



REQUEST FOR PROPOSALS

Platte River Recovery Implementation Program 2015-2018 Interior Least Tern and Piping Plover Habitat Colonization and Productivity Study RFP

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

Office of the Executive Director
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845

January 26, 2015

1
2



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM Request for Proposals

SUBJECT: Interior Least Tern and Piping Plover Habitat Colonization and Productivity Study

REQUEST DATE: January 26, 2015

SITE VISIT: February 4, 2015

CLOSING DATE: February 18, 2015

POINT OF CONTACT: Dave Baasch
Headwaters Corporation
Director of Biological and Ecological Services
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845
(308) 390-0456
baaschd@headwaterscorp.com

RECITALS

The Governance Committee (GC) of the Platte River Recovery Implementation Program (PRRIP or Program) submits this Request for Proposals (RFP) to solicit proposals from contractors to study reproductive success, habitat colonization, dispersal, and renesting of interior least terns (*Sternula antillarum*) and piping plovers (*Charadrius melodus*) nesting on sandpits and river-island habitat along the central Platte River between Lexington and Chapman, Nebraska. The study will be conducted for the Governance Committee and will be supervised by the Program's Executive Director's Office (ED Office). The study must address:

i. Reproductive Success

Quantify abundance, distribution, reproductive success and reproductive habitat parameters in the study area.

ii. Colonization

Quantify colonization rate of nesting habitat by local vs. immigrant adults.

iii. Dispersal

Quantify dispersal of breeding adults between units of nesting habitat.

iv. Renesting

Quantify frequency, timing and location of renesting attempts by adults with failed nests or broods of chicks.

This RFP describes a program of study where field work will be conducted April through August 2015-2018. The schedule below and subsequent budget discussion in this RFP detail the expected course of work from the date the RFP is issued through Program acceptance of the Final Project Report in 2019. Under the final contract, annual written Notice to Proceed from the ED Office will be required before work begins. All work will be contingent on availability of Program funding.



In responding to this RFP, the Governance Committee requests study proposals that include:

- 1) **Scope of work** for completing this project. Prospective contractors should provide a detailed outline of the type of work to be performed (data collection methods, analyses, reporting) to address the tasks identified in the Scope of Work for Contract Services for this RFP.
- 2) **List of relevant project experience** within the past five years, including name, location, and brief description of the projects; name, address, and phone number of the contracting officer for the client; and identification of key project participants and their tasks.
- 3) **Resumes** of all primary investigators and level of full-time employees, part-time employees, and student involvement (if any). Provide a table showing the tasks, responsibilities, and the number of hours each key participant is committing to this project.
- 4) **Schedule** for completing each task in the scope. The following are critical dates for the Governance Committee's preferred schedule for the project:

February 4, 2015 – Pre-proposal conference call / site visit to central Nebraska

February 18, 2015 – Proposal submission deadline

Week of February 23, 2015 – Proposal review period

Week of February 23, 2015 – Interviews/contractor selection

April-August, Annually – Nesting season / field data collection

November 1, Annually – Draft Annual Report and study budget for subsequent year

December 15, Annually – Final Annual Report

2015-2018 AMP Reporting Session – Presentation to Program Committees at annual meetings

February 1, 2019 – Draft of Final Project Report to ED Office

April 1, 2019 – Final Project Report to ED Office

Prospective contractors should address their capability to comply with the above schedule. If it is deemed that the above critical dates should be revised, prospective contractors should offer alternative schedules describing the logic and reasons for the alternative date(s).

- 5) **Detailed cost not to exceed proposal** to complete the project. The proposal should identify costs and hours allocated for each task in the scope of work and the total cost for the project. Hourly rates and reimbursable expenses for the proposing firm/individual and any sub-contractors must be attached to the detailed price proposal. The contract will be awarded on a Cost Not to Exceed basis. Governance Committee approval is needed before the contractor is authorized to begin implementation.
- 6) **Equipment list** sufficient to complete study. The contractor will be required to have Microsoft InfoPath for data entry.
- 7) **Conflicts of Interest Statement** addressing whether or not any potential conflict of interest exists between this project and other past or on-going projects, including any projects currently being conducted for the Program.



8) **Description of insurance** shall be provided with the proposal. Proof of insurance will be required before a contract is issued. Minimum insurance requirements are described in the attached Program's Consultant Contract (Attachment A).

9) **Acceptance of the terms and conditions** as outlined in the attached Program's Standard Consultant Contract, or clear description of any exceptions to the terms and conditions (Attachment A).

10) **Affirmatively state** the firm and all principals of the firm **ARE NOT** on the federal suspended and disbarred list, and provide the firm's Dun & Bradstreet (D-U-N-S) number.

TERMS AND CONDITIONS

The selected contractor will be retained by:

Nebraska Community Foundation
PO Box 83107
Lincoln, NE 68501

The Governance Committee of the Program has the sole discretion and reserves the right to reject any and all proposals received in response to this RFP and to cancel this solicitation if it is deemed in the best interest of the Program to do so. Issuance of this RFP in no way constitutes a commitment by the Program to award a contract, or to pay Consultant's costs incurred either in the preparation of a response to his RFP or during negotiations, if any, of a contract for services. The Program also reserves the right to make amendments to this RFP by giving written notice to Consultants, and to request clarification, supplements, and additions to the information provided by a Consultant. By submitting a proposal in response to this solicitation, Consultant understands and agrees that any selection of a Consultant or any decision to reject any or all responses or to establish no contracts shall be at the sole discretion of the Program. To the extent authorized by law, the Consultant shall indemnify, save, and hold harmless the Nebraska Community Foundation, the states of Colorado, Wyoming, and Nebraska, the Department of the Interior, members of the Governance Committee, and the Executive Director's Office, their employees, employers, and agents, against any and all claims, damages, liability, and court awards including costs, expenses, and attorney fees incurred as a result of any act or omission by the Consultant or its employees, agents, sub-Consultants, or assignees pursuant to the terms of this project. Additionally, by submitting a proposal, Consultants agree that they waive any claim for the recovery of any costs or expenses incurred in preparing and submitting a proposal.

PRE-PROPOSAL CONFERENCE CALL

An **optional pre-proposal conference call and an site visit** for interested parties will be held on Wednesday, February 4th at 10:00 a.m. CST and parties interested in the optional site visits can meet at the Executive Director's Office conference center (4111 4th Avenue, Suite 6, Kearney, NE). Following the conference call, interested parties will tour select locations along the central Platte River.

The optional conference call will be an opportunity for interested parties to ask and have questions answered prior to submitting their proposal. The optional site visits will provide critical information on scope, field logistics, and other details so interested parties are encouraged to attend. To facilitate logistical arrangements, please contact Dave Baasch at



baaschd@headwaterscorp.com by Monday, February 2, 2015 to let him know if you will be participating in the conference call and how many, if any in your party will be attending the optional site visits.

POINT OF CONTACT & RFP DUE DATE

Questions about this RFP should be e-mailed to Dave Baasch. Questions, responses, and any additional information related to the RFP will be available to all bidders on the Program website (www.platteriverprogram.org/Contractors/Pages/OpenRFPs.aspx). One electronic copy of your proposal in PDF format must be submitted to Dave Baasch at **baaschd@headwaterscorp.com** **no later than 5:00 p.m. CST on February 18, 2015.**



SCOPE OF WORK FOR CONTRACT SERVICES

INTRODUCTION

The Program was initiated on January 1, 2007 between Nebraska, Wyoming, and Colorado and the Department of the Interior to address endangered species issues in the central and lower Platte River basin. The species considered in the Program, referred to as “target species”, are the whooping crane, piping plover, interior least tern, and pallid sturgeon. A Governance Committee reviews, directs, and provides oversight for activities undertaken during the Program. The Governance Committee is comprised of one representative from each of the three states, three water user representatives, two representatives from environmental groups, and two members representing federal agencies. The Governance Committee has named Dr. Jerry Kenny to serve as the Program ED. Dave Baasch, representing the Program ED’s Office, will be the primary contact for prospective contractors responding to this RFP.

BACKGROUND

The Program retained the U.S. Geological Survey-Northern Prairie Wildlife Research Center (USGS) to implement a 2-year Foraging Habits study (banding tern and plover adults and chicks) that concluded in 2010. At the conclusion of this study, the Program amended the study plan and entered into a 4-year agreement with the USGS to continue to assist with the implementation of the Program’s tern and plover monitoring protocol as well as to band and resight tern and plover adults and chicks on the central Platte River. The Program’s tern and plover monitoring protocol has been implemented since 2001. ED Office staff, Program participants, technicians and contractors have implemented the protocol since 2007.

OBJECTIVES AND SCOPE

In coordination with ED Office staff, the primary responsibilities of the contractor will be to: 1) provide six (6) research technicians to assist the Program’s Technical Point of Contact with implementation of the Program’s tern and plover monitoring protocol (Attachment B); 2) band tern and plover nesting adults and chicks with unique markers; 3) resight banded adults and chicks to assess reproductive success, habitat colonization, dispersal, and renesting within the Program Associated Habitats; 4) provide weekly updates of nesting activities that occur within the Program Associated Habitats; 5) compile paper and electronic copies of tern and plover data collected each year; and 6) produce Annual Reports documenting research and monitoring activities and submit this information to the ED Office annually. ED Office staff will assist the contractor with all river surveys between Lexington and Chapman, NE, will provide an airboat and operator for these surveys and will also participate in and coordinate all field-related activities during the nesting seasons.

Activities proposed for 2015-2018 include the collection of data outlined in the Program’s tern and plover monitoring protocol, band and resight tern and plover adults and chicks to document habitat colonization, dispersal, and success of tern and plover adults and chicks including those that were banded during current or previous years, and report annual findings to the Program, US Fish and Wildlife Service, and the Nebraska Game and Parks Commission. It is important to note, however, that annual work plans, including FY2015 work plans, will be reviewed by personnel from U.S. Fish and Wildlife Service, Nebraska Game and Parks Commission, and the Program’s Technical Advisory Committee (TAC) and may change between the time annual budgets are developed and the subsequent nesting season. Budget implications related to changes in annual work plans will be negotiated and agreed upon by the contractor and the Program prior to the respective nesting season.



Recent central Platte River surveys by the Program indicate that most terns and piping plovers nest on managed sandpits, though nesting has occurred on riverine habitat and privately-owned, unmanaged sandpits since 2007. Though most recent nesting activity has occurred on sandpits, birds are regularly observed foraging in the river and river nesting is expected to increase as additional river-island habitat becomes available. Thus, the selected contractor will be required to work with the ED Office to review past information about tern and plover nesting locations and to develop and secure written access agreements with sandpit (requires mine safety training) and river land owners before implementing the study methodologies. In addition, the selected contractor will obtain necessary permits required to monitor and band terns and plovers on the central Platte River, will enter data outlined in the Program's tern and plover monitoring protocol into the Program's online database, will maintain an organized database to record banding and resighting data, and will be responsible for reporting band related information as may be required. The selected contractor will be responsible for providing sufficient manpower, and all equipment necessary to complete the study, including four-wheel-drive vehicles to access many of the areas terns and plovers nest. Housing will be negotiated annually and should be included as an incurred expense in all proposals.

LINK TO PRIORITY HYPOTHESES AND BIG QUESTIONS

The purpose of the habitat colonization study is to help determine if habitat availability limits tern and plover populations, if terns and plovers select in-channel (islands) or off-channel (sandpits) nesting habitat, and if reproductive rates (i.e., fledge ratios) are similar on in-channel and off-channel nesting habitats on the central Platte River. The study and its inferences will be linked to testing several priority hypotheses in the Program's Adaptive Management Plan (AMP) and answering the Program's Big Questions related to terns and plovers provided below:

PRIORITY HYPOTHESES

- T1:** Additional bare sand habitat will increase the number of adult least terns
- P1:** Additional bare sand habitat will increase the number of adult piping plovers
- TP1:** There is an interaction of river and sandpit habitat.
- TP2:** The central Platte River may act as a source or sink for terns and plovers.

BIG QUESTIONS

- BQ6:** Does availability of suitable nesting habitat limit tern and plover use and reproductive success on the central Platte River?
- BQ7:** Are both suitable in-channel and off-channel nesting habitats required to maintain central Platte River tern and plover populations?
- BQ10:** How do Program management actions in the central Platte River cumulatively contribute to least tern, piping plover, and whooping crane recovery?

Many covariates influence tern and plover use and productivity on the central Platte River and data collected during 2015-2018, along with banding and other data collected in the past, will be utilized to assess the Program's Big Questions and determine effects and relationships that relate back to priority hypotheses outlined in the Program's Adaptive Management Plan (AMP), the two management strategies identified in the AMP, and overall AMP implementation. Information obtained through past and future banding efforts will allow us to better assess habitat colonization, obtain better estimates of adult and chick survival and overall reproductive success of these species, and will enable us to better discern how a portion of each population interacts and responds to



availability of riverine and sandpit habitats. Proposals should address the ability of the study results to help provide inferences as to the priority hypotheses and big questions and the ability of the proposed methodologies to isolate the effects of habitat type on productivity from other influences such as predation and human disturbance.

METHODOLOGIES

The interior least tern is a federally- and state-listed endangered species; the piping plover is a federally- and state-listed threatened species. All bird handling will require a U.S. Fish and Wildlife Service Threatened and Endangered Species permit and a Nebraska Game and Parks Commission scientific collecting permit. Submitted proposals should include detail about any such permits currently held and any past experience conducting research or monitoring on terns and plovers that included bird handling and the acquisition of required permits. Proposals submitted in response to this RFP will be reviewed by a Proposal Evaluation Team on behalf of the Program, as well as by personnel from the U.S. Fish and Wildlife Service and the Nebraska Game and Parks Commission to ensure the proposed study methods would be allowable and covered by permit requirements. As such, proposals submitted in response to this RFP should include a detailed explanation of the proposed survey and mark-recapture methods.

The contractor will be responsible for field surveys, data entry, data summary, basic analysis, and report preparation. The contractor shall furnish all personnel, equipment, materials, transportation, housing, and services to ensure the completion of the contract. Methods and draft reports will be reviewed by the ED Office and the TAC and the Final Project Report will likely be reviewed by the Program's Independent Science Advisory Committee and/or an independent science panel to ensure scientific integrity. Development of Program-approved peer reviewed publications of collected data and results, in coordination with the ED Office, is strongly encouraged.

STUDY AREA AND TIMING

The area within 3.5 miles either side of the Platte River beginning at the junction of U.S. Highway 283 and Interstate 80 near Lexington, Nebraska and extending eastward to Chapman, Nebraska. When side channels of the Platte River extend beyond the 3.5 mile area, a two-mile area is included around those channels. Typically, piping plovers arrive in the area and initiate nests by mid-April and least terns arrive and initiate nests by mid-May. Both species typically leave the area by mid-August. The study duration is scheduled for 2015-2018, but will be based on data needs, contractor performance, and available funding.

BUDGET

Submitted proposals should provide a detailed budget for all field data collection, analysis, and reporting activities, 2015-2018. Annual study budgets will be subject to Governance Committee approval as a part of the overall annual fiscal year Program budget approval process.

AVAILABLE INFORMATION

In addition to the Program Document, the AMP, and the Integrated Monitoring and Research Plan, the 2012-2013 Tern and Plover Monitoring and Research Report and several additional sources of information are available to assist potential contractors in responding to this RFP. All of these documents can be accessed either from the Program Web site (www.PlatteRiverProgram.org) or by contacting Dave Baasch (baaschd@headwaterscorp.com).



DELIVERABLES

The contractor will provide a weekly e-mail report during the nesting season and monthly e-mail reports during the remainder of the year regarding work progress to the ED Office. The contractor will provide a presentation at the Program's AMP Reporting Session after completion of each study season. Additional study deliverables include, but are not limited to:

- Copies of all annual state and federal filings required in accordance with necessary permits.
 - Raw data sheets, maps, and/or UTM locations documenting all bird captures, relocations, nest and brood sighting information, habitat and productivity metrics collected, etc.
 - Photographs of study implementation, birds, nests, banding activity, and habitat conditions.
 - Data entered into the Program's online database at least weekly and reported in accordance with guidelines outlined in the Program's AMP and the Program's Database Management System.
 - A Draft Annual Report in Microsoft Word format based on results from each nesting season describing field methods, collected data, and data summary/analysis will be submitted to the ED Office and TAC for review and comment by 1 November each year.
 - Final Annual Reports, in PDF format that address comments from the ED Office and the TAC, will be provided to the ED Office two (2) weeks after written and/or verbal comments are provided to the contractor. Raw data sheets, photos, and a QA/QC'd final version of the Program's online database are also required with the submission of the Final Annual Reports.
 - A draft of the Final Project Report, focused on results from the 2015-2018 nesting seasons, but incorporating all data collected by the Program since 2014, that includes field methodologies, collected data, and data analyses and summaries will be submitted to the ED Office and for TAC review and comment by 1 February, 2019.
 - The Final Project Report, in PDF format that incorporates comments from the ED Office, TAC, and any other Program reviews, will be provided to the ED Office four (4) weeks after written and/or verbal comments are provided to the contractor.
- The Final Project Report will likely be reviewed by the Program's Independent Science Advisory Committee and/or an independent science panel to ensure scientific integrity.*
- Development of Program-approved peer reviewed publications is strongly encouraged and if conducted will be done in coordination with and approved by the ED Office.



Attachment A

Standard Consultant Contract

323
324
325



Company
Address 1
Address 2
TIN# 00-0000000

Nebraska Community Foundation, Inc.
PO Box 83107
Lincoln, NE 68501-3107
TIN# 47-0769903

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

Contract between Nebraska Community Foundation, Inc., Platte River Recovery Implementation Program, and [Company].

[Project Name]

1. **Parties.** This Contract is made and entered into by and between the Nebraska Community Foundation, Inc. (“Foundation”) of Lincoln, Nebraska, representing all signatories to the Platte River Recovery Implementation Program (“Program”) and [redacted] (“Consultant”). The following persons are authorized to represent the parties through this Contract: Diane Wilson of the Foundation, Dr. Jerry Kenny of the Program; and [Name] of the Consultant.

2. **Purpose of Contract.** The purpose of this Contract is to allow the Foundation, acting as the fiscal agent for the Governance Committee (GC) of the Program, to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Program, and to delegate the Executive Director’s Office (“ED Office”) through its Executive Director or his designee the authority to administer this Contract.

TERMS AND CONDITIONS

3. **Term of Contract and Required Approvals.** This Contract is effective when all parties have executed it and all required approvals have been granted. The term of this Contract is from (contract initiation date) through (contract expiration date). The services to be performed under this Contract will commence upon receipt of authorization to proceed. All services shall be completed during this term.

If the Consultant has been delayed and as a result will be unable, in the opinion of the Program, to complete performance fully and satisfactorily within this Contract period, the Consultant may be granted an extension of time, upon submission of evidence of the causes of delay satisfactory to the Program.

4. **Payment.**

A. Reimbursement of Expenses. The **Program** agrees to pay the **Consultant** an amount based on the approved budget depicted in **Exhibit B** and hourly rate and reimbursable expenses price schedules depicted in **Exhibit C**, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Exhibit A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed _____ dollars (\$_____).

B. Project Budget. The Project budget for each task included in Exhibit A is as follows:

<u>Task</u>	<u>Estimated Cost</u>
Phase I.	
Subtotal Phase I	
Phase II.	
Subtotal Phase II	
Total Project Cost	

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the **Program**. The Contract total amount is controlling. Payment shall be made directly to the **Consultant**. The **Consultant** shall maintain hourly records of time worked by its personnel to support any audits the **Program** may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The **Consultant** shall send billing reports for services performed for the various tasks outlined in Exhibit A to the **ED Office** (address included below). The Program's Executive Director, upon receiving the billing report, will approve the bill and submit the bill for payment. The submittal for payment will then be reviewed by the Signatory Parties of the Program who will advise the **Foundation** of approval. The **Foundation** will make payment of these funds directly to the **Consultant** within 30 days of notice of approval by the Signatory Parties. Payments of bills are due within 60 days after the billing date of the Consultant.

Billing Point of Contact (Program):

Dr. Jerry F. Kenny, Executive Director
Platte River Recovery Implementation Program
Headwaters Corporation
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845
Phone: (308) 237-5728
Fax: (308) 237-4651
Email: kennyj@headwaterscorp.com

D. Money Withheld. When the **Program** has reasonable grounds for believing that the **Consultant** will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the **Program** may withhold payment of such portion of any amount otherwise due and payable to the **Consultant** reasonably deemed appropriate to protect the **Program** against such loss. These amounts may be withheld until the cause for the withholding is cured to the **Program's** satisfaction or this Contract is terminated pursuant to Section 8U. Any amount so withheld may be retained by the **Program** for such period as it may deem advisable to protect the **Program** against any loss. This provision is intended solely for the benefit of the **Program** and no person shall have any right against the **Program** by reason of the **Program's** failure or refusal to withhold monies. No interest shall be payable by the **Program** on any amounts withheld under this provision. This provision is not intended to limit or in any way prejudice any other right of the **Program**.

E. Withholding of Payment. If a work element has not been received by the **Program** by the dates established in Exhibit A, the **Program** may withhold all payments beginning with the month following that date until such deficiency has been corrected.

F. Final Completion and Payment. The final payment shall be made upon acceptance of the final report and receipt of the final billing.

5. Responsibilities of Consultant.

A. Scope of Services. The **Consultant** shall perform the specific services required under this Contract in a satisfactory and proper manner as outlined in Exhibit A. If there is any conflict between this Contract and the provisions of the specific requirements of Exhibit A, the specific requirements shall prevail.

B. Personnel. All of the services required hereunder will be performed by the **Consultant** or under its supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized, licensed, or permitted under state law to perform such services, if state law requires such authorization, license, or permit.

C. Subcontracts.

(i) **Approval Required for Subcontracts.** Any subcontractors and outside associates or consultants required by the **Consultant** in connection with the services, work performed or rendered under this Contract will be limited to such individuals or firms as were specifically identified in the proposal and agreed to during negotiations or are specifically authorized by the **Program** during the performance of this Contract. The **Consultant** shall submit a list of the proposed subcontractors, associates or consultants; the scope and extent of each subcontract; and the dollar amount of each subcontract prior to Contract execution to the **Program** for approval. During the performance of the Contract, substitutions in or additions to such subcontracts, associates, or consultants will be subject to the prior approval of the **Program**. The **Program** approval of subcontractors will not relieve the **Consultant** from any responsibilities outlined in this Contract. The **Consultant** shall be responsible for the actions of the subcontractors, associates, and subconsultants.

(ii) **Billings for Subcontractors.** Billings for subcontractor, associates or subconsultants services will not include any mark up. The subcontract costs will be billed to the **Program** at the actual costs as billed to the **Consultant**. Subcontract costs will be documented by attaching subcontractor billings to the **Consultant's** billing submittals.

(iii) **Copies of Subcontracts.** The **Consultant** shall provide to the **Program** copies of each subcontractor contract immediately following execution with the subcontractor. All subcontracts between the **Consultant** and a subcontractor shall refer to and conform to the terms of this Contract. However, nothing in this Contract shall be construed as making the **Program** a party of any subcontract entered between the **Consultant** and a subcontractor.

D. Requests from the Program. The **Consultant** shall be responsible and responsive to the **Program** and the **ED Office** in their requests and requirements related to the scope of this Contract.

E. Presentation of Data. The **Consultant** shall select and analyze all data in a systematic and meaningful manner so as to contribute directly in meeting the objectives of the Project, and shall present this information clearly and concisely, in a professional manner.

F. Draft of Final Report. The **Consultant** shall present the **Program** a draft of the final report covering all work elements of the Project including maps, charts, conclusions and recommendations prior to the publication of any final report and no later than the date specified in Exhibit A. Draft Reports will be provided to the Program in Microsoft Word format for distribution and review. The **Program** will respond with written comments to the **Consultant** as soon as possible. The **Consultant** will address the comments of the **Program** in the final report. Final Reports will be provided to the Program in Microsoft Word and PDF format.

G. Project Completion Report. A final project completion report in the form described in Exhibit A shall be submitted to the **Program** by the date specified in Exhibit A.

H. Reports, Maps, Plans, Models and Documents. One (1) copy of maps, plans, worksheets, logs, field notes and other reference or source documents prepared for or gathered under this Contract, and one (1) copy of each unpublished report prepared under this Contract shall be submitted to the **Program**. If the **Consultant** writes or uses a computer program or spreadsheet as a part of this project, the **Consultant** shall submit to the **Program** for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to **Program** in written and digital forms with the final report. Digital media shall be labeled by the **Consultant** to provide sufficient detail to access the information on the media. All user manuals shall be submitted by the **Consultant** to **Program** providing complete documentation of computer programs developed under this Contract. The user manual shall also specify the source code language and the type of computer equipment necessary to operate the program(s). Any programs or computer software generated as a part of this Contract shall be the sole property of the **Program**.

I. Inspection and Acceptance. All deliverables furnished by the Consultant shall be subject to rigorous review by the Program's **ED Office** prior to acceptance.

6. Responsibilities of the Program.

A. Designated Representative. The Executive Director of the **Program** shall act as the **Program's** administrative representative with respect to the **Consultant's** service to be performed under this Contract and shall have complete authority to transmit instructions, receive information, and interpret and define the **Program's** policies and decisions with respect to services covered by this Contract.

B. Data to be Furnished to the Consultant. All information, data, reports, and maps as are available to the **Program** and necessary for the carrying out of the Scope of Services set forth herein shall be furnished to the **Consultant** without charge and the **ED Office** shall cooperate with the Consultant in the carrying out of the project.

C. Review Reports. The **ED Office** shall examine all studies, reports, sketches, opinions of the construction costs, and other documents presented by the **Consultant** to the **Program** and shall promptly render in writing the **Program's** decisions pertaining thereto within the time periods specified in Exhibit A.

D. Provide Criteria. The **ED Office** shall provide all criteria and full information regarding its requirements for the project.

7. Special Provisions.

A. No Finder's Fees. No finder's fee, employment agency fee, or other such fee related to the procurement of this Contract shall be paid by either party.

B. Publication. It is understood that the results of this work may be available to the **Consultant** for publication and use in connection with related work. Use of this work for publication and related work by the **Consultant** must be conducted with prior authorization from the **Program's** Technical Point of Contact.

C. Publicity. Any publicity or media contact associated with the **Consultant's** services and the result of those services provided under this Contract shall be the sole responsibility of the **Program**. Media requests of the **Consultant** should be directed to the Director of Outreach and Operations in the **ED Office**.

D. Monitor Activities. The **Program** shall have the right to monitor all Contract related activities of the **Consultant** and all subcontractors. This shall include, but not be limited to, the right to make site inspections at any time, to bring experts and consultants on site to examine or evaluate completed work or work in progress, and to observe all **Consultant** personnel in every phase of performance of Contract related work.

D. Kickbacks. The **Consultant** certifies and warrants that no gratuities, kickbacks or contingency fees were paid in connection with this Contract, nor were any fees, commissions, gifts, or other considerations made contingent upon the award of this Contract. If the **Consultant** breaches or violates this warranty, the **Program** may, at its discretion, terminate this Contract without liability to the **Program**, or deduct from the Contract price or consideration, or otherwise recover, the full amount of any commission, percentage, brokerage, or contingency fee.

E. Office Space, Equipment, and Supplies. The **Consultant** will supply its own office space, equipment, and supplies.

8. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Contract which are mutually agreed upon by the parties to this Contract shall be incorporated by written instrument, executed and signed by all parties to this Contract.

B. Applicable Law/Venue. The construction, interpretation and enforcement of this Contract shall be governed by the laws of the State of Nebraska. The Courts of the State of Nebraska shall have jurisdiction over this Contract and the parties.

C. Assignment/Contract Not Used as Collateral. Neither party shall assign or otherwise transfer any of the rights or delegate any of the duties set forth in this Contract without the prior written consent of the other party. The **Consultant** shall not use this Contract, or any portion thereof, for collateral for any financial obligation, without the prior written permission of the **Program**.

D. Audit/Access to Records. The **Program** and any of its representatives shall have access to any books, documents, papers, and records of the Consultant which are pertinent to this Contract. The **Consultant** shall, immediately upon receiving written instruction from the **Program**, provide to any independent auditor, accountant, or accounting firm, all books, documents, papers and records of the **Consultant** which are pertinent to this Contract. The **Consultant** shall cooperate fully with any such independent auditor, accountant, or accounting firm, during the entire course of any audit authorized by the **Program**.

E. Availability of Funds. Each payment obligation of the **Program** is conditioned upon the availability of funds and continuation of the Platte River Recovery Implementation Program. If funds are not allocated and available for the continuance of the services performed by the **Consultant**, the contract may be terminated by the **Program** at the end of the period for which the funds are available. The **Program** shall notify the **Consultant** at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the **Program** in the event this provision is exercised, and the **Program** shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section. This provision shall not be construed to permit the **Program** to terminate this Contract to acquire similar services from another party.

F. Award of Related Contracts. The **Program** may undertake or award supplemental or successor contracts for work related to this Contract. The **Consultant** shall cooperate fully with other contractors and the **Program** in all such cases.

G. Certificate of Good Standing. **Consultant** shall provide Certificate of Good Standing verifying compliance with the unemployment insurance and workers' compensation programs prior to performing work under this Contract.

H. Compliance with Law. The **Consultant** shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Contract.

I. Confidentiality of Information. All documents, data compilations, reports, computer programs, photographs, and any other work provided to or produced by the **Consultant** in the performance of this Contract shall be kept confidential by the **Consultant** unless written permission is granted by the **Program** for its release.

J. Conflicts of Interest

(i) **Consultant** shall not engage in providing consultation or representation of clients, agencies or firms which may constitute a conflict of interest which results in a disadvantage to the **Program** or a disclosure which would adversely affect the interests of the **Program**. **Consultant** shall notify the **Program** of any potential or actual conflicts of interest arising during the course of the **Consultant's** performance under this Contract. This Contract may be terminated in the event a conflict of interest arises. Termination of the Contract will be subject to a mutual settlement of accounts. In the event the contract is terminated under this provision, the **Consultant** shall take steps to insure that the file, evidence, evaluation and data are provided to the **Program** or its designee. This does not prohibit or affect the **Consultant's** ability to engage in consultations, evaluations or representation under agreement with other agencies, firms, facilities, or attorneys so long as no conflict exists.

(ii) A conflict of interest warranting termination of the Contract includes, but is not necessarily limited to, representing a client in an adversarial proceeding against the Platte River Recovery Implementation Program, its signatories, boards, commissions or initiating suits in equity including injunctions, declaratory judgments, writs of prohibition or *quo warranto*.

K. Entirety of Contract. This Contract, consisting of (example) twelve (12) pages, Exhibit A, consisting of eleven (11) pages, **Exhibit B**, consisting of one (1) page, and **Exhibit C**, consisting of one (1) page, represents the entire and integrated Contract between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

L. Force Majeure. Neither party shall be liable for failure to perform under this Contract if such failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays. This provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the nonperforming party.

M. Indemnification. The **Consultant** shall indemnify and hold harmless the **Foundation**, the **Program**, the **ED Office**, and their officers, agents, employees, successors and assignees from any and all claims, lawsuits, losses and liability arising out of **Consultant's** failure to perform any of **Consultant's** duties and obligations hereunder or in connection with the negligent performance of **Consultant's** duties or obligations, including but not limited to any claims, lawsuits, losses or liability arising out of **Consultant's** malpractice.

N. Independent Contractor. The **Consultant** shall function as an independent

contractor for the purposes of this Contract, and shall not be considered an employee of the **Program**, **Foundation** or **ED Office** for any purpose. The **Consultant** shall assume sole responsibility for any debts or liabilities that may be incurred by the **Consultant** in fulfilling the terms of this Contract, and shall be solely responsible for the payment of all federal, state and local taxes which may accrue because of this **Contract**. Nothing in this Contract shall be interpreted as authorizing the **Consultant** or its agents and/or employees to act as an agent or representative for or on behalf of the **Foundation** or the **Program**, or to incur any obligation of any kind on the behalf of the **Foundation** or the **Program**. The **Consultant** agrees that no health/hospitalization benefits, workers' compensation and/or similar benefits available to **Foundation** or **Program** employees will inure to the benefit of the **Consultant** or the **Consultant's** agents and/or employees as a result of this Contract.

O. Notices. All notices arising out of, or from, the provisions of this contract shall be in writing and given to the parties at the address provided under this Contract, either by regular mail, facsimile, e-mail, or delivery in person.

P. Notice and Approval of Proposed Sale or Transfer of the Consultant. The **Consultant** shall provide the **Program** with the earliest possible advance notice of any proposed sale or transfer or any proposed merger or consolidation of the assets of the **Consultant**. Such notice shall be provided in accordance with the notice provision of this Contract.

Q. Ownership of Documents/Work Product/Materials. All documents, reports, records, field notes, data, samples, specimens, and materials of any kind resulting from performance of this Contract are at all times the property of the **Program**.

R. Patent or Copyright Protection. The **Consultant** recognizes that certain proprietary matters or techniques may be subject to patent, trademark, copyright, license or other similar restrictions, and warrants that no work performed by the **Consultant** or its subcontractors will violate any such restriction.

S. Proof of Insurance. The **Consultant** shall not commence work under this Contract until the **Consultant** has obtained the following insurance coverages and provided the corresponding certificates of insurance:

(i) **Commercial General Liability Insurance.** **Consultant** shall provide coverage during the entire term of the Contract against claims arising out of bodily injury, death, damage to or destruction of the property of others, including loss of use thereof, and including products and completed operations in an amount not less than Five Hundred Thousand Dollars (\$500,000.00) per claimant and One Million Dollars (\$1,000,000.00) per occurrence.

(ii) **Business Automobile Liability Insurance.** **Consultant** shall maintain, during the entire term of the Contract, automobile liability insurance in an amount not less than Five Hundred Thousand Dollars (\$500,000.00) per occurrence. Coverage will include bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles

(iii) **Workers' Compensation or Employers' Liability Insurance.** The **Consultant** shall provide proof of workers' compensation coverage. Consultant's insurance shall include "Stop Gap" coverage in an amount not less than Five Hundred Thousand Dollars (\$500,000.00) per employee for each accident and disease.

(iv) **Professional Liability or Errors and Omissions Liability Insurance.** The **Consultant** shall provide proof of professional liability insurance or errors and omissions liability insurance to protect the **Foundation, Program** and **ED Office** from any and all claims arising from the **Consultant's** alleged or real professional errors, omissions or mistakes in the performance of professional duties in an amount not less than One Million Dollars (\$1,000,000.00) per claim.

T. Taxes. The **Consultant** shall pay all taxes and other such amounts required by federal, state and local law, including but not limited to federal and social security taxes, workers' compensation, unemployment insurance and sales taxes.

U. Termination of Contract. This Contract may be terminated, without cause, by the **Program** upon fifteen (15) days written notice. This Contract may be terminated immediately for cause if the **Consultant** fails to perform in accordance with the terms of this Contract.

V. Third Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Contract shall not be construed so as to create such status. The rights, duties and obligations contained in this Contract shall operate only between the parties to this Contract, and shall inure solely to the benefit of the parties to this Contract. The provisions of this Contract are intended only to assist the parties in determining and performing their obligations under this Contract.

W. Time is of the Essence. Time is of the essence in all provisions of the Contract.

X. Titles Not Controlling. Titles of paragraphs are for reference only, and shall not be used to construe the language in this Contract.

Y. Waiver. The waiver of any breach of any term or condition in this Contract shall not be deemed a waiver of any prior or subsequent breach.

9. Contacts.

Administrative Point of Contact (Foundation):

Diane M. Wilson
Chief Financial and Administrative Officer
Nebraska Community Foundation
PO Box 83107
Lincoln, Nebraska 68501-3107
Phone: (402) 323-7330
Fax: (402) 323-7349
Email: dwilson@nebcommfound.org

Technical Point of Contact (Program):

Name, Title
Platte River Recovery Implementation Prog.
Headwaters Corporation
Address 1
City, State ZIP
Phone: (000) 000-0000
Fax: (000) 000-0000
Email: [email](#)

Administrative Point of Contact (Consultant):

Name, Title
Company
Address 1
City, State ZIP
Phone: (000) 000-0000
Fax: (000) 000-0000
Email: [email](#)

Admin. Point of Contact (Program):

Dr. Jerry F. Kenny, Executive Director
Platte River Recovery Implementation Prog.
Headwaters Corporation
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845
Phone: (308) 237-5728
Fax: (308) 237-4651
Email: kennyj@headwaterscorp.com

Media Point of Contact (Program):

Dr. Bridget Barron, Director of Outreach
Platte River Recovery Implementation Prog.
Headwaters Corporation
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845
Phone: (308) 237-5728
Fax: (308) 237-4651
Email: barronb@headwaterscorp.com

Technical Point of Contact (Consultant):

Name, Title
Company
Address 1
City, State ZIP
Phone: (000) 000-0000
Fax: (000) 000-0000
Email: [email](#)

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

10. Signatures. By signing this Contract, the parties certify that they have read and understood it, that they agree to be bound by the terms of the Contract, that they have the authority to sign it.

NEBRASKA COMMUNITY FOUNDATION

Diane M. Wilson
Chief Financial and Administrative Officer

Date

[CONSULTANT]

[Name, Title]

Date

EXHIBIT “A” SCOPE OF SERVICES

A. PROJECT DESCRIPTION

1. Location: [Text]
2. Purpose: [Text]
3. History: [Text]

B. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The **Consultant** shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month. The progress report will also show the percentage of the job completed by task and the percentage of budget spent. The progress report will also include a billing projection for the upcoming month for the purpose of Program reimbursement request planning.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Statement of Assumptions, Project Work File

- a. If the **Consultant** writes or uses a computer program or spreadsheet as a part of this project, the **Consultant** shall submit to the **Program** for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the **Program** in written and digital forms with the final report. Digital media shall be labeled by the **Consultant** to provide sufficient detail to access the information on the media. User manuals shall be submitted by the **Consultant** to the **Program** providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. To facilitate the **Program**'s accurate evaluation of the **Consultant's** work product, computations, conclusions and recommendations, the **Consultant** shall:

- * Include in the final report a section describing the assumptions and methodology used by the **Consultant** in generating the data and conclusions contained in that chapter.

- * Maintain a project work file containing the materials used in project analysis. This file will be available for review by the **Program** and should be organized in such a way as to allow replication of the steps and procedures used by the **Consultant** to reach the conclusions described in the study.

- * Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the **Consultant** to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Final Report

The **Consultant** shall use the Contract Scope of Services as the outline for draft and final reports so that **Consultant** compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Nebraska or other state if appropriate to location of project site. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Nebraska. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Nebraska. At a minimum, the reproducible original to be submitted as part of the deliverables required herein must utilize an original seal(s) and original signature(s).

4. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the **Consultant** shall also provide the final documents and related materials in a digital format. This digital report shall, to the extent feasible, be assembled into one file rather than separate files for text, tables, graphics, etc. This digital report shall be contained on a CD(s) or DVD(s), and shall be in both Word and Adobe Acrobat format. Any plates, figures, etc. not suitable for Word shall be in AutoCAD, ArcGIS, Adobe Acrobat, or compatible format. Other formats may be used if approved in advance by the **ED Office**. The final documents will also be provided

fully assembled into one file, in a complete “internet ready” digital format to facilitate their distribution via the Office website.

5. Project Access

The **ED Office** shall be responsible for obtaining access as required for project tasks.

6. Stand-By Time

The **Program** will not reimburse the **Consultant** for stand-by time charges for the Consultant's supervisory personnel.

SCOPE OF SERVICES

**EXHIBIT “B”
BUDGET**

EXHIBIT “C”
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2013



Attachment B

Program Interior Least Tern and Piping Plover Monitoring Protocol



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

2015 Central Platte River Tern and Plover Monitoring and Research Protocol

INTRODUCTION

During 2010, the Platte River Recovery Implementation Program (PRRIP or Program) revised the Program's Tern and Plover Monitoring Protocol entitled 'Monitoring the Abundance, Distribution, Reproductive Success, and Reproductive Habitat Parameters of Least Terns and Piping Plovers on the Central Platte River' (2010 Monitoring Protocol) primarily to: 1) increase the timeframe for conducting tern and plover surveys at all sites from 15 May – 15 July to 1 May – 1 August; 2) increase the frequency of surveys at potential nesting areas; 3) clarify or further define terms within the original Monitoring Protocol; and 4) allow for on-site collection of habitat parameters believed to influence reproductive success of terns and plovers within Program Associated Habitats (2011 Monitoring Protocol). The Program also retained U.S. Geological Survey - Northern Prairie Wildlife Research Center (USGS) to implement a 2-year Foraging Habits study that concluded in 2010. The Program has since retained the USGS to continue to implement inside and outside monitoring and banding at managed and unmanaged sites within the Program Associated Habitat area (2011 Monitoring Protocol).

Activities proposed for 2015–2018 include the collection of data outlined in the Program's 2015 Monitoring Protocol as well as banding tern and plover adults and chicks where approved by the land owner/manager. Data collected at nesting sites during 2015–2018 will be utilized to determine effects and relationships that relate back to priority hypotheses outlined in the Program's Adaptive Management Plan (AMP), the two management strategies identified in the AMP, and overall AMP implementation. Information obtained through banding efforts will allow us to obtain better estimates of chick survival and overall reproductive success of these species and will allow us to discern how the species interact with riverine and sandpit habitats. Banding will also serve as an essential tool in providing long-term information such as site fidelity (within Program Associated Habitats as well as across multiple river systems), recruitment, fledgling and adult survival, and seasonal as well as annual movement patterns. Since interior least terns and piping plovers are banded within several river systems, we can gather information at both a local and regional scale which could result in better demographic population models, a better understanding of how central Platte River terns and plovers contribute to the overall population recovery goals, and additional guidance for future efforts to recover the species.

DESIGN CONSIDERATIONS AND SPECIFICATIONS

Area of Interest

The area of interest consists of the Platte River beginning at the junction of U.S. Highway 283 and Interstate 80 near Lexington, Nebraska, and extending eastward to Chapman, Nebraska. This includes approximately 90 miles of the Platte River and sandpits within 3.5 miles of the main channel or within 2 miles of a side channel if the side channel extends beyond 3.5 miles of the main channel.

Survey Design

The design consists of two main components: 1) semi-monthly river surveys and 2) semi-monthly sandpit surveys. Each sandpit and constructed, managed, or naturally existing river island designated as suitable habitat will be monitored for tern and plover adults, nests, broods, and fledglings from outside as well as from within the nesting area as described in the methods section below. Least tern or piping plover nests or chicks observed during any survey will be monitored twice/week from outside and inside the nesting area to evaluate their status. Data collected will be used to make informed judgments regarding trends in least tern and piping plover reproductive parameters associated with Program effects on habitat.



Semi-monthly River Surveys

Airboat surveys of the entire 90-mile study area between Lexington and Chapman, Nebraska will be conducted on or about 1 and 15 May, June, and July and 1 August as outlined in the Program's Monitoring Protocol. Nebraska Public Power District personnel (NPPD; i.e., Jim Jenniges) will survey potential nesting habitat between the Lexington Bridge and the J-2 Return (i.e., Lexington Island). Program staff and contracted personnel will survey the Platte River between the J-2 Return and the Alda Bridge. U.S. Fish and Wildlife Service personnel will conduct surveys between the Alda and Chapman Bridges when possible, otherwise Program staff and contracted personnel will conduct these surveys. If nesting occurs on a river island between the Alda and Chapman Bridges, Program staff and contracted personnel will monitor nests and broods as outlined below.

Semi-monthly Sandpit Surveys

All sandpits that have areas of bare sand (<25% vegetative cover) greater than 1.5 acres, and for which access can be gained, will be surveyed for active tern and plover colonies on or about 1 and 15 May, June, and July and 1 August. NPPD will conduct outside surveys at the Lexington, Johnson, and Blue Hole Sandpits. Program staff and contracted personnel will conduct inside surveys at all Program managed sites, Lexington, Johnson, and Blue Hole Sandpits, and additional sites where nesting occurs and access can be gained. Central Platte Natural Resources District (CPNRD; i.e., Mark Czaplewski) will conduct outside surveys at all sandpits located between the Alda and Chapman Platte River Bridges.

METHODS

Field Techniques

Standard field methods will be used during each visit to a nesting area and information such as: date; time of day (arrival and departure); weather conditions; number of adults, nests, chicks, and fledglings present; and other species of wildlife present in area will be recorded. Where inside and outside surveys are conducted, observations of adults, nests, chicks, and fledglings collected from outside and inside the nesting area will be documented on separate data sheets; final counts reported will represent the maximum number of adults, nests, chicks, and fledglings counted by either method of observation during each site visit. Continuing to conduct independent surveys at a handful of sites will allow us to address issues related to observer bias and biases associated with field techniques used.

Outside Survey/Monitoring

Where conducted, outside surveys will be performed using binoculars and/or spotting scopes at a distance great enough to not cause disturbance to nesting birds (usually >165 ft, but closer or farther as terrain dictates) and for at least 1/2 hour. Observations will be conducted from multiple locations to provide as complete of coverage of the site as possible. Observers will scan the area using binoculars and/or a spotting scope at least five times and will record the number and/or status of adults, nests, chicks, and fledglings observed as well as any other pertinent information.

Inside Survey/Monitoring

Where conducted, inside surveys will be performed using a systematic grid-search pattern which is the most commonly used method for nest searching (see Figure 1). To initiate this search method, investigators will form a straight line on the edge of and parallel to the longest side of a sandbar or sandpit pond as shown in the figure below. Investigators will be evenly spaced and the distance between individuals will not exceed 10 yards unless chicks are encountered. The spacing will be adjusted to ensure that all nests can be detected while not pushing chicks out of their territory. For example, if visibility is low because of vegetation or other factor, then the distance between technicians will be decreased; however, this distance will be increased when chicks are encountered to allow chicks to move between observers.

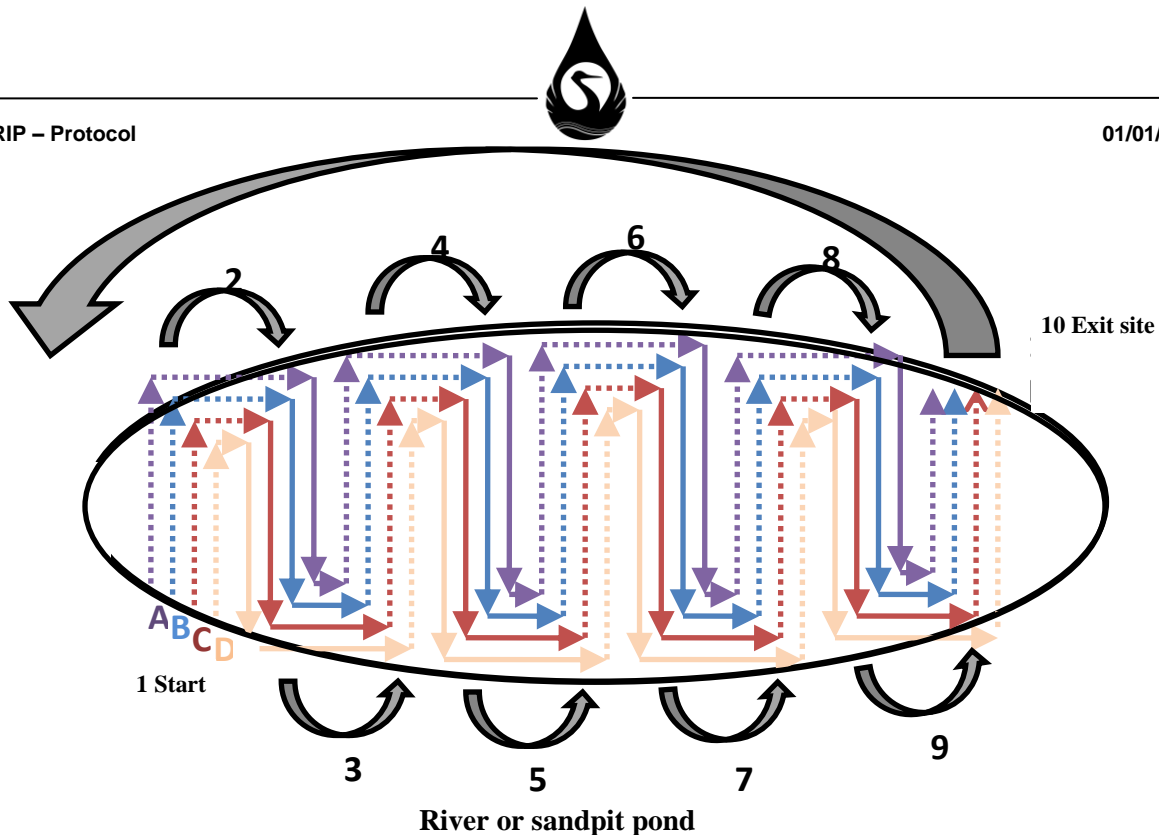


Figure 1. Systematic grid-search pattern used to locate nests and broods while conducting inside surveys of suitable nesting sites

Surveys within each nesting colony will be conducted no more than twice during a seven-day period; activity within the colony areas will be limited so that individual adults are not kept off their nest or away from their brood for >20 minutes (unless further restricted by the Program's State or Federal permit). To reduce stress and mortality to eggs and chicks, all within-site nest visits will be conducted when wind speeds are <25mph and sand is not blowing around, it is not precipitating, and the temperature is >40°F (4°C) and <90°F (32°C).

Adult and Chick Banding

Where allowed, unmarked tern and plover nesting adults and all chicks observed will be marked with a combination of bands that will be unique to the central Platte River, sites within Program Associated Habitats, and specific nests. Chicks will be captured and banded when encountered while conducting nest and brood searches within the nesting colony. Chicks will be captured by hand, weighed, and fitted with a unique combination of bands. When possible, chicks will be captured and released as broods. Chick banding will only occur when air temperature are >40°F (4°C) and <90°F (32°C), the wind is minimal (<25 mph), and there is no precipitation. Unmarked adult plovers will be trapped on their nest after 2-5 days of incubation as determined by egg floating, but before eggs are pipping. Live eggs will be replaced with fake ones during trapping and will be returned to the nest bowl at the completion of the trapping event. Trapping events will be conducted at least two hours prior to or following nest and brood surveys, will last no longer than 20 minutes, and will take place when air temperatures are >40°F (4°C) and <90°F (32°C), the wind is minimal (<25 mph), and there is no precipitation.

Nest and Brood Monitoring



To confirm their status, active nests and broods will be monitored twice per week as outlined above. We will monitor nests/chicks until they become inactive either through success (hatch/fledge) or failure. The fate of each nest and brood, including an estimate of the number of hatched eggs and fledged chicks will be documented. An estimate of the number of successfully fledged chicks will be based on age and date chicks were last observed or will be directly counted if chicks are observed flying from natal areas. When possible, band combinations will be collected from previously marked birds to more accurately ascertain which nests chicks and/or broods were generated from. Each site will be monitored twice a week until nests and chicks are no longer observed at the natal area.

HABITAT MEASUREMENTS

On-site Data Collection

When a new nest is observed, we will document the presence of adults tending each nest, document management activities applied to the nest (elevating, caging, etc), collect a GPS location of the nest, mark nests with a numbered nest marker, float eggs, take a photograph of the nest, and proceed to collect additional habitat measurements as outlined below. Numbered nest markers (e.g., tongue depressor or paint stir-stick) will be placed 10 feet north of each nest, at a maximum height of 6 inches, to allow observers to easily locate and identify nests during subsequent visits. To determine the initiation date, we will float all eggs present in the bowl following methods of Hays and LeCroy (1971) and outlined in the U.S. Army Corps of Engineers' *Least Tern and Piping Plover Monitoring Handbook* (U.S. Army Corps of Engineers, 2009). In order to minimize the amount of time spent at nests and within the nesting colony, we will use a digital camera to collect information at each nest. The camera will be placed on a tripod stand or held at a standardized height that results in a 1-yd² area field of view centered on the nest at ground level. Prior to collecting the image, we will place 3×5-inch card, uniquely identifying each nest, in the camera's field of view to ensure images collected at each nest are properly identified. While at the nest, we will also determine the maximum height of living or current-year vegetation within a 1-yd² area centered on the nest. At riverine sites, we will use a laser range finder to measure distances to predator perch and non-suitable nesting habitat excluding water (e.g., vegetated patch or bank line), will classify % bare sand area at each nesting site, and will measure the wetted width of the channels on each side of the nesting area. We will also collect a GPS location at the waterline nearest the nest and perpendicular to flow at riverine sites to determine distance to and elevation above the waterline for each nest. At sandpit sites, we will use a GIS to delineate the waterline, mark predator perches, and mark non-suitable nesting habitat present so that these distance measures can be determined off-site using a GIS.

Off-site Data Collection/Recording

We will document site-level management activities (pre-emergent herbicide, predator fence, disking, etc) applied to each suitable nesting site in the study area. Information such as number of eggs, % canopy cover, substrate size, distance to nearest current year vegetation >6 inches tall within a 1-yd² area, and the presence/absence of nest furniture will be determined off-site through visual examination of images taken at each nest. A GIS will be used to measure the elevation of each nest above the waterline, distance to the nearest conspecific and other species' nest located at each site, active channel width at suitable riverine nesting sites (width at 1,200cfs including land), and pond size at sandpit sites. Throughout the nesting season, we will also obtain and record data such as daily precipitation, temperature, and river flows between observation periods so we can evaluate their influence on nest and brood survival.

Biological, Reproductive, and Habitat Definitions

Nest – A scrape in the sand, usually lined with pebbles, with eggs in it. Scrapes without eggs and randomly deposited non-incubated eggs(s) outside of a nest bowl will not be considered nests.

Nest Initiation – A nest is initiated when it is constructed and at least one egg is laid.

Total Nests Initiated – Total number of nests initiated whether successful or not. This total includes first nesting attempts as well as re-nesting attempts.



- 163 Incubation Period – The incubation period for interior least terns and piping plovers will be considered to
164 be 21 and 28 days, respectively, from when the adult begins to incubate the eggs.
- 165 Successful Nest – A nest is successful when at least one egg hatches.
- 166 Nest Management – Management activities applied specifically to nests (i.e., exclosures).
- 167 Nest Bowl – Nest cup (depression) including a 3-inch buffer area around the cup.
- 168 Nest Furniture – Any non-living object present within the diameter of the nest bowl such as driftwood,
169 large cobble, boulder, bivalve, bone, etc.
- 170 Vegetative Cover – Percent canopy cover within a 1-yd² area around the nest (<1%, 1-5%, 5-10%, 10-
171 20%, >20%)
- 172 Vegetation Height – Maximum height of all vegetation in a 1-yd² area centered on the nest
- 173 Distance to Water – Distance from each nest to the nearest water line measured with a laser range finder
174 or a GIS
- 175 Distance to Predator Perch – Distance to nearest predator perch \geq 10 feet tall (i.e., tree, power-line pole,
176 etc.) measured via laser rangefinder or off-site using a GIS.
- 177 Distance to Live Vegetation – Measured distance in inches from the center of a nest to living or current
178 year vegetation within a 1-yd² area of the nest.
- 179 Nearest Bank (riverine) – Distance, across water at flows of 1,200cfs, from each nest to the nearest bank
180 measured via laser rangefinder or off-site using a GIS.
- 181 Nest Elevation – Difference between the elevation of each nest and nearest water surface obtained off-site
182 using a GIS.
- 183 Nesting colony – Area encompassed by multiple nests within which disturbance to one nest results in a
184 disturbance reaction by adults of other nests. In cases where only a single nest is present, the nest will
185 serve as the “colony” for habitat measurements.
- 186 Colony Centroid – Average Northing and Easting GPS measure for all nests within a single colony.
- 187 Site – A group of river islands within close proximity of each other and managed as a group or sandpit
188 island habitat surrounded by common water.
- 189 Site Management – Management activities applied to the colony site (i.e. predator fencing, predator
190 trapping, herbicide application, disking, mowing, etc.).
- 191 Brood – 1 or more chicks that hatched from a single nest.
- 192 Brood-rearing Period – The brood-rearing period for interior least terns and piping plovers will be
193 considered to be 21 or 28 days post-hatch, respectively, unless more conclusive evidence of fledging is
194 documented.
- 195 Fledge – An interior least tern or piping plover chick will be considered fledged when it is 21 or 28 days
196 old, respectively, when it is covered in unsheathed feathers, has a black eye stripe (interior least terns),
197 and has a short tail, or when sustained flight is observed.
- 198 Successful Brood – Interior least tern or piping plover brood with ≥ 1 chick that fledges or survives 21 or
199 28 days after hatching, respectively.
- 200 Number of Pairs – Number of pairs will be estimated using the Program’s Breeding Pair Estimator (BPE;
201 Program 2014; Baasch et al. in prep).



Bare Sand – River island or sandpit site with <20% vegetative cover.

Bare Sand Area – Total area with <20% vegetative cover at the colony site.

% Bare Sand Area – Percent of the nesting area classified as bare sand (<25%, 25-50%, 50-75%, >75%)

Active Channel (riverine) – Channels carrying water at minimum flows of 1,200 cfs.

Channel Width (riverine) – Width of entire open-channel, including land, measured from the center of river islands in a direction perpendicular to river flow.

Wetted Channel Widths (riverine) – Wetted width of the channel on each side of the nesting area measured with a survey grade GPS unit or laser-range finder.

Pond Size (sandpit) – Size of pond adjacent to sandpit sites. This parameter will be measured using a GIS.

Adjacent Land Use – Land use classification within 200 feet of river island or sandpit sites.

Site-specific water flow – We will obtain maximum, minimum, and average daily discharge (ft³/sec) as well as observation-period specific discharge data at 4 locations from the “USGS Real-Time Water Data for Nebraska” website including Overton (USGS gage 06768000), Cottonwood Ranch near Overton (USGS gage 06768035), Kearney (USGS gage 06770200), and Grand Island, Nebraska (USGS gage 06770500). We will use the location of each river island site with respect to the nearest upstream and downstream USGS gage to extrapolate flow data collected at the nearest upstream USGS gage of the site to determine site- and observation-period-specific flow at the time habitat characteristics are measured.

Available or Suitable Nesting Habitat – Nesting habitat will be classified as “available” or “suitable” if it is a river island or sandpit site with nesting interior least tern or piping plover adults, or if it fits the following minimum habitat criteria as defined by the Program:

Riverine Habitat

- At least 50% water within a one quarter-mile river reach
- Within the same one quarter-mile reach of river, at least 1.5 acres of sand, 1.5 feet above 1,200 cfs reference stage in minimum channel width of 400 feet
- Minimum buffer of island edge to bank of 50 feet
- Bare sand (i.e., less than 25% vegetative cover); existing vegetation less than 1.5 m in height
- Edge of island at least 200 feet from any vegetation 1.5 m or higher above the top elevation of the nesting island/bar

Sandpit Habitat

- Sandpits within Program associated habitats along the river
- Per site, at least 1.5 acres of bare sand (i.e., less than 25% vegetative cover)
- Edge of bare sand at least 200 feet from any vegetation 1.5 m or higher