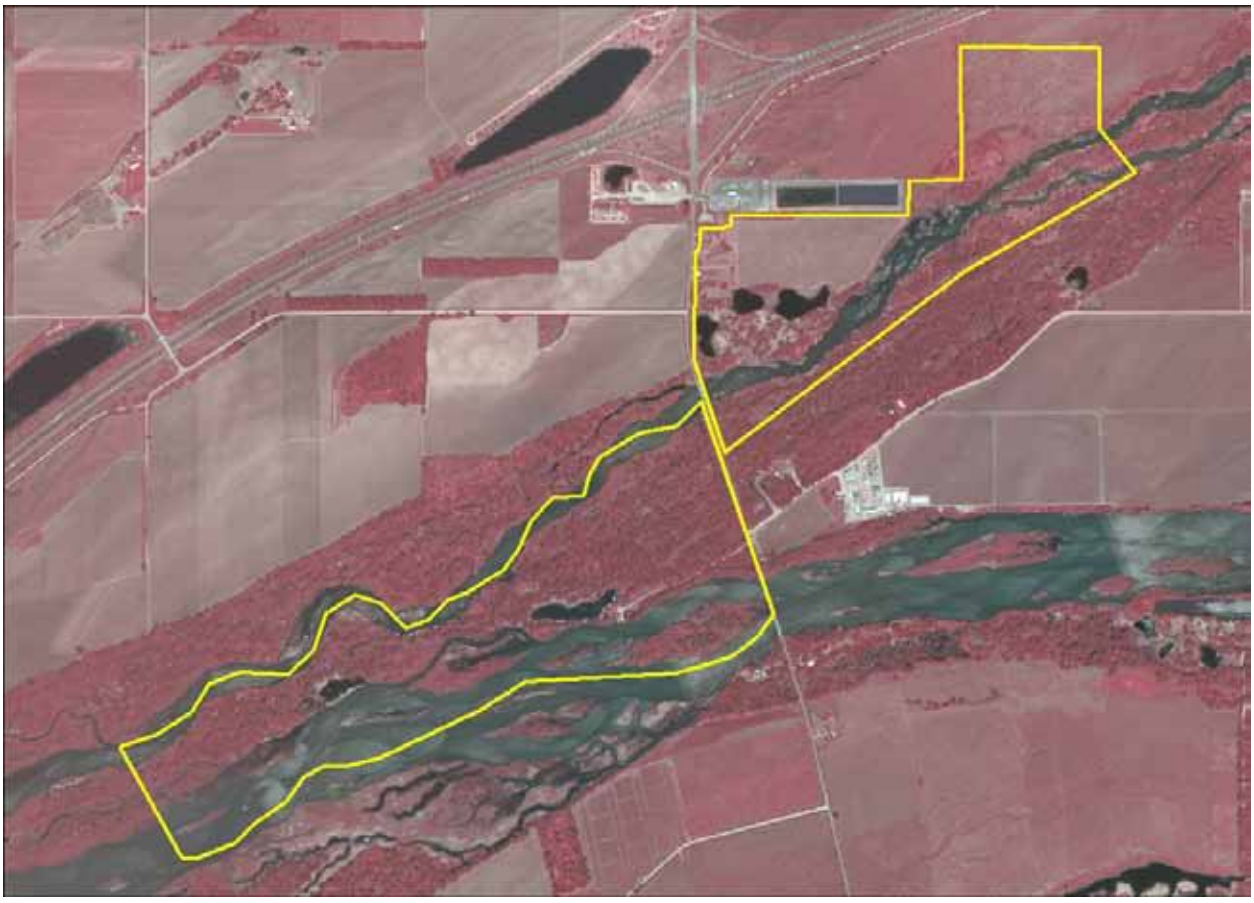
2012-2016 RESTORATION AND MAINTENANCE PLAN

For

TRACT 2011001



Prepared for:
Platte River Recovery Implementation Program
Land Advisory Committee

Completion Date:
06/13/2012

Table of Contents

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 2011001 (Evaluation Tract Number 1001) during the period of 2012-2016.

B. Tract Location and Size

Tract 2011001 is approximately 227 acres in size and is located in portions of Sections 8, 17 and 18, T-9N, R-11W. Figure A-1 (located in Appendix A) delineates the property boundary. The tract straddles the boundary of the Shelton to Wood River and Wood River to Alda bridge segments. 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. The western portion of Tract 2011001 adjoins The Nature Conservancy's Dahms tract on the south.

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 Executive Director's 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 plans 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 eastern portion of the tract (116 acres, approx.) will be managed as non-complex habitat and the western portion of the tract (111 acres, approx.) will be managed as complex habitat. The sand pit areas and the newly created Off-channel Sand and Water habitat area of the eastern portion of the tract are considered as non-complex habitat in accordance with section II.B.2 and *Table 2. Non-Complex Habitat Guidelines* of the Program Land Plan.

Table 1 – Tract 2011001 Complex Habitat Acres (West parcel)

Land Classification*	Acres
Riverine	
Channel	116

* Habitat complex land classification categories are more general than the 2005 land cover/use classification and areas may vary due to changes in land use and vegetation since 2005.

1. Associated Complex Habitat

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

2. Non-Complex Habitat Acres

The sand pit area to be created on the eastern portion of the tract in 2012 will cover approximately 22 acres and will be managed as non-complex habitat. All 62 acres are classified as Sandpit Habitat for Terns and Plovers (i.e. no acres classified as Non-riparian Habitat for Whooping Cranes).

3. Excess Acres

The eastern portion of the east tract is considered as excess acres approximately 55 acres in total. Options will be explored to divest of the excess acres. Area marked for excess is shown on Figure A-10. The remaining 62 acres of the east tract will be retained as non-complex off-channel sand and water habitat.

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 – 2011 CIR Aerial Photography

Table 2 – Tract 2011001 2005 Land Cover/Use Summary

Land Cover Classification	Acres	Percent of Total
Ag	30.01	13.23%
Bareground/Sparse Veg	7.52	3.32%
Meadow Sand Ridge	0.23	0.10%
Mesic Wet Meadow	9.20	4.06%
Phragmites	11.73	5.17%
Purple Loosestrife	0.83	0.37%
Riparian Shrubland	86.22	38.02%
Riparian Woodland	41.99	18.51%
River Channel	3.13	1.38%
River Early Successional	1.73	0.76%
River Shrubland	7.05	3.11%
Rural Developed	4.29	1.89%
Sand Pit	4.01	1.77%
Unvegetated Sandbar	2.16	0.95%
Upland Woodland	0.76	0.33%
Warmwater Slough	1.37	0.60%
Xeric Wet Meadow	14.56	6.42%
	226.80	**100.00%**

C. Existing Land Features of Interest

1. Non-Riverine Surface Water

The western portion of the property contains no non-riverine surface water. On the eastern half of the property, there is a series of three small ponds. These ponds are to be incorporated into a tern and plover nesting restoration project described in Objective 1a and 1b below.

2. River Frontage and Active Channel Widths

The western half of Tract 2011001 is an island with river frontage on the main channel and the north channel. The tract contains approximately 6,500 feet of Platte River frontage on the main channel and 12,000 feet of river frontage on the north channel. The north channel in this reach is narrow and vegetated and would not be considered for extensive habitat restoration.

Channel width measurement protocols define active channel width as the width of the channel that is unvegetated. Channel widths were measured at ¼ mile intervals utilizing color infrared aerial photography flown in June 2010 under high flow conditions. Measured main channel widths are presented in Table 3.

Table 3– Tract 2011001 Channel Widths

Measurement	Width (ft)
Minimum Channel Width	609
Maximum Channel Width	1,000
Median Channel Width	775
Mean Channel Width	767

3. Contiguous Sand Substrates

At the time of the review, and as evidenced by current aerial photography, tract 2011001 contains no substantial areas of contiguous sand substrate.

4. Island and Channel Bank Height

Under typical flow conditions, island and bank heights are on the order of 0-4 feet above water.

5. Groundwater

The west part of the tract is between two river channels and assumed to be tied very closely to the river level. Sandpit water levels on the eastern part of the tract indicate a ground water level of 3-6 feet below the surface.

6. Flooding in Non-Wetland Areas

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

7. Power/Transmission Lines

There is an above ground power line that services the residence approximately ¼ mile west from the highway. This line is within a heavily forested area and is not a concern for target species. There is also a power line running along the road on the west side of the east tract. This power line is not expected to impact target species use in this area.

D. Incompatible Uses and Environmental Concerns

Tract 2011001 does not currently have land uses that are incompatible with target species habitat.

E. Certified Irrigated Acres

Tract 2011001 includes no 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.

1. Species Habitat

- Ø ***Goal 1 – Create sand and water (off-channel sand and water; OCSW) habitat for interior least terns (LETE) and piping plovers (PIPL)***

  - o ***Objective 1a –*** Create and maintain off-channel sand and water (OSCW) target bird species habitat that approximates *Table 2. Non-Complex Habitat Guideline*s of the Program Land Plan, to the degree possible.

    - § **Strategy** – Perform Phase 1 creation of OCSW nesting habitat on the portion of the eastern tract not identified as excess acres.

      - · **Methods –** OCSW construction will be accomplished by first excavating 3 feet of material from the entire area. This material will be moved off site and used by the contractor for fill on other projects. Then, a 5 foot deep moat will be excavated around the perimeter of the nesting area and the excavated sand material will be placed on top of the nesting area to create a bare sand peninsula. OCSW nesting habitat maintenance will be accomplished by annual application of pre-emergent herbicide and installation of predator fencing.

    - § **Area –** Phase 1 habitat restoration and management activities are presented in Figure A-8.

    - § **Timeline –** OCSW habitat construction will be conducted in winter/spring 2012. Nesting habitat maintenance will occur annually.

    - § **Cost –** Annual vegetation control is estimated at $2,000. Sandpit construction is being performed in exchange for fill material taken by the contractor at no cost.

    - § **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 to be performed by contractors.

- ***Objective 1b –*** Perform Phase 2 restoration and maintenance of off-channel sand and water (OSCW) target bird species habitat that approximates *Table 2. Non-Complex Habitat Guideline*s of the Program Land Plan, to the degree possible.

  - **Strategy –** Restore OCSW habitat in area on east tract that was apparently used as a spoil area during original mining/excavation of existing sand pits.

    - **Methods –** Trees will be cleared and all vegetation will be removed over the area identified as Phase 2 on Figure A-8. Areas between existing sandpits will be excavated to create a peninsula that can be fenced for predator access. OCSW nesting habitat maintenance will be accomplished by annual application of pre-emergent herbicide and installation of predator fencing.

  - **Area –** Phase 2 habitat restoration and management activities are presented in Figure A-8.

  - **Timeline –** OCSW habitat construction will be conducted in winter/spring 2013. Nesting habitat maintenance will occur annually.

  - **Cost –** Annual vegetation control is estimated at $2,000. Phase 2 construction costs estimated around $100,000.

  - **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.

Ø ***Goal 2 – Improve sand and water (riverine) habitat for interior least terns (LETE), piping plovers (PIPL), and whooping cranes (WC).***

- ***Objective 2a*** – Create and maintain riverine sand and water habitat for target bird species that approximates *Table 1. Target Habitat Complex Guidelines* of the Program Land Plan, to the degree possible.

  - **Strategy** – Clear all woody vegetation 200 feet north of main channel on west tract and mechanically construct a series of nesting islands within the main channel.

    - **Methods** – The area will be cleared using heavy equipment. Cleared material will be burned and buried on site if possible. Conditions may require other removal methods including chipping

and hauling off-site. Cleared areas will be seeded with native grass and forb species.

- § **Area –** Clearing area and island construction is shown on Figure A-9.
- § **Timeline** – Clearing and island building will take place in winter of 2012. Seeding will be completed in winter/spring of 2013.
- § **Costs** – The clearing/seeding is expected to cost on the order of $70,000.
- § **Responsibilities** – Program staff are responsible for design and permitting. Construction and maintenance activities will be bid.

Ø ***Goal 3 – Provide benefits to other species of concern without compromising ability to accomplish target species goals and objectives***

- o ***Objective 3a –*** Evaluate habitat protection for other species of concern as need or opportunity is brought forward by USFWS or NGPC.
  - § **Strategy –** The Program will utilize the tract management planning and consultation process as the mechanism for identification of opportunities to benefit other species of concern. Following acquisition of a parcel, the Program will request that the USFWS and NGPC provide guidance on species of concern that may be present and benefit from management measures. The Program will survey all tracts to determine presence of those species. The Program will then consult with the USFWS and NGPC to determine appropriate measures for protecting, preserving and enhancing populations of those species while accomplishing Program goals.
  - § **Responsibilities –** Program staff are responsible for initiating coordination. USFWS and NGPC are responsible for bringing forward species of concern that need to be addressed in the planning process. Program staff will be responsible for habitat protection planning, with technical assistance from these agencies.

2. 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 AM experimental design components that may be conducted completely or in part on this property:

1. *"Paired Design" – River nesting vs. OCSW nesting (LETE, PIPL).*
   a. The objective of this experiment is to determine differences in nest success and productivity, as well as species preference 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) and directed research projects (tern and plover habitat colonization and productivity study) may occur on this property based on monitoring and research priorities and schedules.

Ø ***Goal 4 – Refine Program's understanding of interaction between LETE and PIPL riverine and off-channel sand and water (OCSW) nesting habitat.***

- ***Objective 4a*** – 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 Complex riverine habitat. Occurrence, use and productivity will be monitored per the Program's LETE and PIPL monitoring protocol.

    · **Methods** – Maintenance will include using mechanical methods and/or annual application of pre-emergent herbicide to control vegetation. Monitoring methods are presented in the Program's LETE and PIPL monitoring protocol.

  § **Area** – See Goal 1 and Goal 2 and refer to Figures A-8 and A-9 for location of OCSW and riverine nesting habitat.

  § **Timeline** – Maintenance and monitoring will occur annually.

  § **Cost** – None

  § **Responsibilities** – Program staff are responsible for design and permitting of new habitat construction. Program staff or contractors under the supervision of Program staff are responsible for maintenance and monitoring.

3. Property Maintenance

- ***Goal 5 – Fulfill basic property ownership obligations and needs.***

  - ***Objective 5a*** – Control noxious weeds on property.

    - **Strategy** – Infestations of noxious weeds will be eliminated (to the extent possible) annually. An integrated management approach to control noxious weeds will be used to the extent possible and specific control methods will be updated as new information becomes available. Ongoing management/control needs will be assessed annually and incorporated into Work Plans.

      - **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 control activities will be conducted annually.

    - **Costs** – Annual costs will be identified in the annual Work Plans and are expected to be less than $1,000.

    - **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 6 – Minimize habitat impacts due to invasive vegetation.***

  - ***Objective 6a*** – 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) in phases. An integrated management approach to control will be used to the extent possible and specific control methods will be updated as new information becomes available. Ongoing management/control needs will be assessed annually and incorporated into Work Plans.

      - **Methods** – Elimination of existing infestations will be accomplished through a combination of herbicide application and mechanical removal. Control of certain species like eastern red

cedar will not require herbicide while other species may need to be mechanically removed after herbicide application. Management of future infestations will be accomplished through a variety of integrated management methods including: herbicide application, prescribed fire, mechanical disturbance/removal and grazing.

- **Area –** Invasive vegetation will be controlled on the entire property.
- **Timeline** –Control efforts will begin after July 15, 2012 and maintenance/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 $5,000.
- **Responsibilities** – Program staff will be responsible for identifying infestations. Control activities will be carried out by contractors.

4. Land Asset Management

- ***Goal 7 – Dispose of Excess Acres on eastern portion of the tract***
  - ***Objective 7a*** – Dispose of part of the eastern portion of tract 2011001 identified as excess through practical means.
    - **Strategy** – Options will be explored for the Program to divest of their interest in the identified parcel.
      - **Methods** –ED staff will explore practical options for divesting of the excess acres. These options may include, but are not limited to, trade for additional Program land or fee title sale with or without conservation easement. All transactions are subject to GC approval.
    - **Area –** Portion of the tract identified as excess is displayed on Figure A-10.
    - **Timeline** – Divestment of identified excess area should occur by the end of 2014.
    - **Costs** – Upfront costs may include a new appraisal, but overall divestment of the property will likely be a net income situation.
    - **Responsibilities** – Program staff be responsible for acquiring appraisal, identifying options, and completing negotations.

V. MONITORING AND RESEARCH

A. 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. Rotating panel point 30 is located near the center of the complex.
- **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 Program staff and/or contractors or cooperators under supervision Program staff.

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.

B. Research

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

1. LETE and PIPL riverine habitat selection experiment (Goal 2, Objective 2a)

- **Purpose -** Refine Program's understanding of interior LETE, PIPL and WC riverine habitat needs and test associated AMP priority hypotheses for each species.
- **Hypotheses Links** - S1b,T1, P1, TP4d, TP5, WC1, WC3
- **Timeline –** Design and construction to begin in 2012 and be completed in spring 2013. 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.

2. LETE and PIPL riverine versus OCSW experiment (Goal 1, Objectives 1a & 1b)

- **Purpose -** Determine LETE and PIPL preference for and productivity on riverine versus OCSW nesting habitat.
- **Hypotheses Links** - S1b, TP1
- **Timeline –** Phase 1 complete in 2012, Phase 2 complete in 2013. 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.

VI. 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 15th. 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 7th. If this species is present, activities will be modified to prevent destruction of existing plants.

4. Platte River Caddis Fly

No signs of Platte River caddisfly were noted during an October 2011 survey performed by contracted personnel from University of Nebraska–Kearney (UNK). Further surveys to document the presence of Platte River caddisfly, as well as density and distribution if present on the property, will be conducted during spring 2012.

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, if established, will not be disturbed and a 330 foot buffer (no access) or 660 foot buffer (non mechanical equipment access area) will be maintained during the bald eagle breeding season (March – July). Known eagle roost trees and trees within 330 feet of a known eagle nest will not be removed. Tree removal within the 660 foot buffer and outside the 330 foot buffer will not occur during the bald eagle breeding season.

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 2011001 will be provided to the State Historic Preservation Office (SHPO) to facilitate the early identification of potential cultural resources related issues. 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.

VII. PUBLIC ACCESS

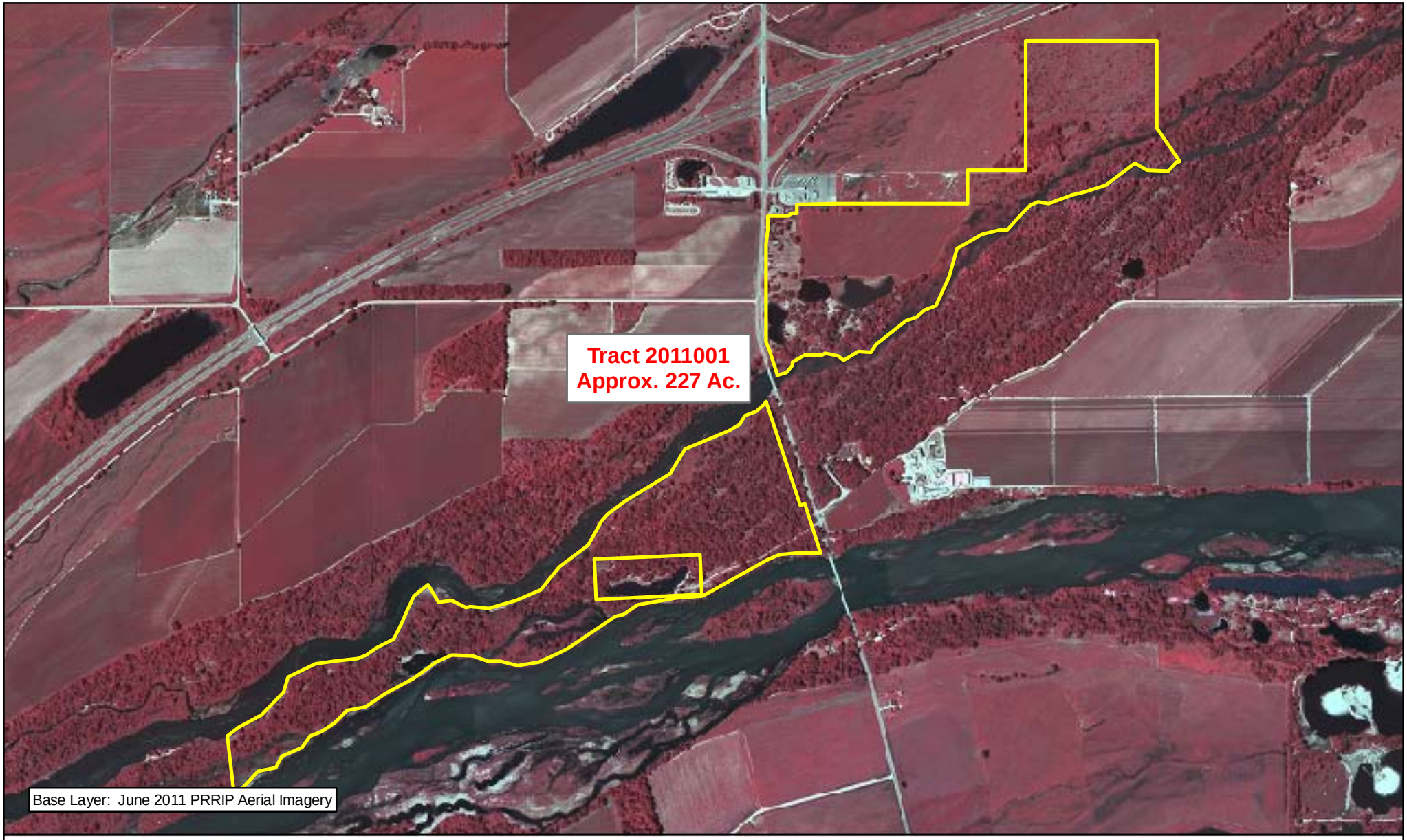
A. Education

Public 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 recreation on either the East or West portion of this property. The East portion will be an off channel tern and plover site which is not conducive to public access. The West portion has a ten acre in-holding and an agreement with the prior owner to retain waterfowl hunting over the southwest portion of our West property. These restrictions do not allow for mixing public access and private retained rights. If the in-holding and the remaining waterfowl hunting rights are acquired, these restrictions can be revisited.

APPENDIX A – FIGURES



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

2011001

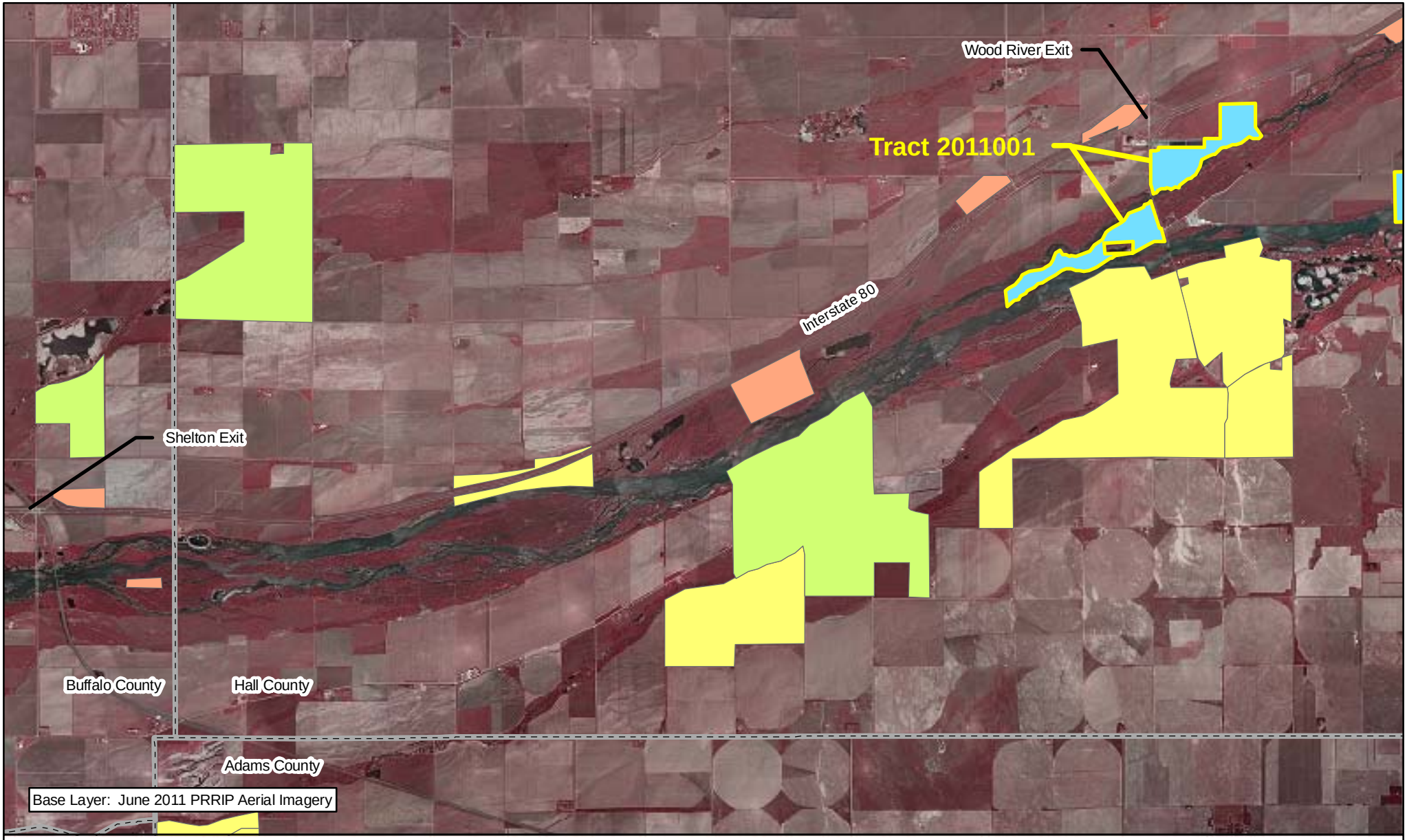
N

0.25 Miles

TRACT 2011001
BOUNDARY MAP

Date: 01/09/12
By: JDB

Figure A-1



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- County
- Audubon
- CNPPID
- NGPC
- NPPD
- PRRIP
- PRWCT
- TNC
- Wyoming

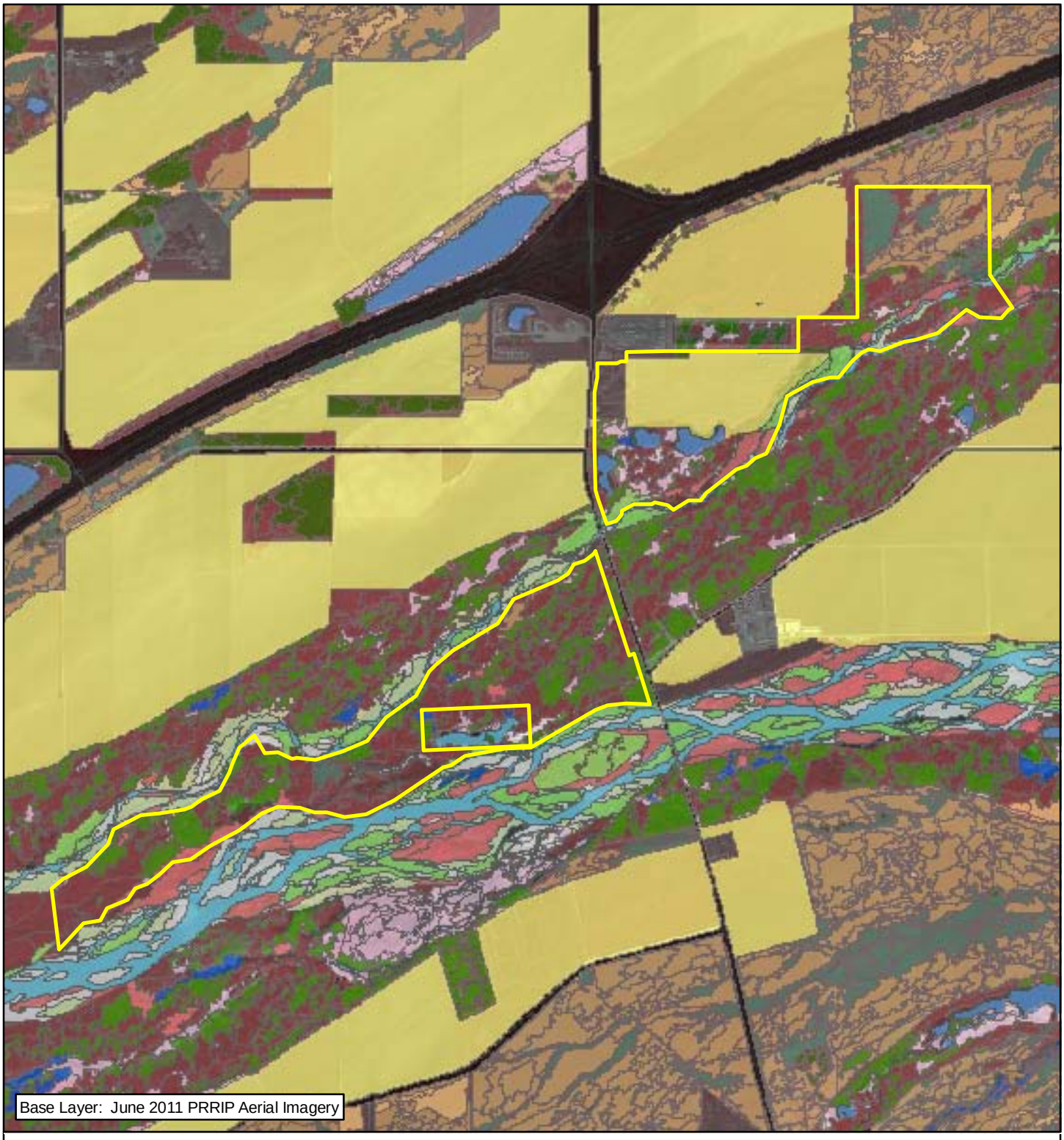
N

Miles
1

TRACT 2011001
LOCATION MAP

Date: 01/10/12
By: JDB

Figure A-2



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- Ag
- Bareground/Sparse Veg
- Canal/Drainage
- Meadow Sand Ridge
- Mesic Wet Meadow
- Phragmites
- Riparian Shrubland
- Riparian Woodland
- River Channel
- River Early Successional
- River Shrubland
- Roads
- Rural Developed
- Sand Pit
- Unvegetated Sandbar
- Upland Woodland
- Warmwater Slough
- Xeric Wet Meadow

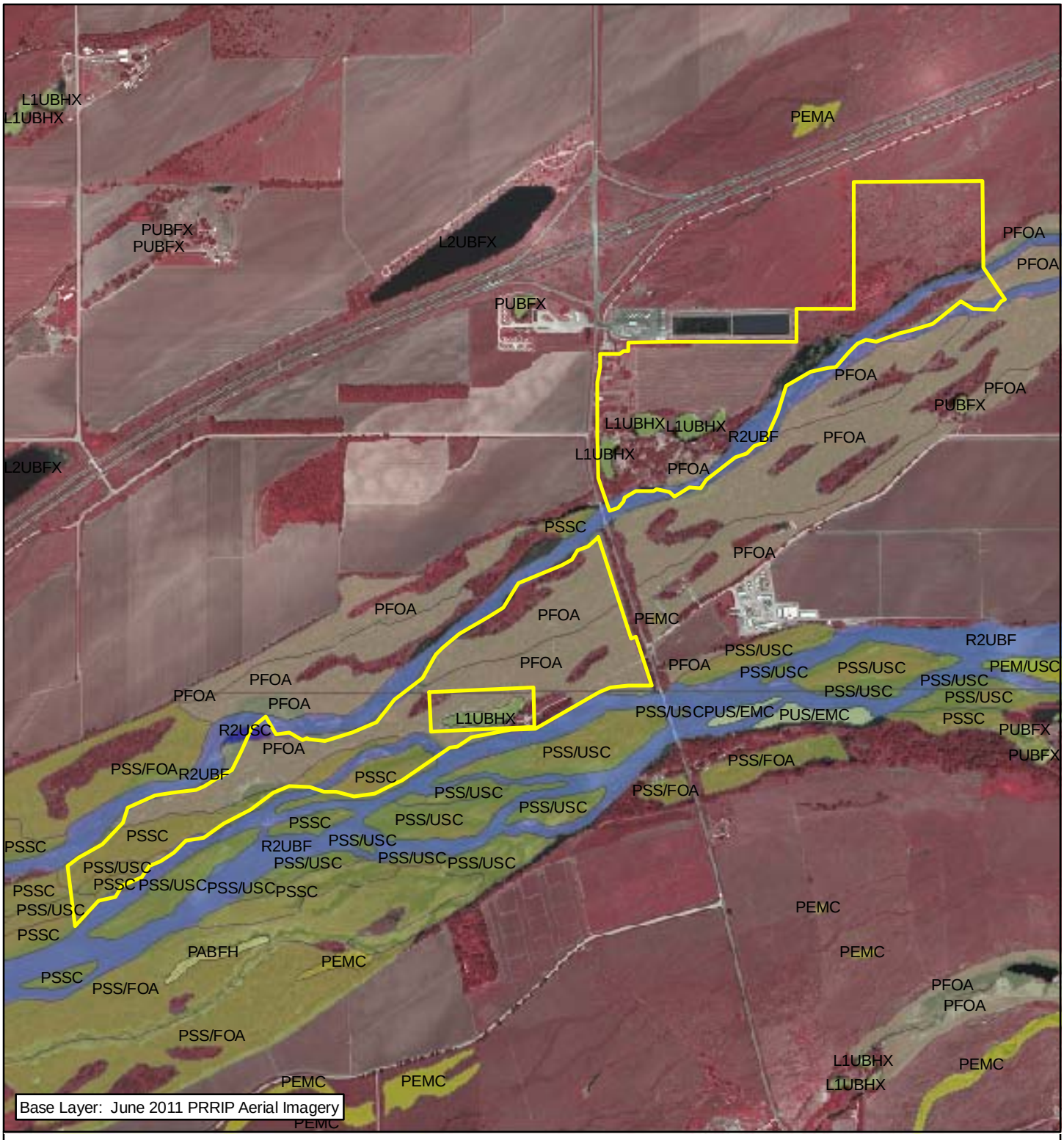
N

0.25 Miles

TRACT 2011001
2005 LAND COVER/USE

Date: 01/04/12
By: JDB

Figure A-3



Base Layer: June 2011 PRRIP Aerial Imagery

PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- 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)

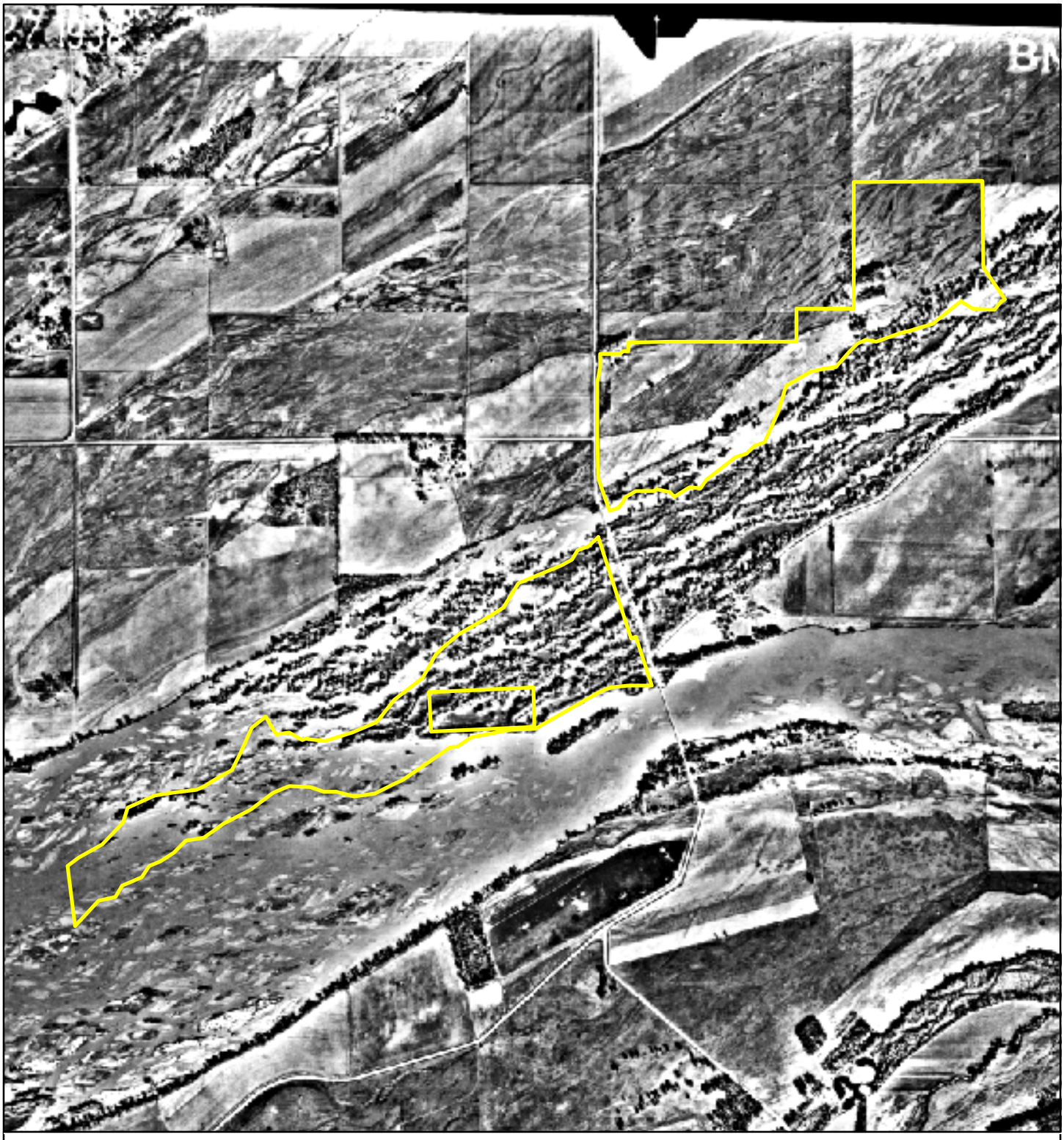
N

0.25 Miles

TRACT 2011001
NWI MAP

Date: 01/10/12
By: JDB

Figure A-4



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

2011001

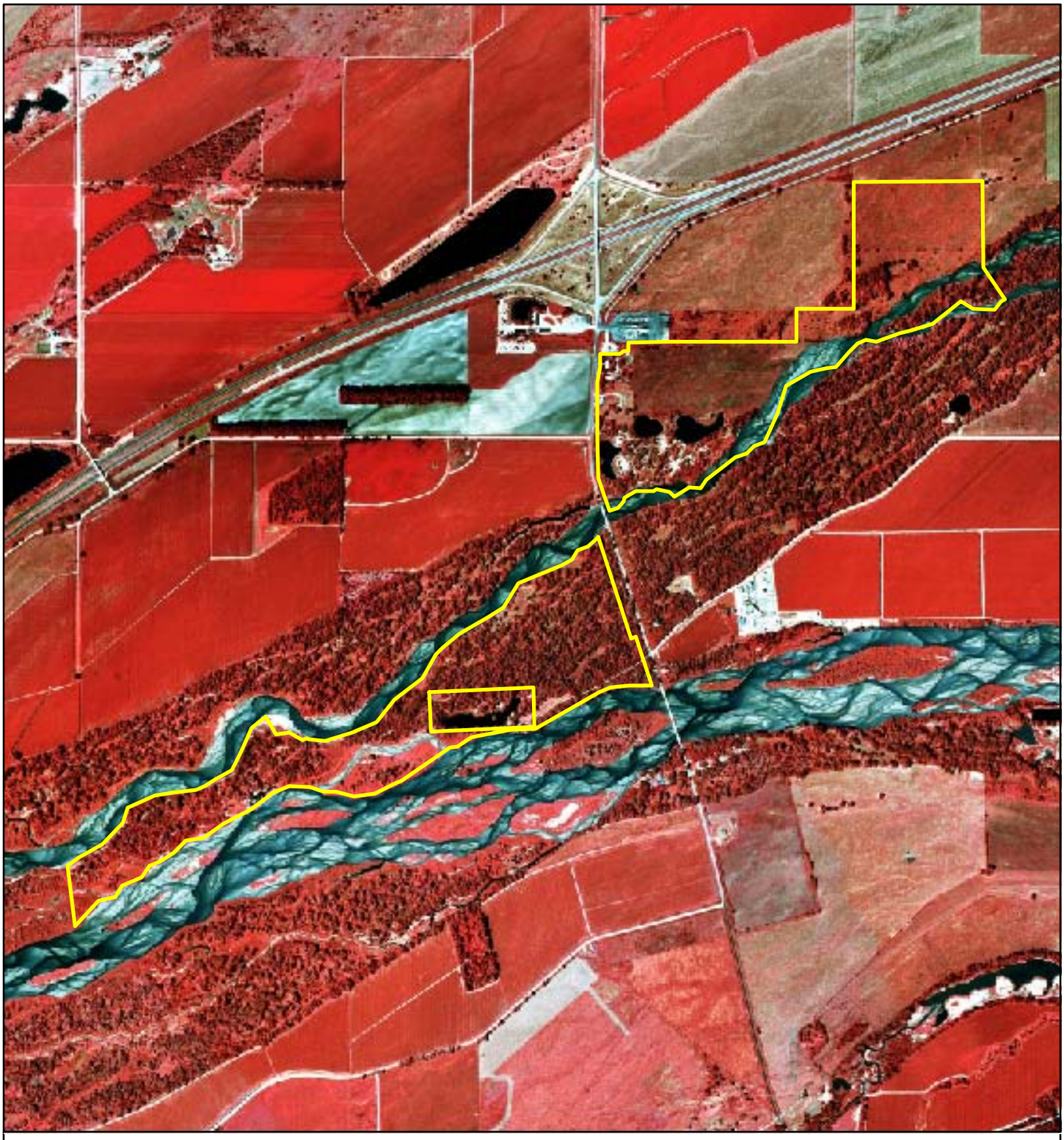
N

0.25 Miles

TRACT 2011001
1938 IMAGERY

Date: 01/10/12
By: JDB

Figure A-5



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

2011001

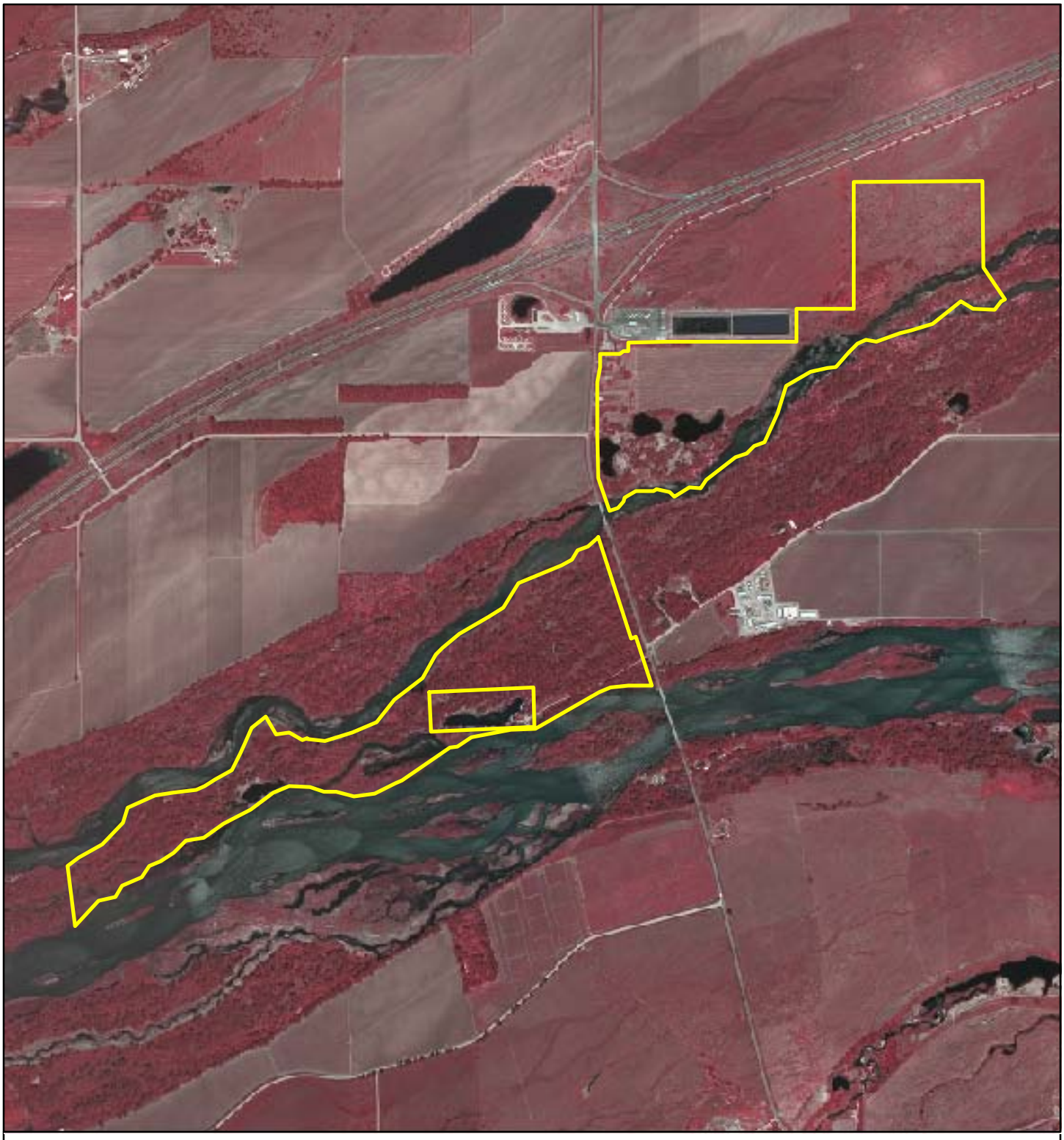
N

0.25 Miles

TRACT 2011001
1998 CIR IMAGERY

Date: 01/10/12
By: JDB

Figure A-6



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

2011001

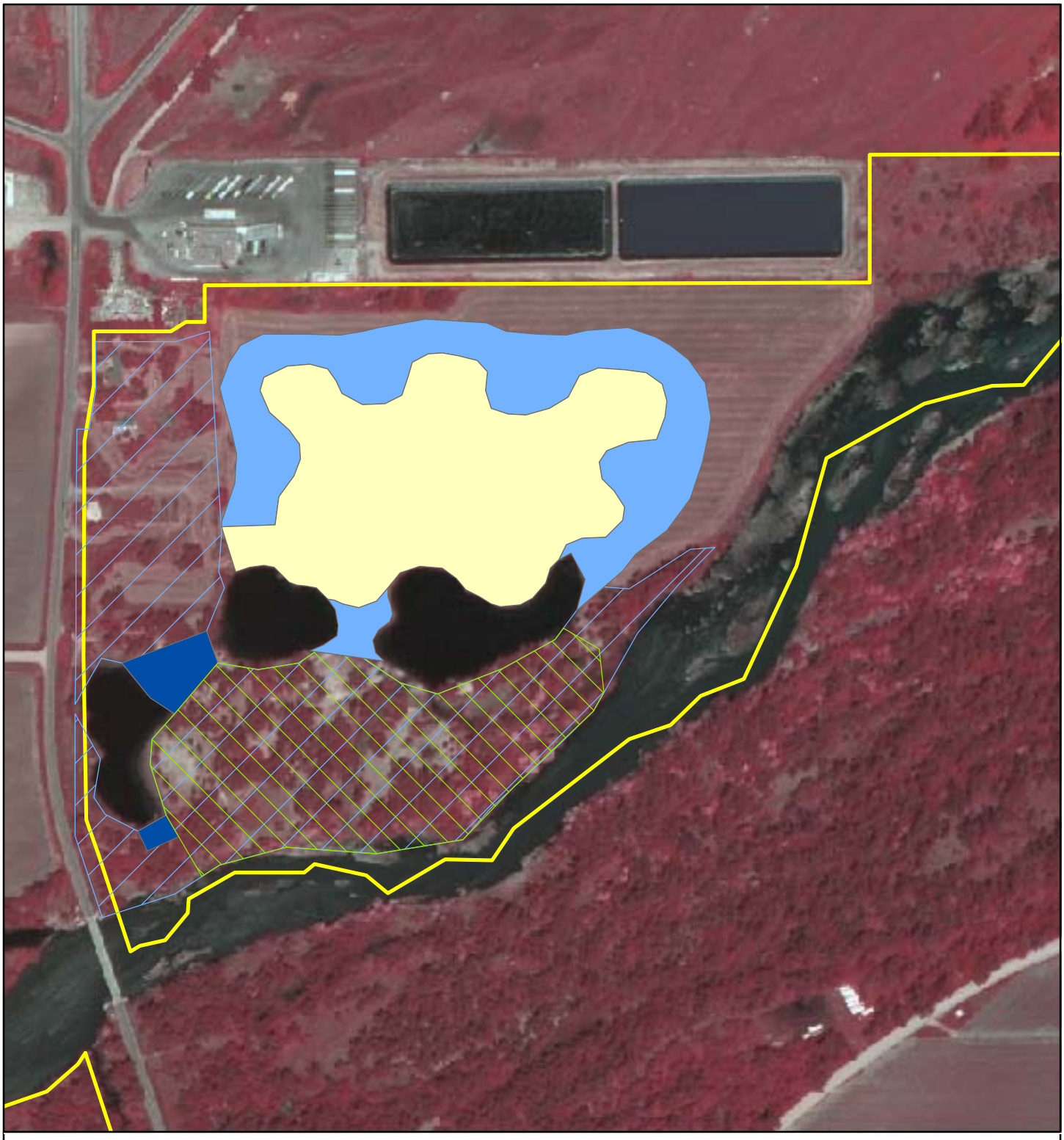
N

0.25 Miles

TRACT 2011001
2011 CIR IMAGERY

Date: 01/10/12
By: JDB

Figure A-7



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- Phase 1 Excavation
- Phase 1 Peninsula
- Phase 2 Clear/Smooth
- Phase 2 Excavation
- Phase 2 Tree Clearing

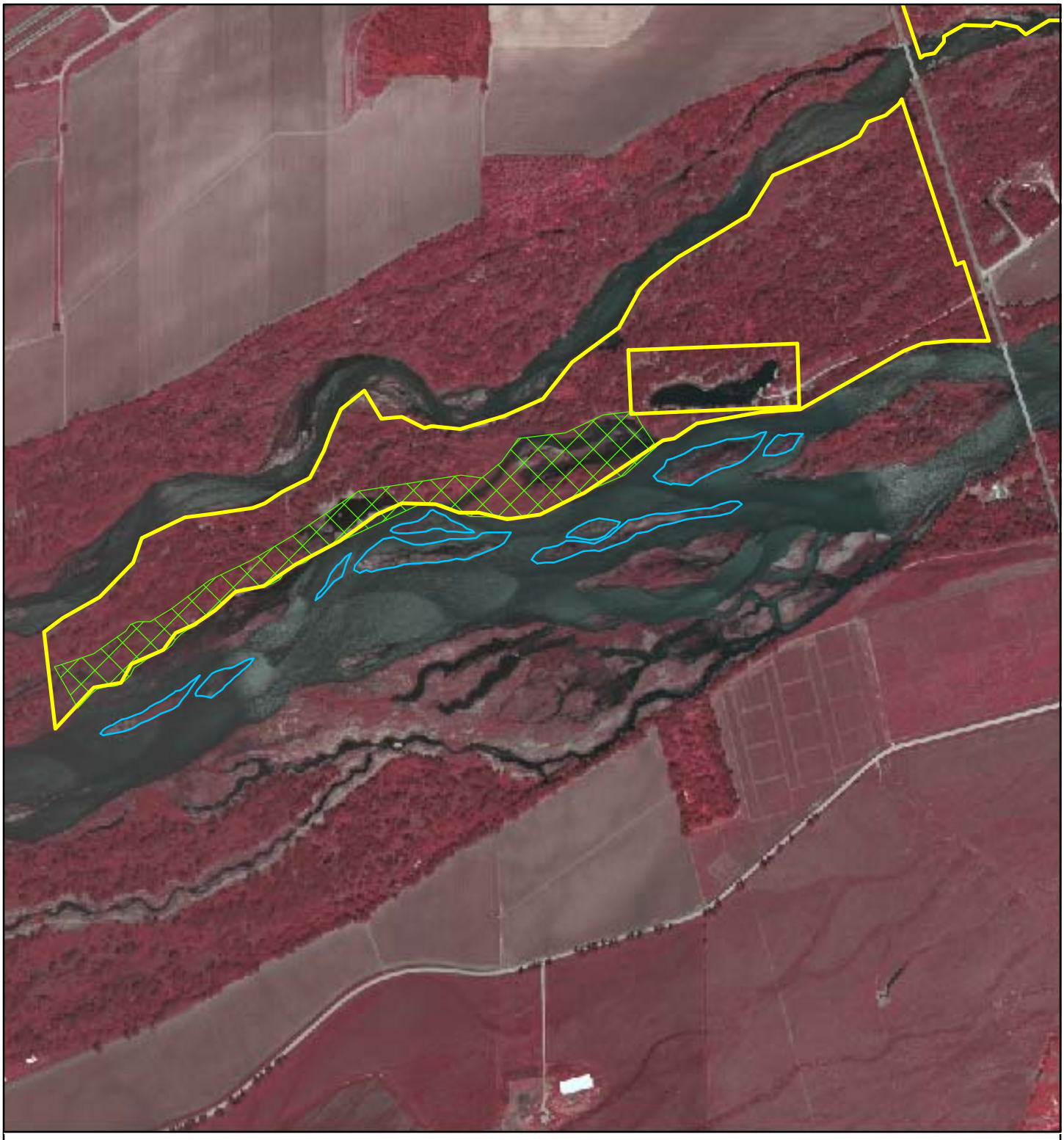
N

0.1 Miles

TRACT 2011001
OCSW Activities

Date: 03/01/12
By: JDB

Figure A-8



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- Tree Clearing
- Island Clearing

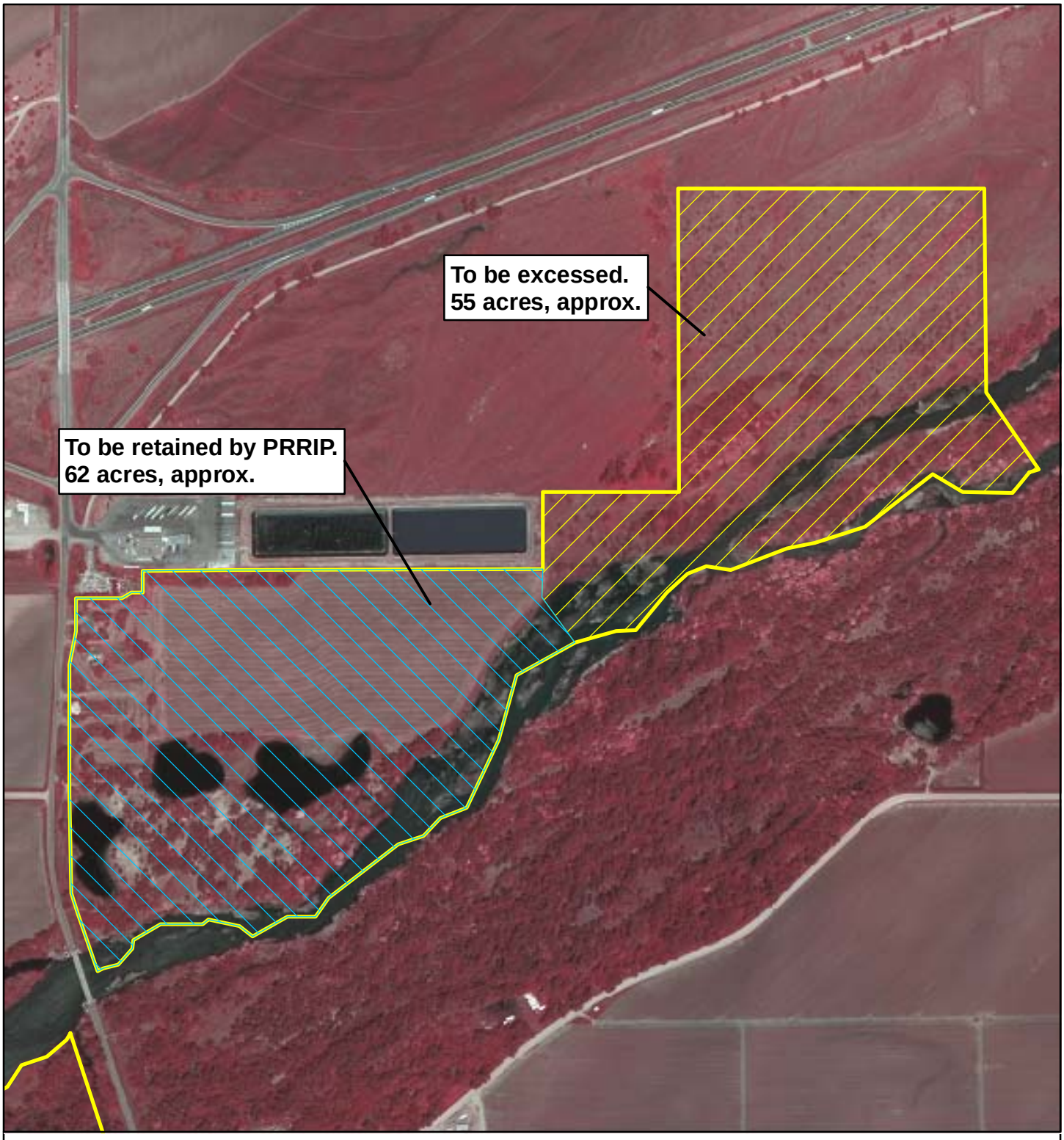
N

0.25 Miles

TRACT 2011001
Riverine Activities

Date: 03/01/12
By: JDB

Figure A-9



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Legend

- 2011001
- Excess Area
- Retained by PRRIP

N

0.2 Miles

TRACT 2011001
Excess Land

Date: 03/01/12
By: JDB

Figure A-10