

# STATE OF COLORADO

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## Colorado Water Conservation Board

### Department of Natural Resources

1580 Logan Street, Suite 600  
Denver, Colorado 80203  
Phone: (303) 866-3441  
Fax: (303) 894-2578  
[www.cwcb.state.co.us](http://www.cwcb.state.co.us)



January 15, 2014

Ducks Unlimited, Inc.  
Attn: Mr. Greg Kernohan, Manager Conservation  
2926 E. Mulberry Street  
Fort Collins, CO 80524

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John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

**RE: Notice to Proceed - WSRA Grant – Water Development Feasibility of  
Colorado State Land Board Property along the Lower South Platte River**

Dear Greg,

This letter is to inform you that the purchase order to assist in the Water Development Feasibility of Colorado State Land Board Property along the Lower South Platte River Basin was signed on January 15, 2014. The original purchase order will be mailed to you.

With the executed purchase order, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through December 31, 2014. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45 days. I wish you much success in your project.

If you have any questions or concerns regarding the project, please contact me.

Sincerely,

//s//

***Craig Godbout***  
***Program Manager***  
***Colorado Water Conservation Board***  
***Water Supply Planning Section***  
1580 Logan Street, Suite 200  
Denver CO 80203  
 [\(303\) 866-3441, ext 3210 \(office\)](tel:(303)866-3441)  
 [\(303\) 547-8061 \(cell\)](tel:(303)547-8061)  
[craig.godbout@state.co.us](mailto:craig.godbout@state.co.us)

Sori

WATER CONSERVATION BOARD  
1313 SHERMAN STREET, ROOM 721  
DENVER, CO 80203

DATE: 01-15-14



**PURCHASE  
ORDER**  
STATE OF COLORADO

Buyer: ALLAN SMITH  
Phone Number: 303-866-3292  
Agency Contact: DORI VIGIL  
Phone Number: 303 866 3441

**IMPORTANT**  
The PO# and Line # must  
appear on all invoices,  
packing slips, cartons  
and correspondence

P.O. # OE PDA 14IBC000027 Page# 01

ACC: 01-14-14

State Award #

BID #

FEIN 135643799 A Phone: 701-355-3500  
Vendor Contact: GREG KERNOHAN  
Purchase Requisition #:

V  
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DUCKS UNLIMITED INC  
2525 RIVER ROAD  
BISMARCK ND 58503-9011

**Invoice in Triplicate**

To: DIVISION OF WATER CONSERVATION  
1313 SHERMAN STREET, ROOM 721  
DENVER, CO 80203

**Payment will be made by this agency**

Ship To: DIVISION OF WATER CONSERVATION  
1313 SHERMAN STREET, ROOM 721  
DENVER, CO 80203

Delivery/Installation Date: 04-01-15  
F.O.B. DESTINATION STATE PAYS NO FREIGHT

**INSTRUCTIONS TO VENDOR:**

1. If for any reason, delivery of this order is delayed beyond the delivery/installation date shown, please notify the agency contact named at the top left. (Right of cancellation is reserved in instances in which timely delivery is not made.)
2. All chemicals, equipment and materials must conform to the standards required by OSHA.
3. NOTE: Additional terms and conditions on reverse side.

**SPECIAL INSTRUCTIONS:**

LINE ITEM	COMMODITY/ITEM CODE	UNIT OF MEASUREMENT	QUANTITY	UNIT COST	TOTAL ITEM COST
001	91843000000				\$33,663.00
	CMS#64770	STATE LAND BOARD SOUTH PLATTE RECHARGE STUDY			

THIS PO IS ISSUED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS  
This PO is effective on the date signed by the authorized individual.  
EPSPO PAA

DOCUMENT TOTAL = \$33,663.00

FOR THE STATE OF COLORADO



Authorized Signature

1/15/14

Date

## EXHIBIT A

### Statement of Work:

Water Activity Name: Water Development Feasibility of Colorado State Land Board Property Along the Lower South Platte River.

Grant Recipient – Ducks Unlimited, Inc.

Funding Sources – Colorado State Land Board (SLB), Ducks Unlimited, Inc. (DU), CWCB

Introduction and Background – DU and the SLB will investigate several SLB properties along the lower South Platte River from Denver to the Nebraska state line to determine feasibility of developing 1-3 properties for river augmentation through wetland recharge. The project will include use of other CWCB tools such as the Wetland Recharge Location Model to identify the best potential sites based on the characteristics of that model. The very best sites from the model will be investigated in the field to determine the best 5 – 10 sites for rigorous field investigation. The top 1-3 properties will then be field tested to confirm model assumptions by coring potential recharge sites, conducting pump tests on potential recharge wells, performing AWAS and StateMod Flow analysis as required, etc. As many as 3 projects will be selected, if appropriate, and moved into design for construction and contracting with partners for water and funding.

Objectives – The overall goal of the project will be met through performing the following tasks:

Task 1 – Develop partnership and contract with SLB

Task 2 – Identify Several Top Tier SLB Properties Using the Wetland Recharge Location Model

Task 3 – Perform Field Investigations of the top 5 to 10 sites

Task 4 – Perform Detailed Investigations for Recharge Suitability

Task 5 – Provide Final Report and Accompanying Work Product

### **Task 1** - Develop Partnership and Contract with State Land Board

Description of Task – Several months work were spent developing a partnership between DU and the SLB. Activities included several meetings between staff, development and presentation of a fictional demonstration project, development of a proposal between the parties, and development and execution of a contract.

Method or Procedure – DU and SLB met on several occasions to discuss the potential to develop wetland recharge sites on SLB property. River augmentation was a new concept for the SLB. Despite having a couple recharge sites with Riverside Irrigation and with Central Colorado Water Conservancy District, the staff had not investigated the development techniques or business structure of river augmentation. DU also walked through our procedure for identifying potential sites and performed a desktop review for a single site owned by the SLB and provided that information as a demonstration of our procedures.

Deliverable – Executed Contract with SLB

Timing – January 2014

Cost - \$4,009 (Match)

## **Task 2** - Identify Several Top Tier SLB Properties Using the Wetland Recharge Location Model

Description of Task – This model was developed by DU under contract with the CWCB to identify potential recharge sites on a landscape level scale. We will use the model to identify the top 20% of sites in the model and which ones are owned by the SLB.

Procedure/Method - The model is currently being completed by our contractor, Brown and Caldwell, and is in such condition to require some GIS analysis skill to deliver specific property information. However, the model is mostly completed and will be submitted to the CWCB in September 2013. It is in such working condition that we can reliably identify quarter-section parcels we wish to further investigate.

- 1) We will have Brown Caldwell manage the model to identify the top 20% of sites in the model and then identify only SLB properties. The model already incorporates published SLB property boundaries so we should be able to identify the properties easily.
- 2) We will then use the weighted criteria to work through the properties from highest to lowest score to find the top 5 – 10 sites for further investigation.

Deliverable – Semi-annual report including map of top 5 - 10 property locations and accompanying report of the property characteristics as described by the model with weighted score for each property.

Schedule – January 2013

Cost - \$1,606 (Match)

## **Task 3** - Perform Investigations of the top 5 to 10 sites

Description of Task – Several criteria considered in the model need to be verified in the field. We will visit each site and determine as best we can the physical limitations and any obvious legal constraints that may hinder development of each property.

Procedure/Method – DU staff, SLB staff, and our contractor will travel to all selected sites and determine limiting characteristics such as topography, water availability, partnerships with water providers, access to the river, complications associated with access for construction of infrastructure and permitting. Some of these issues will be completed with the assistance of landowner boundary maps and discussions with known water providers in the area. It is expected that topography and location relative to the river will eliminate several sites.

- 1) Property Site Visit to confirm physical characteristic of each property.
- 2) Review of landowner maps to determine distance to river, water providers, other physical impediments and potential partners.
- 3) Review of potential access issues and other easements required to develop project.
- 4) Identify major permitting restrictions.

Deliverable – Semi- annual report discussing elimination of sites from the study due to preliminary investigations

Schedule – 250 days from Notice to Proceed (NTP)

Cost - \$16,160

**Task 4** - Perform Detailed Investigations for Recharge Suitability on remaining 1-3 sites

Description – Several different tasks will be pursued simultaneously during this task to determine the suitability of the best sites. We will perform detailed field tests of the remaining sites including soil coring of potential recharge facilities (wetlands), and test recharge well capacity (if needed). We will also be working on commitments from water providers as needed and developing easements from adjacent landowners as required.

Procedure/Method

- 1) Drill soil cores for potential recharge sites
- 2) Perform recharge well pump tests
  - a. This will likely be performed from the closest local well.
- 3) Develop commitments with Water Providers
  - a. MOU or Contracts
- 4) Develop access and pipeline easements as needed.

Deliverable – Provide information on all sites as part of the semi-annual report

Schedule – 365 days from NTP

Cost – \$37,042

**Task 5** - Develop Final Report

Description – The final report will be an add-on from the semi-annual reports required by the CWCB. It will include the final agreements or commitments from water providers, identify all easements or potential easements required for the project and a conceptual design of the project.

Procedure/Method – Develop a written report for the CWCB and roundtable. Turn over all work products and materials to the CWCB.

Deliverable – Final report as required by the CWCB.

Schedule – 425 days from NTP

Cost - \$6,510

\*Project to expire March 30<sup>th</sup>, 2015

## Budget

	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Grant Costs
Task 1 – Develop partnership and contract with State Land Board	\$3,952	\$56.92		\$4,009
Task 2 – Identify Several Top Tier SLB Properties Using the WRL Model	\$1,539	\$67.80		\$1,606
Task 3 – Perform Field Investigations of the top 5 to 10 sites	\$15,577	\$583.75		\$16,160
Task 4 – Perform Detailed Investigations for Recharge Suitability	\$17,688	\$19,354.25		\$37,042
Task 5 – Provide Final Report and Accompanying Work Product	\$6,260	\$250.00		\$6,510
Total Cash Contributions (State Land Board)			\$28,427	(\$28,427)
Total Cash Contributions (DU)			\$3,237	(\$3,237)
Indirects	\$3,763	\$1,698.14	\$5,461.37	0
Total Costs:	\$48,778	\$22,011	\$37,125	\$33,663
		Total Cash Match %	52%	
		Meet Cash Match Requirement?	Yes	
		Total Match Provided %	52%	

## Timeline

Year	2014 Quarters				2015 Qtr
Quarter	1	2	3	4	1
Task					
Task 1					
Task 2					
Task 3					
Task 4					
Task 5					