

# **EXHIBIT- A**

Statement Of Work					
Date Prepared:	June 30, 2023				
Name of Grantee:	Ducks Unlimited, Inc.				
Name of Water Project: North Sand Creek Health & Water Quality					
Water Project Overview:					
have gravel and cobble strear	unusual sand-bed stream, unlike most streams in the Southern Rockies that nbeds. NSC begins on forested state land, flows adjacent to the North Sand Hills managed by PLM) for 2/2rds of a mile, then crosses private land for 2 miles				

have gravel and cobble streambeds. NSC begins on forested state land, flows adjacent to the North Sand Hills Recreation Area (federal land managed by BLM) for 2/3rds of a mile, then crosses private land for 3 miles before arriving at the first diversion structure used to irrigate a 400-acre meadow. NSC subsequently flows into the Canadian River which in turn flows into the North Platte River, well-known for its trout fishery.

Beginning around 2010, a combination of increased recreational use of North Sand Hills, drought, and high runoff destabilized the streambed and increased sedimentation. This excess sedimentation has made it difficult if not impossible to maintain and use an important water diversion structure on NSC that irrigates a ~400 acre agricultural meadow, putting this water right at risk. In 2015, NSC was added to the 303d list of water-quality impaired streams (for sediment). This listing prompted research at CSU to better understand sandbed stream dynamics (see Grabowski and Wohl 2021). Also, in 2019, the Bureau of Land Management (BLM) fenced ~40 acres of highly sensitive dunes to eliminate off-highway vehicles (OHV) use in an area assessed as contributing most to water quality degradation. To date, limited resources have constrained the ability to assess the effectiveness of the fencing, although anecdotal observations show vegetation establishing in the exclosure but not outside the exclosure, evidence that this intervention is having some positive effect.

In 2020, the Center for Collaborative Conservation at Colorado State began engaging on NSC by interviewing numerous stakeholders to assess interest in a collaborative partnership to address water quality and stream health issues. Having concluded there was interest, a core group of stakeholders began meeting since 2021. Initially, the focus of the Grantee's meetings was to enhance communication and trust and determine a path forward together. The Grantees are pivoting into more intensive planning, accompanied by initial monitoring of baseline conditions in the stream.

# **Project Objectives:**

- 1. The Grantee will establish and begin implementing monitoring procedure for the North Sand Hills exclosure and North Sand Creek, a 303d listed impaired stream.
  - The Grantee will plan to design and begin to implement a monitoring program to further understand baseline conditions and, over time, evaluate the effectiveness of mitigation and restoration activities.
- 2. The Grantee will identify and analyze feasibility of potential implementation projects, decide which projects they will advance, and seek funding for on-the-ground restoration.
  - With increased support for planning capacity, the Grantee will be able to research, plan, and analyze the feasibility of several project elements, including planning for dune revegetation and installing in-channel logjam structures that will stabilize the stream channel and attenuate sediment load.



- 3. The Grantee will increase community engagement in collaborative conservation projects related to North Sand Creek.
  - This collaborative group will continue to convene regularly virtually and in-person for the following purposes: to collaborate on developing solutions to improve water quality of North Sand Creek, build trust and partnerships between stakeholders within the community, and to seek funding together for implementing stream restoration projects.

# Tasks

## Task 1 - Design and begin implementing long-term monitoring

#### Description of Task:

The Grantee will evaluate baseline conditions and the effectiveness of restoration actions. The Grantee will initiate data collection to evaluate the effectiveness of the OHV exclosure that was built in 2019. The Grantee's partners will assess species composition and cover within the exclosure. The Grantee may also determine that vegetation monitoring along the stream is warranted.

Another key focus of this task will be continuing the monitoring of sediment dynamics and the role of largewood logjams in North Sand Creek as done by Grabowski and Wohl (2021). This work has already enhanced the Grantee's understanding of stream function, and continued data collection will enhance the Grantee's understanding of baseline conditions prior to restoration actions.

The Grantee will develop a plan for sediment monitoring that meets the standards of the Clean Water Act Section 319. This plan may include monitoring channel change, water grab samples, remote sensing options, and/or other approaches.

#### Method/Procedure:

- 1.) Vegetation monitoring:
  - The Grantee will develop a plan for assessing plant composition and cover over time
- 2.) Near-term sediment monitoring:
  - The Grantee will use repeat photography at selected sites along the stream to document changes in sediment storage over time. The Grantee has already re-installed multiple cameras and staff gages at sites used by Grabowski and Wohl and will be installing cameras at new sites on private land. The Grantee may (pending permission from the Colorado State Land Board) install additional cameras on East Sand Creek, which was used as a control site by Grabowski and Wohl.
- 3.) Planning for long-term sediment monitoring:
  - The Grantee will analyze potential options for sediment monitoring in this unusual stream system.

#### Deliverables:

- The Grantee will provide CWCB Staff with:
  - The vegetation monitoring plan for North Sand Hills and, if applicable, additional areas of interest within the project site.
  - A summary of photo-point sediment monitoring
  - A draft of a long-term monitoring plan for North Sand Creek

Tasks

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#### Task 2 – Design in-stream structures

Description of Task:

The Grantee's design consultant and partners will generate a list of feature options, hazards, contextual information, field photos, and limitations for the project area. The Grantee's consultants and partners will lead a design charette with all stakeholders to outline a rough mitigation/ rehabilitation strategy for the project area.

The Grantee's design consultant will then layout the developed conceptual design. The Grantee's design consultant will also provide a short design memorandum outlining project goals, implementation plan, construction implications and needs, and potential timelines.

Method/Procedure:

1.) The Grantee and Grantee's design consultant will complete a feasibility assessment through conducting background research to assess the feasibility of possible options for project implementation.

2.) Ther Grantee, Grantee's design consultant, and partners will convene and hold a meeting to collectively develop an implementation plan to address the NSC concerns.

Deliverable:

The Grantee will provide the CWCB Staff with conceptual design documents and draft implementation plan. The Grantee will invite CWCB Staff to milestone meetings to analyze restoration concepts.

#### Tasks

# Task 3 - Management plan to maintain and enhance revegetation at North Sand Hills

Description of Task:

The exclosure built in 2019 is leading to new plant establishment, but the Grantee does not yet understand future conditions for this site. The Grantee assumes that there should be more vegetation cover in the exclosure compared to what currently exits. If the Grantee finds this to be true, then they will draft a plan to accelerate plant establishment (and thus sand stabilization) with seeds and/or seedlings. Given the popularity of the OHV recreation on the North Sand Hills, on-going management of the site is essential. This is especially true for the OHV exclosure built in 2019. Without on-going monitoring, maintenance, and enforcement, this exclosure will fail to perform as needed. This task includes on-going public outreach.

Method/Procedure:

1.) The Grantee and partners will develop a revegetation plan. This work includes:

- Review existing literature on sand dune stabilization and restoration, locally and globally, to gather knowledge on site preparation, planting success, and maintenance.
- Identify gaps in current understanding and areas requiring further testing or research.
- Examine habitat distribution in the area and reference sites to establish benchmarks for successful plant density and diversity.
- Engage in discussions with project stakeholders to gather insights and perspectives.
- Develop a comprehensive revegetation plan incorporating appropriate techniques for site preparation and planting.



- Include a monitoring plan with specific data collection methods to accurately measure project success.
- Define success criteria for revegetation with clear metrics.
- Design a plan for site preparation and planting techniques based on the gathered information.
- 2.) The Grantee will work with Bureau of Land Management staff and other partners to support the continued management and monitoring of OHV use at North Sand Hills. This work includes:
  - Monitoring and, as needed, maintenance and repair of the fence.
  - Direct engagement with recreational users.
  - Maintenance of site facilities to support compliance with management expectations.
  - Where necessary, law enforcement.

Deliverable:

The Grantee will provide CWCB Staff with a status summary outlining ongoing management activities related to the OHV use and a revegetation plan outlining the need, if any, for plantings and/or additional interventions to encourage revegetation at North Sand Hills.

#### Tasks

## Task 4 – Stakeholder Engagement

Description of Task:

The Grantee will expand their collaborative stakeholder group through outreach to stakeholders not currently engaged, including intervening private landowners, adjacent state agencies, the North Platte Basin Roundtable, Jackson County, OHV users and user groups, and other groups with interests and our influence over this work.

The Grantee intends to support BLM outreach to recreation users on the Dunes with the design of 4 bilingual signs in the North Sand Hills Recreation Area, as well as produce bilingual pamphlets.

Method/Procedure:

1.) The Grantee will establish new connections and broaden stakeholder engagement.

- Beginning from the stakeholder assessment already completed, the Grantee will engage additional stakeholders by continuing the approach used to date: working through existing relationships, making personal connection, involving stakeholders in design and implementation, and communicating regularly with the full range of stakeholders through various approaches.

Deliverable:

The Grantee will provide CWCB Staff with a summary of the process and primary outcomes stemming from stakeholder engagement and involvement in the planning process.



# Tasks

#### Task 5 - Project Administration and Facilitation

Description of Task:

Since this is a highly collaborative project, there are multiple people from several organizations involved in this work. These partners are varyingly participating in planning, implementing work, and providing resources. Facilitating all these partners in a project with multiple components requires ongoing facilitation and coordination.

Method/Procedure:

- 1.) The Grantee will complete grant administration
- 2.) The Grantee and Grantee partners will complete group facilitation:
  - Facilitate partnership meetings
  - Facilitate the development of additional proposals; and
  - Ensure coordination of planning and on-the-ground monitoring
- 3.) The Grantee, Grantee's design consultants, and Grantee's partners will develop implementation strategies and coordinate several aspects of plan development.

Deliverables:

The Grantee will provide CWCB Staff with a summary of quarterly partnership meetings

# **Budget and Schedule**

This Budget and Schedule that reflects the tasks identified in the Statement of Work.

Task No.	Task	Estimated Task Start Date	Estimated Task End Date	Grant Funding	Match Funding	Total
	Design and begin implementing long-term					
1	monitoring	11/15/23	8/30/24	\$12,960.00	\$0.00	\$12,960.00
2	Design in-stream structures	11/15/23	8/30/24	\$16,438.00	\$9,138.00	\$25,576.00
	Management plan to maintain and enhance					
3	revegetation at North Sand Hills	12/15/23	2/28/24	\$6,080.00	\$0.00	\$6,080.00
4	Stakeholder Engagement	8/1/23	8/30/24	\$2,938.00	\$4,738.00	\$7,676.00
5	Project Administration and Facilitation	11/15/23	8/30/24	\$19,218.00	\$5,938.00	\$25,156.00
	Total for all tasks			\$57,634.00	\$19,814.00	\$77,448.00

# **Reporting Requirements**

**Progress Reports:** The grantee shall provide the CWCB a progress report every six months, beginning from the date of issuance of the grant agreement. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

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**Final Report:** At completion of the project, the applicant shall provide the CWCB a final report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the final report is completed to the satisfaction of CWCB staff. Once the final report has been accepted, and final payment has been issued, the grant agreement will be closed without any further payment.

## Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this grant agreement are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this grant agreement must be provided to the CWCB as part of the project documentation.

# **Performance Measures**

Performance measures for this grant agreement shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget. Per grant guidelines, the CWCB will pay out the last 10% of the budget when the final report is completed to the satisfaction of CWCB staff. Once the final report has been accepted, and final payment has been issued, the grant agreement will be closed without any further payment.

(b) Accountability: Per grant guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, progress reports must be submitted at least once every 6 months. A final report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each progress report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the grant agreement.

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