

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions		
<p>All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.</p> <p>To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) AND the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.</p> <p>If you have questions, please contact the current CWCB staff Roundtable liaison:</p>		
Arkansas Ben Wade ben.wade@state.co.us 303-866-3441 x3238	Gunnison North Platte South Platte Yampa/White Craig Godbout craig.godbout@state.co.us 303-866-3441 x3210	Colorado Metro Rio Grande Southwest Megan Holcomb megan.holcomb@state.co.us 303-866-3441 x3222

WSRF Submittal Checklist (Required)	
✓	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
✓	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
✓	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
✓	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)
✓	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)
✓	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
✓	Map ⁽²⁾
	Photos/Drawings/Reports
✓	Letters of Support
	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)
Contracting Documents	
	Certificate of Good Standing ⁽³⁾
	W-9 ⁽³⁾
	Independent Contractor Form ⁽³⁾ (If applicant is individual, not company/organization)
	Electronic Funds Transfer (ETF) Form ⁽³⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

(3) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	March 2019
Desired Notice to Proceed Date:	May 2019

Water Activity Summary		
Name of Applicant	Ducks Unlimited, Inc.	
Name of Water Activity	North Park Irrigated Meadows Conservation Program - Phase II	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
North Platte Basin Roundtable	\$148,698	
Basin Account Request Subtotal	\$148,698	
Statewide Account Request ⁽¹⁾	\$301,902	
Total WSRF Funds Requested (Basin & Statewide)	\$450,600	
Total Project Costs	\$924,600	

(1) Please indicate the amount recommended for approval by the Roundtable(s)

Grantee and Applicant Information	
Name of Grantee(s)	Ducks Unlimited, Inc.
Mailing Address	1825 Sharp Point Drive, Suite 118, Fort Collins, Colorado, 80525
FEIN	13-5643799
Grantee's Organization Contact ⁽¹⁾	Jason A. Roudebush
Position/Title	Water Resource Specialist
Email	jroudebush@ducks.org
Phone	970.231.8317
Grant Management Contact ⁽²⁾	<u>Nancy Jensen</u>
Position/Title	Project Coordinator

Grantee and Applicant Information	
Email	njensen@ducks.org
Phone	701.355.3514
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee	
Provide a brief description of the grantee's organization (100 words or less).	
<p>Ducks Unlimited, Inc. is a member organization structured under section 501(c)(3). The organization was created in 1937 for the conservation of North America's waterfowl and its habitat. Ducks Unlimited conserves, restores, and manages wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people. DU is the world's leader in wetland conservation, having conserved more than 14 million acres across the continent. DU's Colorado Field Office in Fort Collins employs experts in biology, engineering, hydrology, water law, agricultural economics, and land protection. Our experience in the region, network of landowners and partners, fundraising capabilities, and diverse skillsets position enable DU to effectively deliver multi-beneficial projects in this important focus landscape.</p>	
Type of Eligible Entity (check one)	
<input type="checkbox"/>	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
<input type="checkbox"/>	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
<input type="checkbox"/>	Private Incorporated: mutual ditch companies, homeowners associations, corporations
<input type="checkbox"/>	Private Individuals, Partnerships, and Sole Proprietors: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
<input checked="" type="checkbox"/>	Non-governmental organizations: broadly, any organization that is not part of the government
<input type="checkbox"/>	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
<input type="checkbox"/>	Study
<input checked="" type="checkbox"/>	Implementation

Category of Water Activity (check all that apply)

✓	Nonconsumptive (Environmental)	
✓	Nonconsumptive (Recreational)	
✓	Agricultural	
	Municipal/Industrial	
	Needs Assessment	
✓	Education & Outreach	
	Other	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Jackson County, Colorado
Latitude	40.666459
Longitude	-106.342744

Water Activity Overview
<p>Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.</p>
<p>DU proposes the second phase of its irrigated meadows conservation program in the North Platte Basin of Colorado. We continue our work of rehabilitating irrigated lands in North Park that provide habitat to waterfowl. Four ditches in the Basin that need infrastructure repair have been identified. Upon completion of the construction work we will have conserved over 1,000 acres of irrigated meadow and wetlands that provide habitat for ducks. Project outcomes will be evaluated by DU, CSU and CPW to determine the impact of the work on irrigated land quality and waterfowl use. Project assessments will be used to guide future multi-benefit projects in the Basin and elsewhere in Colorado, provide Best Management Practices for waterfowl on irrigated lands, and to provide evidentiary proof of habitat gains to private, state and federal funders of conservation programs targeting irrigated lands. WSRF funds will be used to pay for DU staff, contractor charges for both construction and assessment tasks, and materials and equipment for both the construction and assessment tasks included in this proposal. This work directly addresses three (#3, #4 and #5) of the Basin Goals identified in the North Platte Basin Implementation Plan.</p>

Measurable Results	
To catalog measurable results achieved with WSRF funds please provide any of the following values.	
	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive

Measurable Results		
16	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
1,000	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
2	Other	Explain: Sets of Best Management Practices for waterfowl in irrigated lands.

Water Activity Justification
<p>Provide a description of how this water activity supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the respective Roundtable Basin Implementation Plan and Education Action Plan ⁽¹⁾. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).</p> <p>For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in 2016 WSRF Criteria and Guidelines).</p> <p>This proposal addresses three of the eight goals instituted by the North Platte Basin Implementation Plan published April 17, 2015.</p> <p>Our work will: 'Continue to restore, maintain and modernize critical water infrastructure to preserve current uses and increase efficiencies.' (p.21) We will do this through the installation of at least four modern diversions on the Jennie Ditch, the Newport/Walker Ditch, the Sherman Ditch and the Hamilton Ditch. These headgates will be fish-friendly structures that will allow for the diversion of the full decreed amounts of water under prior appropriation and the maintenance of irrigated meadows flooded by these ditch systems. We will also install water-control structures and improved conveyance (ditches, culverts and pipeline) on these systems as well as the water infrastructure serving the Lost Creek Ditch and Darcy Reservoir. Through this work we will rehabilitate and maintain irrigation on at least 1,000 acres of pasture and hayland in the Park.</p> <p>Our work will: 'Maintain healthy rivers and wetlands through the strategic implementation of projects that meet prioritized environmental and recreational needs.' (p.21-22) These same irrigated meadows provide habitat to one of the most important waterfowl populations in the State of Colorado. The Irrigated Meadow Conservation Program continued under this proposal is specifically identified in the BIP as addressing this goal. Our work will conserve these habitats for the 30-year term of our Site Conservation Agreements with landowners. Moreover, the assessment work included in this proposal will provide powerful evidence as to the relationship between waterfowl populations and irrigated lands in the Park. This information will inform future conservation work, environmental planning and recreational opportunity in North Park. This will address the consumptive and nonconsumptive users targeted by the NPBIP.</p> <p>Our work will: 'Describe and quantify the environmental and recreational benefits of agriculture use.' (p. 23-24) The project assessment work funded under this proposal will evaluate under a powerful, quantitative research program the mutual benefits that traditional use of water by irrigators may provide to duck populations in the Basin. It will identify how and quantify how much those birds rely upon working agricultural lands and their beneficial use of water in different stages of their life cycle in North Park. This knowledge will be put to practical use by the publishing of Best Management Plans for waterfowl in irrigated lands, it will be put to financial use to further opportunities for raising</p>

Water Activity Justification

cost-share dollars for multi-benefit projects, and it will allow conservation practitioners to better administer conservation agreements targeting waterfowl.

Our work will also further the goals outlined in the 2016-2019 North Platte Basin Roundtable Education Action Plan. The outreach materials published as a result of this proposal will be used to: ‘help the roundtable outreach to potential project proponents for the new projects and methods needed to meet future water needs to determine if they are interested in being partners or the lead entity. The North Platte Basin Implementation Plan indicates the components and activities of the EAP will continue to be utilized to facilitate public outreach and education related to the North Platte Basin.’ In addition to the number of reports submitted to our project landowners and the Basin Roundtable members, we will publish at least two articles in Basin-oriented media (eg. The Jackson County Star) and at least one article in statewide media (eg. Headwaters) that summarizes the work performed here and how waterfowl populations rely upon irrigated lands to meet life cycle needs.

This project supports several measurable objectives under Section 10.3 (Critical Action Plan) of the Colorado Water Plan. Specifically, following is a description of critical action items this project will contribute toward:

10.3.D Agriculture by maintaining ‘Colorado’s agricultural productivity, support of rural economies, and food security.’ (p. 10-10). Our work specifically addresses the second and third critical agricultural action items listed in this part of the plan by providing financial and technical assistance to both planning and implementation efforts to update and improve ageing infrastructure.

10.3.E Storage by producing more information on the potential beneficial impacts additional storage projects may have on waterfowl populations in the North Platte Basin and in other similar basins with irrigated meadows in Colorado. Quantitative, research-based evaluation of the relationship between waterfowl and irrigation projects in North Park could be used to ‘Advocate for more effective and efficient permitting in which state agencies work together to complete their work...’ (p. 10-11). The Best Management Practices produced by this work will inform the permitting and mitigation processes called for in the fourth Critical Storage and Permitting action highlighted in this section.

10.3.F Watershed Health, Environment and Recreation by providing wetland and wet meadow habitat to a host of avian, mammalian and amphibian species that rely on these habitats to survive. The work we propose will have positive benefits on populations of Northern Pintail, Lesser Scaup, Sandhill Crane, Greater Sage Grouse, and Northern Leopard Frog amongst many others. These are all species identified in Colorado Parks & Wildlife’s State Wildlife Action Plan as species of conservation concern. Our work will contribute to the ‘restoration, recovery, and resiliency of endangered, threatened and imperiled aquatic and riparian dependent species...’ (p. 10-12) by rehabilitating and maintaining over 1,000 acres of wet meadow habitat for at least 30 years.

10.3.H Education, Outreach and Innovation by providing both Basin and Statewide populations with popular media relating how irrigated lands contribute to populations of waterfowl in North Park and Colorado generally. This work will enable the citizens of Colorado to better apprehend how water use in rural areas of the State like North Park may impact their recreation and enjoyment of wildlife in other parts of the state. This will ‘Inform Coloradoans about water issues to encourage engagement and innovation in determining Colorado’s water future.’ (p. 10-13)

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

Matching Requirements: Basin Account Requests

Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity’s letterhead). Attach additional sheet if necessary.

Matching Requirements: Basin Account Requests	
Contributing Entity	Amount and Form of Match (note cash or in-kind)
Colorado Parks & Wildlife	\$252,000 (cash)
Colorado State University	\$71,000 (cash)
Ducks Unlimited, Inc.	\$151,000 (cash)
Total Match	\$474,000 (cash)
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests	
Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3 rd party) and shall be accompanied by a letter of commitment . Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind):
Colorado Parks & Wildlife	\$252,000 (cash)
Colorado State University	\$71,000 (cash)
Ducks Unlimited, Inc.	\$151,000 (cash)
North Platte Basin Roundtable	\$148,698 (cash)
Total Match	\$622,698 (cash)
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

Related Studies
Please provide a list of any related studies, including if the water activity is complimentary to or assists in the implementation of other CWCB programs.
<p>Arnold, T.W., A.M. Pagano, J.H. Devries, R.B. Emery, D.W. Howerter, B.L. Joynt. 2008. Social indices of breeding productivity in parkland mallards. The Journal of Wildlife Management, 72: 224-230.</p> <p>Blevins, S.C. 2015. Valuing the non-agricultural benefits of flood irrigation in the upper Green River Basin. M.S. Thesis, University of Wyoming.</p> <p>Brown, P.W. 2008. Flood vs. pivot irrigation for forage crops: What are the advantages and disadvantages? In Proceedings of the 2008 California Alfalfa & Forage Symposium and Western Seed Conference, San Diego, CA, 2-4 December, 2008. University of California, Davis, CA.</p> <p>Colorado Division of Wildlife. 1989. Colorado statewide waterfowl management plan 1989 2003. Unpublished report, Fort Collins, Colorado, USA.</p> <p>Devineau, Olivier & Kendall, William & F. Doherty, Paul & Shenk, Tanya & White, Gary & Lukacs, Paul & P. Burnham, Kenneth. (2014). Increased Flexibility for Modeling Telemetry and Nest-Survival Data Using the Multistate Framework. The Journal of Wildlife Management, 78:224-230.</p> <p>Eldeiry, A.A., R.M Waskom, A. Elhaddad. 2015. Using remote sensing to estimate evapotranspiration of irrigated crops under flood and sprinkler irrigation systems. Irrigation and Drainage, 65:85-97.</p>

Related Studies

Gilbert, D.W., D.R. Anderson, J.K. Ringelman, and M.R. Szymczak. 1996. Response of nesting ducks to habitat and management on the Monte Vista National Wildlife Refuge, Colorado. *Wildlife Monographs* 131:3-44.

Kirkman, R. L. 1956. An evaluation of waterfowl production of lakes in North Park, Colorado, 1964 and 1955. Master's thesis, Colorado A&M College, Fort Collins.

Lemly, J., and L. Gilligan. 2012. North Platte River Basin wetland profile and condition assessment. Colorado Natural Heritage Program, Colorado State University, Fort Collins, Colorado.

Petrie, M., J. Vest, D. Smith. 2013. Chapter 4: Waterfowl *in* Intermountain West Implementation Plan: Strengthening science and partnerships. Intermountain West Joint Venture, Missoula, MT.

Runge, J. P. 2011. Intermountain duck habitat management pilot study. Unpublished annual progress report, Colorado Parks and Wildlife, Fort Collins, Colorado, USA.

Sanders, R. E. 1997. Montane wetland characteristics and waterfowl use on the Routt National Forest, Colorado. Thesis, University of Missouri-Columbia, Missouri, USA.

Setash, C.M. 2018. Cinnamon Teal Breeding Ecology in the San Luis Valley of Colorado. Unpublished Master's Thesis. Colorado State University. Fort Collins, CO.

Szymczak, M.R. 1986. Characteristics of duck populations in the intermountain parks of Colorado. Colorado Division of Wildlife Technical Publication No. 35, Denver, Colorado, USA.

Previous CWCB Grants

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

Applicant Name	Water Activity Name	Approving Roundtable	CWCB Date	Contract #
Ducks Unlimited, Inc.	Sambrito Wetlands	Southwest	3/18	CTGG1 2018-2001
Ducks Unlimited, Inc.	Narrows Feasibility Study	South Platte	12/15	CTGG1 2016-1148
Ducks Unlimited, Inc.	Water Development Feasibility - State Land Board	South Platte	12/13	OE PDA 14IBC00027
Ducks Unlimited, Inc.	Prewitt Reservoir Wetland Partnership	South Platte	9/13	POGG1 2015-145
Ducks Unlimited, Inc.	FLEX Water Market Education and Implementation	South Platte	7/13	C154227
Ducks Unlimited, Inc.	South Platte Phreatophyte Control	South Platte	7/12	OE PDA 13IBC000004
Ducks Unlimited, Inc.	Decision Support System Model for Recharge	South Platte	6/12	OE PDA 12IBC000023
Ducks Unlimited, Inc.	NP Irrigated Meadow Conservation Program	North Platte	6/10	OE PDA 10000000126
Ducks Unlimited, Inc.	Weld County School District Wetland Partnership	South Platte	2/9	OE PDA 09000000063
Ducks Unlimited, Inc.	Central South Platte Wetland Partnership	South Platte	9/9	C150454
Ducks Unlimited, Inc.	Lower South Platte Water Protection	South Platte	4/9	09 PDA 00097
Ducks Unlimited, Inc.	South Platte Recharge Project	South Platte	4/8	08 PDA 00094

Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

Not Applicable