#### Contract No. 002-022

"Red River Riparian Project"

Submitted by Red River Regional Council

Principal Investigator: Dawn Keeley/Danielle Gorder^

### **PARTICIPANTS**

Revised^

Sponsor	Cost Share	Cost Share
EPA Section 319	\$223,800	\$182,480^
Landowner	<u>\$114,594</u>	\$226,325^
Subtotal Cash Cost Share	\$338,394	\$408,805^
North Dakota Industrial Commission	<u>\$230,000</u>	<u>\$230,000</u>
Total Project Cost	\$568,394	\$638,805^
Project Schedule – 24 months	Project Deliverables:	
Contract Date - 7/14/2014	Status Report: November 30, 2014✓	

Contract Date − 7/14/2014 Status Report: November 30, 2014 ✓
Start Date − 7/17/2014 Status Report: November 30, 2015 ✓
Completion Date − 6/30/2018\*\* Status Report:\* November 30, 2016\* ✓
Status Report:\*\* November 30, 2017\*\* ✓

Final Report: October 31, 2018\*\*\* ✓

## **OBJECTIVE/STATEMENT OF WORK:**

This project will provide cost share to landowners for projects that will enhance riparian areas and improve water quality in the targeted watersheds of the Middle Sheyenne, Forest and Park Rivers.

Tasks for the project include:

- Provide technical support to develop a minimum of fifteen riparian management plans for targeted 303(d) listed streams.
- Provide financial support to facilitate the installation of 10 river miles of riparian restoration in targeted reaches of the Park River, Forest River, and Middle Sheyenne Rivers.
- Promote stewardship of riparian areas through outreach to local school and volunteer groups.
- Educate stakeholders, landowners, and local natural resource professionals on riparian practices.

### **STATUS:**

With the award of \$230,000 were two stipulations -- any landowners receiving funding must provide a 40% match and the maximum amount of cash share dollars for each manure management system is \$175,000.

7/17/14 - Contract 002-022 - Executed

<u>3/30/15</u> - Status report received. Report indicates: In early January 2015 Brent D. Wilde was employed by the Red River Regional Council as the Environmental Program Manager and will manage the Red River Riparian Program. The former program manager resigned in September 2014 following two months of medical leave. Without a full-time program manager temporarily, we have not allocated any of the OHF funds at this time to projects within our region. We have several projects that are completing the planning stage and are ready to launch and will be presenting projects to allocate OHF funds at our April Board of Directors meeting.

<u>11/25/15</u> - Status report received. Report indicates: The purchase and installation of two frost free watering tanks as part of a grazing management system to disperse use and keep cattle from watering in the Tolna Coulee. A no-cost extension has been requested and granted.

<u>3/31/16</u> - Status report received. Report indicates: Installation of water lines, electrical and windbreak panels. Work done to move cattle watering out of the Tolna Coulee - Landowners involved are Ross and Joey Messner.

<u>4/15/16</u> - Status report received. Report indicates: Phase 1 of Park River Snag & Clear (first 5 miles), Walsh County Water Resource District, acting as fiduciary for adjacent landowners who will be assessed for costs.

<u>4/30/16</u> - Status report received. Report indicates: Phase 2 of Park River Snag & Clear (next 4 miles), Walsh County Water Resource District, acting as fiduciary for adjacent landowners who will be assessed for costs.

**11/30/16** - Status report received. Report indicates:

The following information is a summary of all completed, on-going and future projects carried out under the current Outdoor Heritage Fund grant award, which was executed on July 14, 2014.

# **Completed Project**

## 1. Ross Messner - Proper Livestock Grazing Management

Various best management practices were utilized to implement responsible livestock grazing practices including, exclusionary fencing to limit grazing in a riparian area, off-channel watering, rotational grazing, and proper use of windbreaks. This project significantly aided in proper manure management, improvement of grazing and wildlife habitat, as well as water quality in the Sheyenne River Watershed.

#### **On-going Projects**

Although no dollars were spent during this reporting period, significant progress was made on current projects, which include:

### 1. Walsh County Water Resource District (WCWRD) Park River Debris Removal (Phase 2)

Nine of fourteen miles have been completed in the WCWRD Park River debris removal project. This project is succeeding in maintaining navigable waters, stabilizing river banks, and minimizing instream erosion, resulting in maximum riparian function and enhanced water quality.

In October 2016, the cutting-edge unmanned aircraft systems (UAS) technology was utilized to assess the extent of storm damage within the Park River riparian corridor and final work to be completed in phase 2. All parties involved agree that the use of UAS technology significantly increases efficiency, effectiveness, and success of the Park River debris removal project.

Phase 2 of debris removal on the Park River will continue in December 2016 and be completed by spring of 2017. Preparation for the third and final phase of the Park River debris removal project has begun. Work is set to be executed in winter 2017/2018 and completed by spring of 2018.

### 2. City of Graton Park River Debris Removal (Phase 1)

In November 2016, UAS technology was also used in phase 1 of the Park River debris removal project to assess the extent of work to be completed. Due to project management and coordination with appropriate parties, the project is ready to be executed and completed in winter 2016/2017.

### 3. John Hovde - Proper Livestock Grazing Management

Technical and financial assistance is being provided to cattle producer, John Hovde, to implement responsible grazing practices. Because overgrazing livestock in a riparian area causes bank instability, increased erosion and sedimentation, and intensifies nutrient pollution, the producer is limiting grazing within his riparian corridor by utilizing exclusionary fencing and an off-channel watering system.

#### 4. Elmwood Native Prairie Restoration

In coordination with the Grafton Parks and Recreation Department, restoration of native prairie within a riparian area is in progress at a historic site within the city of Grafton.

### **New Projects**

Two new projects have been prepared and are ready to be presented to the Red River Regional Council Board of Directors on December 15, 2016 for funding consideration with a total amount of \$26,262.00. These projects include:

## 1. Carl Quam, Jr. - Partial System Manure Management Plan

This plan will utilize cropland as a winter feeding area for Carl's cattle. A rotational schedule will be followed that allows for proper manure distribution by periodically moving feeding sites and portable windbreaks throughout the cropland. The partial system manure management plan will reduce manure accumulation near surface water and the need to spread.

## 2. Ray Zajac - Prescribed Grazing Plan

This plan will utilize a cell grazing method, in which the producer will rotate cattle throughout cells in order to ensure maintenance and improvement of vegetation by allowing for adequate recovery/rest periods during the growing season as well as meet the needs of the grazing animal and enhance wildlife habitat. Rotational grazing will also limit grazing within a riparian area, resulting in reduced erosion, sedimentation, and nutrient pollution.

Because of delays in completing the Park River debris removal project due to inadequate weather conditions in the winter of 2015/2016, a no-cost extension was requested. A no-cost extension has been requested and granted. Changes have been noted above as \*\*.

#### **Status Report - 12/9/2016**

Funding has been provided for an off-channel watering system that included approximately 1,300 ft of pipeline, a trough and waterer as well as materials and labor to seal a free flowing artesian well that was contaminating surface water with toxic artesian water which was adversely impacting the health of livestock, water quality and habitat of aquatic organisms.

^New staff has worked on a revised budget to reflect the 60/40% requirement of the Outdoor Heritage Fund. Changes have been noted above.

### **Status Report - 3/2/2017**

Over the course of summer 2016 the Park River Snagging and Clearing Phase 2 project area experienced heavy rain and high flows as well as a severe wind storm on June 17, with winds reaching 100 mph. This

severe weather resulted in a significant amount of additional timber added to the channel and the need to re-clean 9 miles of river channel in Phase 2 of the Park River Snagging and Clearing project.

From December 2016 to the end of January 2017, additional unfavorable debris was removed from the first 9 miles of the Phase 2 Park River Snagging and Clearing project, which enabled us to achieve desired results including unrestricted flow, reduced erosion, stable river banks, improved water quality and maximum riparian function. This project is expected to fully conclude with 15.2 miles successfully cleared of unfavorable debris by April 1, 2017.

The Walsh County Water Resource District is acting as a fiduciary for landowners adjacent to the river who will be assessed for the cost of match.

#### **Status Report - 4/12/2017**

Phase II of the Park River Snagging and Clearing project concluded on March 24, 2017. The remaining 6.2 river miles were cleared of unfavorable debris, which completed the 15.2 mile project. Following debris removal, debris was properly disposed and project cleanup was carried out, successfully meeting requirements for certification. This project enabled us to minimize in-stream erosion, improve river bank stability, maintain unrestricted and efficient flow, maximize riparian function, and enhance water quality within the Park River.

### **Status Report - 7/19/2017**

A reimbursement request was submitted along with a map showing the location of the fencing being installed. The report is posted on the OHF website. The report states in part: Ray Zajac, landowner of 120 acres approximately 3 miles northwest of Fordville, constructed a barbed-wire fence for rotational grazing. Fencing divides the property into 3 grazing cells. Following a prescribed grazing plan, the producer will rotate cattle throughout the cells in order to ensure maintenance and improvement of vegetation by allowing for adequate recovery/rest periods during the growing season as well as meet the needs of the grazing animal and enhance wildlife habitat. Rotational grazing will also limit grazing within the riparian area, resulting in reduced erosion, sedimentation, and nutrient pollution in the Forest River. The fence measures 14,233 feet with 10,386 feet of boundary fence and 3,847 feet of cross fence. This OHF reimbursement request is based on Section 319 Nonpoint Source Pollution Program Cost-Share Guidelines, which indicate a cost-share payment of \$1.08/ft. of barbed wire fence (60% of \$1.80/ft.).

#### **Status Report - 11/30/2017**

Danielle Gorder provided a detailed annual report along with photos has been posted on the Outdoor Heritage Fund website. The report notes the following projects that have been completed:

Ross Messner - Proper Livestock Grazing Management Walsh County Water Resource District Park River Debris Removal (Phase 2) John Hovde - Proper Livestock Grazing Management Ray Zajac - Prescribed Grazing Plan

### Ongoing projects include:

City of Grafton Park River Debris Removal (Phase 1)
Walsh County Water Resource District Park River Debris Removal (Phase 3)
Grafton Parks and Recreation - Historic Elmwood Restoration
Carl Quam, Jr. - Partial System Manure Management Plan

Noted in the annual report is that all but \$0.87 has been allocated.

### **Status Report - 3/6/2018**

A reimbursement request was submitted. Phase I of the Park River Snagging and Clearing project concluded on February 22, 2018. Successfully meeting Natural Resource Conservation Service Standards for Cleaning and Snagging, 3.8 river miles were cleared of unfavorable debris. Following debris removal, debris was properly disposed and project cleanup was carried out, successfully meeting requirements for certification. This project enabled us to reduce riverbank erosion, maintain unrestricted flow, and enhance water quality within the Park River.

## **Status Report - 4/10/2018**

A reimbursement request was submitted. The Walsh County Water Resource District (WCWRD) project, Park River Snagging and Clearing Phase 3, began near the west edge of Grafton city limits in January 2018. Phase 3 is split into Part A and Part B. Part A is in progress and includes 5.8 river miles. Provided WCWRD funding needs are met, Part B is planned for winter 2018-2019 and includes 8.4 river miles.

Successfully meeting Natural Resources Conservation Service Standards for Clearing and Snagging, approximately 4 river miles have been cleared of unfavorable debris. During this period, 4.0 miles of snagging and clearing has been performed on the north side of the Park River and .6 miles of snagging and clearing has been performed on the south side of the Park River.

The project continues to be in progress as winter conditions allow. Snagging and clearing enables us to reduce riverbank erosion, maintain unrestricted flow, and enhance water quality within the Park River.

## **Status Report – 5/8/2018**

\*\*\*A no-cost extension request until October 31, 2018 was granted. This will enable the project to utilize the full summer 2018 work season to wrap up projects and align with the conclusion of the ND Department of Health 319 program.

The status report states in part that the remaining snagging and clearing miles have been completed. See Table 1 to review Phase 3 work completed to date.

Table 1. WCWRD Park River	Snag and Clear	Work Complete	ed to Date (	(4/24/18)	

Phase 3 Invoices & OHF	Work Completed		
Reimbursement Requests	North Side of Park River	South Side of Park River	
3/26/18 OHF Request #1	4 miles	.6 miles	
4/24/18 OHF Request #2	1.8 miles	5.2 miles	
<b>Total Work Completed</b>	5.8 miles	5.8 miles	

WCWRD payments are made at 50% for each side of the river channel, minus an additional 50% until clean-up and hauling has been completed. To date, Phase 3 work has been completed minus clean-up and hauling on 2.1 river miles. Provided that the contractor successfully concludes Phase 3 clean-up, the final reimbursement which is to be requested at a later date will include payment for clean-up and hauling on 2.1 river miles and the 10% retainage that was withheld until successful completion.

The Park River channel included in Phase 3A has been cleared of unfavorable debris.

# Status Report – 8/14/18

Elmwood is a 20-acre historic site within a meander cutoff along the Park River within Grafton, North Dakota. A restoration project was done to achieve increased diversity in tree, shrub, grass, and forb

communities, nature trail establishment, and development of brochures with information to educate visitors on established species and riparian areas. Throughout summer and fall 2017, site visits and surveying completed by the Grafton Parks and Recreation Department, Red River Regional Council, and Walsh County Three Rivers Soil Conservation District resulted in a restoration plan. Plans were made to include, down tree cleanup, mowing, herbicide application, planting, maintenance work, and trail development for site access. Project implementation began spring 2018 and is currently wrapping up.

Photos of the site are available in the full report.

# Status Report - 8/14/18

Fabric squares and tree tubes have been utilized to control weeds and protect against outside influences. The Elmwood riparian restoration project is now complete.

## Status Report – 10/1/18

Phase 3 of the Park River Snagging and Clearing project was completed.

### **Final Report**

A final report has been submitted. The report states in part:

### **Project Results:**

	River	Acres Impacted	Feet of Fencing	Feet of
	Miles		_	Pipeline
Ross Messner Livestock Management		120		1,000
Park River Snag & Clear Phase 1 – City	3.8			
of Grafton				
Park River Snag & Clear Phase 2 -	15.2			
WCWRD				
Park River Snag & Clear Phase 3 -	5.8			
WCWRD				
John Hovde Livestock Management		23	5,987	1,300
Ray Zajac Prescribed Grazing		120	14,233	
Elmwood Riparian Restoration		20		
Total	24.8	283	20,220	2,300
Total number of producers	6			

The full report is available online.

This contract is now closed with a returned commitment of \$6,813.32.

Updated 10/31/2018