



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2014 Work Plan

Date of Report: January 10, 2014

Date of Next Status Update Report: January 1, 2015

Date of Work Plan Approval:

Project Completion Date: June 30, 2016

Does this submission include an amendment request? No

PROJECT TITLE: Northwest Minnesota Regional Aquatic Invasive Species Prevention Pilot

Project Manager: Joe Courneya

Organization: Red River Basin Commission (RRBC)

Mailing Address: 1120 28th Ave N, Suite B

City/State/Zip Code: Fargo, ND 58102

Telephone Number: O: (701) 356-3183 M: (218) 790-0706

Email Address: joe@redriverbasincommission.org

Web Address: <http://www.redriverbasincommission.org/>

Location: Becker, Clay, Otter Tail and Wilkin

Total ENRTF Project Budget:	ENRTF Appropriation:	\$219,000
	Amount Spent:	\$0
	Balance:	\$219,000

Legal Citation: M.L. 2014, Chp. 226, Sec. 2, Subd. 04c

Appropriation Language:

\$219,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Red River Basin Commission to develop aquatic invasive species prevention strategies on a watershed scale and develop materials to sustain watershed scale decision-making and implementation. This initiative must be coordinated with the Department of Natural Resources and outdoor heritage fund activities for locally based invasive species control. Specific reporting and analysis of outcomes and findings of this alternative approach must be provided to enable duplication in other regions of the state.

I. PROJECT TITLE: Northwest Minnesota Regional Aquatic Invasive Species (AIS) Prevention Pilot

II. PROJECT STATEMENT:

Aquatic Invasive Species (AIS) spread has become one of the top concerns especially as it relates to emerging nonnative species that threaten the recreational and economic viability of the surface water resources of the Red River of the North watershed. The greatest area of immediate concern is centered on the counties of Becker and Ottertail in Minnesota, where according to the Minnesota Department of Natural Resources Infested Waters report (4-29-2013), three species, Zebra Mussel, Faucet Snail and Flowering Rush alone have invaded 35 lakes and wetlands, with Zebra mussels also listed in the Otter Tail, Pelican and Red River systems.

The Local Governmental Units (LGU's) are implementing plans to address the issues within the lakes and wetlands at the county level, but introduction into our river systems necessitate a regional approach to education, outreach and management of nonnative species evolving within the Red River Basin. Additional data supporting this idea comes from Becker and Otter Tail county data related to nonresident riparian property ownership which exceeds 63% Becker and 55% Otter Tail indicating that future transport of nonnative species to other regions of the watershed are of significant concern for this region.

The goal of this pilot project is to expand Aquatic Invasive Species work from a largely county based process to a larger context or "watershed scale" through partnerships with local government units. We will target the three main watersheds, Buffalo, Otter Tail and Wild Rice, which make up the Red River drainage basins of Becker, Clay, Otter Tail and Wilkin Counties.

Three specific outcomes will include 1) Coordination with Local Government Units (LGU's) to develop effective AIS communication and management for basin residents. 2) Develop and distribute educational materials that support proper practices for AIS outreach education and citizen engagement planning strategies at the watershed scale. 3) Expand and leverage opportunities with state, federal and provincial agencies and institutions efforts to develop and deliver an AIS program based on promising practices and newer more innovative methods that are replicable throughout the Red River of the North Watershed.

III. PROJECT STATUS UPDATES:

Project Status as of January 1, 2015:

Project Status as of September 1, 2015:

Project Status as of April 1, 2016:

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Coordination with Local Government Units

Description: This pilot project will support the development of AIS prevention strategies and resources that focus beyond the local level supporting a watershed based approach within the targeted project area and expand Aquatic Invasive Species work to the "watershed scale" through partnerships with local government units within three watersheds, Buffalo, Otter Tail and Wild Rice, which make up the Red River drainage basins of Becker, Clay, Otter Tail and Wilkin Counties.

The RRBC working collaboratively with, our County Commissioner based Joint Powers Board, will coordinate with LGU's to develop effective AIS communication and management for basin residents. The engagement

process will include working closely with county AIS staff and their task force groups. Coalition of Lake Associations (COLA) groups, Watershed and Soil and Water Conservation Districts (SWCD) managers and local Lake Associations that are within key destination, infested waters and waters directly connected rivers within the targeted watersheds.

The plan will include a survey of riparian property owners, regional businesses and natural resource partners (riparian audience). Survey methodologies will include, an electronic and paper survey to gauge riparian audience attitude, knowledge and interest in invasive species prevention and management and planned observational methods at destination water access sites to form baseline knowledge. Survey results will be reported to LGU'S and natural resource community to help prioritize strategies that support watershed approach to AIS efforts.

This pilot project will establish a Geographic Information System (GIS) database that focuses on the science of an individual watershed ecosystem based on physical and chemical features favorable to grow and sustain new species. This database will help managers and decision makers establish targeted programs that direct resources in a more cost effective manner. The GIS database will use current surface water quality data, lake monitoring data and physical landscape features to create a map within each watershed's most vulnerable water bodies.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 109,165
Amount Spent: \$ 0
Balance: \$ 109,165

Activity Completion Date: June 30, 2016

Outcome	Completion Date	Budget
1. Develop & administer survey to establish baseline information around AIS Attitude, knowledge and interest. Including reporting of preliminary results by 2015 Red River Basin Commission (RRBC) International Water Conference.	January 15, 2015	\$ 22,000
2. Facilitate regional meetings and educational efforts with AIS task force, COLA and local lake association to support and develop the watershed approach to AIS prevention and management. Lead efforts to establish an Integrated AIS plan developed at watershed scale within each of the targeted watersheds.	June 30, 2016	\$ 70,000
3. Develop GIS data base for use by LGU's, citizens and decision makers	November 1, 2015	\$ 17,165

Activity Status as of January 1, 2015:

Activity Status as of September 1, 2015:

Activity Status as of April 1, 2016:

Final Report Summary:

ACTIVITY 2: Material development, distribution

The pilot project will expand programs like the "Stop Aquatic Hitchhikers" campaign and State Agency Invasive Species resources and educational materials to the Red River Basin, including a focus to "regionally brand" resources to fit the impact area (Red River Watershed) in an effort to support ownership and sense of place

connections to the decisions that citizens of this region make as they relate to surface water impacts from nonnative species.

In an attempt to emphasize the watershed approach at least three lake associations in each watershed (Buffalo, Otter Tail, Pelican and Wild rice) will be targeted for planning and training to make a personal connection to local property owners. In these instances branding will be scaled to reflect the sub-watershed (Buffalo, Ottertail/Pelican, and Wild Rice) that are immediately impacted by decisions of each local riparian user. This effort will directly distribute educational materials to 1000 riparian property owners whose activities directly impact their watershed. Additional materials will be distributed through partners (sporting goods/bait distributors, real estate agents, civic groups and service industry businesses) to reach an additional 4000 participants.

To support the current trend of mobile media as a tool for sharing and receiving information, this project will expand on two successful mobile applications (apps) developed for the Red River Watershed, "River Mapper" and "CRED- Flood reporting" by developing adding an invasive species app to these mobile based educational tools. Organizational arrangement for this phase will mirror existing mobile apps of which examples include: Minnesota Department of Natural Resources (MN DNR) Lake finder, PaddleNet-Launch Sites, Early Detection and Distribution Mapping System (EDD Maps). These apps are examples of phone or tablet based apps that promote citizen engagement, education and reporting of information and data for science and additional citizen participation.

The mobile environment will serve to target a younger demographic for gathering data and disseminating branded educational material content and as a tool to engage those participants who are or will be engaged as citizen scientists. This will be a critical component to support and validate the GIS data planned for the project site. The plan is to develop and test this app creating a field tested version ready for release and distribution as a tool for use across Minnesota and the region.

In an effort to help determine the potential effectiveness of branding resources to impact at the watershed scale, focus group sessions will be conducted within each county to gather citizen response to print and mobile materials. The results of this feedback will be used for future planning of prevention and management activities that invest resources in a more clearly defined manner. Results will also be used to develop promising practices for larger scale watershed and education and outreach planning throughout the state of Minnesota.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 77,335
Amount Spent: \$ 0
Balance: \$ 77,335

Activity Completion Date: March 15, 2016

Outcome	Completion Date	Budget
1. Develop and distribute regionally branded AIS educational materials	March 15, 2016	\$ 50,000

within project site. Targeting a minimum of 5000 citizens		
2. Develop and field test “Invasive App” in counties and watersheds within project	June 30, 2015	\$ 17,335
3. Conduct a minimum of 10 focus group sessions to evaluate and summarize effectiveness of branded materials and Invasive mobile tools	December 31, 2015	\$ 10,000

Activity Status as of January 1, 2015:

Activity Status as of September 1, 2015:

Activity Status as of April 1, 2016:

Final Report Summary:

ACTIVITY 3: Leveraging to sustain promising practices

Description: As a function of the overall coordination effort by the project director, time will be devoted to developing promising practices that can be integrated throughout Minnesota and the Red River Watershed. The RRBC board of directors, water quality and fish and wildlife work group members will engage in a strategy that will support leveraging of resources from North Dakota and Manitoba to sustain and build upon the watershed scale decision-making and thinking around AIS program development for the Red River of the North International Watershed.

Summary Budget Information for Activity 3:

**ENRTF Budget: \$ 32,500
Amount Spent: \$ 0
Balance: \$ 32,500**

Activity Completion Date: 4/30/2016

Outcome	Completion Date	Budget
1. Establishment of a working technical science team to address current and future needs for watershed scale invasive species prevention and management	09/30/2015	\$17,500
2. Develop and initiate a base funding strategy to support sustainability of AIS program efforts for Northwest Minnesota and the Red River Watershed	4/30/2016	\$15,000

Status as of January 1, 2015:

Status as of September 1, 2015:

Status as of April 1, 2016:

Final Report Summary:

V. DISSEMINATION:

We will communicate outcomes of what we learn to local groups, state agencies, and national AIS related peer groups through the RRBC website, public presentations and educational displays. We will develop a set of

"promising practices" that other Minnesota watersheds and community groups can use to assist in planning for cost effective AIS related programs. We will create targeted media messages for print media and radio spots as part of our "Ripple Effect" water minutes that currently air in this region on clear channel radio. Details of survey results will available as a final report to LCCMR and other project partners and we will create summary fact sheets and other documents that supports the RRBC's long term strategy to expand watershed scale AIS efforts throughout the Red River Watershed, Minnesota and the region. The "Invasive App" will be shared and promoted for use throughout Minnesota and the Red River Watershed.

Activity Status as of January 1, 2015:

Activity Status as of September 1, 2015:

Activity Status as of as of April 1, 2016:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Explanation
Personnel:	\$ 186,020	<p><i>Joe Courneya, Project Manager: \$56,028 (66% salary, 34% benefits); .25 FTE for 2 years</i></p> <p><i>Leah Thevdt, Outreach Specialist: \$33,933 (66% salary, 34% benefits); .25 FTE for 2 years</i></p> <p><i>TBH, Project Field Technician: \$96,060(85%salary, 15% benefits) 1 FTE for 2 years</i></p>
Professional/Technical/Service Contracts:	\$ 25,480	<p>TBD (competitive bid) "invasives App" Develop and Beta test including developer fees for research of existing apps, writing code, artwork and building functionality of app for IOS/Android platforms</p> <p>RMB Environmental labs, GIS data acquisition, input and mapping support. RMB currently houses the lake and stream water quality , so working directly with the lab ,rather than using the International Water Institute (IWI) will save time and expenses for the GIS mapping portion of the project</p> <p>River Keepers, Survey collection and analysis</p> <p>Regionally branded AIS educational material organization and distribution including printed Id cards, boat sponges and towels for watercraft cleaning, printed plastic bag for distributing materials, floating key fobs, refrigerator magnets, etc.</p>
Printing:	\$ 1,500	Riparian property owner survey print and distribution
Travel Expenses in MN:	\$ 6,000	Mileage, lodging, meals for travel within project site and within MN portion of Red River Basin
TOTAL ENRTF BUDGET:	\$ 219,000	

Explanation of Use of Classified Staff: NA

Explanation of Capital Expenditures Greater Than \$5,000: NA

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 3 FTE (2 year total)

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: N/A

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
RRBC- Joint Powers Board	\$ 7,500	\$	Support for RRBC staff time to do pre-grant coordination work, meeting with project partners.
RRBC	\$2,500		Contract work for Mobile App. Discovery Phase
Red River Watershed Management Board	\$25,000		Project Support, basin wide expansion support and sustainability planning
TOTAL OTHER FUNDS:	\$35,000	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

This project is in cooperation with Becker, Clay, Otter Tail and Wilkin Counties and the watersheds of Buffalo, Otter Tail/Pelican, and Wild Rice. Additional Partners include: Joe Eisterhold, MN DNR Invasive Species Specialist, Neil Powers, USFWS, Manager – Tamarac National Wildlife Refuge, Wayne Goeken, International Water Institute, Christine Laney, FM River Keepers, Laura Bell, University of Minnesota-Crookston, Doug Jensen, MN Sea Grant Program- University of Minnesota, Robert Borash, RMB Environmental Labs, Andre Delorme, Valley City State University, Fred Ryckman, North Dakota Game and Fish- Invasive Species Specialist.

This is the base group is currently providing expertise to the RRBC and will serve as the core group to provide technical and content expertise as part of a “technical planning team”.

B. Project Impact and Long-term Strategy:

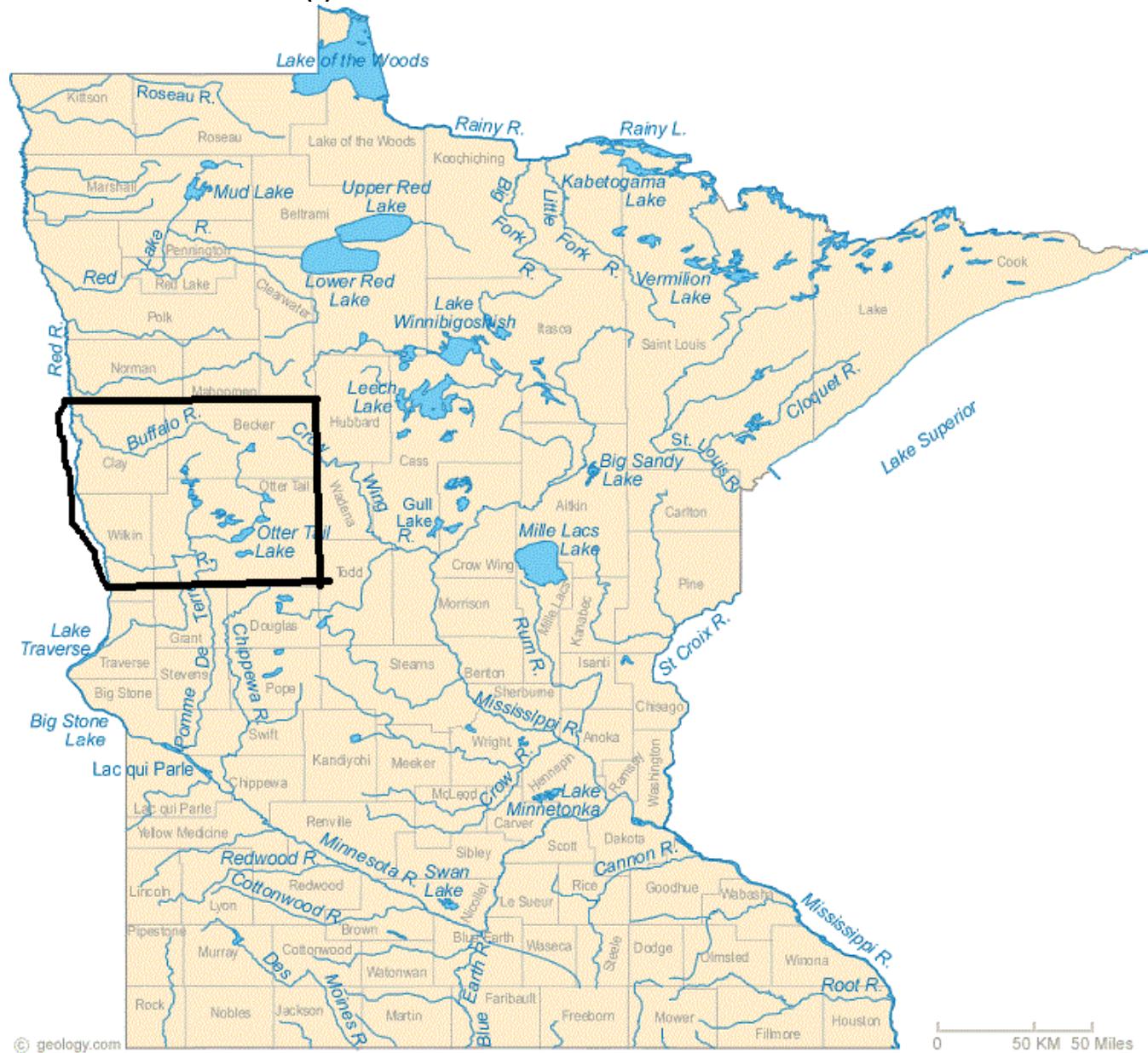
The project will serve to expand AIS thinking and planning beyond the local level using a watershed approach for the Red River Watershed. Both promising practices and new educational tools will be part of sustainability planning effort that will involve expansion of the project to the Red River of the North watershed and throughout the state of Minnesota. The Red River Watershed Management Board (RRWMB) will serve as the partner that supports articulation of long term strategies on the Minnesota side of the watershed. Their support will directly reflect the Minnesota Association of Watershed

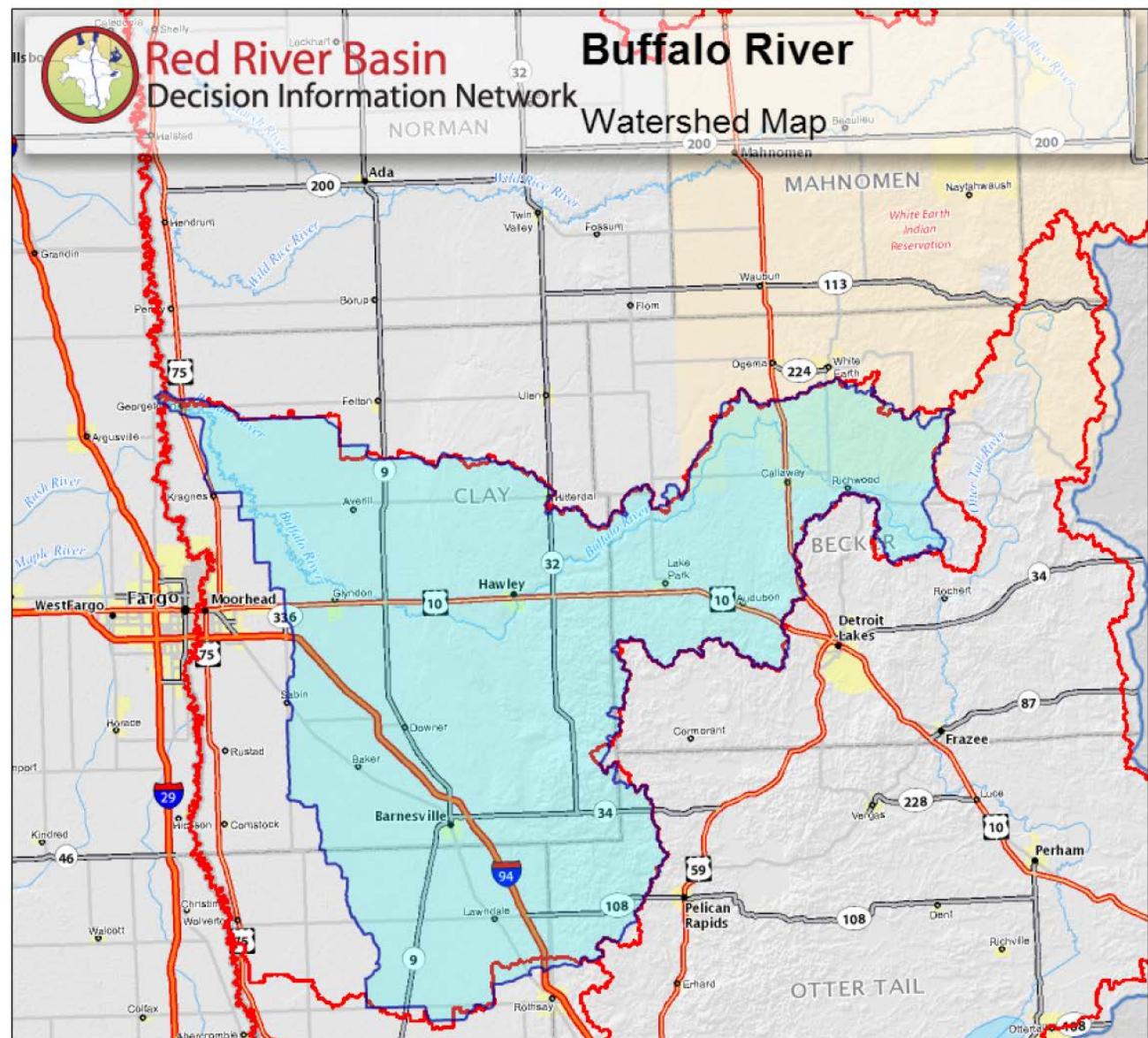
Districts (MAWD)" support through partnerships with lake associations in providing aquatic plant management and controlling invasive species". The RRBC long term strategy will include planning that will leverage additional resources from North Dakota and the Province of Manitoba to provide multi-jurisdictional leadership in RRBC Goal area 2: Aquatic and Riparian Ecosystem Health.

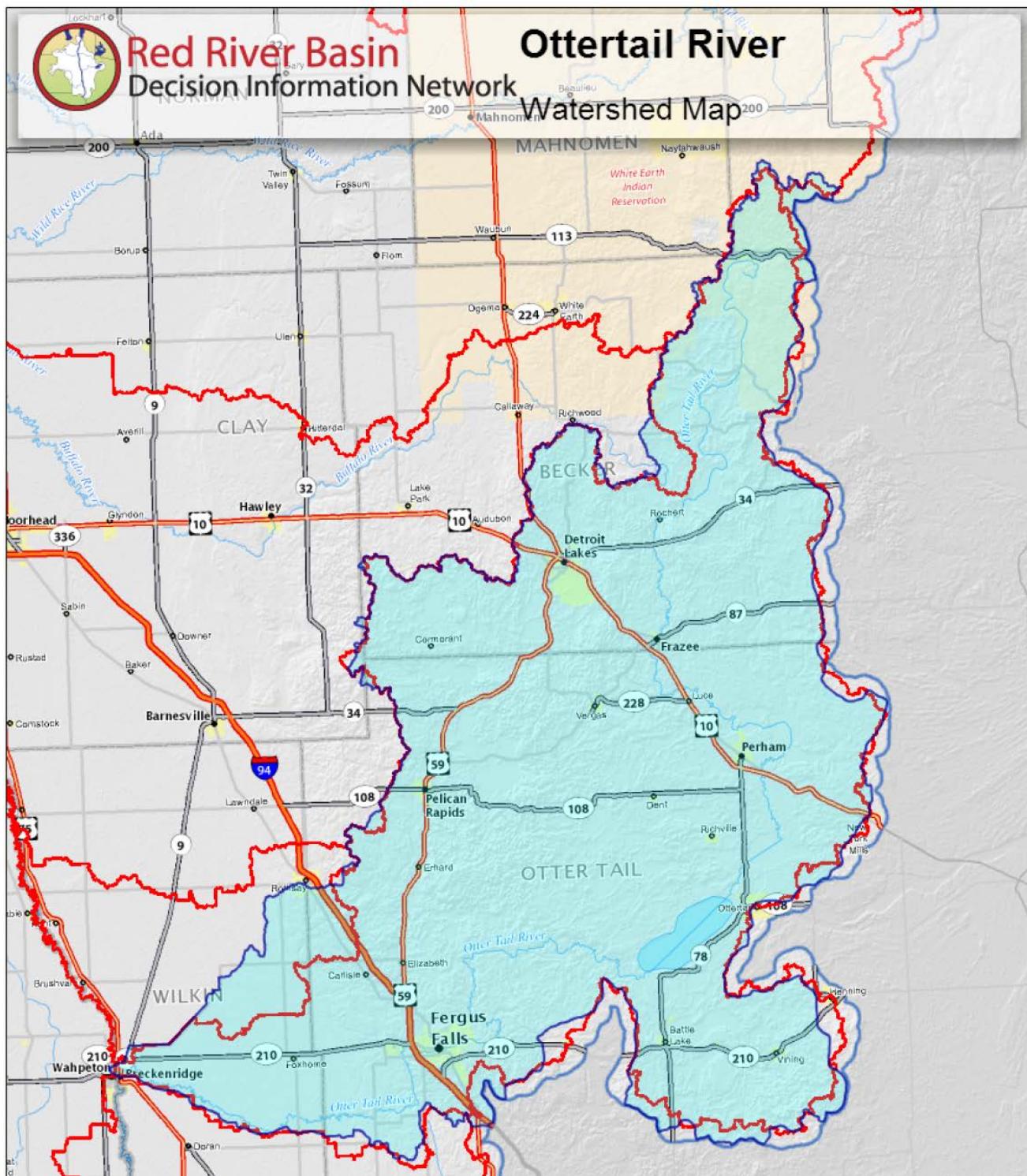
C. Spending History: N/A

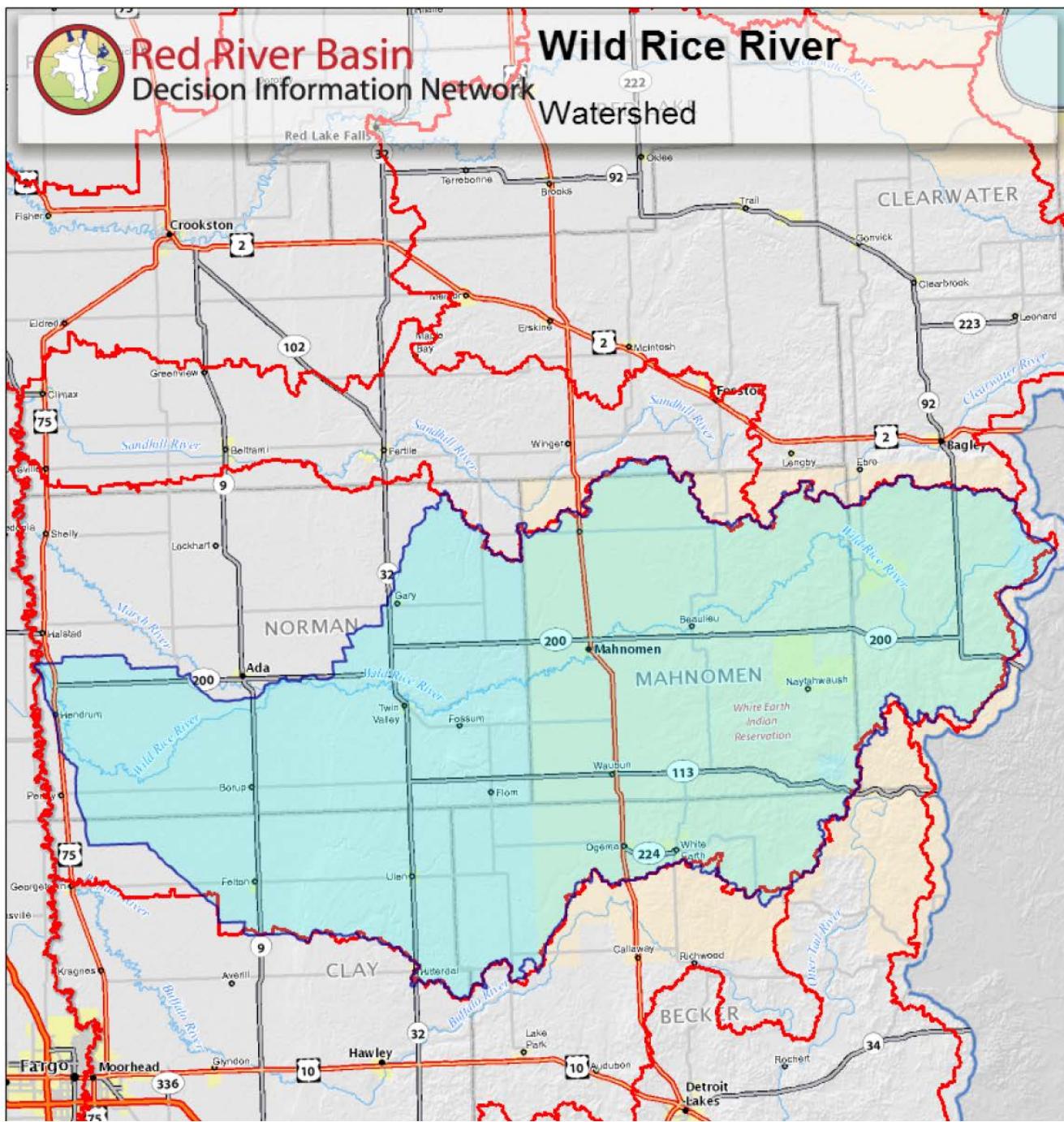
VIII. ACQUISITION/RESTORATION LIST: N/A

IX. VISUAL ELEMENT or MAP(S):









X. ACQUISITION/RESTORATION REQUIREMENTS WORKSHEET: N/A

XI. RESEARCH ADDENDUM: N/A

XII. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than January 1, 2015, September 1, 2015 and April 1, 2016. A final report and associated products will be submitted between June 30 and August 15, 2016.



Environment and Natural Resources Trust Fund											
M.L. 2014 Project Budget											
Project Title: Northwest Minnesota Regional Aquatic Invasive Species Prevention Pilot											
Legal Citation: Fill in your project's legal citation from the appropriation language - this will occur after the 2014 legislative session.											
Project Manager: Joe Courneya											
Organization: Red River Basin Commission											
M.L. 2014 ENRTF Appropriation: \$ 219,000											
Project Length and Completion Date: 2 years, June 30, 2016											
Date of Report: January 10, 2014											
ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	Activity 3 Budget	Amount Spent	Activity 3 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Coordination with County & Watershed LGU's</i>			<i>Educational Material Development & Distribution</i>			<i>Leveraging Support and Resources to Sustain Promising Practices</i>				
Personnel (Wages and Benefits) <i>Joe Courneya, Project Manager: \$56,028 (66% salary, 34% benefits); .25 FTE for 2 years</i>	\$98,965		\$98,965	\$54,555		\$54,555	\$32,500		\$32,500	\$186,020	\$186,020
<i>Leah Thevdt, Outreach Specialist: \$33,933 (66% salary, 34% benefits); .25 FTE for 2 years</i>											
<i>TBH, Project Field Technician: \$96,060(85%salary, 15% benefits) 1 FTE for 2 years</i>											
Professional/Technical/Service Contracts <i>TBD (competitive bid) "invasives App" Develop and Beta test including developer fees for research of existing apps, writing code, artwork and building functionality of app for IOS/Android platforms</i>				\$10,280		\$10,280				\$10,280	\$10,280
<i>International Water Institute, GIS data acquisition, input and mapping support</i>	\$3,700		\$3,700							\$3,700	\$3,700
<i>River Keepers, Survey collection and analysis</i>	\$1,000		\$1,000							\$1,000	\$1,000
Equipment/Tools/Supplies <i>Regionally branded AIS educational material organization and distribution including printed Id cards, boat sponges and towels for watrcraft cleaning, printed plastic bag for distributing materials, floating key fobs,refrigerator magnets, etc</i>				\$10,500		\$10,500				\$10,500	\$10,500
Printing <i>Riparian property owner survey print and distribution</i>	\$1,500		\$1,500							\$1,500	\$1,500
Travel expenses in Minnesota <i>Mileage,lodging, meals for travel within project site and within MN portion of Red River Basin</i>	\$4,000		\$4,000	\$2,000		\$2,000				\$6,000	\$6,000
COLUMN TOTAL	\$109,165		\$109,165	\$77,335		\$77,335	\$32,500		\$32,500	\$219,000	\$219,000