Statement of Work

WATER ACTIVITY NAME – NORTH PARK IRRIGATED MEADOW CONSERVATION PROGRAM – PHASE I

GRANT RECIPIENT – Ducks Unlimited, Inc.

FUNDING SOURCE – WSRA: North Platte Basin Roundtable Allocation

INTRODUCTION AND BACKGROUND

The rehabilitation of irrigation systems in North Park will increase the vitality of the area's agricultural economy through increased yields and heightened efficiencies. It will also benefit wetland-dependent wildlife species inhabiting the park, especially the breeding waterfowl population found there, by providing more reliable, higher quality and more interconnected wetland habitats. Using established resource information, Ducks Unlimited, Inc. will assess the viability of a number of irrigated meadow restoration projects such that those with the most benefits for both consumptive and nonconsumptive water users are identified and, subsequently, developed. We will work with landowners, wildlife groups and the local water community to assess, design, and permit these projects. The goal of this first phase of the project is to develop a portfolio of project plans that we can present to diverse funding partners, including the North Platte Basin Roundtable, for funding of the infrastructure work. The result will be the more efficient use of existing water supplies as well as a fuller utilization of the irrigated meadow acreage allowed under the North Platte Decree. This will secure both the economic and ecological benefits an increase in irrigated meadows in the park bestows on its landowners, citizens and the public.

OBJECTIVES

1.) Integration of existing water supply and habitat studies in the NPB;
2.) Identification of high-priority irrigated meadow restoration areas;
3.) Outreach to willing landowners in high-priority restoration areas;
4.) Development of feasibility for specific properties within high-priority restoration areas;
5.) Development of plans, budgets, permits and schedules for suitable project sites;

TASKS

TASK 1 – MODELING

Description of Task

Existing resource data will be integrated with models produced by the CWCB and the NPBRT to identify priority areas for irrigated wet meadow conservation. These areas will be the focus of outreach and further conservation work. While extensive work has been done to identify potentially irrigable lands, water supply availability, potential habitat and land ownership, the whole of these datasets have not been integrated in such a way as to highlight areas of the NPB where water supplies could be put to use on additional irrigated lands. The intent is to provide a basin-wide synopsis of priority areas where Program funds can be most effectively applied.

Method/Procedure

DU will work with the NPBRT, the Colorado Division of Wildlife, the Colorado Natural Heritage Program and other stakeholders to develop a spatially-explicit model highlighting priority areas for irrigated meadow conservation. Data from the nonconsumptive needs assessment, the NPB Surface Water Model, and other resource data will be analyzed by Geographic Information System to guide conservation efforts. Model outputs will be intersected with land ownership data in the County to identify potential landowners. Conversely, landowners already interested in the Program will be apprised of the potential for irrigated meadow conservation on their properties. Subsequently, DU will work with our conservation partners, members of the NPBRT, and the Water Conservation District to contact landowners in high-priority areas and inform them of opportunities for project planning under the Program.

Deliverable

1.) Thunderstorm map of priority irrigated meadow areas
2.) Map of potential Program project sites
3.) Contact list of potential Program landowners
4.) North Platte Basin Roundtable Board Review and Approval of Map
5.) Outreach to potential Program landowners

TASK 2 – SITE ASSESSMENTS

Description of Task

Site visits to potential project sites will be made to assess project scope, viability, cost and potential impacts on existing land use. A portfolio of potential projects in the NPB will be developed. While many landowners in the Park have expressed interest in cooperative projects, no systematic effort to identify and meet with all potential landowners has been done. Information is also lacking on specific practices needed to improve qualifying tracts to benefit irrigators and waterfowl. This task will provide an equitable approach allowing all qualifying landowners an opportunity to participate in the program with standard reports on project scope, cost and schedule.

Method/Procedure

DU biologists and engineers will schedule site visits with interested landowners in the NPB to assess the current condition of irrigated meadows, appurtenant water-delivery systems, and water availability under existing rights. A project plan will be produced for each project that outlines project objectives, expected benefits, the scope of necessary work to achieve those benefits, and assessment of necessary permits required to begin that work. The budget presented in this application will provide enough funding for 10-15 site visits, depending upon the size and complexity of the properties identified in Task 1.

Based on this information a set of four to five projects will be selected for further development. These projects will be selected based upon estimated benefits gained from the development, both consumptive and nonconsumptive. Other factors to be considered will be available water supply, project cost, and potential negative impacts project development could have on existing land and water use, wildlife populations, or plant communities. Longevity of proposed improvements will also be assessed.

Remaining projects will be fully developed in subsequent years.

Deliverable

6.) Potential Program project portfolio
    i. Project conceptual plan
    ii. Project water supply
    iii. Project provisional budget
    iv. Project stipulations and challenges.
7.) Potential Program project prioritization list
8.) North Platte Basin Roundtable Board Review and Approval of Program project portfolio and project prioritization list.

TASK 3 – PRIORITY PROJECT SURVEY AND DESIGN

Description of Task

Four to five projects identified in the Site Assessments task will have detailed project plans developed. These project plans will serve as the basis for requests to upcoming funding requests for applications. The intent of this phase is to have four to five detailed plans ready for deployment should project funding be secured.

Method/Procedure

Certified DU engineering staff will survey priority meadows and existing irrigation infrastructure. A topographic map will be generated which will serve as the basis for irrigation improvements. DU staff will use the survey and topographic map information to develop detailed project plans based on objectives obtained in Task 2. Professional CAD drawings of the scope of work, design of necessary project structures, and detail drawings of project infrastructure will be produced and made available to the landowner. Additionally, DU biologists will identify potential funding sources for the designed work and develop a schedule of requests to achieve the necessary level of funding to accomplish the project.

Deliverable

9.) Topographic Maps

10.) Designs

11.) Project Plans

12.) Project Funding Plan

13.) North Platte Basin Roundtable Board Review of priority project plans

TASK 4 – ASSESSMENT AND PERMITTING

Description of Task

Each of the four to five projects designed in Task 4 will undergo a thorough assessment regarding potential negative impacts the project may have on existing land and water use, wildlife populations, plant communities and other environmental concerns. This assessment will consider the impact of the project on Colorado's administration of its irrigation and storage allowances under the Decree, the Platte River Cooperative Agreement, and the NPB Nonconsumptive Needs Assessment. Further, this assessment will identify all necessary permits required for the project to move forward. These include both state and federal permitting requirements. If possible, said permits will be secured. The intent of this task is to assure all stakeholders that irrigation development accomplished under the Program will not abrogate existing law, rule and policy protecting the water, land, and wildlife resources of the State of Colorado and the federal government.

Method/Procedure

For each of the priority projects identified in Task 2, DU staff and their agents will work with the landowner to identify the impacts expansion of their irrigated acres may have. Existing land use and the wildlife and plant communities that rely upon that use will be recorded. To the extent that reliable data and analyses exist that can predict wildlife and plant community response to diversions planned in Task 3, those responses will be noted in the project plan. If a significant, negative response is found to be likely alternatives to the planned irrigation improvements will be identified. This land use assessment will attempt to take into consideration the multiple scales at which land use changes impact wildlife and plant communities. Similarly, a water use assessment will be used to determine the negative impacts, if any, of water diversions on the stream flows and habitats for each of the projects identified in Task 2. Acting on behalf of the willing landowner, DU will engage

the expertise of the landowners, our conservation partners, representatives of federal land management agencies, the members of the NPBRT and its Nonconsumptive Needs Assessment committee, and other stakeholders to identify concerns and alternatives to project plans.

Fore each of the priority projects identified in Task 2, DU will work with the landowner to identify which permits will be necessary to ensure speedy project development. If a federal nexus exists, necessary permits include National Environmental Protection Act clearance, Endangered Species Act clearance, Clean Water Act clearance, National Historic Preservation Act clearance, and any additional permissions deemed necessary under the Platte River Cooperative Agreement. Additionally, if the project design is based upon a new water right, this will be noted in the project plan and the necessary legal and engineering work to secure that water right will be identified. If possible any of these permits will be secured to ensure the project is prepared for construction after funds have been secured.

Deliverable

14.) Land use assessment
15.) Water use assessment
16.) Permit docket with instructions and schedule
17.) North Platte Basin Roundtable Board Review of project assessments

BUDGET

TOTAL COSTS							
Task	Labor		Other Direct Costs		Matching Funds		Total Project Costs
Modeling	$ 1,752		$ -		$ -		$ 1,752
Site Assessment	$ 4,000		$ 48		$ 15,000		$ 19,048
Survey and Design					$ 11,202		$ 11,202
Assess/Permitting	$ 4,882		$ 7,500		$ 11,378		$ 23,760
Total Costs	$ 10,634		$ 7,548		$ 37,580		$ 55,762
Indirect (<10%)	$ 1,063		$ 755		$ 3,758		$ 5,576
Total Request:			**$ 20,000**				$ 61,338

PROJECT PERSONNEL COSTS							
Personnel:	Biologist	Engineer	Program Manager	Technician I			Total
Tasks	$73.00	$73.00	$73.00	$62.00			
Modeling	24						24
Site Assessment	120	120					240
Survey and Design		38		120			158
Assess/Permitting	80		40				120
Modeling	$ 1,752	$ -	$ -	$ -	$ -	$ -	$ 1,752
Site Assessment	$ 8,760	$ 8,760	$ -	$ -	$ -	$ -	$ 17,520
Survey and Design	$ -	$ 2,774	$ -	$ 7,440	$ -	$ -	$ 10,214
Assess/Permitting	$ 5,840	$ -	$ 2,920	$ -	$ -	$ -	$ 8,760
Total Hours	224	158	40	120	0	0	542
Direct Personnel Costs	$ 16,352	$ 11,534	$ 2,920	$ 7,440	$ -	$ -	$ 38,246

OTHER DIRECT EXPENSES					
Tasks	Items & Description	Est. Quant.	Unit	Unit Price	Total
Site Assessment	Travel	944	MI	$ 0.48	$ 448
	Lodging	18	DAYS	$ 60.00	$ 1,080
Survey and Design	Travel	944	MI	$ 0.48	$ 448
	Lodging	9	DAYS	$ 60.00	$ 540
Assess/Permitting	Contractor Fees	1	L.S.	$ 7,500.00	$ 7,500
	Professional Fees	1	L.S.	$ 7,500.00	$ 7,500
			TOTAL DIRECT EXPENSE		$ 17,516

MATCH CONTRIBUTIONS					
Project Task	Sources	Grant $$	Match $$	In-kind $$	Total
Modeling	WSRA	$ 1,752			$ 1,752
Site Assessment	WSRA	$ 4,048			$ 4,048
	NAWCA		$ 5,000		$ 5,000
	DOW		$ 10,000		$ 10,000
Survey & Design	NAWCA		$ 6,000		$ 6,000
	DOW		$ 5,202		$ 5,202
Assessment/Permitting	WSRA	$ 12,382			$ 12,382
	CDOW		$ 11,378		$ 11,378
		$ 18,182	$ 37,580		$ 55,762
Indirect (<10%)	IND	$ 1,818	$ 3,758	$ -	$ 5,576
Total		**$ 20,000**	$ 41,338	$ -	$ 61,338

WSRA:	Water Supply Reserve Account	State of Colorado	Approved
DOW:	DOW Wetlands Program Fund	State of Colorado	Approved
NAWCA:	North American Wetlands Conservation Act	Federal	Approved

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

Task	Deliverable	Start Date	Finish Date
1 MODELING			
	1 Thunderstorm map	Upon NTP	NTP + 30 days
	2 Map of potential sites	Upon NTP	NTP + 30 days
	3 Contact list of potential landowners	NTP +30 days	NTP + 45 days
	4 NPBRT Board Review & Approval	NTP +45 days	NTP + 60 days
	5 Outreach to potential landowners	NTP +45 days	NTP + 60 days
2 SITE ASSESSMENTS[1]			
	6 Projects Portfolio	NTP +60 days	NTP +120 days
	7 Priority Project List	NTP +120 days	NTP +135 days
	8 NPBRT Board Review & Approval	NTP +120 days	NTP +150 days
3 PROJECT SURVEY AND DESIGN[1]			
	9 Topographic Maps	NTP +120 days	NTP +150 days
	10 Designs	NTP +130 days	NTP +160 days
	11 Project Plans	NTP +130 days	NTP +180 days
	12 Project Funding Plan	NTP +120 days	NTP +180 days
	13 NPBRT Board Review	NPT +180 days	NTP +240 days
4 ASSESSMENT AND PERMITTING			
	14 Land use assessment	NTP +160 days	NTP +180 days
	15 Water use assessment	NTP +160 days	NTP +180 days
	16 Project permit docket	NTP +160 days	NTP +180 days
	17 NPRBRT Board Review	NTP + 180 days	NTP +240 days

NTP = Notice to Proceed

[1] Subject to delay due to adverse seasonal conditions: Assessments and surveys may be delayed due to inclement weather in the high altitude park.

The above statements are true to the best of my knowledge:

Signature of Applicant: 

Print Applicant's Name: Matthew A. Reddy, Regional Biologist

Project Title: North Park Irrigated Meadow Conservation Program – Phase I

Return this application to:

Mr. Todd Doherty
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203

To submit applications by Email, send to: todd.doherty@state.co.us
To submit applications by Fax, send to: (303) 894-2578
For questions, call Telephone No.: (303) 866-3426