

# STATE OF COLORADO

## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

John W. Hickenlooper  
Governor

FROM: Greg Johnson,  
Water Supply Planning Section

Mike King  
DNR Executive Director

DATE: May 2, 2013

Jennifer L. Gimbel  
CWCB Director

SUBJECT: **Agenda Item 25, May 14-15, 2013 Board Meeting  
Water Supply Reserve Account Program**

### Staff Recommendation

A summary of staff's recommendation for each WSRA application is provided in the table below. Favorable recommendations may be contingent on providing the CWCB with additional information, clarifications, or modifications in the scope of work. Please refer to the Water Activity Summary Sheets contained within this agenda item to find a summary of staff's review and any conditions associated with each recommendation. Full application materials are available upon request.

	Basin	Project Name	Total Request	Recommendation
a.	North Platte	Mutual Ditch – Structure for Water Control	\$41,940	To fund up to \$41,940 from the North Platte Basin Account.
b.	Rio Grande	Drip Irrigation Field Trial for Sustainable Potato Cropping in the San Luis Valley	\$40,000	To fund up to \$40,000 from the Rio Grande Basin Account.

### Background

For this agenda item the Board is provided with a brief overview of applications to the Water Supply Reserve Account (WSRA). Attachments to this memo include:

- Summary spreadsheet detailing funding requests for the basin and statewide accounts;
- Water Activity Summary Sheets which provide an overview, discussion, issues/additional needs, and staff recommendation regarding funding, partial funding, or not funding the applications; and

Staff's review of the applications involves the following steps:

- 1) Applications are reviewed for completeness based on the information requirements, which are primarily outlined in Part 2 of the Criteria and Guidelines (C&G).
- 2) Applications are reviewed to verify that the water activity meets the **eligibility requirements** in Section 39-29-108 (III) C.R.S. (C&G, Part 2) and the **threshold criteria**, which are based on the requirements of Section 39-29-108 (III) C.R.S., and two sections of the Water for the 21st Century Act (House Bill 1177); Section 37-75-102 and Section 37-75-104(2)(c) (C&G,

Part 3). Staff also verifies that the applicant is an **eligible entity** to receive funding (C&G, Part 2).

- 3) Staff then prepares the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.

#### **Water Supply Reserve Account Balance Summary and Project Status Report**

To provide the Board updates on the status of specific Water Supply Reserve Account grant applications and projects, staff provides a status report in the CWCB Director's Report. The WSRA status report includes the following information:

- List of completed WSRA projects;
- List of WSRA projects in progress; and
- List of WSRA projects in the contracting and procurement process.

# COLORADO WATER CONSERVATION BOARD

## Water Supply Reserve Account - Balance Summary

April 1, 2013

Fund Appropriation and Receipts				
Fiscal Year	Legislative Appropriation	Funds Received	Statewide Account	Basin Account
2006/2007	\$10,000,000	\$10,000,000	\$5,500,000	\$4,500,000
2007/2008	\$6,000,000	\$6,000,000	\$4,200,000	\$1,800,000
2008/2009	\$10,000,000	\$7,000,000	\$4,300,000	\$2,700,000
2009/2010	\$5,775,000	\$5,775,000	\$4,215,750	\$1,559,250
2010/2011	\$6,000,000	\$6,000,000	\$4,380,000	\$1,620,000
2011/2012	\$7,000,000	\$7,000,000	\$4,732,000	\$2,268,000
2012/2013	\$10,000,000	\$7,157,724	\$4,580,943	\$2,576,781
Interest	N/A	\$2,334,459	\$2,334,459	\$0
<b>TOTAL</b>	<b>\$44,775,000</b>	<b>\$51,267,183</b>	<b>\$34,243,152</b>	<b>\$17,024,031</b>

Note: The WSRA is a Severance Tax "Tier II" program with 40% of funds distributed on July 1, 30% on January 1, and the final 30% on April 1.

In FY 2008/2009 the final 30% installment of \$3,000,000 was not received due to the State's budgetary shortfall.

*In January 2012 interest for the program from its inception to date was credited directly to the Statewide Account.*

*Interest from January 2012 on is regularly calculated by the Treasury and credited to the Statewide Account.*

Fund Distribution					
Basin	Approved Basin Grants	Total Basin Funds	Basin Account Balance	Approved State Grants	Statewide Account Balance
Arkansas	\$1,610,313	\$1,891,559	\$281,246	\$5,230,925	
Colorado	\$1,428,830	\$1,891,559	\$462,729	\$3,741,036	
Southwest	\$1,466,346	\$1,891,559	\$425,213	\$5,038,306	
Gunnison	\$1,407,997	\$1,891,559	\$483,562	\$2,642,324	
Metro	\$1,264,929	\$1,891,559	\$626,630	\$2,225,268	
North Platte	\$1,150,077	\$1,891,559	\$741,482	\$311,027	
Rio Grande	\$1,628,366	\$1,891,559	\$263,193	\$7,389,273	
South Platte	\$1,335,476	\$1,891,559	\$556,083	\$2,595,980	
Yampa/White	\$1,208,874	\$1,891,559	\$682,685	\$466,813	
<b>TOTAL</b>	<b>\$12,501,209</b>	<b>\$17,024,031</b>	<b>\$4,522,822</b>	<b>\$29,640,951</b>	<b>\$4,602,201</b>
<b>TOTAL APPROVED GRANTS</b>					<b>\$42,142,160</b>

Note: Only includes grants approved by CWCB

**Water Supply Reserve Account Program  
Water Activity Summary Sheet  
May 2013 CWCB Meeting  
Agenda Item 25.a**

**Applicant:** Greg Ray

**Water Activity Name:** Mutual Ditch – Structure for Water Control

**Water Activity Purpose:** Structural Agricultural Water Project

**County:** Jackson

**River Basin:** North Platte

**Water Source:** Big Grizzly Creek

**Amount Requested:** \$41,940 (North Platte Basin Account)

**Matching Funds:** \$4,660 cash match (applicant), \$2,900 in-kind (NRCS)

<b>Staff Recommendation</b>
Staff recommends approval of up to \$41,940 from the North Platte Basin Account for the project titled: Mutual Ditch – Structures for Water Control.

**Water Activity Summary:**

The applicant seeks to replace an old, deteriorated check and waste-gate structure located about 4,900 feet downstream from the existing headgate on Big Grizzly Creek. The existing structure was built in 1949 and is now deteriorated, resulting in ineffective control of water levels. The structure plays an essential role in regulating the water level in the Mutual Ditch. It serves as an emergency waste-gate during periods of high flows. At the location where Anderson Draw and the Mutual Ditch intersect, the ditch is often inundated with water. Prior to the installation of the check-gate/waste-gate in 1949, the Mutual Ditch washed out numerous times at the intersection. Without the capability to divert the excess water from Anderson Draw back into the Grizzly Creek drainage, the ditch runs the risk of failing once again.

The new proposed structure will allow users' to effectively manage the amount water in the Mutual Ditch during seasonal irrigation flows. It will also provide an emergency waste-gate at Anderson Draw during periods of high water. The structure will improve the accuracy of water control, thus improving irrigation water management and benefiting all uses associated with the Mutual Ditch. Installation of the new structure addresses both consumptive and nonconsumptive needs in a cost effective, collaborative way. The Mutual Ditch provides irrigation water to over 4,900 acres of hay and pasture land. In addition to irrigating the valuable hay land, water is also allocated for livestock and domestic use. Finally, the laterals below the structure create extremely valuable irrigation-induced wetlands and riparian areas that provide habitat for many species of big game, waterfowl and upland birds, including the Greater Sage Grouse.

The water right holders of the Mutual Ditch have received technical and engineering assistance through the Natural Resources Conservation Service (NRCS) for the survey and design of the proposed structure.

*Threshold and Evaluation Criteria*

The application meets all four Threshold Criteria.

**Discussion:**

No additional discussion is needed.

**Issues/Additional Needs:**

No additional issues or needs were identified.

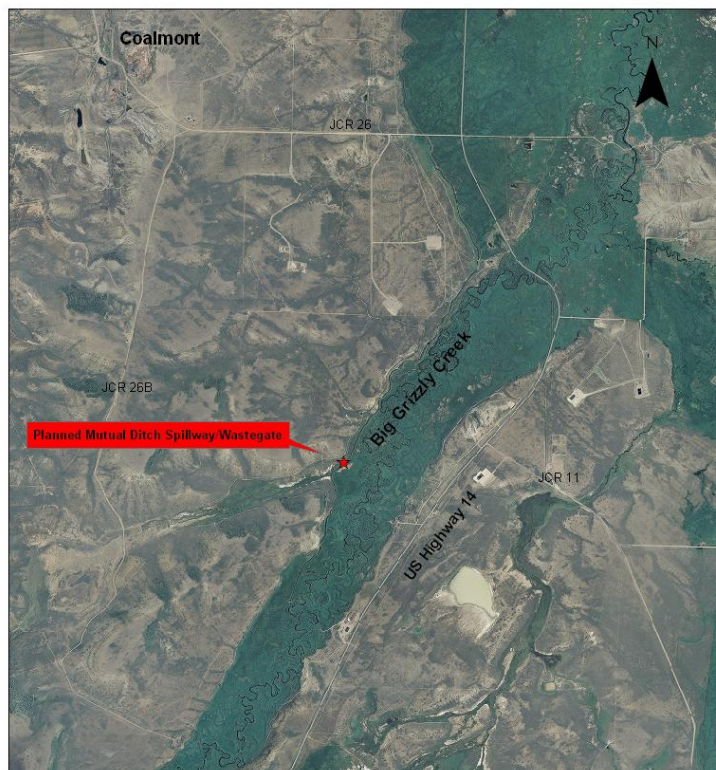
**Staff Recommendation:**

Staff recommends approval of up to \$41,940 from the North Platte Basin Account for the project titled: Mutual Ditch – Structures for Water Control.

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 and Final Deliverable:** 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. 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.

**Location Map:****Mutual Ditch - Structure For Water Control  
Location Map**

Location of Planned Spillway/Wastegate Structure for Water Control:  
Township 7 North  
Range 80 West  
Section: 6 (SE1/4, SW1/4 of 6)

0 0.2 0.4 0.8 1.2 1.6 Miles

**Water Supply Reserve Account Program  
Water Activity Summary Sheet  
May 2013 CWCB Meeting  
Agenda Item 25.b**

**Applicant:** Colorado Potato Administrative Committee

**Water Activity Name:** Drip Irrigation Field Trial for Sustainable Potato Cropping, San Luis Valley

**Water Activity Purpose:** Structural Agricultural Project

**County:** Saguache

**Drainage Basin:** Rio Grande

**Water Source:** Unconfined Aquifer

**Amount Requested:** \$40,000 (Rio Grande Basin Account)

**Matching Funds:** \$52,982 cash (applicant), \$63,346 in-kind (applicant)

<b>Staff Recommendation</b>
Staff recommends approval of up to \$40,000 from the Rio Grande Basin Account to assist in the funding of the project titled: Drip Irrigation Field Trial for Sustainable Potato Cropping in the San Luis Valley.

**Water Activity Summary:**

The Colorado Potato Administration Committee (CPAC) seeks to install two sub-surface agricultural drip irrigation systems on 47 acres in the central San Luis Valley. These installations will be on two farms near Hooper, within the boundaries of Subdistrict #1 of the Rio Grande Water Conservation District. This area has been hard hit by extremely dry weather, below average snow pack, and heavy groundwater pumping, resulting in a critically diminishing water supply.

Given the Rio Grande Basin's limited reservoir storage, and financial incentives offered to take land out of production, the cost and availability of irrigation water is the major concern for growers. If the Valley's economy and agricultural way of life are to survive, the long term future of the potato industry must be secured. What is needed, is an effective and sustainable water delivery system, improved irrigation efficiencies, and a different approach to the management of water – with growers using less water, and using it as economically as possible.

CPAC has analyzed production and marketing patterns over the years. Given the continuing drought and diminishing water security, plus positive results of recent research, CPAC has concluded that sub-surface drip irrigation may be a solution. This proposal, with a total Project cost of \$156,328 requests \$40,000 from Basin funds to field test this proposition, to determine the practical and economic feasibility of drip irrigation for potato producers in the Valley. The matching component for this request pays for 74.4% of the Total Project Cost.

**Issues/Additional Needs:**

No issues or additional needs have been identified.



**Staff Recommendation:**

Staff recommends approval of up to \$40,000 from the Rio Grande Basin Account to assist in the funding of the project titled: Drip Irrigation Field Trial for Sustainable Potato Cropping in the San Luis Valley.

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.

**Location Map:**