



## LAND EVALUATION REPORT

For

### TRACT 1902



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

Evaluation Team:  
**Bruce Sackett, Andrew Pierson, Dave Zorn,**  
**Mark Czaplewski, Matt Rabbe, Brock Merrill**

Site Visit Date:  
**9/5/2019**

Evaluation Report Completion Date:  
**10/21/2019**



## Table of Contents

I. EVALUATION TEAM AND SCHEDULE .....	1
A. Evaluation Team Members .....	1
B. Date of Evaluation .....	1
II. GEOGRAPHIC CONSIDERATIONS .....	1
A. Tract Location and Size .....	1
III. LAND USE CONSIDERATIONS .....	1
A. Land Cover/Use .....	1
B. Incompatible Uses and Environmental Concerns .....	2
C. Restoration and Maintenance Impacts on Neighboring Properties .....	2
D. Target Species Use .....	2
E. Certified Irrigated Acres .....	2
IV. TARGET SPECIES HABITAT CONSIDERATIONS .....	2
A. Existing Species Habitat .....	2
1. Non-Riverine Surface Water .....	2
2. River Frontage and Active Channel Widths .....	3
3. Contiguous Sand Substrates .....	3
4. Island and Channel Bank Height .....	3
5. Groundwater .....	3
6. Flooding in Non-Wetland Areas .....	3
7. Power/Transmission Lines .....	3
B. Complex and Non-Complex Habitat .....	3
1. Habitat Complex Acres .....	3
2. Non-Complex Habitat Acres .....	3
3. Excess Acres .....	3
4. Habitat Restoration and Maintenance Needs and Conceptual Costs .....	3
5. Buffer .....	4
V. PROPERTY MANAGEMENT CONSIDERATIONS .....	4
A. Encumbrances .....	4
1. Legal Encumbrances .....	4
2. Management Encumbrances .....	4
B. Environmental Audit .....	4
C. Property Interest Acquisition Options and Costs .....	4
D. Extraneous Costs .....	5
E. Operations and Maintenance .....	5
F. Other Considerations .....	5
VI. EVALUATION TEAM RECOMMENDATION .....	5
VII. LAC RECOMMENDATION .....	5
APPENDIX A – MAPS .....	0
APPENDIX B – LEGAL REVIEW .....	0



## **I. EVALUATION TEAM AND SCHEDULE**

### **A. Evaluation Team Members**

The Tract 1902 Evaluation Team members are:

- Bruce Sackett – Platte River Recovery Implementation Program
- Matt Rabbe – US Fish & Wildlife Service
- Andrew Pierson – Audubon Rowe Sanctuary
- Mark Czaplewski – Central Platte Natural Resources District
- Dave Zorn – Central Nebraska Public Power & Irrigation District
- Brock Merrill – US Bureau of Reclamation

### **B. Date of Evaluation**

The Evaluation Team performed a review of this property on September 5, 2019. A summary of this Evaluation Report was presented to the Land Advisory Committee (LAC) and discussed at the October 29, 2019 LAC meeting in Kearney, Nebraska. The Report was finalized following that meeting.

## **II. GEOGRAPHIC CONSIDERATIONS**

This tract lies within the Alda to Grand Island, NE reach of the Platte River and within 3.5 miles of the main channel or 2 miles of a side channel. As such, it is eligible for inclusion in the Program.

### **A. Tract Location and Size**

Tract 1902 is approximately 28 acres in size and is located in 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 Program land acquisition area, bridge segment and its proximity to existing leased and owned conservation lands and other tracts being evaluated by the Program.

## **III. LAND USE CONSIDERATIONS**

Land cover/use information for this phase of the land evaluation process is compiled by Program Staff utilizing best available Geographic Information System (GIS) datasets developed by the Program and its partners. A more detailed field analysis of target species habitat considerations is conducted during the next phase of the tract evaluation process and is discussed further in the next section of this report.

### **A. Land Cover/Use**

Existing land cover/use on and adjacent to this tract was evaluated utilizing the 2005 land cover overlay developed in cooperation with the Whooping Crane Maintenance Trust Inc. (Crane Trust) and the United States Fish and Wildlife Service (USFW). 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 – 2019 CIR Aerial Photography

**Table 1 – Tract 1902 2005 Land Cover/Use Summary**

Land Cover Classification	Acres	Percent of Total
Ag	28.2	100.00%
	<b>28.2</b>	<b>100.00%</b>

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

Currently, tract 1902 is operated for typical agricultural purposes – typically corn and soybean rotation during the growing season and cattle forage in the winter. There are no environmental concerns with this tract.

#### **C. Restoration and Maintenance Impacts on Neighboring Properties**

Restoration and maintenance on this tract is not expected to have negative impacts on neighboring properties. Program Staff would coordinate with neighboring landowners to inform them about restoration and maintenance activities and use this contact as a tool to develop positive relationships.

#### **D. Target Species Use**

There is no documented target species use of this tract.

#### **E. Certified Irrigated Acres**

Tract 1902 includes 29.05 NRD certified irrigated acres.

### **IV. TARGET SPECIES HABITAT CONSIDERATIONS**

#### **A. Existing Species Habitat**

On September 5, 2019 the Evaluation Team visited tract 1902. The information in this section of the report has been compiled from that review.

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

Tract 1902 contains no non-riverine surface water.



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

Tract 1902 is being evaluated as non-complex least tern and piping plover nesting habitat. The tract contains no river frontage.

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

This tract contains no major areas of contiguous sand substrate.

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

Not applicable.

## ***5. Groundwater***

Static water level readings from the NDNR well drilling logs on the property indicate a groundwater level of 6' to 14' below ground surface. Observations of the adjacent pit indicate groundwater may typically be found 3-6' below the ground surface.

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

Analysis of multiple years of aerial imagery shows no evidence of temporary inundation of non-wetland areas on this tract.

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

Power lines on tract 1902 are located running from north to south on both the east and west boundaries. They service irrigation wells and the residence on the east side of the tract. They are not expected to be an issue for tern and plover habitat on this site.

## **B. Complex and Non-Complex Habitat**

Tract 1902 is being 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. Habitat Complex Acres***

No portion of this tract is being considered as complex habitat.

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

The entirety of tract 1902 would be considered non-complex (approx. 28 acres).

### ***3. Excess Acres***

This tract does not contain any excess acres.

### ***4. Habitat Restoration and Maintenance Needs and Conceptual Costs***

Tract 1902 is being pursued as potential off-channel sand and water habitat. The property would be excavated, not mined, in order to provide habitat as soon as possible after acquisition. Conceptual construction costs are listed below, using a best-case depth to groundwater of 3 feet and a rough conceptual design shown in Figure A-8. Spoil material excavated from the newly created water area and any excess spoil from the new sand area could be spoiled in the adjacent



pit, so the resulting OCSW habitat would not be overly high above the water surface. **In total 15 acres of nesting area could be created through excavation of approximately 150,000 cubic yards. The total cost would be approximately \$600,000-\$900,000, based on recent bid information.**

After construction, other typical activities may include installation of a woven wire predator fence, including permanent electric fencing across the peninsula entrances. These activities will cost on the order of \$50,000.

### **5. Buffer**

This tract is bounded on the south by a PRRIP-owned sandpit. This tract is bound to the west, north, and east by agricultural land.

## **V. PROPERTY MANAGEMENT CONSIDERATIONS**

### **A. Encumbrances**

#### **1. Legal Encumbrances**

At the time of review there were no known legal restrictions. The owner did not detail any information about any restrictive easements; public records have not yet been reviewed. This evaluation is subject to a complete title search. Upon initial approval by the LAC a review of title will be ordered, and will be attached when completed.

#### **2. Management Encumbrances**

No management encumbrances have been identified.

### **B. Environmental Audit**

An environmental audit has not been completed for Tract 1902.

### **C. Property Interest Acquisition Options and Costs**

The property owner prefers the sale of a fee simple absolute title to the Program. Table 2 identifies costs expected during the acquisition process.

**Table 2 – Tract 1902 Land Interest Acquisition Cost Estimate**

<b>Acquisition Item/Activity</b>	<b>Cost</b>
<b>Title Review</b>	\$125
<b>Appraisal</b>	\$5,000
<b>Appraisal Review</b>	\$500
<b>Surveying</b>	\$3,000
<b>Total Estimated Cost</b>	<b>\$8,625</b>



#### **D. Extraneous Costs**

Extraneous costs include current land use modification or cessation, third party impacts, and adjacent incompatible use mitigation costs. No extraneous costs have been identified at this time.

#### **E. Operations and Maintenance**

If the entire site is developed into least tern and piping plover nesting habitat, operations and maintenance will include primarily treatment of vegetation through preemergent herbicide application and predator fence maintenance. These items are expected to cost less than \$10,000 annually.

#### **F. Other Considerations**

No other considerations were identified that are not discussed in this report.

### **VI. EVALUATION TEAM RECOMMENDATION**

The Evaluation Team felt that tract 1902 has potential to satisfy part of the requirement in the adaptive management plan to create non-complex “new” off-channel sand and water habitat. Developing OCSW through excavation is expensive, but is an option that must be considered when abandoned pits are not available. The evaluation team did not want to turn down willing seller, although creation of habitat through excavation should not be the preferred method. The advantage to this site is that excess spoil could be placed in the adjacent pit.

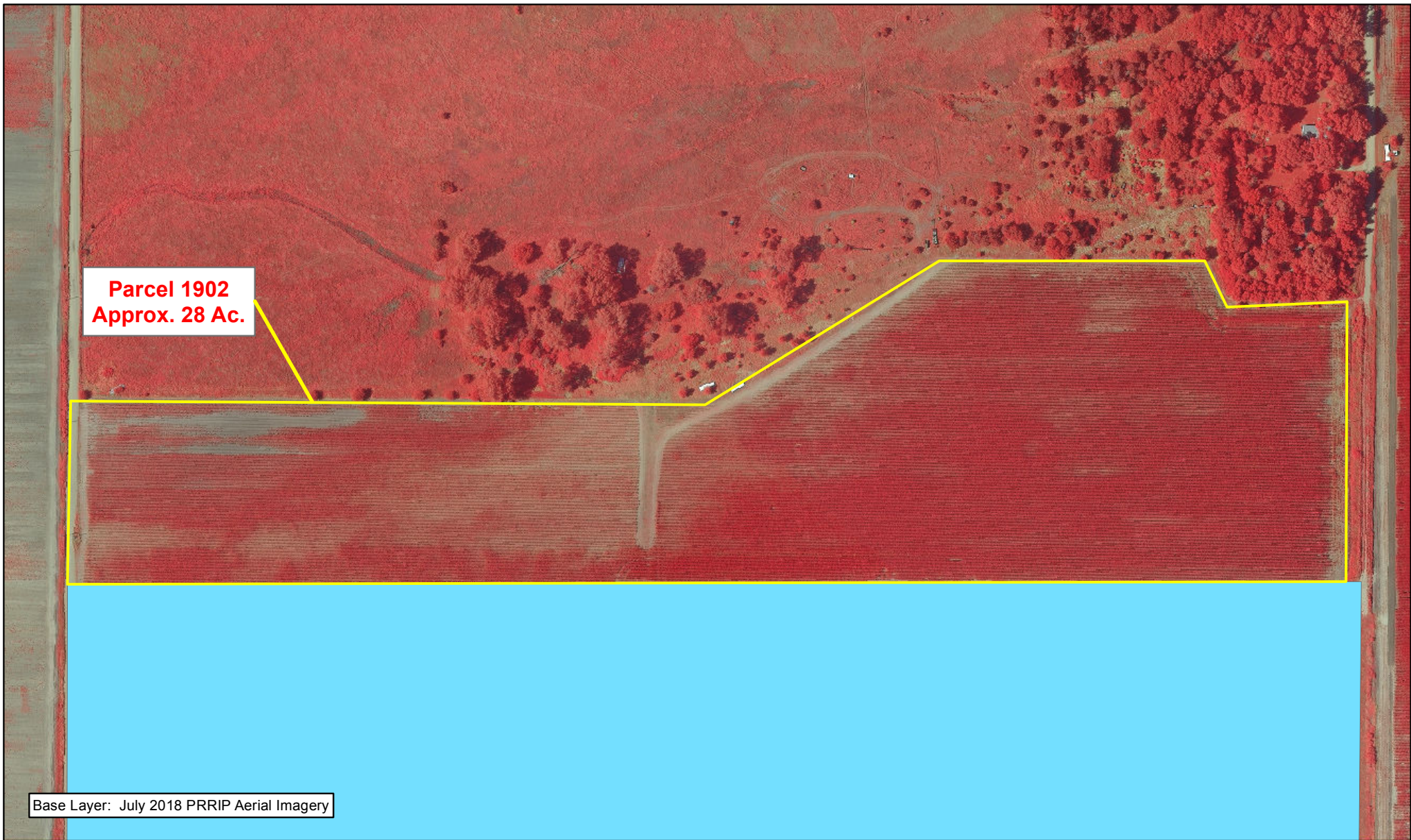
### **VII. LAC RECOMMENDATION**



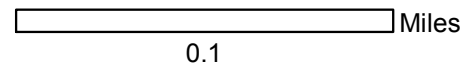
## APPENDIX A – MAPS

CONFIDENTIAL





**Legend**

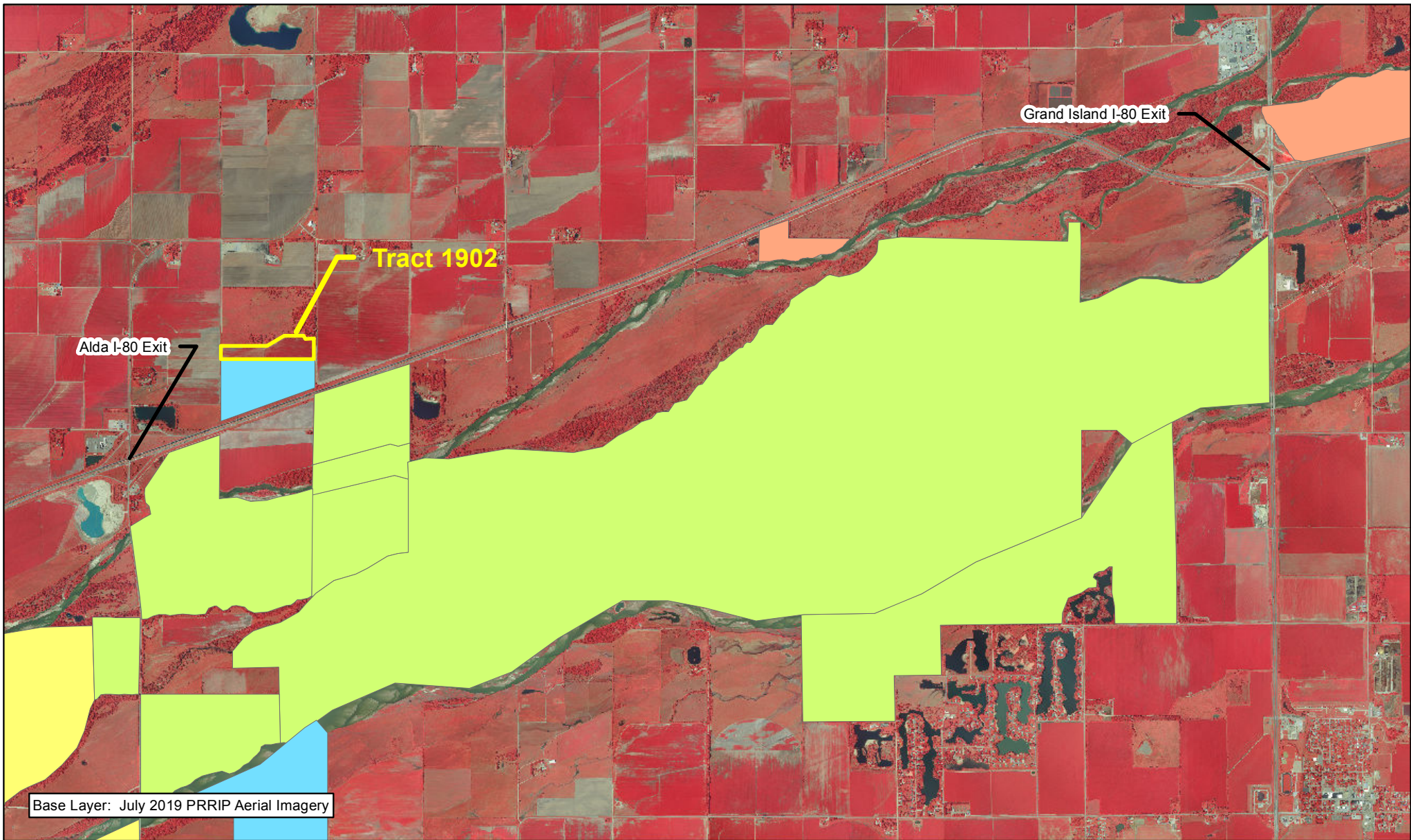


**TRACT 1902  
BOUNDARY MAP**

Parcel Evaluation  
Date: 8/16/19  
By: JDB

**Figure A-1**
















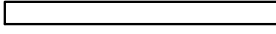
Base Layer: July 2019 PRRIP Aerial Imagery



### Legend

	1902		Audubon		PRRIP
	County		CNPPID		PRWCT
			Ducks Unlimited		TNC
			NGPC		USFWS
			NPPD		



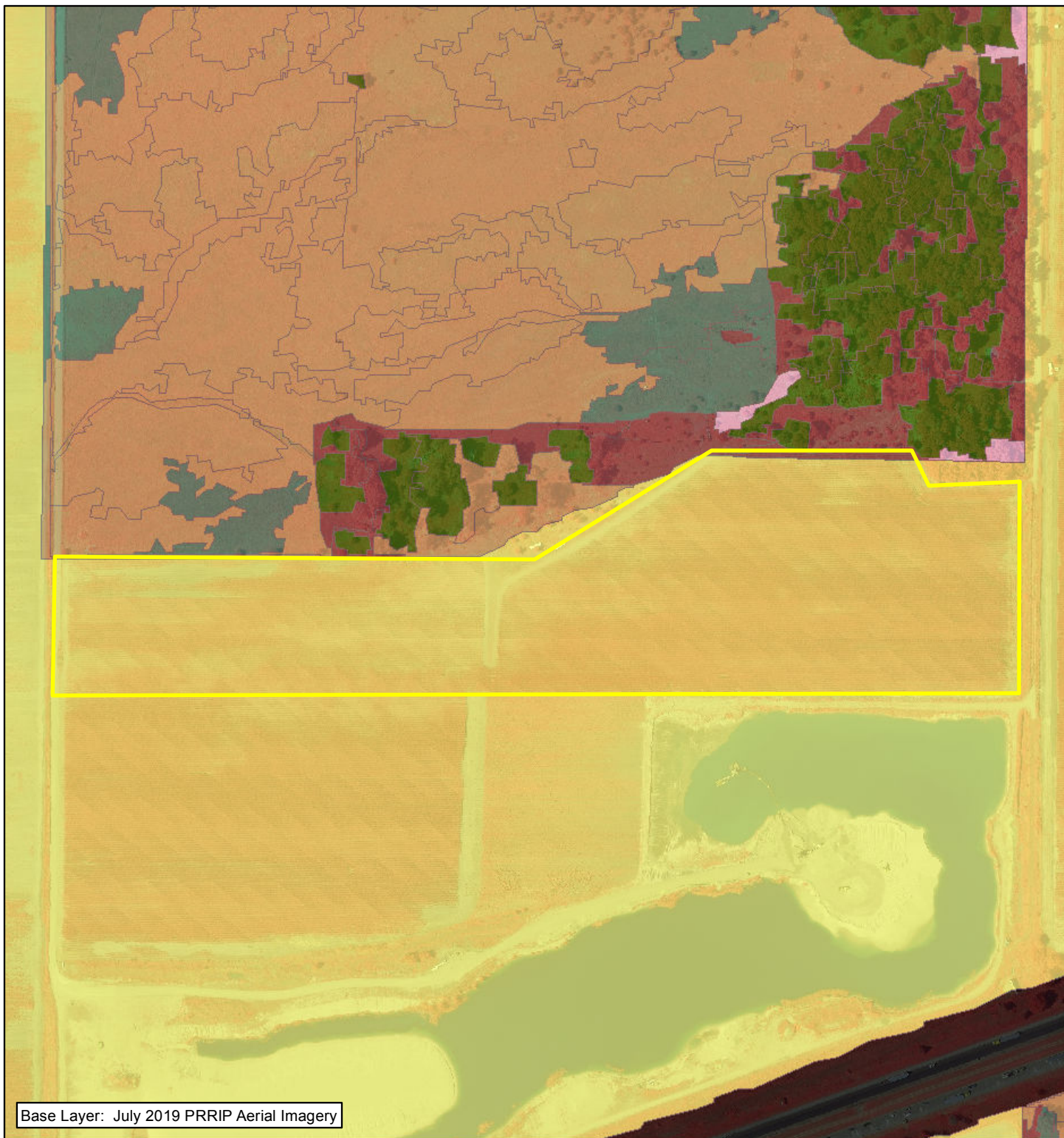
 Miles  
1

### TRACT 1902 LOCATION MAP

Parcel Evaluation  
Date: 8/16/19  
By: JDB

Figure A-2





Base Layer: July 2019 PRRIP Aerial Imagery



**Legend**

- |                       |                          |
|-----------------------|--------------------------|
| Tract 1902            | River Early Successional |
| Ag                    | River Shrubland          |
| Bareground/Sparse Veg | Roads                    |
| Canal/Drainage        | Rural Developed          |
| Meadow Sand Ridge     | Sand Pit                 |
| Mesic Wet Meadow      | Unvegetated Sandbar      |
| Phragmites            | Upland Woodland          |
| Riparian Shrubland    | Warmwater Slough         |
| Riparian Woodland     | Xeric Wet Meadow         |
| River Channel         |                          |



0.1 Miles

**TRACT 1902  
2005 LAND COVER/USE**

Parcel Evaluation  
Date: 10/18/19  
By: JDB

**Figure A-3**





#### Legend

- Tract 1902
- 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 1902 NWI MAP

Parcel Evaluation  
Date: 10/18/19  
By: JDB


Figure A-4





**Legend**  
 Tract 1902



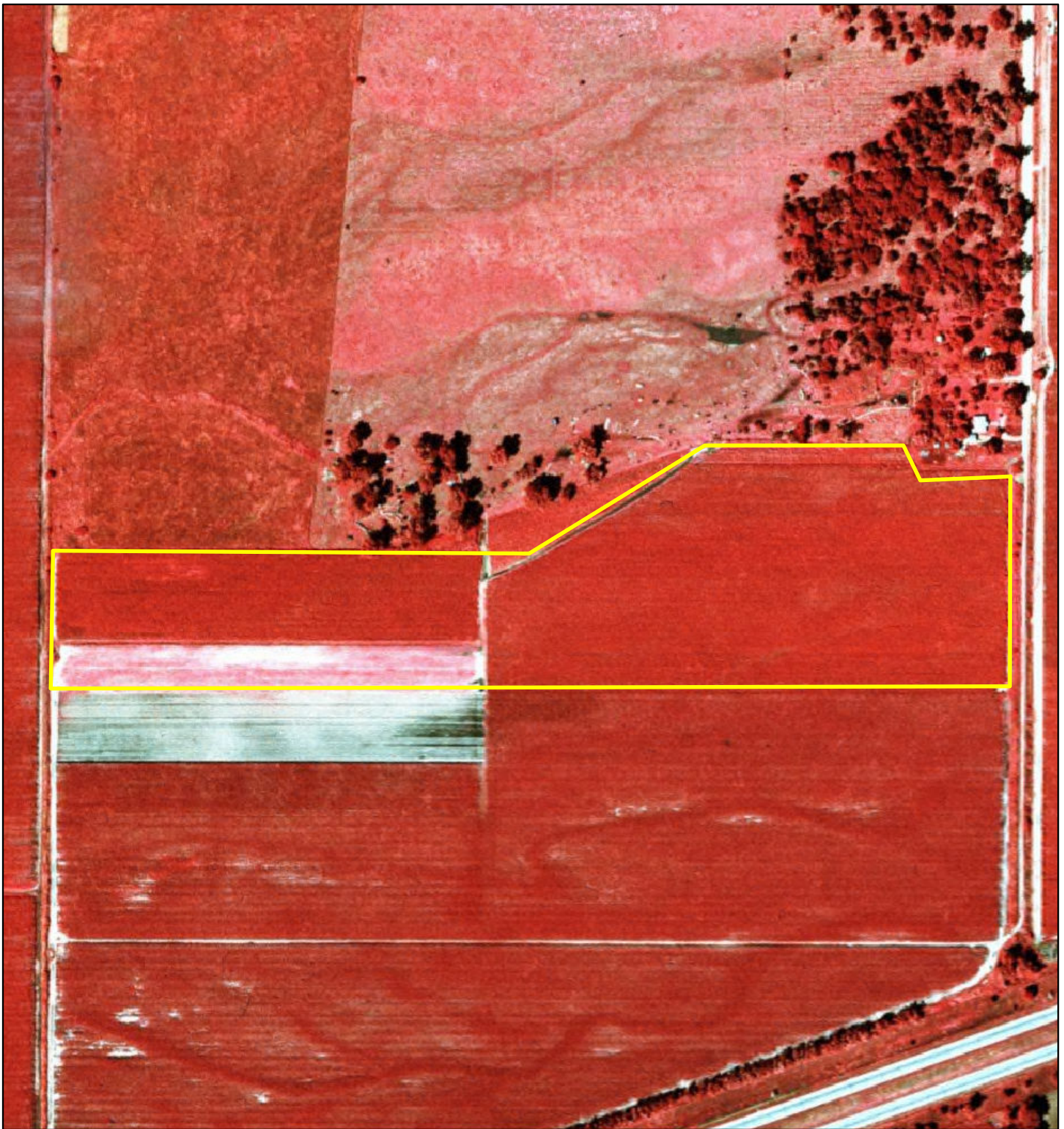
 Miles  
0.1


**TRACT 1902**  
**1938 IMAGERY**

Parcel Evaluation  
Date: 10/18/19  
By: JDB


**Figure A-5**





**Legend**  
 Tract 1902



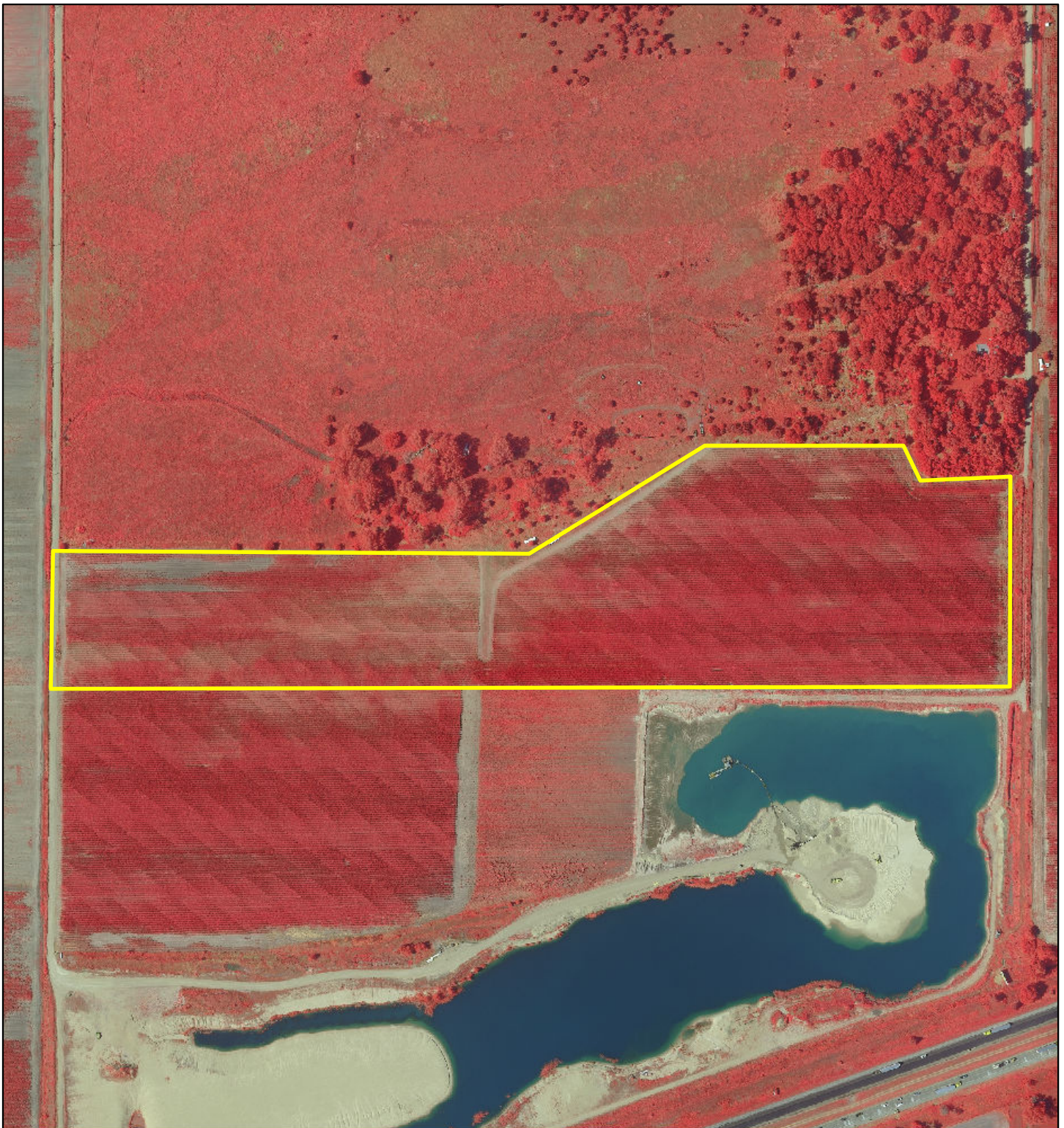
 Miles  
0.1


**TRACT 1902**  
**1998 CIR IMAGERY**

Parcel Evaluation  
Date: 10/18/19  
By: JDB


**Figure A-6**





**Legend**  
 Tract 1902



 Miles  
0.1

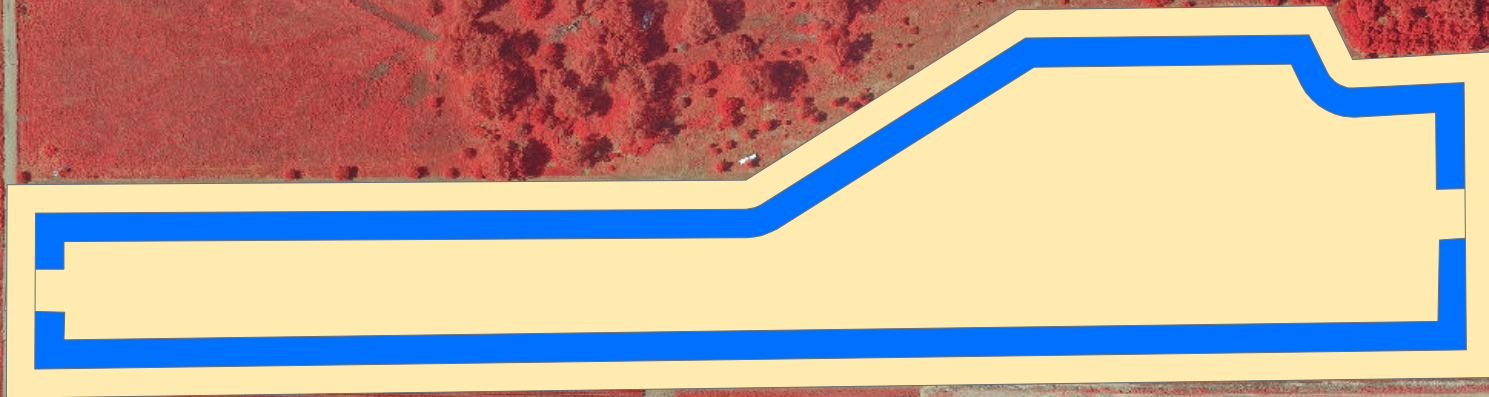
**TRACT 1902**  
**2019 CIR IMAGERY**

Parcel Evaluation  
Date: 10/18/19  
By: JDB

**Figure A-7**





Approx. OCSW Area: 15 acres  
Water Width: 50 feet



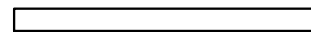
Base Layer: July 2019 PRRIP Aerial Imagery



**Legend**

-  Sand
-  Water



 Miles  
0.1

TRACT 1902  
OCSW DESIGN OPTION

Parcel Evaluation  
Date: 10/21/19  
By: JDB

Figure A-1





## APPENDIX B – LEGAL REVIEW

CONFIDENTIAL