



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Craig Godbout
Program Manager - Water Supply Reserve Account Grant Program
Water Supply Planning Section

DATE: September 7, 2016

AGENDA ITEM: 19 (a-t) WSRA Grant Requests

Staff Recommendation - Action Items: WSRA Grant Requests

A summary of staff's recommendation for each WSRA application is provided in the first component of the attached table. If applicable, the table also includes a breakdown of match amounts for applications that include a request for Statewide Account WSRA funds.

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.

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;
- Summary spreadsheet displaying current WSRA Balance Summary of Fund Appropriations and Receipts by Fiscal Year, and Fund Distribution by Basin and Statewide Account.
- Water Activity Summary Sheets which provide an overview, discussion, issues/additional needs, and staff recommendation regarding funding, partial funding, or not funding the applications.

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 was 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 can provide a status report of the following information upon request:

- 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 Fund - Balance Summary
July 2016

8/3/2016

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
2013/2014	\$10,000,000	\$10,091,639	\$6,458,649	\$3,632,990
2014/2015	\$10,000,000	\$10,000,000	\$6,400,000	\$3,600,000
2015/2016	\$10,000,000	\$9,103,590	\$5,826,298	\$3,277,292
2016/2017				
Interest	N/A	\$2,857,935	\$1,829,078	\$0
Prior Years Interest Adjustment			\$1,028,856	\$0
2014/2015 Interest	N/A	\$ 240,216	\$240,216	\$0
2015/2016 Interest	N/A	\$ 219,458	\$219,458	\$0
2016/2017 Interest	N/A			
TOTAL	\$84,775,000	\$81,445,561	\$53,911,248	\$27,534,313

Interest diverted to SW per
DNR reconciliation

Note: The WSRF 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	\$2,879,465	\$3,059,368	\$179,903	\$8,739,504	
Colorado	\$2,636,041	\$3,059,368	\$423,327	\$5,612,524	
Southwest *	\$2,548,665	\$3,059,368	\$510,703	\$7,199,911	
Gunnison *	\$2,467,014	\$3,059,368	\$592,354	\$4,249,681	
Metro	\$2,725,031	\$3,059,368	\$334,337	\$7,346,148	
North Platte	\$2,105,468	\$3,059,368	\$953,900	540,942	
Rio Grande	\$2,714,212	\$3,059,368	\$345,156	\$10,350,323	
South Platte *	\$2,635,562	\$3,059,368	\$423,806	\$6,955,510	
Yampa/White	\$2,194,744	\$3,059,368	\$864,624	\$731,747	
TOTAL	\$22,906,202	\$27,534,313	\$4,628,111	\$51,726,289	\$2,184,959
TOTAL APPROVED GRANTS					\$74,632,491

Note: Only includes grants approved by CWCB

Water Supply Reserve Fund Applications for Consideration at the CWCB September 2016 Board Meeting

Agenda Item	Basin	Applicant	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	Total Request	Cash Match	In-Kind Match	Total Applicant Match	Total Basin Account & Applicant Match	Total Project/ Study Costs	Staff Recommendations
19(a)	Metro South Platte	Lower South Platte Water Conservancy District	South Platte River Storage Study (HB16-1256)	\$0	\$211,168	\$211,168	n/a	n/a	n/a	0	\$211,168	Staff recommends approval of \$211,168 from the Statewide Account.
19(b)	Colorado	Center for Snow And Avalanche Studies	Colorado Dust-on-Snow Project	\$0	\$140,000	\$150,000	\$261,000	\$21,000	\$282,000	\$292,000	\$432,000	Staff recommends approval of \$2,500 from the Colorado Basn Account; \$2,500 from the Gunnison Basin Account; \$2,500 from the Rio Grande Basin Account; and \$2,500 from the Southwest Basin Account.
	\$2,500											
	\$2,500											
	\$2,500											
19(c)	Arkansas	Huerfano County Water Conservancy District	Arkansas BIP Coordinator - Phase 2	\$20,267	\$40,533	\$60,800	\$0	\$0	\$0	\$20,267	\$60,800	Staff recommends approval of \$20,267 from the Arkansas Basin Account; and \$40,533 from the Statewide Account.
19(d)	Arkansas	St. Charles Mesa Water District	Long-term Water Supply for Zinno Subdivision	\$25,000	\$50,000	\$75,000	\$1,088,586	\$0	\$1,088,586	\$1,113,586	\$1,163,586	Staff recommends conditional approval of \$25,000 from the Arkansas Basin Account; and \$50,000 from the Statewide Account.
19(e)	Arkansas	Fountain Creek Watershed Flood Control and Greenway District	Feasibility Study of Flood Control Alternatives for Fountain Creek	\$21,200	\$72,100	\$93,300	\$40,000	\$0	\$40,000	\$61,200	\$133,300	Staff recommends approval of \$21,200 from the Arkansas Basin Account; and \$72,100 from the Statewide Account.
19(f)	Arkansas	Fort Lyon Canal Company	Adobe Creek Dam Seepage Evaluation (Ft Lyon)	\$5,000	\$45,000	\$50,000	\$10,000	\$0	\$10,000	\$15,000	\$60,000	Staff recommends approval of \$5,000 from the Arkansas Basin Account; and \$45,000 from the Statewide Account.
19(g)	Arkansas	Lower Arkansas Valley Water Conservancy District & Fort Lyons Rule 10 Association	Phase 2 of Tailwater Return Flow Study of Fort Lyon Canal	\$26,000	\$148,796	\$174,796	\$75,000	\$0	\$75,000	\$101,000	\$249,796	Staff recommends approval of \$26,000 from the Arkansas Basin Account; and \$148,796 from the Statewide Account.
19(h)	Arkansas	Upper Arkansas Water Conservancy District	Groundwater and Surface Water Interactions and Potential for Underground Storage	\$50,000	\$256,618	\$306,618	\$335,442	\$25,000	\$360,442	\$410,442	\$667,060	Staff recommends approval of \$50,000 from the Arkansas Basin Account; and \$256,618 from the Statewide Account.
19(i)	Arkansas	Holbrook Mutual Irrigation Company	Holbrook Reservoir #1 Outlet Flow Measurement Upgrade, Phase I	\$10,000	\$20,000	\$30,000	\$0	\$10,500	\$10,500	\$20,500	\$40,500	Staff recommends approval of \$10,000 from the Arkansas Basin Account; and \$20,000 from the Statewide Account.
19(j)	Colorado	Trout Unlimited	Ware and Hinds Fish Passage Project	\$31,750	\$31,750	\$63,500	\$83,380	\$19,550	\$102,930	\$134,680	\$166,430	Staff recommends approval of \$31,750 from the Colorado Basin Account; and \$31,750 from the Statewide Account.
19(k)	Gunnison	Fire Mountain Canal and Reservoir Company	Fire Mountain Canal Piping Project	\$60,000	\$60,000	\$120,000	\$30,000	\$0	\$30,000	\$90,000	\$150,000	Staff recommends approval of \$60,000 from the Gunnison Basin Account; and \$60,000 from the Statewide Account.
19(l)	Gunnison	Orchard Ranch Ditch Company	Orchard Ranch Ditch Company Pipe Project	\$25,000	\$25,000	\$50,000	\$1,380,721	\$0	\$1,380,721	\$1,405,721	\$1,430,721	Staff recommends approval of \$25,000 from the Gunnison Basin Account; and \$25,000 from the Statewide Account.
19(m)	Rio Grande	Trout Unlimited	San Luis Valley Wetland Wildlife Conservation Assessment	\$39,000	\$0	\$39,000	\$45,000	\$144,000	\$189,000	\$228,000	\$228,000	Staff recommends approval of \$39,000 from the Rio Grande Basin Account.
19(n)	North Platte	Crosby Creek Ranch	Stambaugh Reservoir Outlet Repair	\$29,200	\$0	\$29,200	\$0	\$0	\$0	\$29,200	\$29,200	Staff recommends approval of \$29,200 from the North Platte Basin Account.
19(o)	Southwest	La Plata Water Conservancy District	Joseph Freed & Red Mesa Headgate and Ditch Improvement Project	\$55,000	\$0	\$55,000	\$16,552	\$0	\$16,552	\$71,552	\$71,552	Staff recommends approval of \$55,000 from the Southwest Basin Account.
19(p)	Southwest	Spring Creek Extension Ditch Company	Spring Creek Ditch Siphon Replacement	\$29,000	\$0	\$29,000	\$37,000	\$0	\$37,000	\$66,000	\$66,000	Staff recommends approval of \$29,000 from the Southwest Basin Account.
19(q)	Southwest	King Consolidated Ditch Company	Gauging Station with Telemetry	\$12,100	\$0	\$12,100	\$5,000	\$0	\$5,000	\$17,100	\$17,100	Staff recommends approval of \$12,000 from the Southwest Basin Account.
19(r)	Southwest	The Nature Conservancy	Wines Ditch Diversion Evaluation	\$40,000	\$25,000	\$65,000	\$25,000	\$28,037	\$53,037	\$93,037	\$118,037	Staff recommends approval of \$40,000 from the Southwest Basin Account; and \$25,000 from the Statewide Account.
19(s)	Southwest	Sullivan Ditch Company	Sullivan Ditch Repair Project	\$27,298	\$0	\$27,298	\$27,298	\$0	\$27,298	\$54,596	\$54,596	Staff recommends approval of \$27,298 from the Southwest Basin Account.
Subtotal				\$515,815	\$1,125,965	\$1,641,780						
Loan/Grant Combos												
17	Colorado	Grand Valley Water Users Association	Grand Valley Project – Government Highline Canal Top 500 Feet Lining Project – Canyon Canal Improvement	\$15,000	\$285,000	\$300,000	\$488,000	\$12,000	\$500,000	\$800,000		Staff recommends approval of \$15,000 from the Colorado Basin Account; and \$285,000 from the Statewide Account.
Total				\$530,815	\$1,410,965	\$1,941,780						
Change of Fiscal Agent (Grantee)												
Agenda Item	Basin	Current Fiscal Agent (Grantee)	Proposed Fiscal Agent (Grantee)	Name of Water Activity		PM						Staff Recommendations
19(t)	Arkansas	Purgatoire River Water Conservancy District	Huerfano County Water Conservancy District	Ditch Infrastructure Repair Project		Craig Godbout						Staff recommends approval of in change of fiscal agent from the Pugatoire River Water Conservancy District to the Huerfano County Water Conservancy District

Basin	Basin Account Requests	Statewide Account Requests	Total Requests	Current Basin Account Balances	Remaining Basin Account Balances (if all requests approved)	Current Statewide Account Balance	Remaining Statewide Account Balance (if all requests
Arkansas Basin	\$157,467	\$633,047	\$790,514	\$179,903	\$22,436		
Colorado Basin	\$49,250	\$351,750	\$401,000	\$423,327	\$374,077		
Gunnison Basin	\$87,500	\$120,000	\$207,500	\$592,354	\$504,854		
Metro Basin	\$0	\$105,584	\$105,584	\$334,337	\$334,337		
North Platte	\$29,200	\$0	\$29,200	\$953,900	\$924,700	\$2,184,595	\$773,630
Rio Grande	\$41,500	\$35,000	\$76,500	\$345,156	\$303,656		
Southwest	\$165,898	\$60,000	\$225,898	\$510,703	\$344,805		
South Platte	\$0	\$105,584	\$105,584	\$423,806	\$423,806		
Yampa/White/Green	\$0	\$0	\$0	\$864,324	\$864,324		
Water Supply Reserve Fund Total Requests	\$530,815	\$1,410,965	\$1,941,780	\$4,627,810	\$4,096,995		

Water Supply Reserve Fund– Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(a)

Applicant & Fiscal Agent: Lower South Platte Water Conservancy District
Water Activity Name: HB16-1256 South Platte Storage Study
Water Activity Purpose: Study
County: All Counties w/in the South Platte Basin
Drainage Basin: South Platte
Water Source: South Platte River and all tributaries
Amount Requested/Source of Funds: \$211,168 Statewide Account
\$211,168 Total Grant Request

Matching Funds: As this study is legislatively mandated, and it is of statewide importance, the Metro and South Platte Basin Roundtables have requested that 100% of the funding come from the Statewide Account. CWCBC Staff concur and recommend that the Basin Account matching requirement be waived in this case.

Staff Recommendation:

Staff recommends approval of up to \$211,168 from the Statewide Account to fund the project titled: HB16-1256 South Platte Storage Study.

Water Activity Summary: HB16-1256, signed into law by the Governor on June 9th, 2016, authorizes the Colorado Water Conservation Board (CWCBC), in collaboration with the State Engineer (SEO), and the South Platte Basin and Metro Roundtables, to conduct a study to identify multi-purpose water storage possibilities along the South Platte River Basin. These water storage possibilities will include new reservoir sites, the enlargement/rehabilitation of existing sites, or alternative storage mechanisms (e.g., underground storage).

The primary objective of this study is to investigate multiple possible sites in the Lower South Platte Basin for constructing a new reservoir, enlarging an existing reservoir, or for implementing an alternative storage mechanism. Each of these identified sites will include the following analysis as per HB16-1256:

- 1) An estimate of the volume of water that could have been stored annually (only including measured flow in the South Platte River existing at the time of the study, this does not include any future or newly created transmountain diversions).
- 2) A preliminary estimate of the cost for obtaining the permits and acquiring the property or easements for either construction of a new reservoir, enlargement or rehabilitation of an existing reservoir, or implementing an alternative storage mechanism.
- 3) A cost-benefit analysis for constructing a reservoir or implementing an alternative storage mechanism including environmental, financial, and legal constraints.

In conducting these investigations, the Contractor will take into account existing absolute and conditional water rights and interstate agreements, e.g., the interstate compact with Nebraska, and the Platte River Cooperative Agreement with Nebraska and Wyoming for the endangered species recovery program on the Platte River.

Discussion: This grant is consistent with the next steps for implementation identified by the roundtables, the IBCC, and the CWCB, as well as in Colorado's Water Plan. The study fits the statutory language of HB16-1256 and will be a good starting point in identifying potential storage sites for further study and investigation.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds: n/a

CWCB Project Manager: Andy Moore

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(b)

Applicant & Fiscal Agent: Center for Snow and Avalanche Studies

Water Activity Name: Colorado Dust-on-Snow Project

Water Activity Purpose: Study/Monitoring

County: Multiple counties in the Rio Grande, Colorado, Southwest and Gunnison Basins

Drainage Basin: Rio Grande, Colorado, Southwest, and Gunnison

Water Source: Snow

Amount Requested/Source of Funds:

\$2,500	Rio Grande Basin Account
\$2,500	Colorado Basin Account
\$2,500	Southwest Basin Account
\$2,500	Gunnison Basin Account
\$10,000	Total Basin Account Requests
<u>\$140,000</u>	<u>Statewide Account</u>
\$150,000	Total Grant Request

Matching Funds: Basin Account Match (\$10,000) = 6.7% of total grant request;
Applicant Match
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$2,500 from the Rio Grande Basin Account; \$2,500 from the Colorado Basin Account; \$2,500 from the Gunnison Basin Account; \$2,500 from the Southwest Basin Account; and \$140,000 from the Statewide Account to help fund the Study titled: Colorado Dust-on-Snow Project.

Water Activity Summary: The Center for Snow and Avalanche Studies is an independent not-for-profit organization that operates the Colorado Dust-on-Snow (CODOS) program. Dust on snowpack events advance snowmelt timing, enhance runoff intensity, and decrease snowmelt yields. CODOS is the only organization monitoring dust-on-snow in Colorado in a comprehensive, applied manner on behalf of the water community, providing forecasts of dust-on-snow impacts on snowmelt runoff behavior throughout the state in the form of timely and actionable updates and alerts. If approved, expenditures of grant monies will be provided to:

- Conduct dust-on-snow field campaigns to track the severity and extent of dust events throughout the snow accumulation and ablation period for WY2017, 2018, and 2019;
- Provide timely and applicable updates and alerts to forecasters and the water community;
- Operate long-term snow system study sites in Colorado's San Juan Mountains;

- Manage dust-on-snow and methodological data collection, management, validation, and reporting. Ensuring correct operation of instruments, and maintain data, metadata, and sensor status files;
- Maintain project webpages and data files, graphs, and relevant information;
- Initiate website upgrades to improve access, and support data, graphics, and interpretation platforms;
- Develop visualization and interpretive tools on project webpages for easy dissemination of information, and;
- Provide educational outreach for K-12 schools in Southwest Colorado.

Discussion: This grant is consistent with the next steps for implementation identified by the roundtables, the IBCC, and the CWCB, as well as in Colorado's Water Plan.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRF Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRF Rio Grande Basin Account	\$2,500	n/a	\$2,500
WSRF Colorado Basin Account	\$2,500	n/a	\$2,500
WSRF Southwest Basin Account	\$2,500	n/a	\$2,500
WSRF Gunnison Basin Account	\$2,500	n/a	\$2,500
Total Basin Account Requests	\$10,000	n/a	\$10,000
USGS	\$0	\$21,000	\$21,000
USBOR	\$37,500	\$0	\$37,500
City of Grand Junction	\$7,500	\$0	\$7,500
Colorado River Water Conservation District	\$60,000	\$0	\$60,000
Denver Water	\$18,000	\$0	\$18,000
CWCB	\$75,000	\$0	\$75,000
Dolores Water Conservancy District	\$3,000	\$0	\$3,000
Rio Grande Water Conservancy District	\$15,000	\$0	\$15,000
Southwestern Water Conservation District	\$15,000	\$0	\$15,000
Tri-County Water Conservancy District	\$7,500	\$0	\$7,500
Upper Gunnison River Water Conservancy District	\$22,500	\$0	\$22,500
Subtotal Matching Funds	\$261,000	\$21,000	\$282,000
WSRA Statewide Account	\$140,000	n/a	\$140,000
Total Project Costs	\$411,000	\$21,000	\$432,000

CWCB Project Manager: Joe Busto

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(c)

Applicant & Fiscal Agent: Huerfano County Water Conservancy District

Water Activity Name: Arkansas Roundtable BIP Coordinator - Phase 2

Water Activity Purpose: Educational & Multipurpose

County: All Counties w/in Arkansas Basin

Drainage Basin: Arkansas

Water Source: Arkansas River and all tributaries

Amount Requested/Source of Funds: \$20,267 Arkansas Basin Account
\$40,533 Statewide Account
\$60,800 Total Grant Request

Matching Funds: Basin Account Match (\$20,267) = 33.3% of total grant request;
This is an ABRT initiated BIP effort, as such no matching funds are required.
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$20,267 from the Arkansas Basin Account; and \$40,533 from the Statewide Account to help fund the project titled: Arkansas Roundtable BIP Coordinator - Phase 2.

Water Activity Summary: The Arkansas Basin Roundtable's 2015 Basin Implementation Plan identified over 500 individual needs throughout the basin which were generated from Roundtable members, 17 public meetings around the basin as well as from state and federal agencies. About 300 projects are conceptual or planned and could benefit from regional solutions to regional challenges. Similarly, a wider perspective that integrates environmental and recreational benefits with agricultural and municipal projects offers the potential for multi-benefit projects. A BIP Coordinator has proven to be a position which can proactively bring parties together in support of feasible solutions in order to move identified needs and concepts forward through planning, financing and construction to completion. At the direction of the Arkansas Basin Roundtable Executive Committee the objectives of continuing the BIP Coordinator position are:

Conduct outreach to entities with identified needs but which lack the capacity for project development and/or coordination with state and federal agencies. Bring projects forward on behalf of small or challenged project proponents and regional collaborations.

Identify and coordinate WSRA and non-WSRA funding alternatives for project feasibility, planning, permitting, design and construction.

Maintain and update the Basin Needs Database, identifying opportunities for regional collaboration and multi-purpose projects to address identified and future basin needs.

Recommend projects for phased development to the Arkansas Basin Roundtable Executive Committee for addition to the Major Needs List.

Support the Arkansas Basin Roundtable in the implementation of its Basin Plan by accomplishing designated administrative and non-administrative tasks, and by coordinating with the Arkansas River Watershed Collaborative, the Arkansas River Basin Water Forum, and the PEPO Working Group.

Discussion: This grant is consistent with the next steps for implementation identified by the roundtables, the IBCC, and the CWCB, as well as in Colorado's Water Plan. The coordinator will be focused on small entities within the basin which are unable to develop strategies to address local water resources issues without assistance. The grant will also sustain and increase momentum for meeting the needs of the Arkansas Basin through the roundtable through specific tasks, such as keeping the Needs Database current on the Roundtable website.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Arkansas Basin Account	\$20,267	n/a	\$20,267
WSRA Statewide Account	\$40,533	n/a	\$40,533
Total Project Costs	\$60,800	n/a	\$60,800

CWCB Project Manager (interim): Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(d)

Applicant & Fiscal Agent: St. Charles Mesa Water District

Water Activity Name: Long-term Potable Water Supply to Zinno Subdivision

Water Activity Purpose: Municipal and Industrial

County: Pueblo

Drainage Basin: Arkansas

Water Source: Arkansas River

Amount Requested/Source of Funds: \$25,000 Arkansas Basin Account*
\$50,000 Statewide Account*
\$75,000 Total Grant Request

Matching Funds: Basin Account Match (\$25,000) = 33.3% of total grant request (meets 5% min);
Applicant/3rd Party Match (\$1,088,586) = 1,451% of total grant request (meets 5% min);
Basin Match & Applicant/3rd Party Match (\$1,113,586) = 1,485% of total grant request (meets 25% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends conditional approval of up to \$25,000 from the Arkansas Basin Account; and \$50,000 from the Statewide Account to help fund the project titled: Long-term Potable Water Supply to Zinno Subdivision (contingent upon the resolution of legal issues associated with the water provider transition).

Water Activity Summary: If approved, WSRF funds will be expended to assist the Zinno Water Users Association (ZWUA) in its transition from an inadequate and dilapidated private water supply (Joseph Water Corporation, or JWC) to an established water provider, St. Charles Mesa Water District (SCMWD). There are currently 97 active water taps in the subdivision served by a 43 foot deep well. Power outages, pump failures, and main breaks in the existing water system have caused numerous interruptions in past years. Water quality has also resulted in health and safety risks. The residents of Zinno Subdivision are actively seeking a remedy through an agreement with the SCMWD to include the Zinno Subdivision in its district boundaries and construct new infrastructure to provide continuous, quality, potable water service and stables water rates. The activities funded by this grant include planning efforts for the official inclusion of Zinno Subdivision into SCMWD and construction activities to connect Zinno Subdivision residents to the SCMWD infrastructure. Legal issues related to transition from JWC to SCMWD are currently being resolved.

Discussion: *The front page of the WSRF application has a discrepancy between the basin and statewide request amounts. Staff has confirmed the proper amounts with the applicant as detailed herein.

This project meets the goals and objectives identified in the Arkansas Basin Implementation Plan, specifically the municipal goal to “Support regional infrastructure development for cost-effective solutions to local water supply gaps.” (Section 1, page 15)

This project also aligns with critical actions identified in Colorado’s Water Plan, such as the support of BRT-identified priority projects. Additionally, this project correlates with action items in Section 6.5 related to the maintenance and updating of aging infrastructure.

Issues/Additional Needs: Staff recommends **conditional** approval contingent upon the resolution of legal issues associated with the water provider transition.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRF Application for applicant’s detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Co. Department of Local Affairs Grant	\$569,293	\$0	\$569,293
Co. Water Resources & Power Development Authority Loan	\$269,343	\$0	\$269,343
CWCB Water Efficiency Grant	\$49,950	\$0	\$49,950
Pueblo County	\$200,000	\$0	\$200,000
Subtotal Matching Funds	\$1,088,586	\$0	\$1,088,586
WSRF Arkansas Basin Account	\$25,000	n/a	\$25,000
WSRF Statewide Account	\$50,000	n/a	\$50,000
Total Project Costs	\$1,163,586	n/a	\$163,586

CWCB Project Manager: Derek Johnson

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 WSRF 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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
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Applicant & Fiscal Agent: Fountain Creek Watershed Flood Control and Greenway District

Water Activity Name: Feasibility Study of Flood Control Alternatives for Fountain Creek

Water Activity Purpose: Multipurpose

County: El Paso & Pueblo

Drainage Basin: Fountain Creek

Water Source: Fountain Creek

Amount Requested/Source of Funds: \$21,200 Arkansas Basin Account
\$72,100 Statewide Account
\$93,300 Total Grant Request

Matching Funds: Basin Account Match (\$21,200) = 22.7% of total grant request;
Applicant Match (\$40,000) = 43% of Total Grant Request (meets 5% min);
Basin & Applicant Match (\$61,200) = 65.6% of Total Grant Request (meets 25% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$21,200 from the Arkansas Basin Account; and \$72,100 from the Statewide Account to help fund the project titled: Feasibility Study of Flood Control Alternatives for Fountain Creek.

Water Activity Summary: WSRF Grant funds, if approved, will be expended to assist the District with evaluating the feasibility of flood and sediment control facilities along Fountain Creek in El Paso and Pueblo Counties. Historically, lower Fountain Creek has experienced major flood events that have threatened agricultural lands and communities along the creek, with the City of Pueblo suffering serious damage as recently as September 2016. This project executes Phase 2 of the Needs Assessment, to select a preferred alternative and set the stage for the execution of remaining phases of the process leading to construction of flood control facilities (or multi-use facilities) along the reach between Colorado Springs and the Fountain Creek confluence with the Arkansas River. This phase has four components:

- Assemble and summarize previous design information and costs estimates for projects similar to candidate alternatives including the development of a fatal flaw analysis of costs associated with the operation of the analyzed alternatives;
- Identify implementation issues for the candidate alternatives;
- Prepare graphics or animation to visualize the effects on implementation of candidates;

- Identify and evaluate any potential opportunities for the use of the candidate alternatives to assist in meeting consumptive and non-consumptive needs, including preliminary fatal flaws associated with such uses;
- Compare the candidate alternatives conceptually and analytically using existing information;
- Formulate and analyze options or combinations of options to form feasible alternatives that meet project objectives leading to the selection of a preferred alternative.

Discussion: This project furthers multiple goals and objectives of the Arkansas Basin Implementation Plan. With respect to Colorado’s Water Plan, this project supports Objective E. Storage: “Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs”, and multiple attributes of Objective F. Watershed Health, Environment and Recreation.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant’s detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Fountain Creek Watershed Flood Control and Greenway District	\$40,000	\$0	\$40,000
WSRA Arkansas Basin Account	\$21,200	n/a	\$21,200
WSRA Statewide Account	\$72,100	n/a	\$71,200
Total Project Costs	\$133,300	\$0	\$133,300

CWCB Project Manager: Kevin Houck

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(f)

Applicant & Fiscal Agent: Fort Lyon Canal Company

Water Activity Name: Adobe Creek Dam Seepage Evaluation

Water Activity Purpose: Implementation

County: Kiowa and Bent

Drainage Basin: Arkansas

Water Source: Arkansas River

Amount Requested/Source of Funds: \$5,000 Arkansas Basin Account
\$45,000 Statewide Account
\$50,000 Total Grant Request

Matching Funds: Basin Account Match (\$5,000) = 10% of total grant request;
Applicant Match (\$10,000) = 43% of Total Grant Request
(meets 5% min);
Basin & Applicant Match (\$15,000) = 30% of Total Grant
Request (meets 25% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$5,000 from the Arkansas Basin Account; and \$45,000 from the Statewide Account to help fund the project titled: Adobe Creek Dam Seepage Evaluation.

Water Activity Summary: WSRF Grant funds, if approved, will be expended to assist the Fort Lyons Canal Company to perform subsurface and engineering evaluations to determine the extent of dam and outlet work rehabilitation necessary for safe water storage impoundment behind the Adobe Creek Dam. Uncontrolled seepage and the potential for initial stages of piping failure were recently observed by the Division 2 Dam Safety Engineer in the area downstream of the dam toe. Numerous temporary repairs to the area have been made over the years, and additional temporary repairs were made to the dam in March 2016 with the goal of keeping the dam operational without storage restrictions through the 2016 water year.

Discussion: This project furthers multiple goals and objectives of the Arkansas Basin Implementation Plan. With respect to the Colorado Water Plan, this project supports Objective A. Supply-Demand Gap: "Protect and Develop Compact Entitlements and Manage Risks," Objective D. Agriculture: "Support Agricultural Conservation and Efficiency," Objective E. Storage: "Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs," and Objective F. Watershed Health, Environment and Recreation: "Protect healthy environments" (Section I 0.3). With respect to the last objective, Adobe Creek Reservoir is a nesting area for the Least Term.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Fort Lyon Canal Company	\$10,000	\$0	\$10,000
WSRA Arkansas Basin Account	\$5,000	n/a	\$5,000
WSRA Statewide Account	\$45,000	n/a	\$45,000
Total Project Costs	\$60,000	n/a	\$60,000

CWCB Project Manager: Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(g)

Co-Applicants & Fiscal Agent: Lower Arkansas Valley Water Conservancy District & Fort Lyons Rule 10 Association.

Fiscal Agent: Lower Arkansas Valley Water Conservancy District

Water Activity Name: Phase 2 of Tailwater Return Flow Study of Fort Lyon Canal

Water Activity Purpose: Agricultural

County: Bent

Drainage Basin: Arkansas

Water Source: Arkansas River

Amount Requested/Source of Funds: \$26,000 Arkansas Basin Account*
\$148,796 Statewide Account*
\$174,796 Total Grant Request
* The Roundtable Chair Recommendation Letter indicating \$36,000 request from the Arkansas Basin Account; and \$138,796 request from the Statewide Account are incorrect, while the values in the Application are correct and are reflected above.

Matching Funds: Basin Account Match (\$26,000) = 15% of total grant request;
Applicant Match (\$75,000) = 43% of Total Grant Request (meets 5% min);
Basin & Applicant Match (\$101,000) = 57.8% of Total Grant Request (meets 25% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$26,000 from the Arkansas Basin Account; and \$148,796 from the Statewide Account to help fund the project titled: Phase 2 of Tailwater Return Flow Study of Fort Lyon Canal.

Water Activity Summary: If approved, WSRF grant funds will constitute additional funding to continue a study currently underway pursuant to a Water Supply Reserve Account grant originally titled: *FIRI Analysis and Tailwater Return Flow Study on Fort Lyon Canal Project*. The overarching goal of the Project is to conduct an investigation and collect data to determine whether adjustment to the assumed tailwater factor and irrigation efficiency factor for flood irrigation in the H-I Model and Irrigation System Analysis Model (ISAM) is warranted to more accurately reflect actual conditions, as both of these inputs are considered overly conservative.

The first phase of the Project determined that given the extensive size of the Fort Lyon Canal and the amount of data needed to support potential adjustments to the H-I Model and the ISAM, the Project should be pursued in a phased approach. Phase One of the Project is yielding promising results – showing that the tailwater assumption contained in the H-I Model and ISAM does appear to be overly conservative. However, additional study and data are required before the results are sufficiently persuasive to support a potential State of Colorado request to Kansas for a modification of the irrigation efficiency factor and tailwater factor assumptions in the H-I Model and ISAM. Therefore, Lower Ark seeks funding for a second phase of the Project that will (1) allow for continued site monitoring and data collection on actual amounts of tailwater occurring from flood irrigated farms and (2) to begin on-farm measurement and data collection to analyze irrigation efficiency.

Discussion: This project furthers multiple goals and objectives of the Arkansas Basin Implementation Plan. With respect to the Colorado Water Plan, this project supports Objective A Supply-Demand Gap: "Protect and Develop Compact Entitlements and Manage Risks," Objective D. Agriculture: "Support Agricultural Conservation and Efficiency," (Section 10.3).

Of particular note are the benefits which may derive from this project's alignment with Objective H. Education, Outreach and Innovation: Inform Coloradans about water issues to encourage engagement and innovation in determining Colorado's water future." By assessing return flow patterns in the field, as agriculture becomes more efficient, this project may benefit Colorado's future water use with respect to both agricultural efficiency and water quality.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Lower Arkansas Valley Water Conservancy District	\$75,000	\$0	\$75,000
WSRA Arkansas Basin Account	\$26,000	n/a	\$26,000
WSRA Statewide Account	\$148,796	n/a	\$148,796
Total Project Costs	\$249,796	\$0	\$249,796

CWCB's Project Manager: Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(h)

Applicant & Fiscal Agent: Upper Arkansas Water Conservancy District

Water Activity Name: Groundwater and Surface Water Interactions and Potential for Underground Storage

Water Activity Purpose: Study (Multipurpose Water Balance)

County: All Counties w/in Arkansas Basin

Drainage Basin: Arkansas

Water Source: Arkansas River and all tributaries

Amount Requested/Source of Funds: \$50,000 Arkansas Basin Account
\$256,618 Statewide Account
\$306,618 Total Grant Request

Matching Funds: Basin Account Match (\$50,000) = 16.3% of total grant request;
Applicant/3rd Party Match (\$360,442) = 118% of Total Grant Request (meets 5% min);
Basin & Applicant/3rd Party Match (\$101,000) = 134% of Total Grant Request (meets 25% min).
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$50,000 from the Arkansas Basin Account; and \$256,618 from the Statewide Account to help fund the project titled: Groundwater and Surface Water Interactions and Potential for Underground Storage.

Water Activity Summary: WSRF grant funds, if approved will be expended to assist the Upper Arkansas Water Conservancy District in conducting the Groundwater and Surface-Water Interaction and Potential for Underground Water Storage study that will address the ‘gap’ through the evaluation of the available supply of water and the water balance of the Upper Arkansas Basin. This study will provide the tools necessary to manage future water supplies and will offer insight on the potential for alluvial aquifer storage, and create a mechanism for evaluating and implementing efficient irrigation practices. This study will quantify surface-water and groundwater, including recharge rates, and characterize the interactions between them in order to estimate the availability and sustainability of water resources and the effects that changes in water use or climate might have on water supplies. Agriculture represents the largest user group in the upper basin and agricultural water management will be evaluated through field-scale irrigation management data collection to create an agricultural water balance. Study results will meet both Basin and State needs for consumptive and non-consumptive use. Study results can be used for both water and land use planning and will provide important data for future water management and storage options. This study will provide data for

multiple purposes through a collaborative approach to meet future water challenges and addresses all measurable objectives identified in Colorado's Water Plan.

Discussion: This project furthers multiple goals and objectives of the Arkansas Basin Implementation Plan. With respect to the Colorado Water Plan, this project supports Objective A. Supply-Demand Gap: "Meet Colorado's Water Supply Gaps" Objective D. Agriculture: "Support Agricultural Conservation and Efficiency," Objective E. Storage: "Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs," and Objective F. Watershed Health, Environment and Recreation: "Protect healthy environments" (Section 10.3).

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Upper Arkansas Water Conservancy District	\$43,639	\$25,000	\$68,639
Chaffee County & Municipalities	\$30,000	\$0	\$30,000
Fremont Counties & Municipalities	\$30,000	\$0	\$30,000
Custer County & Municipalities	\$10,000	\$0	\$10,000
USGS	\$192,300	\$0	\$192,300
CSU Pueblo	\$29,503	\$0	\$29,503
Subtotal Matching Funds	\$335,442	\$25,000	\$360,442
WSRA Arkansas Basin Account	\$50,000	n/a	\$50,000
WSRA Statewide Account	\$256,618	n/a	\$256,618
Total Project Costs	\$642,060	\$25,000	\$667,056

CWCB Project Manager: Andy Moore

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
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Applicant & Fiscal Agent: Holbrook Mutual Irrigation Company

Water Activity Name: Holbrook Reservoir #1 Outlet Flow Measurement Upgrade, Phase I

Water Activity Purpose: Multipurpose

County: Otero

Drainage Basin: Arkansas

Water Source: Arkansas River

Amount Requested/Source of Funds: \$10,000 Arkansas Basin Account
\$20,000 Statewide Account
\$30,000 Total Grant Request

Matching Funds: Basin Account Match (\$10,000) = 33.3% of total grant request;
Applicant Match (\$10,500) = 35% of total grant request
Basin & Applicant Match (\$20,500) = 68.3% of total grant request
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$10,000 from the Arkansas Basin Account; and \$20,000 from the Statewide Account to help fund the project titled: Holbrook Reservoir #1 Outlet Flow Measurement Upgrade, Phase 1.

Water Activity Summary: WSRF grant funds, if approved, will be expended to assist in the rehabilitation and replacement of existing measuring structures and devices, and the outlet structure. Rehabilitation of the outlet structure will allow measurement under low flow conditions that will enhance the ability of the State Engineer to comply with compact compliance obligations. Improvements include the installation of 2 stage broad crested weir upstream of the existing Parshall flume.

Discussion: This project furthers multiple goals and objectives of the Arkansas Basin Implementation Plan. With respect to the Colorado Water Plan, this project supports Objective A. Supply-Demand Gap: "Protect and Develop Compact Entitlements and Manage Risks," Objective D. Agriculture: "Support Agricultural Conservation and Efficiency" and Objective E. Storage: "Assess and promote opportunities for multipurpose and multi-partner storage projects that address strategic needs." (Section 10.3).

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Holbrook Mutual Irrigation Company	\$0	\$2,000	\$2,000
Recovery of Yield Group	\$0	\$8,150	\$8,150
WSRA Arkansas Basin Account	\$10,000	n/a	\$10,000
WSRA Statewide Account	\$20,000	n/a	\$20,000
Total Project Costs	\$30,000	\$10,150	\$40,150

CWCB Project Manager (interim): Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
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Applicant & Fiscal Agent: Trout Unlimited

Water Activity Name: Ware and Hinds Fish Passage Project

Water Activity Purpose: Nonconsumptive

County: Garfield

Drainage Basin: Colorado

Water Source: Elk Creek

Amount Requested/Source of Funds: \$31,750 Colorado Basin Account
\$31,750 Statewide Account
\$63,500 Total Grant Request

Matching Funds: Basin Account Match (\$31,750) = 33.3% of total grant request (meets 5% min);
Applicant/3rd Party Match (\$102,930) = 162% of total grant request (meets 5% min);
Basin Account & Applicant/3rd Party Match (\$134,680) = 212% of total grant request (meets 25% min);
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$31,750 from the Arkansas Basin Account; and \$31,750 from the Statewide Account to help fund the project titled: Ware and Hinds Fish Passage Project.

Water Activity Summary: WSRF grant funds, if approved would be expended to assist with the construction of a fish bypass channel around the Ware and Hinds Ditch diversion dam, enabling migrating trout and native fishes to access 3.3 miles of excellent spawning and rearing habitat upstream of the dam, habitat which is currently under-utilized. The Ware and Hinds Ditch diversion dam spans the entire width of Elk Creek. The ditch has some of the most senior water rights on the creek and provides irrigation water to agricultural producers along the north side of the Colorado River from New Castle to Silt, Colorado. While the diversion structure creates a barrier to upstream fish migration, its location just upstream from the main-stem Colorado River and its senior water rights also provide an opportunity to restore fish populations of the Elk Creek drainage and the Colorado River, without negative impacts to agricultural producers or their water rights.

Discussion: The proposed improvement to the Ware and Hind diversion structure, which has the full support of water users under the ditch, will improve trout habitat, trout populations and their resiliency in Elk Creek as well as in the Colorado River. The restoration activities are expected to increase populations of trout in the future. This improvement is directly in line with the primary theme identified by the Colorado Basin Implementation Plan, which is Ecosystem Health: Protect and restore streams, rivers, lakes and riparian areas. Further, this project will serve as a model project

for other diversions in the basin and elsewhere that impact fish. This project is borne out of a collaborative effort that has received the blessings of over 60 water users serviced by the Ware and Hinds Ditch. Collaboration over conflict is not only a common thread identified in the Colorado Water Plan, but it is also an identified foundation for future projects. This project will further meet stated goals of Colorado's Water Plan by modifying irrigation infrastructure to meet the needs of more than one water user, or water use.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CPW	\$78,500	\$19,550	\$98,050
Trout Unlimited	\$4,880	\$0	\$4,880
Subtotal Matching Funds	\$83,380	\$19,550	\$102,930
WSRA Colorado Basin Account	\$31,750	n/a	\$31,750
WSRA Statewide Account	\$31,750	n/a	\$31,750
Total Project Costs	\$146,880	\$19,550	\$166,430

CWCB Project Manager (interim): Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(k)

Applicant & Fiscal Agent: Fire Mountain Canal and Reservoir Company

Water Activity Name: Fire Mountain Canal Piping Project

Water Activity Purpose: Agricultural & Nonconsumptive

County: Gunnison & Delta

Drainage Basin: Gunnison

Water Source: North Fork of the Gunnison & Leroux Creek

Amount Requested/Source of Funds: \$60,000 Gunnison Basin Account
\$60,000 Statewide Account
\$120,000 Total Grant Request

Matching Funds: Basin Account Match (\$60,000) = 50% of total grant request (meets 5% min);
Applicant Match (\$30,000) = 25% of total grant request (meets 5% min);
Basin & Applicant Match (\$90,000) = 75% of total grant request (meets 25% min);
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:
Staff recommends approval of up to \$60,000 from the Gunnison Basin Account; and \$60,000 from the Statewide Account to help fund the project titled: Fire Mountain Canal Piping Project.

Water Activity Summary: The 33 mile long Fire Mountain Canal diverts water from the North Fork of the Gunnison supplied by both early season stream flow and later season releases from Paonia Reservoir, as well as Leroux Creek. Total annual diversions into the Fire Mountain Canal average approximately 37,000 AF. Nearly 60% of this water is delivered to users on the last 3.5 miles of the canal on Rogers Mesa, west of Leroux Creek. This project plans to replace 19,220 linear feet of the existing earthen Fire Mountain Canal with a pipeline from just east of the existing diversion at Leroux Creek to the end of the main canal. The project includes replacing the existing siphon under Leroux Creek, and construction of a screening and inlet structure. If approved, WSRF grant funds will be used exclusively to construct the screening and pipe inlet structure, other funding sources will finance the remainder of this project. The objectives of the project are to reduce seepage losses, reduce maintenance, eliminate salinity and selenium contributions to the Colorado River, potentially extend the irrigation season, and enable improved management of the system. Meeting these objectives will support the continued use of these water rights for agricultural purposes, as well as contribute to improvement of water quality in the North Fork of the Gunnison and Colorado Rivers.

Discussion: This project supports the following goals identified in the Gunnison Basin Implementation Plan:

1. Protects existing water uses in the Gunnison Basin;
2. Discourages conversion of productive agricultural land to other uses;
3. Improves ag water supplies to reduce shortages;
6. Improves water quality;
7. Describe and encourage the beneficial relationship between agricultural, environmental and recreational water uses;
8. Restores, maintains and modernizes critical water infrastructure.

This project is also a portion of the Fire Mountain Canal Delivery and Efficiency Project (Ref. No.5, Table 7- Tier 1 Proposed Basin Projects, Gunnison Basin Implementation Plan). The Gunnison BIP identifies this project as one that does an excellent job of meeting the Basin Goals.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Fire Mountain Canal Company	\$30,000	\$0	\$30,000
WSRA Gunnison Basin Account	\$60,000	n/a	\$60,000
WSRA Statewide Account	\$60,000	n/a	\$60,000
Total Project Costs	\$150,000	\$0	\$150,000

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
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Applicant & Fiscal Agent: Orchard Ranch Ditch Company

Water Activity Name: Orchard Ranch Ditch Company Pipe Project

Water Activity Purpose: Agricultural & Nonconsumptive/Implementation

County: Delta

Drainage Basin: Gunnison

Water Source: Surface Creek

Amount Requested/Source of Funds: \$25,000 Gunnison Basin Account
\$25,000 Statewide Account
\$50,000 Total Grant Request

Matching Funds: Basin Account Match (\$25,000) = 50% of total grant request (meets 5% min);
Applicant/3rd Party Match (\$1,380,721) = 2,761% of total grant request (meets 5% min);
Basin & Applicant/3rd Party Match (\$1,405,721) = 2,811% of total grant request (meets 25% min);.
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Gunnison Basin Account; and \$25,000 from the Statewide Account to help fund the project titled: Orchard Ranch Ditch Company Pipe Project.

Water Activity Summary: The ORDC project entails changing 10,800 feet of main canal and laterals to a pressurized pipe delivery system for irrigation water owned by the stockholders. The project included all aspects of feasibility, engineering design, construction and wildlife habitat replacement. The main objective of the project will be to eliminate water loss, due to seepage lessening liability issues encountered with an open ditch and eliminating salt load of approximately 1,000 tons per year from the Gunnison River. It will also decrease the amount of selenium entering the river. The company has qualified for a US Bureau of Reclamation grant. The turnouts from the pipe will be designed to deliver water at pressures suitable for furrow irrigation and to be convertible to deliver water under pressure as farmers convert to sprinkler irrigation. Water will be measured using meters and flumes.

Discussion: This project has been identified in the Gunnison Basin Implementation Plan and has been ranked as a #3 priority for ditches in the Surface Creek area with a Tier 1 rating.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRa Application for applicant's detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
USBOR	\$1,280,721	\$0	\$1,280,721
Orchard Ranch Dutch Company (Exist CWCB Loan)	\$100,000	\$0	\$100,000
Subtotal Matching Funds	\$1,380,721	\$0	\$1,380,721
WSRA Gunnison Basin Account	\$25,000	n/a	\$25,000
WSRA Statewide Account	\$25,000	n/a	\$25,000
Total Project Costs	\$1,430,721	\$0	\$1,430,721

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(m)

Applicant & Fiscal Agent: Trout Unlimited

Water Activity Name: San Luis Valley Wetland Wildlife Conservation Assessment

Water Activity Purpose: Needs Assessment

County: All within the San Luis Valley

Water Source: Rio Grande & tributaries

Amount Requested/Source of Funds: \$39,000 Rio Grande Basin Account

Matching Funds: Applicant/3rd Party Match: \$45,000 = 53% of the total project cash amount of \$84,000
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$39,000 from the Rio Grande Basin Account to help fund the project titled: San Luis Valley Wetland Wildlife Conservation Assessment.

Water Activity Summary: This project addresses multiple goals including needs assessment and non-consumptive purposes. Task1 (Assessment – see Exhibit A) will provide natural resource agencies with a framework to determine how limited water resources (non-consumptive uses) may be more efficiently and effectively utilized (within adjudication) on public lands by agencies and organizations. A compilation of historic and current information related to wetland extent, water use, and wildlife use does not currently exist and will be a key component for setting future conservation goals among agencies. This information also will help land trusts and other entities with willing landowners seeking conservation easements to more accurately determine priorities and conservation values.

Objectives

- Assess historic versus current wetland/riparian and land use changes since the 1870s.
- Identify priority species and their limiting resources across natural resource agencies.
- Identify surface and groundwater resources for each land management agency.
- Develop conservation goals and objectives along with a framework for future cooperative efforts to manage and monitor water and habitats on public lands across the SLV.
- Develop priority habitat conservation goals and potential water and wetland infrastructure projects.

Discussion: The Assessment and prioritized project will meet the following Rio Grande Basin Implementation Plan Goals (RGBIP):

1. Protect, preserve, and/or restore the sustainability of the Rio Grande Basin watersheds by focusing on watershed health and ecosystem function.

2. Protect and preserve the doctrine of prior appropriation and vested water rights, and fully utilize Colorado's compact entitlements as specified under the Rio Grande and Costilla Creek Compacts.
3. Sustain the confined and unconfined aquifers in accordance with Senate Bill 04-222 and operate within the State Engineer's new Rules and Regulations for the SLV.
4. Operate, maintain, rehabilitate, and create necessary infrastructure to meet the Basin's long-term water needs, including storage.
6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.
10. Promote water management and administrative practices that are adaptive, flexible, and responsive to optimize multiple benefits.
11. Protect, preserve, and enhance terrestrial and aquatic wildlife habitats throughout the basin.
12. Conserve restore, and maintain wetlands and riparian areas for the benefit of a healthy watershed.
13. Work to sustain active river flows throughout the year in cooperation with water users and administrators to restore and sustain ecological function of the rivers and floodplain habitats within the context of exciting water rights and compact obligations.
14. Maintain and enhance water dependent recreational activities.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
SLV Conservation Connection Initiative	\$42,000	\$0	\$42,000
Bird Conservancy of the Rockies	\$3,000	\$0	\$3,000
CPW, BLM, USFWS, NRCS, NPS	\$0	\$144,000	\$144,000
Subtotal Matching Funds	\$45,000	\$144,000	\$189,000
WSRA Rio Grande Basin Account	\$39,000	n/a	\$39,000
Total Project Costs	\$84,000	\$144,000	\$228,000

CWCB Project Manager: Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
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Applicant & Fiscal Agent: Crosby Creek Ranch
Water Activity Name: Stambaugh Reservoir Outlet Repair
Water Activity Purpose: Agricultural
County: Jackson
Drainage Basin: North Platte
Water Source: Unknown
Amount Requested/Source of Funds: \$29,200 North Platte Basin Account
Matching Funds: n/a

Staff Recommendation:

Staff recommends approval of up to \$29,200 from the North Platte Basin Account to help fund the project titled: Stambaugh Reservoir Outlet Repair.

Water Activity Summary: WSRA funds, if approved, will enable the rehabilitation of a deteriorating corrugated steel outlet pipe from Stambaugh Reservoir. The rehabilitation effort will include engineering design and lining the existing pipe. This latest effort is a continuation of earlier improvements that included the replacement of the headgate in 2015.

Discussion: The NPBRT has identified the development of the full allocation of irrigated acreage in the basin allowable under the Equitable Apportionment Decree and the Three States Agreement as a very high priority consumptive need. The Roundtable's Basin Implantation Plan also has a goal to restore, maintain, and modernize critical water infrastructure to preserve current uses and increase efficiencies. This project will address both goals by helping to preserve the infrastructure that provides critical water for irrigated lands on the Crosby Creek Ranch.

Issues/Additional Needs: Staff will work with applicant to update statement of work, budget and schedule to comply with contracting requirements.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRF North Platte Basin Account	\$29,200	n/a	\$29,200
Total Project Costs	\$29,200	\$0	\$29,200

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
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Applicant & Fiscal Agent: La Plata Water Conservancy District

Water Activity Name: Joseph Freed & Red Mesa Headgate and Ditch Improvement Project

Water Activity Purpose: Agricultural Project Implementation

County: La Plata

Drainage Basin: Southwest

Water Source: Unknown

Amount Requested/Source of Funds: \$55,000 Southwest Basin Account

Matching Funds: Applicant Match: \$16,552 = 23% of the total project cost of \$71,552
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$55,000 from the Southwest Basin Account to help fund the project titled: Joseph Freed & Red Mesa Headgate and Ditch Improvement Project.

Water Activity Summary: If approved, WSRF grant funding will be employed to assist in the lining of the Joseph Freed Ditch. The Joseph Freed and Red Mesa Supply Ditches are two ditches within the La Plata River Basin. These earthen ditches have been estimated to lose as much as 40 percent of conveyed water due to seepage through the cobble and gravel soils. The La Plata Water Conservation District proposes lining one section in each of these ditches where seepage losses are particularly high. The ditches will be lined with soil amendments (bentonite and lime) that will be mixed with the existing clay soils on the ditch bottom and sides.

Discussion: The proposed work is on the list of identified projects and processes (IPP) for the La Plata River (LPR) Basin, outlined in the Southwest Basin Roundtable Basin Implementation Plan (IPP ID 15-LaP and ID 4-LaP). The IPPs include La Plata River ditch lining projects that would increase efficiency of Compact deliveries and work that will complement the existing infrastructure to conserve water used for irrigation and domestic augmentation needs.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
La Plata Water Conservancy District	\$16,552	\$0	\$16,552
WSRA Southwest Basin Account	\$55,000	n/a	\$55,000
Total Project Costs	\$71,552	\$0	\$71,552

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
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Applicant & Fiscal Agent: Spring Creek Extension Ditch Company
Water Activity Name: Spring Creek Ditch Siphon Replacement
Water Activity Purpose: Agricultural/Implementation
County: La Plata
Drainage Basin: Southwest
Water Source: Pine River
Amount Requested/Source of Funds: \$29,000 Southwest Basin Account
Matching Funds: Applicant/3rd Party Match: \$37,000 = 56% of the total project cost of \$66,000
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$29,000 from the Southwest Basin Account to help fund the project titled: Spring Creek Ditch Siphon Replacement.

Water Activity Summary: WSRF grant funds, if approved will be expended to assist in the replacement of an existing siphon that carries the East lateral of the spring Creek Ditch under Pine Valley Canal. The existing inverted siphon is a concrete pipe that is approximately 75 years old and has deteriorated to a point that failure is likely. Failure of the existing siphon would interrupt irrigation supplies to approximately 1,200 acres of land. Replacement will consist of installing approximately 285 lineal feet of buried steel or plastic pipe crossing under the Pine Valley Canal. A new outlet structure will be constructed just upstream of the existing inlet. The new pipe will be connected to the existing outlet with riprap placed in the canal downstream of the outlet to reduce erosion. A trash rack will be installed on the inlet structure to prevent debris from plugging the siphon, and the existing pipe will be plugged with concrete to prevent infiltration of soil into the existing pipe.

Discussion: This project has been identified as an IPP in the Southwest Basin Implementation Plan (SWBIP) as IPP ID 4-MB. The project meets a Measurable Goal and Outcome for the SWBIP to *Maintain Agricultural Water Needs*.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Spring Creek Extension Ditch Company	\$8,000	\$0	\$8,000
Southwestern Water Conservation District	\$29,000	\$0	\$29,000
Subtotal Matching Funds	\$37,000	\$0	\$37,000
WSRA Southwest Basin Account	\$29,000	n/a	\$29,000
Total Project Costs	\$66,000	\$0	\$66,000

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
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Applicant & Fiscal Agent: King Consolidated Ditch Company
Water Activity Name: Automated Gauging Station with Satellite Telemetry
Water Activity Purpose: Agricultural/Implementation
County: La Plata
Drainage Basin: Southwest
Water Source: Unknown
Amount Requested/Source of Funds: \$12,100 Southwest Basin Account
Matching Funds: Applicant Match: \$5,000 = 29% of the total project cost of \$17,100.
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$12,100 from the Southwest Basin Account to help fund the project titled: Automated Gauging Station with Satellite Telemetry.

Water Activity Summary: WSRF grant funds, if approved will assist in the installation of two automated gauging stations with wireless satellite telemetry. One station will be located at the Martin Lateral and the other at the end of the ditch. Both stations will include associated housing and wells. There are no current gauging stations on any structure in the King Ditch. The wireless units will be used to monitor and regulate appropriate levels of irrigation water. This will ensure efficiency and save labor by allowing the King Consolidated Ditch Company to monitor these locations remotely and adjust the flow of water as needed to eliminate waste.

Discussion: This project is covered under IPP ID 4-MB of the Southwest Basin Implementation Plan (SWBIP). The project also meets a Measurable Goal and Outcome for the SWBIP to *Maintain Agricultural Water Needs*.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Morrison Consolidated Ditch Company	\$5,000	\$0	\$5,000
WSRA Southwest Basin Account	\$12,100	n/a	\$12,100
Total Project Costs	\$17,100	\$0	\$17,100

CWCB Project Manager: Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
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Applicant & Fiscal Agent: The Nature Conservancy

Water Activity Name: Wines Ditch Diversion Evaluation

Water Activity Purpose: Agricultural/Study

County: Mesa

Drainage Basin: Southwest

Water Source: Dolores River

Amount Requested/Source of Funds: \$40,000 Southwest Basin Account
\$25,000 Statewide Account
\$65,000 Total Grant Request

Matching Funds: Basin Account Match (\$40,000) = 61.5% of total grant request (meets 5% min);
Applicant/3rd Party Match (\$53,037) = 81.6% of total grant request (meets 5% min);
Basin & Applicant/3rd Party Match (\$93,037) = 143.1% of total grant request (meets 25% min)
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$40,000 from the Southwest Basin Account; and \$25,000 from the Statewide Account to help fund the project titled: Wines Ditch Diversion Evaluation.

Water Activity Summary: WSRF grant funds, if approved, will assist in a study to evaluate the preliminary design, alternatives analysis, and construction costs opinions for the reconstruction and improvements on the Wines Ditch No.1 Diversion Structure and conveyance located on the Dolores River. The study will address multiple consumptive and non-consumptive water interest, including water delivery improvement, sensitive species protection and enhancement, channel stabilization, and recreation improvements. The Wines Ditch No 1 Diversion Structure is located on BLM land and is operated and maintained by Western Sky Investments under a pre-FLPMA authorization.

The work will include topographic, hydraulic, and economic analysis, along with a fishery and riparian habitat evaluation. The project will entail coordination with multiple agencies including applicant The Nature Conservancy (TNC), US Army Corps of Engineers (USACE), Colorado Parks and Wildlife (CPW), American Whitewater (AW), Western Sky Investments, and the Bureau of Land Management (BLM). The project will result in the preliminary design and evaluation of several alternative schematics.

Discussion: The proposed project will meet several goals and measureable outcomes identified in the Basin Implementation Plan.

- “Balance All Needs and Reduce Conflict”: this project will meet several goals and measurable outcomes under this theme because it is a multi-stakeholder, multi-purpose project that promotes dialogue, fosters cooperation, and resolves conflict.
- “Maintain Agricultural Water Needs”: this project will meet several goals and measurable outcomes under this theme because it improves agricultural water delivery of a pre-Compact water right (preserving agricultural and open space values) while helping to address environmental and recreational values.
- “Meet Recreational Water Needs”: this project will meet goals and measurable outcomes because it will enhance and protect recreational values.
- “Meet Environmental Water Needs”: this project will meet several goals and measurable outcomes because it will protect and enhance three sensitive aquatic species (roundtail chub, bluehead sucker, and flannelmouth sucker) in the Dolores and San Miguel Rivers and because it will diminish the impact of the diversion structure on the up-stream and downstream riparian habitat.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria:

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant’s detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CPW	\$0	\$7,400	\$0
The Nature Conservancy	\$20,000	\$10,637	\$30,637
American Whitewater	\$5,000	\$5,000	\$10,000
Western Sky Investments	\$0	\$5,000	\$5,000
Subtotal Matching Funds	\$25,000	\$28,037	\$53,037
WSRA Southwest Basin Account	\$40,000	n/a	\$40,000
WSRA Statewide Account	\$25,000	n/a	\$25,000
Total Project Costs	\$90,000	\$28,037	\$118,037

CWCB Project Manager (interim): Craig Godbout

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
September 21-22, 2016
Agenda Item 19(s)

Applicant & Fiscal Agent: Sullivan Ditch Company
Water Activity Name: Sullivan Ditch Repair Project
Water Activity Purpose: Agricultural
County: La Plata
Drainage Basin: Southwest
Water Source: Pine River
Amount Requested/Source of Funds: \$27,298 Southwest Basin Account
Matching Funds: Applicant/3rd Party Match: \$27,298 = 50% of the total project cost of \$54,596
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$27,298 from the Southwest Basin Account to help fund the project titled: Sullivan Ditch Repair Project.

Water Activity Summary: WSRF grant funds, if approved, will assist in the rehabilitation of two sections of existing earthen ditch (North Section: 300 feet and South Section: 125 feet) along Sullivan Ditch that traverses steep cliff areas that are positioned above the Pine River. With the recent failure of the Thompson-Epperson Ditch which is adjacent to the Sullivan Ditch, ditch representatives hope to avoid the same type failure on the Sullivan Ditch by taking preemptive action. Rehabilitation will consist of replacing the existing ditch in two places with 3 foot diameter ADS pipe. Inspectors determined that these areas of existing ditch along the cliff present problems because of soil compaction and the proximity of the ditch to the cliff. If the ditch fails in either of the two specified sections, the side of the ditch could fall directly into the Pine River. If this were to occur, the river might be blocked and repairs would be extremely difficult and expensive.

Discussion: This project falls under IPP ID 4-MB (Ditch Company Improvement and Efficiency Projects) of the Southwest Basin Implementation Plan (SWBIP). The project also meets a Measurable Goal and Outcome of the SWBIP: Goal B - Meeting Agricultural Needs.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Southwestern Water Conservation District	\$27,298	\$0	\$27,298
WSRA Southwest Basin Account	\$27,298	n/a	\$27,298
Total Project Costs	\$54,596	\$0	\$54,596

CWCB Project Manager: Finance Section

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Request for Change of Fiscal Agent
September 21-22, 2016
Agenda Item 19(t)

Current Applicant & Fiscal Agent: Purgatoire River Water Conservancy District

Proposed Fiscal Agent: Huerfano County Water Conservancy District

Water Activity Name: Ditch Infrastructure Repair Project

Water Activity Purpose: Agricultural

County: Las Animas

Drainage Basin: Arkansas

Water Source: Purgatoire River

Amount Requested/Source of Funds: \$30,000 Arkansas Basin Account
\$60,000 Statewide Account
\$90,000 Total Grant Request

Matching Funds: Basin Account Match (\$30,000) = 33% of total grant request (meets 5% min);
Applicant/3rd Party Match (\$132,500) = 147% of total grant request (meets 25% min);
Basin Account & Applicant Match (\$162,500) = 180% of total grant amount
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of in Change of Fiscal Agent from Purgatoire River Water Conservancy District to the Huerfano County Water Conservancy District for the project titled: Ditch Infrastructure Repair Project.

Water Activity Summary: WSRA funds, if approved, will be expended to perform critical repairs needed throughout the irrigation system downstream from Trinidad Dam. Each of the individual ditch companies completed its own assessment of needs, which the District compiled into a master project list, comprising eight components:

1. Picketwire Ditch - Headgate

Debris carried down the Purgatoire River lodges against this headgate, interfering with and blocking its opening. There is currently no safe way for the superintendent to clean this out, other than to hang on the rail revetments and clear debris by hand.

The solution at this location will include:

- Improve safety by installing surface mount ladders down to the headgates
- Reduce debris collection by installing a trash rack to divert large floatables coming down the Purgatoire River

- Improve safety and maintenance access by building a catwalk on the trash rack
- Control erosion and limit debris lodging by installing a concrete wall along the railroad rail and riprap revetment
- Control erosion and help stabilize the outlet works by installing a new concrete floor ahead of the gate structure
- Improve water control by installing new gate seals
- Improve safety and decrease public access by constructing fencing, two access gates, handrails, catwalks, and signage.

2. Chilili Ditch – Ditch Piping

The Chilili Ditch is a senior ditch on the River, with a diversion right of 7 cfs. The ditch is seven miles long, approximately 60 percent running parallel to the BNSF Railroad tracks. There exists a reach, approximately 700-feet long, wherein the ditch is narrowly constrained between a bluff and the railroad tracks. The ditch receives highway runoff and runoff from the bluff, which causes it to overtop, resulting in damage to the ditch bank, and flooding and washing of debris onto the railroad tracks. The very limited accessibility exacerbates problems with repair and maintenance. Approximately 450-feet of the ditch was previously put into a metal pipe culvert, but has now deteriorated and failed at various locations.

The Project will replace approximately 450 feet of existing metal culvert, extending it an additional 300 feet to provide protection for the full reach where a breach could damage the railroad embankment. This improvement would provide the added benefit of reduced maintenance costs, and reduced water losses. Included in the construction will be the installation of new debris screens.

3. Baca Ditch - Siphon Protection

The section of concern is an inverted siphon which carries water for the Baca, El Moro, and Picketwire Ditches under the Powell Arroyo drainage. Measures in place to control head cutting in the arroyo, consisting of railroad rails and rock-filled wire baskets, are deteriorating and allowing fines to wash through, and threaten the long term viability of the structure.

The planned approach for this repair is to buttress the existing revetment by constructing grouted rock riprap across the arroyo channel, providing energy dissipation as water flows over the top of the rocks.

4. Enlarged Southside Irrigation Ditch - Diversion Erosion Repair and Debris Removal

At this location, the Purgatoire River has eroded the bank beyond the wing wall of the diversion structure, working its way back to the Southside Ditch and threatening the loss of the ditch embankment. Sediment continues to build up on the opposite side of the river, directing current toward the area, causing further erosion.

The plan of work for this area includes the removal of the area of built up sediment, using the excavated/dredged material to backfill the eroded area, followed by armoring the eroded area with rock riprap.

5. Enlarged Southside Irrigation Ditch - Railroad Crossing

At this location the ditch parallels the railroad tracks and then makes an abrupt turn to the right to cross under the railroad embankment via four 60-inch culverts. The abrupt change in

direction is causing erosion and debris accumulation on the outside of the bend, eroding the bank, railroad grade, and the entrance to the culverts.

The proposed work at this location is to construct a concrete headwall and wing walls for the culverts, including a concrete floor at the entrance to the culvert entrance. This chosen option carries the added benefit of improved flow and culvert hydraulics.

6. El Moro - Hoehne Pipeline Association – Headgate Repair

The headgate at this location no longer functions correctly, failing to completely close water flow. It is believed that replacement of the gate seals will solve the problem.

7. New John Flood Ditch – Headgate Replacement

At the headgate where the diversions are made from the Picketwire Ditch, the headgate diversion cannot be completely shut off because the gate operator moves upward as the gate is screwed down. This means that water is lost from the shareholders of the Picketwire Ditch without providing benefit to the New John Flood Ditch. The concrete headwalls and slab to which the slide gate and operator are attached are in such poor condition that it is no longer possible to set new or additional anchors. Therefore, replacement is the only option to restore the operation of this headgate structure.

8. New John Flood Ditch - Lietzendorfer Arroyo Flume

A significant amount of water is being lost from an open channel flume, which conveys water across the Lietzendorfer Arroyo, from areas where the flume's metal plates have rusted out or welds have broken. The ditch company has been maintaining this structure over time by welding patches over holes as they develop, but due to deterioration of the base metal to where it is very thin, this is no longer a viable plan of maintenance. Since the flume's support structure is in good condition, it is not necessary to replace the entire structure. The plan is to weld new metal plate lining in-place over the existing lining.

Discussion: This project aligns with Goals and Measurable Outcomes described in the Arkansas Basin Implementation Plan. Projects related to this WSRA Grant are included in the Appendix 5.2-A Arkansas Basin Implementation Plan per the following table:

Arkansas Basin ID (ARK-2015-)	Project Title	Project Proponent
0517	Trinidad Project Infrastructure Upgrade	Purgatoire River Water Conservancy District
0520	Baca-Picketwire Headgate Improvement	Purgatoire Watershed Partnership
0522	Chilili Ditch Diversion and Improvement	Chilili Ditch Co., Purgatoire Watershed Partnership
0521	Powell Arroyo Siphon Protection Structure	Baca Ditch Co.
0518	El Moro - Hoehne Pipeline Association Water Line Replacement	El Moro - Hoehne Pipeline Association

This project also aligns with Colorado’s Water Plan, *Section 10.3 – Critical Goals and Actions*, item D. - Agriculture, serving to maintain agricultural viability, and supporting agricultural conservation and efficiency.

Issues/Additional Needs: No issues or additional needs have been identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: This activity has been reviewed and evaluated and has staff determined that it satisfies the Evaluation Criteria. Please refer to the WSRA Application for applicant’s detailed response.

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Purgatoire River Water Conservancy District	\$100,000	\$0	\$100,000
Picketwire Ditch Company	\$4,640	\$0	\$4,640
Enlarged Southside Irrigation Ditch Co.	\$13,420	\$0	\$13,420
Chilili Ditch Company	\$7,870	\$0	\$7,870
Baca Ditch Company	\$2,350	\$0	\$2,350
New John Flood Ditch Co.	\$4,030	\$0	\$4,030
El Moro - Hoehne Pipeline Association	\$190	\$0	\$190
Sub-total matching funds	\$132,500	\$0	\$132,500
WSRA Arkansas Basin Account	\$30,000	n/a	\$30,000
WSRA Statewide Account	\$60,000	n/a	\$60,000
Total Project Costs	\$222,500	\$0	\$222,500

The applicant has provided a Basin Roundtable Letter indicating recommendation of the Basin and Statewide grant amounts. It should be duly noted that the applicant’s required cash matching should be \$132,500, not \$121,500 as stated in the Basin Roundtable Letter.

CWCB Project Manager: Derek Johnson

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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, any corrective action taken to address these issues, and copies of construction progress meeting minutes.

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 shall 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.