex.

#### 1. *Adaptive Management Goals and Objectives*

This section contains objectives related to the experimental design of implementation of the Program's Adaptive Management Plan and experiments to be conducted through that plan. The following summarizes major adaptive management experimental design components that may be conducted completely or in part within this tract:

1. *"Paired Design" – River nesting vs. OCSW nesting*
  - a. The objective of this experiment is to determine differences in nest success and productivity, as well as species selection and use, between river nesting and OCSW nesting of the target species by offering both types of available habitats in close proximity.
2. *Conservation Monitoring and Directed Research*
  - a. System-wide Program conservation monitoring protocols (tern and plover, whooping crane, geomorphology/in-channel vegetation, water quality) and directed research projects (tern and plover foraging habits study, vegetation scour research) may occur on this tract based on monitoring and research priorities and schedules.

#### ➤ ***Goal 1 – Refine Program's understanding of interaction between LETE and PIPL riverine and off-channel sand and water (OCSW) nesting habitat.***

- ***Objective 1a*** – Test Program System, LETE and PIPL hypotheses related to bird response to habitat development, habitat preference for and productivity on riverine versus OCSW nesting habitat. (Priority hypotheses S1b, T1, P1, TP1)
  - **Strategy** – Monitor LETE and PIPL use and productivity on Program sandpit OCSW habitat and adjacent Shoemaker Island Complex riverine habitat. Occurrence, use and productivity will be monitored per the Program's LETE and PIPL monitoring protocol.
  - **Methods** – Past maintenance has included using mechanical methods and/or annual application of pre-emergent herbicide to control vegetation. OCSW habitat creation and maintenance methods are presented under Objective 2a. Monitoring methods are presented in the Program's LETE and PIPL monitoring protocol.



- **Area** – See Objective 2a and Figure A-8 for location of OCSW habitat. The location of the Program-owned Shoemaker Island Complex properties can be seen on Figure A-2.
- **Timeline** – Maintenance and monitoring will occur annually.
- **Cost** – None
- **Responsibilities** – Program staff or contractors under the supervision of Program staff are responsible for maintenance and monitoring.

## 2. *Species Habitat*

- **Goal 2 – Improve sand and water (off-channel sand and water; OCSW) habitat for interior least terns (LETE) and piping plovers (PIPL)**
  - **Objective 1a** – Create and maintain off-channel sand and water (OCSW) target bird species habitat that approximates *Table 1. Target Habitat Complex Guidelines* of the Program Land Plan, to the degree appropriate, and approximates at least the Program’s minimum habitat guidelines.
    - **Strategy** – Restore OCSW nesting habitat on the sandpit on the property and coordinate pumping design and operations with current sand & gravel company to create additional OCSW nesting habitat on the sandpit.
    - **Methods** – OCSW restoration will be accomplished by removing all trees located south of nesting habitat, mechanically clearing and grubbing all vegetation from the south peninsula and creating a second peninsula through coordination of continued pumping by the gravel pit operator. OCSW nesting habitat maintenance will be accomplished by annual application of pre-emergent herbicide and installation of predator fencing.
    - **Area** – Nesting areas and tree clearing areas are presented in Figure A-8.
    - **Timeline** – Creating of the northern, larger nesting area will occur over the next 7-10 years as the pit is mined out. Existing nesting habitat maintenance will occur annually. Tree clearing will occur in 2016.
    - **Cost** – Sandpit rehabilitation costs are expected to be minimal, as the nesting area will be created as the pit is mined out. Tree clearing would cost on the order of \$5,000.



- **Responsibilities** – Program staff or contractors under the supervision of Program staff (in conjunction with the appropriate advisory committees) are responsible for design, permitting and monitoring. Construction and maintenance activities will be bid.
- **Objective 2a** – Maintain off-channel sand and water (OSCW) target bird species habitat that approximates *Table 2. Non-Complex Habitat Guidelines* of the Program Land Plan, to the degree appropriate, and approximates at least the Program’s minimum habitat guidelines.
  - **Strategy** – Maintain and protect OCSW nesting habitat on the peninsula located within the sandpit leased area.
    - **Methods** – Typical OCSW maintenance will be accomplished by annual application of pre-emergent herbicide and installation of predator fencing (see also Obj. 3b). Mechanically clearing and grubbing of vegetation from proposed nesting areas will occur when necessary.
  - **Area** – Habitat maintenance activities will occur on the existing nesting area shown in Figure A-8.
  - **Timeline** – OCSW habitat maintenance will occur annually.
  - **Cost** – Annual maintenance costs are estimated at \$2,000.
  - **Responsibilities** – Program staff is responsible for coordination of maintenance activities. Contractors will perform herbicide applications.

### 3. Property Maintenance

#### ➤ **Goal 3 – Fulfill basic property ownership obligations and needs.**

- **Objective 3a** – Establish and maintain property boundary fencing and signage.
  - **Strategy** – Maintain and/ or replace boundary fence as necessary.
    - **Methods** – Boundary fencing will be four wire livestock fencing and will be constructed per Natural Resources Conservation Service (NRCS) and Nebraska Game and Parks Commission (NGPC) design criteria. Boundary fence will include Program ownership and contact signage at regular intervals. Maintenance



methods may include mowing or spraying of woody species in the cleared area as well as routine fence upkeep.

- **Area** – Property boundary (Figure A-8).
  - **Timeline** – Boundary signage will be installed on existing boundary fences in 2016. Boundary fence maintenance will occur as needed.
  - **Costs** – Boundary signage is expected to cost on the order of \$500. Four wire livestock fence construction costs will be approximately \$10,000. Annual maintenance costs are expected to be on the order of \$1,000.
  - **Responsibilities** – Program staff are responsible for design and permitting. Construction and maintenance activities will be bid.
- **Objective 3b** – Establish and maintain predator fencing and signage.
- **Strategy** – A permanent predator fence will be constructed at each entrance to the nesting area to exclude people and predators from accessing the nesting area over land.
    - **Methods** – The fence will be installed in 2016 on the existing nesting area. Maintenance methods may include mowing or spraying of woody species in the cleared area as well as routine fence upkeep.
  - **Area** – Fence will be located at the entrance to the peninsula (identified on Figure A-8).
  - **Timeline** – Fence will be installed in 2016.
  - **Costs** – Predator fence is expected to cost on the order of \$5,000 and approximately \$200 annually for maintenance.
  - **Responsibilities** – Program staff are responsible for design and permitting. Construction and maintenance activities will be bid.
- **Objective 3c** – Control noxious weeds on property.
- **Strategy** – Infestations of noxious weeds will be eliminated (to the extent possible) annually. Ongoing management/control needs will be assessed annually and incorporated into Work Plans. This tract will be maintained



with little to no vegetation (see Obj. 2a) and noxious weed control needs should be minimal.

- **Methods** - Herbicide application will be the primary method for control of noxious weeds. Biological controls will be considered but only used if deemed effective enough to result in effective control within three growing seasons.
- **Area** – Noxious weed control will be conducted on the entirety of the property.
- **Timeline** – Noxious weed assessment and control activities will be conducted annually.
- **Costs** – Annual costs will be identified in the annual Work Plans and are expected to be less than \$500.
- **Responsibilities** – Program Staff are responsible for identifying infestations and planning/coordinating control efforts. Control activities will be carried out by contractors. The contractor will typically be the county weed authority.

➤ **Goal 4 – Minimize habitat impacts due to invasive vegetation.**

- **Objective 4a** – Eliminate existing and control future infestations of invasive vegetation not listed as noxious weeds.
  - **Strategy** – Existing stands of invasive vegetation will be eliminated (to the extent possible). Ongoing management/control needs will be assessed annually and incorporated into Work Plans. This tract will be maintained with little to no vegetation (see Obj. 2a) and invasive vegetation control needs should be minimal
    - **Methods** – When necessary, invasive vegetation control will be accomplished through a combination of herbicide application and mechanical removal.
  - **Area** – Invasive vegetation will be controlled on the entire property.
  - **Timeline** – Maintenance and control efforts will continue annually.
  - **Costs** – Annual costs will be identified in the annual Work Plans as needed and are expected to be less than \$1,000.



- **Responsibilities** – Program staff will be responsible for identifying infestations. Control activities will be carried out by contractors.

#### 4. *Agricultural Operations*

##### ➤ *Goal 6 – Manage cropland responsibly.*

- **Objective 6a** – Coordinate with renter to ensure that crop rotation, tillage practices and nutrient/pest management are being conducted in accordance with current agricultural best management practices (BMPs).
  - **Strategy** – The Program will make entry into a rental agreement subject to agreement to coordination and approval of the above-mentioned items. The Program will employ standard crop management BMPs like annual soil nutrient testing to ensure that objectives are being met.
    - **Methods** – Methods will be determined annually by Program staff and/or farm management contractors in association with the renter.
  - **Area** – All cropland areas.
  - **Timeline** – Annual.
  - **Costs** – Cropland management activities are expected to cost on the order of \$500 annually. Estimated income is \$6,000 for 2016, but will be reduced as the mine expands into the cropland.
  - **Responsibilities** – Program staff or a farm management contractor acting on behalf of the Program will be responsible for annual planning and coordination.



## MONITORING AND RESEARCH

### **B. Baseline Monitoring**

A variety of monitoring activities will be conducted on and around this property as part of the system-wide investigations conducted under the Integrated Monitoring and Research Plan (IMRP). Baseline monitoring efforts include:

#### ***1. Land Cover Analysis***

- **Objectives** – Document pre-Program land cover conditions. Land cover analysis will be performed again near the end of the First Increment to document changes in land cover.
- **Hypotheses Links** – S1, S1a
- **Timeline** – Pre-Program completed in 2007. Next analysis in 2018.
- **Responsibilities** – ED Office

#### ***2. Channel LiDAR Project***

- **Objectives** – Document channel topography annually.
- **Hypotheses Links** – S1, S1a, Flow1, Sediment1-4
- **Timeline** – Baseline LiDAR collection completed in March of 2009. Collection to continue annually under leaf-off and low flow conditions.
- **Responsibilities** – Collection and analysis by contractor under supervision of ED Office.

#### ***3. Aerial Photography***

- **Purpose** – Document annual channel features and vegetation.
- **Hypotheses Links** - TP 5, Sediment 3, WC3
- **Timeline** – Annual during First Increment per protocol.
- **Responsibilities** – Data collection performed by contractors under supervision ED Office. Analysis by ED Office.

#### ***4. In-Channel Geomorphology and Vegetation Monitoring***

- **Purpose** – System-wide analysis of changes/trends in geomorphology and in-channel vegetation over time. Correlate Program actions with changes/trends.
- **Hypotheses Links** – Flow1-5, Sediment1-4
- **Timeline** – Annual during First Increment.
- **Responsibilities** – Monitoring performed by contractors under supervision ED Office.

#### ***5. Least Tern, Piping Plover and Whooping Crane Monitoring***

- **Purpose** - Document WC use, document LETE and PIPL use, nesting pairs, and fledging success.
- **Hypotheses Links** – T1, P1, TP1-5, WC1 & 3
- **Timeline** – Annual during First Increment.
- **Responsibilities** – Monitoring performed by contractors or cooperators under supervision ED Office.



### ***6. Species of Interest Surveys***

- **Purpose** - Document habitat for and use of Program properties by “species of concern” or other species of interest.
- **Hypotheses Links** – S2
- **Timeline** – Following acquisition and later, as appropriate, after restoration.
- **Responsibilities** – Coordination by ED Office. Surveys by contractors or agency personnel.

### **C. Research**

Research efforts to be conducted in full or part on this complex under the IMRP include:

#### ***1. LETE and PIPL riverine versus OCSW experiment (Goal 1, Objective 1a)***

- **Purpose** - Determine LETE and PIPL preference for and productivity on riverine versus OCSW nesting habitat.
- **Hypotheses Links** - S1b, TP1
- **Timeline** – Maintenance and monitoring annually.
- **Responsibilities** – Program staff or contractors under the supervision of Program staff (in conjunction with the appropriate advisory committees) are responsible for design, permitting and monitoring. Construction and maintenance activities will be bid.





## **V. ENVIRONMENTAL LAWS, PERMITTING AND COMPLIANCE**

### **A. Section 7 Consultation**

#### ***1. Measures to Minimize or Eliminate Take of Least Tern and Piping Plover***

Habitat improvement activities occurring on river channel or sandpits between April 15 and August 15 will only be conducted in the absence of nesting least terns and piping plovers. Program Staff will insure that a survey for these species is conducted by qualified individuals (e.g. by Program staff, contractor, conservation owner) in the area that will be disturbed within three days prior to the initiation of activities.

If least terns or piping plovers nest on the off-channel nesting complex, appropriate measures will be taken to control predation. At a minimum, any land connection to the nesting area for maintenance will be protected by electrified predator fencing. Other measures may be warranted and Service concurrence will be obtained before implementing additional measures.

#### ***2. Measures to Minimize or Eliminate Take of Whooping Crane***

For habitat restoration and land management activities in or within 0.25 miles of the Platte River channel occurring between March 23 and May 10, or October 1 and November 15, construction shall only take place from one hour following sunrise to two hours prior to sunset unless otherwise approved by the Service's Coordinator of the Whooping Crane Migration Tracking Program. Program staff will notify the Service when Program habitat restoration work will be conducted during the above dates from the Highway #283 and Interstate 80 intersection near Lexington, Nebraska downstream to Chapman, Nebraska.

Construction or other work crews working in or within 0.25 miles of the channel during the above dates will check channel areas for the presence of whooping cranes prior to starting work each day, and report the presence of whooping cranes to Program staff. When whooping cranes are discovered in the Platte River valley, either by the Program monitoring crew or the above required check by construction or work crews, or are known to be in the valley through other sources, including via notification from the Service's Coordinator, Program staff will confer with the Service and will notify construction crews if it is necessary to temporarily halt construction activities.

Construction work should be completed as quickly as possible. Earth moving equipment will be moved from the river channel to an upland site located behind a tree line at the end of each work day if such features are available on the property. In the instance that such features are unavailable, equipment should be moved to a position at least 0.25 miles away from the channel.

#### ***3. Measures to Minimize or Eliminate Take of Pallid Sturgeon***

Land management activities will not result in incidental take of pallid sturgeon.



## **B. Fish and Wildlife Coordination Act and Nebraska Non-game and Endangered Species Conservation Act**

The Program will work with the USFWS and NGPC to identify potential impacts to state and federal species of concern and address them as part of this document. Program actions to avoid or mitigate potential species impacts not addressed in other portions of Section VI are presented below.

### ***1. Raptors***

The Program will conduct raptor surveys for management activities that may affect active raptor nests during the period of February 1 through July 15<sup>th</sup>. If a nest is discovered, that tree will not be removed.

### ***2. Northern River Otter***

The Program will conduct natal den surveys when performing restoration or management actions during the period of February 15 to June 15 that may impact river channel or slough banks where natal dens may be present. If natal dens are discovered, the Program will coordinate with the NGPC to design appropriate buffers.

### ***3. Western Prairie Fringed Orchid***

Projects that will result in the disturbance of native prairies or wet meadows will be surveyed for the presence of Western Prairie Fringed Orchid during the flowering period of June 15 through July 7<sup>th</sup>. If this species is present, activities will be modified to prevent destruction of existing plants.

### ***4. Platte River Caddis Fly***

The tract was not surveyed for presence of Platte River caddisfly (PRCF). The bare sand and open water habitat that encompasses the entirety of this tract is not conducive to PRCF populations based on current knowledge of their biology.

### ***5. Vegetation Communities of Conservation Importance***

Surveys for Northern Cordgrass Wet Prairie, Northern Sedge Wet Meadow, and Wet Mesic Tallgrass Prairie will be conducted on all Program properties during the soonest recommended period after acquisition. If occurrences are found, the Program will coordinate with the USFWS and NGPC to determine appropriate methods to avoid or mitigate negative impacts from Program management actions. Additionally, the Program will investigate opportunities to re-establish these communities if suitable locations are present.

### ***6. Regal Fritillary***

The Program will coordinate with the USFWS and NGPC to investigate opportunities to establish native violet species (*Viola spp.*) in native grasslands or grassland restorations to provide a host species for the regal fritillary and promote its conservation.



### **C. Migratory Bird Treaty Act**

Land management that involves burning, cutting or mechanical removal of vegetation (with the exception of restoration activities on ground that was previously in agricultural crops) will not occur between April 15 and July 15 without first doing surveys to insure that no occupied migratory bird nest will be destroyed.

### **D. Bald Eagle Act**

Eagle nests will not be disturbed and a quarter mile buffer will be maintained while occupied by adults or young. Known eagle roost trees will be left in place.

### **E. United States Army Corps of Engineers Section 404 Permitting and Nebraska Department of Environmental Quality Section 401 Water Quality Certification**

Prior to commencement of construction work to be accomplished in wetlands or waters of the United States, including dredging or placement of fill material, the Program will obtain a 404 permit and 401 water quality certification. Work in wetlands or waters of the State that are not jurisdictional under the Federal Clean Water Act will still need to comply with the Nebraska Department of Environmental Quality's Title 117.

### **F. National Pollutant Discharge Elimination System Construction Stormwater Discharge Permit**

All construction work that will disturb an area exceeding 1 acre in size will be required to meet the requirements of the Environmental Protection Agency NPDES Construction General Permit. This permit includes the development of a Stormwater Pollution Prevention Plan. The Program will submit a Notice of Intent a minimum of seven days before commencement of construction activities.

### **G. County Floodplain Development Permit**

All fill placed within the 100-year floodplain will require a floodplain development permit from the county where the work is undertaken. In order to obtain a permit, a project must have No-Rise certification meaning that it will raise the 100-Year Base Flood Elevation (BFE) by less than one foot.

### **H. State Historic Preservation Office Clearance**

The legal description of Tract 2010002 will be provided to the State Historic Preservation Office (SHPO) to facilitate the early identification of potential cultural resources related issues. Potential cultural resources concerns on the property are not expected, as it is a location that has been actively mined for sand and gravel. If Program actions uncover potential artifacts or human remains, work will cease until such time that the Program can consult with SHPO to determine the appropriate course of action.



### **I. Good Neighbor Policy**

The Program will comply with local, state, and federal laws, and to the extent permitted by such laws will be responsible for its actions to the same extent as a private individual under like circumstances.

## **VI. PUBLIC ACCESS**

### **A. Education**

Access for education, including non-Program research, will be allowed on a case-by-case basis as long as it is compatible with target species usage and does not negatively impact species habitat. Program staff will be responsible for evaluating requests and granting access permission.

### **B. Recreation**

There will be no public recreation on this property due to the off channel tern and plover site which is not conducive to public access.



## APPENDIX A – FIGURES

Tract 2011002  
Approx. 71 Ac.

Base Layer: June 2015 PRRIP Aerial Imagery



**Legend**

Tract 1019	Audubon	PRRIP
CNPPID	PRWCT	
NGPC	TNC	
NPPD	Wyoming	



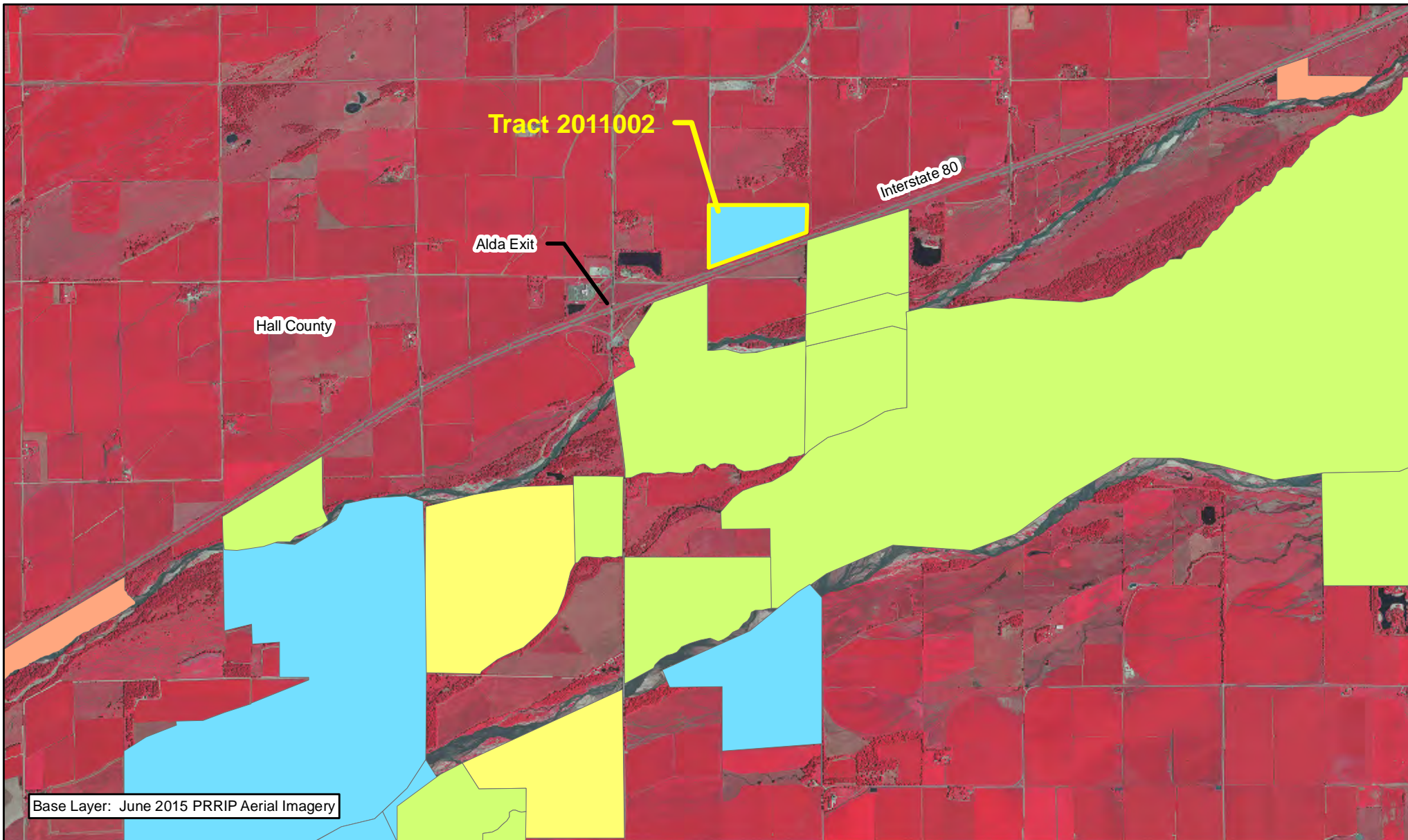
Miles  
0.05

**TRACT 2011002  
BOUNDARY MAP**

Date: 11/04/15  
By: TRT

Figure A-1





### Legend

Tract 1019	Audubon	PRRIP
County	CNPPID	PRWCT
	NGPC	TNC
	NPPD	Wyoming



Miles

1

### TRACT 2011002 LOCATION MAP

Date: 11/04/15  
By: TRT

Figure A-2



#### Legend

- |                       |                          |
|-----------------------|--------------------------|
| Tract 1019            | River Early Successional |
| Ag                    | River Shrubland          |
| Bareground/Sparse Veg | Roads                    |
| Canal/Drainage        | Rural Developed          |
| Mesic Wet Meadow      | Sand Pit                 |
| Phragmites            | Unvegetated Sandbar      |
| Riparian Shrubland    | Upland Woodland          |
| Riparian Woodland     | Warmwater Slough         |
| River Channel         | Xeric Wet Meadow         |



0.09 Miles

TRACT 2011002  
2005 LAND COVER/USE

Date: 11/04/15  
By: TRT

Figure A-3





- Legend**
- Tract 1019
  - Lacustrine Unconsolidated Bottom (LUB)
  - Palustrine Aquatic Bed (PAB)
  - Palustrine Emergent (PE)
  - Palustrine Forested (PF)
  - Palustrine Scrub-Shrub (PSS)
  - Palustrine Unconsolidated Bottom Excavated (PUBx)
  - Palustrine Unconsolidated Shore
  - Riverine Unconsolidated Bottom (RUB)
  - Riverine Unconsolidated Shore (RUS)
  - Riverine Streambed (RS)

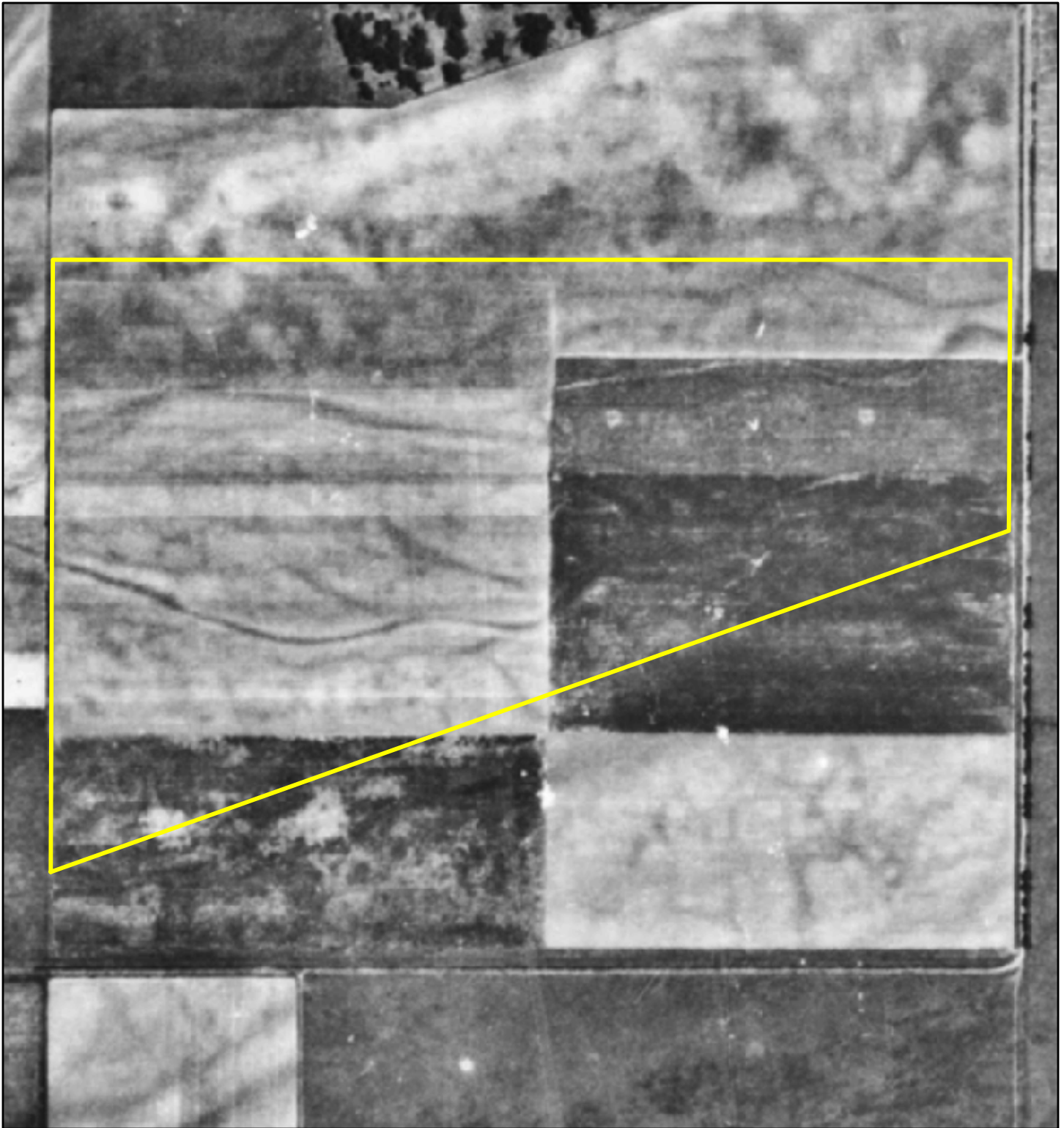



0.1 Miles

TRACT 2011002  
NWI MAP


Date: 11/04/15  
By: TRT

Figure A-4



**Legend**  
 Tract 1019



 Miles  
0.1


TRACT 2011002  
1938 IMAGERY

Date: 11/04/15  
By: TRT


Figure A-5





**Legend**  
 Tract 1019



 Miles  
0.1


TRACT 2011002  
1998 CIR IMAGERY

Date: 11/04/15  
By: TRT


Figure A-6





**Legend**  
 Tract 1019



 Miles  
0.1





TRACT 2011002  
2015 CIR IMAGERY

Date: 11/04/15  
By: TRT

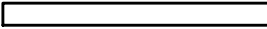
Figure A-7





- Legend**
-  Existing Nesting Area
  -  Future Nesting Area
  -  Potential Tree Clearing
  -  Property Boundary



 0.1 Miles

TRACT 2011002  
Example Habitat Layout

Date: 11/04/15  
By: JDB

Figure A-8