

Workplan / Grant Application / Project Summary Report
**Prioritizing Conservation Project Implementation in
the 400- mile Mississippi Headwaters**

Submitted by: **Mississippi Headwaters Board JPB**

Grant Fund Type: Accelerated Implementation Grant

Fund Year: 2012

<i>Total Grant Amount:</i>	\$100,000.00	<i>Amount Budgeted for this Workplan:</i>	\$100,000.00	<i>Amount Spent for this workplan:</i>	4,249.33	<i>Amount Not Spent on this workplan:</i>	\$95,750.67
----------------------------	---------------------	---	---------------------	--	-----------------	---	--------------------

BMP Detail Summary

Number of BMP's Installed	BMP Name	Shape Type	Linear Ft.	Total Acres	Total Mapped BMPs	Soil Loss Reduction Tons/Yr	Sediment Reduction Tons/Yr	Phosphorus Reduction Lbs/Yr
1	□□□□□□□J□□□□□□□							
Total # installed BMPs:						Tons/Yr	Tons/Yr	Lbs/Yr
Total # mapped BMPs:								



Initiative Name: **MHB - Grant Administration****Initiative Type:** Admin/CoordinationYear: 2012Description

This 400-mile Mississippi Headwaters project will develop a prioritization methodology that utilizes a GIS land analysis along with existing water quality data sets in order to determine river water quality trends that are increasing, decreasing, static or needing more information. The administration component will be limited to project setup, developing and coordinating the contracts with outside consultants, and conducting BWSR reporting as outlined below. The MHB has designated Crow Wing County to serve as the coordinator for this grant in terms of the following tasks.

1. Project Setup

- o Meeting with current MHB staff to understand current administrative items such as budgets, reporting, etc. and to prep for new reporting requirements for this new grant as well as to iron out any general housekeeping items
- o Initial contact with member counties via phone, email, or letter

2. Develop contracts for consultants

- o Award contract for water quality analysis to outside consultant.
- o Meet with and finalize contract with Sandy Vary for review of data and development of implementation recommendations.

3. Conduct BWSR-required reporting activities as well as other misc. administrative duties

Estimated Initiative Cost: \$3,350 (3.35% of grant)

Actual Results

Executed the contract with EOR, conducted invoicing, reporting, and bookkeeping tasks.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2012 - Accelerated Implementation Grants - Mississippi Headwaters Board (JPB)	3,350.00	3,350.00	334.36	12/31/12	12/31/12
Totals:	3,350.00	3,350.00	334.36		

Initiative Name: **MHB - Project Development**

Initiative Type: Project Development

Year: 2012

Description

1. Initiating dialog with 8 member counties
 - o Meeting at each of the other 7 counties. This is initial face-to-face meetings with county water planners and GIS coordinators to provide background on the project and gauge their level of participation.
 2. Meeting with local/state/federal governmental entities to begin process of collecting data
 - o Some or all of the meeting will likely include MHB's consultant for water quality data. It is assumed that after these initial meetings, the MHB consultant will be able to work direct with the appropriate entity to gather further data as needed.
 - o Joint meetings with MPCA staff and MHB consultant to determine the amount of existing chemical and biological data available through the MPCA's Intensive Watershed Monitoring program, et. al.
 - o Meetings with DNR
 - o Meeting with US Forest Service
 - o Meeting with State Archaeologist
 - o Meeting with Camp Ripley GIS & Environmental Staff
 - o Meetings with tribal entities & other groups
 - o Initiate dialog with cities along the corridor
 3. Ongoing meetings with 7 other member county water-planners as well as the outside consultant (Sandy Vary) to update them on the initial findings from the data & to share results from the GIS modeling
 4. Develop implementation strategies
 5. Develop standard water plan language across all 8 counties
 6. Monthly MHB board and subcommittee meetings (assuming 2 meetings per month and prep time)
 7. Present findings from project at various public forums
 8. Other water planner & GIS staff involvement.
- Estimated Initiative Cost: \$27,650 (27.65%)
- Estimated Match: 25%
- Match will consist of 8-county GIS, planning and zoning, and water planner in-kind time. Use of Crow Wing County vehicle.

Actual Results

- Presented at a kick-off event in Walker on 3-30-12, which was well attended by County Commissioners from each of the 8 counties
- Met with representatives from all 8 counties to explain the grant, see where each county was at in terms of water plan updates, and to request GIS data.
- Met and/or requested data with various other agencies and organizations.
- Updated the Board monthly on the progress of the grant.

Comments

Comments: Because of the unique nature of this project in that it involves 8 counties and over 400 miles of river, about 27% of the project will be working with these other counties and other agencies not only to coordinate data gathering, but also to develop strategies and goals for implementation projects for MHB along the corridor in the future. The future success of the MHB is largely based on the success of this initiative. This fits with the MHB's comprehensive plan objectives that calls for supporting the goals and objectives of the 8 county water plans (C1-9) and working with various local, state, and federal entities (C2-4,7,8), C4-4).

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2012 - Accelerated Implementation Grants - Mississippi Headwaters Board (JPB)	27,650.00	27,650.00	1,697.50	12/31/12	12/31/12
2. MHB - Local Match	25,000.00	25,000.00	11,469.50	12/31/12	12/31/12
Totals:	52,650.00	52,650.00	13,167.00		

Initiative Name: **MHB - GIS Data Analysis**

Initiative Type: Technical and Engineering

Year: 2012

Description

The GIS component will include land area within the defined MHB corridor (500-1000' from the river) at a minimum.

This fits with several of the MHB's Comprehensive Plan objectives which are to protect and enhance the scientific, nature, and historic values of the river by promoting water quality data gathering and analysis (C1-2), shoreline analysis and bluff identification/protection (C1-6), land value trend analysis (C1-8), point and non-point source ID (C2-3,6), flow data analysis C2-4), identification of critical habitat (C2-5), forestry planning (C2-7), watershed planning (C2-8), model development (C2-9), collection of historical info (C3-1,2,8), analysis of land use and public land data (C4-3).

1. Data assembly & synthesis

Assemble and synthesize available GIS data from all potential sources (see below) while integrating into a unified GIS system as much as possible. Types of data (where available) could include:

- Ownership (public vs. private)
- Land Use/Cover
- Wetlands
- Impaired waters
- Bluffs / Steep slopes
- Soil types
- Impervious surfaces/developed areas
- MCBS data
- Parcels

2. Develop GIS models for identifying sensitive shorelines and development of prioritization tool

o Begin GIS modeling from synthesized data utilizing both GIS and non-GIS sources with the goal of identifying sensitive shoreline areas or areas of concern due to existing degradation or potential threats. The result of this modeling will likely be some sort of prioritization tool or layer that can assist the MHB's project review team and local water planners with determining the location of implementation projects

Estimated Initiative Cost: \$14,000 (14%)

Estimated Match: \$0.00 (0%)

Actual Results

Data Collection Summary:

- We now have GIS data from all eight counties.
- We have had discussions and/or have received data from DNR fisheries, DNR Ecological Services, Mississippi Parkway Commission, Minnesota Land Trust, U.S. Fish & Wildlife Service, MN Department of Agriculture/Health, MPCA, Camp Ripley, U.S Census Bureau, and others.
- Overall, it is estimated that we have over 90% of the readily available data in hand.

Data Analysis:

There are a number of map overlays that we will be generating. Some of the potential overlays that we are envisioning at this point include:

- Public vs. Private Land
- Existing Conservation Easements
- Population Density & Growth Patterns
- Feedlots
- Ecological Sensitive Areas
- Impaired / Infested Waters
- Slope Comparison
- Wetland / Upland Area

Analysis will be conducted both at the catchment level (which is the smallest watershed unit available) and within the MHB corridor. I'm sure there are other potential overlays that would be easily developed, so please let me know of ones that you think of that are not on the attached list. Our plan is to have a draft report completed in the spring of 2013 in that synthesizes EOR's water quality data assessment and the GIS analysis. We also plan to present draft Water Plan language then. If you have any questions or suggestions, please let me know.

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2012 - Accelerated Implementation Grants - Mississippi Headwaters Board (JPB)	14,000.00	14,000.00	402.50	12/31/12	12/31/12
Totals:	14,000.00	14,000.00	402.50		

Initiative Name: **MHB - Water Quality Data Gathering & Analysis**Initiative Type: Technical and EngineeringYear: 2012Description

MHB - Water Quality Data Gathering & Analysis

The Mississippi Headwater Board (MHB) would contract for and manage professional services responsible for pulling together existing water quality data from MPCA, MDNR, USFS, USACE, and local sources to compare water quality trends within the 400-mile river corridor. This fits with several of the MHB's Comprehensive Plan objectives which are to protect and enhance the scientific and natural values of the river by promoting water quality data gathering and analysis (C1-2), fish surveys (C2-1), point and non-point source identification (C2-3,6), flow data analysis (C2-4), interagency watershed planning (C2-8), and model development (C2-9).

Examples of existing data would include Nitrogen and Phosphorus loads, total suspended solids, dissolved oxygen, fecal coliform, fisheries data, wild rice survey data, near shore MN County Biological Survey information as it relates to land use and other known attributes that can be evaluated comparatively along the project scope. This analysis would likely be similar to the trend analysis conducted for the large-lake assessments in Cass, Crow Wing, and Aitkin counties, but would depend on what data was available. Analysis of existing water quality data will be primarily from the river directly and likely not as broad as the watershed or HUC 12 basins.

It is also recognized that the MPCA has a ten-year Intensive Watershed Monitoring (IWM) program established. This CWF project coordinated by the MHB would accelerate data gathering that would:

- o Be able to advance the projected workplan of MPCA
- o Provide information sooner than the 2015 MPCA IWM schedule and open the door for collaboration between MPCA and the MHB for implementation strategies long-term
- o Allow the MHB to apply for CWF projects sooner than the 2015- 2016 MPCA workplan completion

Estimated Initiative Cost: \$45,000 (45%)

Estimated Match: \$0.00 (0%)

Actual Results

EOR has begun the initial work of gathering what available water quality data is available. They are preparing a draft report that will be releases in the spring of 2013.

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2012 - Accelerated Implementation Grants - Mississippi Headwaters Board (JPB)	45,000.00	45,000.00	1,457.47	12/31/12	12/31/12
Totals:	45,000.00	45,000.00	1,457.47		

Initiative Name:

MHB - Consultative Overview of Data with Development of Implementation Recom

Initiative Name: **MHB - Consultative Overview of Data with Development of Implementation**

Initiative Type: Technical and Engineering

Recommendations

Year: 2012

Description

The expertise of Sandy Vary will be used to review initial data collected, provide insights involving the modeling process, and to provide ideas for implementation strategies/projects

Estimated Initiative Cost: \$10,000 (10%)

Actual Results

2012 summary: Several phone calls and one meeting with Sandy, Chris Pence, and Mitch Brinks

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2012 - Accelerated Implementation Grants - Mississippi Headwaters Board (JPB)	10,000.00	10,000.00	357.50	12/31/12	12/31/12
Totals:	10,000.00	10,000.00	357.50		

Program Specific Workplan Items

<i>Water Plan Reference:</i>	There is limited focus currently in each of the 8 county water plans. One of the goals of this project is to add a chapter unique to the river.
<i>TMDL Reference (if applicable):</i>	N/A
<i>Watershed Name (81 Majors)</i>	Miss. R - Brainerd, Miss R. - Sartell, Miss R. -Grand Rapids, Miss. R - Headwaters
<i>Project Description:</i>	This 400-mile Mississippi Headwaters project will develop a prioritization methodology that utilizes a GIS land analysis along with compilation and analysis of existing water quality data sets in order to determine river water quality trends that are increasing, decreasing, static or needing more information. Much of the project will be coordination amongst the 8 counties with the goal of developing implementation strategies for the corridor and writing a water plan chapter in each of the 8 county water plans that focuses on the Mississippi River.
<i>Project Outcomes:</i>	-GIS data & model identifying priority areas for future project focus along corridor (500-1000 ft from river) -report and data on water quality trends along river corridor -implementation strategies based on the results from above -Miss. R. water plan chapter in each county water plan document -increased public awareness
<i>Members and qualifications of the LGU Board</i>	Mississippi Headwaters Board: Davin Tinquist (Itasca) Neal Gaalswyk (Cass) Paul Thiede (Crow Wing) Brian Napstad (Aitkin) Jack Frost (Beltrami) Tom Wenzel (Morrison) Lyle Robinson (Hubbard) Dean Newland (Clearwater)
<i>LGU CWF Website</i>	http://mississippiheadwaters.org/
<i>Full Time Equivalent Employees</i>	Part-time staff of the MHB: Pam Kichler