

**PROGRESS REPORT - December 2013 - January 2015****PLAZA PROJECT – PHASE 2: MCDONALD DITCH IMPLEMENTATION PROJECT  
WSRA GRANT PAY REQUEST #3**

Project Cost expended during this Pay Request is summarized below:

		<b>Invoice Amount</b>
Russell Surveyors		
Task 1 – Project survey.	Invoice #3420, 12/04/2013	<b>\$5,071.95</b>
Timothy Goddard – Three Bears Consulting		
Task 1 – Archeology Survey.	Invoice #X, 03/14/2014	<b>\$1,704.00</b>
Riverbend Engineering		
Task 1 – Check dam design finalization and bid document preparation.	Invoice #798, 11/13/2014	<b>\$3,604.16</b>
Robins Construction		
Task 2 – Diversion Dam Replacement	Invoice #001166, 01/06/2015	<b>\$322, 950.00</b>
<i>Project mobilization, clearing and grubbing, traffic control, water removal, first concrete pour, quality control, rebar, and other material.</i>		
Colorado Rio Grande Restoration Foundation		
Task 8 - Project Management	Invoice #X, 01/20/2015	<b>\$6,110.00</b>
<b><u>Current Total Project Charges</u></b>		<b><u>\$339,440.11</u></b>

**Project Update:**

The design, all needed surveys, and permits were completed in 2014. The Project partners bid the project to the regional community and awarded the Project construction contract to Robins Construction. Robins mobilized in December 2014 and began water removal and earthwork for the diversion dam construction. They poured the dam footers in December 2014 and the dam floor in early January 2015. The project conditions have been favorable with mild weather and better water removal conditions than anticipated. The contractor is on schedule to finish the concrete work for the diversion dam, headgate, and fish/boat passage in February 2015. They will then install the pipeline from the new headgate to the existing ditch.

**PROGRESS REPORT - February 2015****PLAZA PROJECT – PHASE 2: MCDONALD DITCH IMPLEMENTATION PROJECT****WSRA GRANT PAY REQUEST #4**

Project Cost expended during this Pay Request is summarized below:

		<b>Invoice Amount</b>
Robins Construction		
Task 2 – Diversion Dam Replacement	Invoice #001194, 02/16/2015	<b>\$351,036.00</b>
Task 3 – Headgate Replacement		
<i>Construction surveys, removal of water, concrete for major structures (less rebar and material that was paid in previous invoice), rock rip rap, metal fabrication, pollution control, quality control, gate fabrication, and bonding.</i>		
Colorado Rio Grande Restoration Foundation		
Task 8 - Project Management	Invoice #X, 02/28/2015	<b>\$975.00</b>
<b><u>Current Total Project Charges</u></b>		<b><u>\$352,011.00</u></b>

**Project Update:**

The Project Contractor, Robins Construction, poured the sluice gate, fish and boat passage, back wall and slope, energy dissipaters, and most of the headgate works in late January and February 2015. They started installing the rock rip-rap around the dam. They were delayed from completing all concrete work while waiting for a trench box to ensure crew safety. They will finish the headgate and install most of the pipeline from the new headgate to the existing ditch in March 2015. The project conditions continue to be favorable with mild weather and the Contractor remains on schedule and within the budget.

tasks completed coincides with Reimbursement Request #2 for WSRA Grant Contract Number C150492.

**TASK 1 – Finalize Design for Project Elements****Underway**

*Description of Task: Finalize the design for the Project Elements, which include the McDonald Ditch headgate and diversion replacement, the Sevenmile Plaza Bridge streambank stabilization, and the Rio Grande County wetland reclamation.*

Methods: Using preliminary designs developed by the NRCS in Phase 1, district, area, and state engineers completed the designs for the Project Elements. This included consulting with geology, hydraulic, and vegetation specialists, completing HEC-RAS hydraulic modelling, and performing a load analysis for the diversion and headgate structures.

Stantec Engineering was hired to analyze the relationship, if any, between the proposed McDonald Ditch Diversion and scour potential at the Sevenmile Plaza Bridge. Stantec collected additional data, built an existing conditions model, and completed a hydraulic analysis. The Stantec Engineers and the NRCS Engineers compared the results of the analysis and determined the new diversion will not increase the probability of scouring at the Sevenmile Plaza Bridge. However, the proposed diversion would have increased the likelihood of flooding. The explanation is: the current diversion is porous as it is made of piled concrete, dirt, and logs. In flood conditions, the water passes through and over the diversion. The proposed structure would be made of impervious concrete. As such, flows in 25 year, 50 year, 100 year, and greater flood events would be backed up by the diversion and flood the Sevenmile Plaza Bridge and surrounding community.

The NRCS engineers worked together to develop a solution: The new plan includes a new diversion, headgate, and pipeline upstream of the current dam. The new diversion will include fish and boat passage and 1 radial sluice gate. The pipeline will deliver water to the existing ditch. The current diversion structure will be removed and replaced with a check rock dam to maintain the grade of the river and protect the bridge upstream from scour. Riparian restoration will occur throughout project area. The NRCS worked all 2013 to finalize the project design that is currently in final review. River Bend Engineering has been hired to design the rock check dam. The changes to the design increased the costs and the RGHRP and McDonald Ditch Company secured additional needed funds. An additional \$431,000 of CWCB WSRA grant funds was given and the loan was increased by \$30,000. These increases in grant and loan amounts were approved in September 2013. With these increases, the WSRA grant totals \$726,000 and the loan totals \$100,000.

**TASK 2 – McDonald Ditch Diversion Replacement****Scheduled for Summer 2014**

*Description of Task: Replace the McDonald Ditch Diversion with a diversion that is concrete and allows for fish and boat passage.*

**TASK 3 – McDonald Ditch Headgate Replacement**

**Scheduled for Summer 2014**

*Description of Task: Replace the McDonald Ditch headgate with a headgate that is concrete and includes solar-powered automated gates.*

**TASK 4 – Channel Shaping and Streambank Stabilization**

**Scheduled for Summer 2014**

*Description of Task: Implement channel and streambank stabilization techniques upstream and downstream of the Sevenmile Plaza Bridge and upstream and downstream of the McDonald Ditch diversion and headgate structure; Implement riparian restoration throughout project area; Replace rock grade control structure in location of current diversion.*

**TASK 5 – Wetland Reclamation**

**Complete**

*Description of Task: Reclaim a two acre wetland located within the Project boundary.*

Methods: NRCS completed the physical design and the RGHRP completed the vegetation plan for the wetland reclamation. Rio Grande County officials and the US Army Corps of Engineers approved the plans. RGHRP hired Mike Tezak Construction to implement the design. The Contractor sloped and stabilized eroding banks by reducing the grade, spreading topsoil, seeding, and installing erosion control mats. The Contractor built floodplain benches, increased the amount of waterline by adding sinuosity, and planted appropriate shrubs, grasses, and forbs in different vegetation zones. The NRCS and RGHRP visited the site daily during construction to ensure on the ground activities were consistent with the plans.

Deliverable: Improved vegetation condition, function of the wetland, riparian areas, and aquatic habitat.

**TASK 6 – Monitoring**

**Scheduled for Summer 2014**

*Description of Task: Monitor the site for two years using the RGHRP Sampling and Analysis Plan (SAP).*

**TASK 7 – Outreach and Education**

**Underway**

*Description of Task: Conduct a public outreach and education program to raise awareness of Phase 2 activities and the RGHRP, and encourage other landowners to participate in future projects.*

Methods: The RGHRP developed visual aids and written materials showing the specific sites and proposed work. These materials were used during presentation to tours and college groups and at the San Luis Valley Crane Festival in March 2012. In addition, interviews and status reports were given on two local radio stations in April 2012. Tours of the site have been given on numerous occasions, including one with over 40 participants during the 2012 Rio Grande Stakeholders Meeting in May 2012 and another to 30 teachers from throughout Colorado during the Rio Grande Watershed Conservation and Education Initiative's Annual

Teacher Workshop in June 2012. Presentations were made at the Rio Grande Inter-basin Roundtable; Quarterly Board Meetings of the Rio Grande Water Conservancy District; Board Meetings of the San Luis Valley Water Conservancy District, and public meetings throughout 2013.

**TASK 8 – Project Administration**

**Underway**

*Description of Task: Complete all necessary contracts, status reports, and internal and external documents. Ensure Tasks are completed within approved costs and timelines.*

Methods: The RGHRP is administering Phase 2. This includes completing contracts with the CWCB, NRCS, Project partners, landowners, and contractors; obtaining the necessary environmental permits; managing budgets and reimbursement requests; and completing semi-annual and final reports. Additionally, the RGHRP performs Project oversight; making certain project design and implementation are timely and accurate. The RGHRP is organizing outreach and education efforts and will complete site monitoring in accordance the SAP.

## PROGRESS REPORT - December 2015

### PLAZA PROJECT – PHASE 2: MCDONALD DITCH IMPLEMENTATION PROJECT WSRA GRANT PAY REQUEST #6

Project Costs expended during this Pay Request are summarized below:

		Invoice Amount
Robins Construction		
Task 2 – Diversion Dam Replacement	Invoice #001318, 05/13/2015	\$189,997.00
Task 3 – Headgate Replacement	amount paid under pay request #5	\$172,336.07
	Amount remaining	<b>\$17,660.93</b>

*Construction surveys, demobilization, removal of water, concrete for major structures, pipe, rock rip-rap, water control gates, metal fabrication, pollution control, quality control, gate fabrication, and conduit.*

Robins Construction		
Task 3 – Headgate Replacement	Invoice #001688, 12/28/2015	<b>\$33,915.00</b>
Cost of plastic pipe		

Task 8 - Project Management	Invoice #X, 12/31/2015	<b>\$105.00</b>
<i>Project management includes construction oversight, payment processing, expense tracking, partner coordination, and reporting in December 2015.</i>		

**Current Total Project Charges      \$51,680.93**

#### Project Update:

The Project Contractor, Robins Construction, poured the remaining concrete for the headgate, installed water control gates, and finished placing the rock rip-rap around the dam in March and April 2015. They were delayed from installing the pipeline from the new headgate to the existing ditch due to a warm spring and very fast and high runoff. Because the contractor and project partners did not feel it was safe to install the pipeline next to a very big river, the work was delayed until the end of the 2015 irrigation season. The contractor purchased the plastic pipe and began installing the pipeline in December 2015. The installation of the gate automation, and pipeline were completed in time for the 2016 irrigation season. The contractor remains within the budget. The RGHRP continues to oversee the project and complete necessary reporting, payments, and outreach and education.

## PROGRESS REPORT - December 2015

### PLAZA PROJECT – PHASE 2: MCDONALD DITCH IMPLEMENTATION PROJECT WSRA GRANT PAY REQUEST #6

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Task 8 - Project Management	Invoice #X, 12/31/2015	<b>\$105.00</b>
<i>Project management includes construction oversight, payment processing, expense tracking, partner coordination, and reporting in December 2015.</i>		

**Current Total Project Charges      \$51,680.93**

#### **Project Update:**

The Project Contractor, Robins Construction, poured the remaining concrete for the headgate, installed water control gates, and finished placing the rock rip-rap around the dam in March and April 2015. They were delayed from installing the pipeline from the new headgate to the existing ditch due to a warm spring and very fast and high runoff. Because the contractor and project partners did not feel it was safe to install the pipeline next to a very big river, the work was delayed until the end of the 2015 irrigation season. The contractor purchased the plastic pipe and began installing the pipeline in December 2015. The installation of the gate automation, and pipeline were completed in time for the 2016 irrigation season. The contractor remains within the budget. The RGHRP continues to oversee the project and complete necessary reporting, payments, and outreach and education.

## PROGRESS REPORT - December 2015

### PLAZA PROJECT – PHASE 2: MCDONALD DITCH IMPLEMENTATION PROJECT WSRA GRANT PAY REQUEST #5

Project Costs expended during this Pay Request are summarized below:

		Invoice Amount
Robins Construction		
Task 2 – Diversion Dam Replacement	Invoice #001318, 05/13/2015	<b>\$189,997.00</b>
Task 3 – Headgate Replacement		
<i>Construction surveys, demobilization, removal of water, concrete for major structures, pipe, rock rip-rap, water control gates, metal fabrication, pollution control, quality control, gate fabrication, and conduit.</i>		
Moxiecran Media		
Task 7 – Outreach and Education	Invoice #0103, 10/12/2015	<b>\$1,500.00</b>
<i>Creation of a video about the RGHRP and the McDonald Ditch Project to be used for Outreach and Education about the project and partners. It is available to view at: <a href="https://vimeo.com/139287660">https://vimeo.com/139287660</a></i>		
Colorado Rio Grande Restoration Foundation		
Task 7 – Outreach Education	Invoice #X, 12/01/2015	<b>\$875.00</b>
<i>Staff attended the Sustaining Colorado Watersheds Conference to speak about the McDonald Ditch Project in a forum about Agriculture and Environmental Partnerships.</i>		
Task 8 - Project Management	Invoice #X, 12/01/2015	<b>\$686.70</b>
<i>Project management includes construction oversight, payment processing, expense tracking, partner coordination, and reporting from February through November 2015.</i>		
<b>Current Total Project Charges</b>		<b><u>\$193,058.70</u></b>

#### Project Update:

The Project Contractor, Robins Construction, poured the remaining concrete for the headgate, installed water control gates, and finished placing the rock rip-rap around the dam in March and April 2015. They were delayed from installing the pipeline from the new headgate to the existing ditch due to a warm spring and very fast and high runoff. Because the contractor and project partners did not feel it was safe to install the pipeline next to a very big river, the work was delayed until the end of the 2015 irrigation season. The contractor remains within the budget. The RGHRP continues to oversee the project and complete necessary reporting, payments, and outreach and education.