

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 32.b.**

**Applicant:** Ducks Unlimited

**Water Activity Name:** Development of a Decision Support Model for Identifying South Platte River and Ranking Waterfowl and Wildlife Related Recharge Projects along the South Plate River

**Water Activity Purpose:** Non-Structural Activity

**County:** Multiple

**Drainage Basin:** South Platte

**Water Source:** South Platte River

**Amount Requested:** \$99,821

**Source of Funds:** Statewide account (\$99,821)

**Matching Funds:** Yes (approximately 20% of Statewide request)

<b>Staff Recommendation</b>
Staff recommends approval of up to \$99,821 from the Statewide account to fund the Decision Support Model for Identifying South Platte River and Ranking Waterfowl and Wildlife Related Recharge Projects along the South Plate River the Lower South Platte Water Cooperative Organizational Analysis.

**Water Activity Summary:**

Over the last several years, Ducks Unlimited, with the help of the Colorado Water Conservation Board, has been very successful in constructing multi-purpose water conservation wetlands in Colorado – especially in the South Platte basin between Denver and the Colorado-Nebraska state line. The water from conservation wetlands have served environmental and recreational interests by enhancing waterfowl habitat and by providing new bird watching and hunting opportunities. In addition, these wetlands have proven to be valuable alluvial aquifer recharge facilities.

While the program for constructing water conservation wetlands has been successful, it has also been somewhat opportunistic in its application. Now that the success of the program has been proven, there is a desire to take a more strategic approach to its application. This project seeks to develop this strategic approach. It is anticipated that this approach will serve as a model that can be applied to other river basins or geographic areas in Colorado.

If this funding request is successful, this project will develop a process and tool (or decision support model) that will be used in locating future water conservation wetland projects in the South Platte basin between Denver and the Colorado-Nebraska stateline. The specific objectives of this project are to:

- Assess important factors to consider in locating future water conservation wetlands.
- Develop a process and a supporting tool that can be used to identify potential areas where water conservation wetlands could be constructed considering a number of important factors.
- Using the tool, produce a map showing areas in the South Platte basin targeted for future water conservation wetlands.

- Lay the foundation for a program to provide financial and technical assistance to agricultural producers who are interested in constructing water conservation wetlands.

There are many factors that will influence decisions regarding the most favorable locations for future wetlands. Some of these factors are more important than others and they vary geographically. These are factors that DU has considered in previous projects and will consider in the context of the decision support model. Examples of these factors include the following:

- Amount of waterfowl habitat in the vicinity of a proposed project
- Available water supply
- Ability to recharge the alluvial aquifer
- Characteristics of the alluvial aquifer and lag times
- The need for additional alluvial aquifer recharge
- Funding partners
- Potential permitting issues
- Need for recreational opportunities
- Cost/value of water and land
- Comparative economic returns to water
- Suitability of land

#### **Discussion:**

Over the past several years, the Colorado Water Conservation Board has been supportive of Ducks Unlimited's efforts in developing wetland recharge projects in the South Platte River basin. In the past, staff has inquired of DU's staff on the criteria or plan used for selecting the wetland recharge project site locations. While there was an overall mission, the selection was most based on what resources are available at a given time. This grant proposal is in direct response to CWCB's questions regarding their planning efforts. Recharge wetlands are demonstrated to be an effective solution for providing recharge credits for a variety of uses including municipal, industrial, environmental and agricultural. Ideally, this tool will be used to help ensure that future projects are selected because they promise to produce the greatest benefits for the investment.

**Issues/Additional Needs:** Staff requests that the applicant meet with CWCB's DSS section to ensure compatibility and avoidance of any redundancies.

#### **Staff Recommendation:**

Staff recommends approval of up to \$99,821 from the Statewide Account to fund the Decision Support Model for Identifying South Platte River and Ranking Waterfowl and Wildlife Related Recharge Projects along the South Platte River the Lower South Platte Water Cooperative Organizational Analysis.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.

In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

**Reporting:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Deliverable:** At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

**Engineering:** All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.