**R7** **I&M BRANCH PROPOSAL OUTLINE**

Proposals may not exceed 3 pages. Literature cited and approvals are not included in page limits. See the outline below for details on what will constitute a complete proposal.

**HEADER:**

|  |  |  |
| --- | --- | --- |
| **1. Station**:  Yukon Delta NWR | **2. Org Code (FBMS)**:  FF07RYKD00 | **3. Amount Requested**:  $13,800 |
| **4. Project Title**:  Assistance with completion of Bristle-thighed Curlew Project | | |
| **5a. Project Officer**:  Kristine Sowl | **5b. Phone**:  907-543-1015 | **5c. email**:  kristine\_sowl@fws.gov |
| **6. I&M Staff Name**:  N/A | **7. PRIMR Survey ID**:  FF07RYKD00-007 | **8. Station Project Ranking**:  1 |

**PROPOSAL BODY:**

9. Problem Statement and Objectives

10. Methods/Scope of Work

11. Partnerships and Roles

12. Products and Schedule

**PROPOSAL APPENDICES**:

13. Literature Cited (Not included in page limit)

14. Budget (1 page)

15. Station Project Leader Approval

**1. STATION**: Yukon Delta National Wildlife Refuge

**2. ORG CODE (FBMS):** FF07RYKD00

**3. AMOUNT REQUESTED:** $13,800

**4. PROJECT TITLE:** Assistance with completion of Bristle-thighed Curlew Project

**5a-c. PROJECT OFFICER**: Kristine Sowl, 907-543-1015, [kristine\_sowl@fws.gov](mailto:kristine_sowl@fws.gov)

**6. I&M STAFF**: Provide the name(s) of I&M staff (if any) assisting on the project.

**7. PRIMR SURVEY ID**: FF07RYKD00-007 (Current but long interval)

**8. REFUGE PROJECT RANKING**: 1

**9. PROBLEM STATEMENT AND OBJECTIVES**:

**Clearly describe the problem and how the proposed work will address it.**

The Bristle-thighed Curlew is a Tier 2 priority species for Region 7. It has also been considered as a possible candidate species under the Endangered Species Act. But it is a rare species that is difficult to study and therefore has many knowledge gaps. The 2010-12 project was intended to address some of these knowledge gaps. This project consisted of three parts: 1) PhD thesis by graduate student, 2) life history data collection by YDNWR, and 3) population assessment by USGS using data collected by YDNWR. The final project report was intended to explain the overall project and address the life history data. The PhD has been completed and several draft scientific publications have been spawned from it. The population assessment by USGS is a high priority and was on their docket for completion this year. It is a high priority for the refuge to complete the final project report and address the potential for additional scientific publications.

Data collection was completed for the Bristle-thighed Curlew project in 2012. Shortly after that, Yukon Delta NWR experienced an exodus biological staff right before or during the 2012-13 hiring freeze. The principal investigator for the project, Kristine Sowl, has been covering for multiple staff vacancies in the past five years as our refuge has continued to have high staff turnover and chronic staff shortages within the biological program. There has been no time to work on the report. It is a high priority to complete this final project report, but there are still some data entry and data analysis tasks that need to be taken care of first. A biological technician could be tasked with assisting with these tasks and advance the progress of report completion.

**Objective statements are specifications of the primary products or results to be derived from the project. They should be directly and obviously linked to needs described in the Problem Statement.**

1. Complete data entry tasks for curlew project.
2. Analyze point count data and nest success data for Allen Creek study site.
3. Assist with other tasks that biologist may need for report completion.

**10. METHODS/SOW:** Clearly describe what work will be done and how it will achieve the stated objectives. Methods must detail the means by which each of the objectives will be achieved. Provide sufficient detail so that the likelihood of achieving each of the objectives can be fully evaluated. Include a description of the proposed method of implementation.

1. Point count data was entered into Excel for 2010 and 2011, but the formatting changed in 2012 to a format that made analysis easier. The 2010 and 2011 data needs to be restructured to fit the improved format.
2. Literature search to decide on point count analysis method. Distance data and time of detection data are available for detectability analysis (Buckland et al. 2001; Farnsworth et al. 2002).
3. Point count data needs to be analyzed for density and frequency of occurrence for avian species that were recorded on the point counts (shorebirds, shorebird predators, nest predators).
4. Density and frequency of occurrence of avian species recorded on point counts in 2010 and 2011 will need to be compared to results from point count surveys conducted in 1993-94.
5. Enter nest monitoring data into a spreadsheet and conduct Mayfield analysis of nest success.
6. Assist with other tasks that biologist may need for report completion, including literature searches, map production, and miscellaneous data entry.

**11. PARTNERSHIPS AND ROLES:** Provide the names, affiliation, and the specific roles of each partner (including FWS contributions) that will be involved in this project through added expertise, funding, in-kind contributions, etc. Identify how specific fund contributions will be transferred to the project (e.g. intra-agency agreement, cooperative agreements, etc.). Itemize contributions in the budget section of the proposal.

Kristine Sowl, Wildlife Biologist, Yukon Delta National Wildlife Refuge – Project supervisor and primary author of report

TBD – person to conduct project. Plan to advertise for a biological technician that wants to supplement their time on the job after their field work is done or a FWS detailee. Help with recruiting this person would be appreciated.

**12. PRODUCTS AND SCHEDULE**: Describe timelines and provide specific products expected and delivery dates as applicable. Include the start and completion dates (the completion date is when products and report will be submitted to the I&M Branch).

Project Dates: July 10-Oct 30, 2017

1. September 1 - Data entry and analysis tasks of bio tech completed
2. September 29 – First draft of project report completed by refuge biologist
3. October 31 – Final report of project completed by refuge biologist

**13. LITERATURE CITED**:

Buckland, S.T., Anderson, D.R., Burnham, K.P., Laake, J.L., Borchers, D.L. and Thomas, L. 2001. [Introduction to Distance Sampling: Estimating Abundance of Biological Populations](http://www.ruwpa.st-and.ac.uk/distance.book/). Oxford University Press, Oxford, UK.

George L. Farnsworth, Kenneth H. Pollock, James D. Nichols, Theodore R. Simons, James E. Hines, and John R. Sauer. 2002. A removal model for estimating detection probabilities from point-count surveys. Auk119(2):414–425.

**14. BUDGET:** Provide realistic costs in an itemized table.

* The budget must include how the money will be spent or obligated by the end of the Fiscal Year (9/30/2017), e.g., contract, financial agreement, etc.

*Salary and travel costs to be charged to a FWS cost code.*

* If work is to be done in-house, state who will complete the work and the number of hours expected to be devoted to the project.

*Work to be completed by a bio tech or detailee. Project estimated to happen over 4 pay periods, number of hours = 320*

* Salaries for technical support, temporary and/or contract employees are eligible for funding.
* Itemize partner contributions in the budget breakout.

Budget Table

|  |  |  |
| --- | --- | --- |
| **Item** | **FWS I&M Funds** | **Other funds (state source)** |
| Personnel (hours x rate) | 320 hr x 21.54/hr (GS-07) = $6900 |  |
| Fringe Benefits |  |  |
| Travel | $2000 (RT ticket from Lower 48) + $3240 (30 days full per diem) + $1620 (30 days half per diem) | Housing in bunkhouse provided by YDNWR. |
| Equipment |  | Computer provided by YDNWR but personnel would need SmartCard |
| Supplies |  |  |
| Contractual |  |  |
| Other |  |  |
| Indirect Charges  (x% rate x Project Total) |  |  |
| **Total** | $13,760\* |  |

\* Note cost of project can be reduced by using a lower graded bio tech and using someone within state.

**15. APPROVALS:** Approval is required from the Refuge Manager.

Refuge Manager: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_