

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 15-17, 2015
Agenda Item 18(h)

Applicant & Fiscal Agent: Ducks Unlimited, Inc. (DU)

Water Activity Name: MacFarlane Dam Rehabilitation

Water Activity Purpose: Reservoir Rehabilitation

County: Jackson

Drainage Basin: North Platte Basin

Water Source: Soap Creek

Amount Requested/Source of Funds: \$500,000 North Platte Basin Account
\$100,000 Statewide Account
\$600,000 Total Grant Request

Matching Funds: Basin Account Match: \$500,000 = 83% of total grant request (meets 5% min);
Basin Account & Applicant Match: \$1,586,465 = 264% of total grant request
(meets 25% min);
Applicant & 3rd Party Match: \$1,086,465 = 64% of total project costs
(refer to *Funding Summary/Matching Funds*)

Staff Recommendation:
Staff recommends conditional approval (refer to <i>Issues/Additional Need</i> section below) of up to \$500,000 from the North Platte Basin Account, and \$100,000 from the Statewide Account to help fund the project titled: Ducks Unlimited: MacFarlane Dam Rehabilitation.

Water Activity Summary: Built in 1915, and reconstructed in 1962, MacFarlane Dam impounds at least 6,500 AF of water. This water is decreed for irrigation, recreation, wildlife habitat, and piscatorial purposes, and is used to irrigate more than 1,600 acres of pasture and wet meadow in North Park. Thousands of acres of wetlands and wet meadow are associated with the water stored and delivered from the reservoir. DU believes that this area contains some of the highest quality waterfowl and sage grouse production areas in the state. The MacFarlane Reservoir is owned by the Evans Land and Cattle, Inc (ELC) (50%) and the Department of the Interior (DOI) (50%) including United States Fish and Wildlife Service (USFWS), and the Bureau of Land Management (BLM).

WSRA funds, if approved, will be expended to fund this collaborative effort for the MacFarlane Dam Rehabilitation Project (the Project), which will repair the outlet pipe and toe drains as necessary to avoid a State Engineer's Office, Dam Safety storage restriction order. MacFarlane Dam has a history of seepage and slope stability problems, including a slope failure near the left abutment of the dam which was repaired in 1975. A 2014 field investigation noted several dam safety deficiencies including: (1) Wave erosion damage along the upstream slope of the north embankment; (2) Inadequate seepage control along both embankments; (3) Localized slope instability in the downstream slope of both embankments; (4) A severely deteriorated outlet works terminal structure; and, (5) No emergency spillway control section to minimize scour during large spillway discharges.

The Project goal is to address the identified dam safety deficiencies. The following are objectives to meet that goal: (1) Ensure dam safety by repairing the existing embankment and associated outlet structures; (2) Ensure longevity of the dam by reconstructing the emergency spillway; (3) Provide adequate storage volumes matching existing water rights; and, (4) Provide reliable access to the site.

Discussion: Repair of the dam and maintenance of its storage capacity is a high-priority project for the North Platte Basin. In its Basin Implementation Plan (BIP), the North Platte Basin has identified eight basic goals to establish priorities for water development and maintain important historical water uses in the basin. This Project directly addresses four of those needs and is identified in the BIP as a potential project meeting BIP goals. Specifically the Draft BIP states *“This Project excels at meeting the basin goals 1, 3, 4, and 5. The preserved storage helps to maintain and maximize the consumptive use of water in the basin (Goal 1), while helping to maintain important existing infrastructure (Goal 3). In addition, the multiple purpose uses of the reservoir help to directly maintain healthy wetlands (Goal 4), while showcasing the beneficial relationship between agricultural and environmental and recreational water use (Goal 5).”* Additionally, this project is identified as “Planned Project” in the North Platte BIP (Section 4.2: Updated Project List, Table 3. Planned Consumptive Project List, page 63). While this project is classified under “Planned Consumptive Projects” a footnote to the above mentioned table indicates that this project is a *“mutli-purpose project(s) with consumptive, environmental, and recreational benefits”*.

Issues/Additional Needs: This Project cannot go forward until ELC is able to raise its remaining share of Project cost, currently an amount of \$100,000. ELC has indicated they will seek a CWCB Loan for this amount at the November 2015 Board meeting, or a Board meeting soon thereafter. Therefore staff recommends **conditional** approval based upon ELC successfully securing the \$100,000 needed to fully fund this Project from a CWCB loan or through another source of funds.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

Staff has reviewed and evaluated the applicant’s response to the Statewide Account Supplemental Scoring Matrix and has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant’s detailed response.

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Ducks Unlimited, Inc	\$0	\$69,540	\$69,540
Evans Land & Cattle, Inc	\$100,000	\$0	\$100,000
Department of the Interior	\$916,925	\$0	\$916,925
Sub-total matching funds	\$1,016,925	\$69,540	\$1,086,465
WSRA North Platte Basin Account	\$500,000	\$0	\$500,000
WSRA Statewide Account	\$100,000	\$0	\$100,000
Total	\$1,616,925	\$69,540	\$1,686,465

CWCB Project Manager: Jonathan Hernandez

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.