Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

# Final Report Format

**Surface Water Assessment Grant (SWAG)**
Appendix C

*Doc Type: Grant Application*

**Instructions on Page 4**

## Grantee Information

Grantee name: Zumbro Watershed Partnership  Contact name: Lisa Eadens
Contact phone number: 507-226-6787  Grant award: $25,250
Contact e-mail: admin@zumbrowatershed.org
Project title: Nitrogen and Bacteria Monitoring of the Zumbro River Watershed
Grant budget period: Start date: June 16, 2009  End date: June 30, 2011
Project time period covered by this report: Start date: June 16, 2009  End date: June 30, 2011

## Section I – Work Plan

1. **Have you worked with Minnesota Pollution Control Agency (MPCA) Storage and Retrieval Water Data Repository (STORET/EQuIS) staff to establish all sites listed in your grant work plan?**
   ☒ Yes ☐ No  Date submitted: 6/16/2009

2. **Was monitoring data for these established sites submitted for storage into STORET/EQuIS annually?**
   ☒ Yes ☐ No  Last submittal date: 6/24/2011

3. **Describe in detail the monitoring that has been conducted during the entire grant period. Please be specific by completing Table 1. The table should reflect all sites in your grant work plan, their site identifications (IDs), the number of samples to be collected according to the work plan and the number of samples actually collected (include Quality Assurance/Quality Control [QA/QC] sampling). If you were not able to meet your sampling obligations, describe in the comments section what sampling was missed and why. Refer to the end of this report for an example of the completed table.**

**Table 1. Monitoring summary**

| Waterbody[1] (Site ID#) | Planned annual sampling | | Actual for past season | | Comments |
|---|---|---|---|---|---|
| | Parameter | No. | Parameter | No. | |
| Cold Spring Brook (S005-734) | Nitrate-N | 16 | Nitrate-N | 18 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| | E. Coli | 15 | E. Coli | 20 | |
| | Temperature | 56 | Temperature | 29 | |
| | Transparency | 56 | Transparency | 29 | |
| Hammond Creek (S005-735) | Nitrate-N | 16 | Nitrate-N | 18 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| | E. Coli | 15 | E. Coli | 20 | |
| | Temperature | 56 | Temperature | 29 | |
| | Transparency | 56 | Transparency | 29 | |
| Long Creek (S005-738) | Nitrate-N | 16 | Nitrate-N | 18 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of |
| | E. Coli | 15 | E. Coli | 20 | |
| | Temperature | 56 | Temperature | 29 | |
| | Transparency | 56 | Transparency | 29 | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| Long Creek 2 (S005-737) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| Mazeppa Creek (S005-739) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| Middle Creek (S005-740) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| North Fork Zumbro River – Mazeppa (S005-741) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| North Fork Zumbro River 71 & 7 (S005-742) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| Spring Creek West (S005-745) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| Trout Brook Creek (S005-746) | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 16<br>15<br>56<br>56 | Nitrate-N<br>E. Coli<br>Temperature<br>Transparency | 18<br>20<br>29<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| West Indian Creek WC (S005-733) | Nitrate-N<br>E. Coli<br>Temperature | 16<br>15<br>56 | Nitrate-N<br>E. Coli<br>Temperature | 18<br>20<br>29 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of |

| | | | | | |
|---|---|---|---|---|---|
| | Transparency | 56 | Transparency | 29 | Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| West Indian Creek SC (S004-452) | Nitrate-N | 16 | Nitrate-N | 18 | Three extra E. Coli samples were mistakenly taken in September-October 2009. Data includes two QA/QC samples for Nitrate-N and E. Coli (one in 2009 and one in 2010). We found it impractical to take 28 samples of Temperature and Transparency each year so measurements were recorded in conjunction with Nitrate and E. Coli sampling. |
| | E. Coli | 15 | E. Coli | 20 | |
| | Temperature | 56 | Temperature | 29 | |
| | Transparency | 56 | Transparency | 29 | |

**4. Please describe progress in successfully carrying out aspects of the grant work plan other than actual field water monitoring. Attach copies of any documents or products that were produced (i.e., brochures, press releases, etc.).**

In addition to field water monitoring, Year 1 monitoring results were presented at the Zumbro Watershed Partnership monthly board meeting on January 14th 2010 (see Attachments A, B and C). Initial results were also presented at a quarterly meeting of the Zumbro Watershed Partnership Project Advisory Committee on January 14th, 2010, which included attendees from the Minnesota Board of Water and Soil Resources, Olmsted SWCD, Goodhue SWCD, Wabasha SWCD, Dodge SWCD, Olmsted County, McGhie and Betts Environmental Services, MPCA, Dodge County Environmental Services, and the U.S. Fish and Wildlife Service. Results and SWAG grant progress were also included in the Zumbro Watershed Partnership's quarterly newsletter 'The Zumbro Current', which was mailed to 76 members and distributed across the watershed in February 2010 (see Attachment D).

Year 2 results were presented at the Zumbro Watershd Partnership monthly board meeting on May 12th 2011 and at the quarterly meeting of the Zumbro Watershed Partnerhsip Project Advisory Committee on May 12th 2011 (see Attachment E).

All results are posted on our website at: www.zumbrowatershed.org.

**5. Describe in detail any problems, delays, or difficulties that have occurred in fulfilling the grant work plan. How did the grantee resolve these problems? Were there any change orders and/or amendments to the grant contract (work plan and/or budget)? If yes, list.**

There wasn't any data for S005-743 (Pine Island/Dry Creek) due to being a dry run. S005-744 (Spring Creek) and S005-736 (Helbig Creek) were on private property and we were unable to get permission to sample there. S005-747 (West Albany Creek) was an unsafe stop once data collection started. Therefore, these locations were not sampled. Additionally, we started sampling late in 2009 (in early July) because that was when grant money was received and a contract was signed between the Zumbro Watershed Partnership and Wabasha Soil and Water Conservation District for the field water monitoring.

A change was made to the grant contract on October 27, 2009 to modify the Project Manager from Jennifer Ronnenberg to Lisa Eadens. On January 30, 2010 a grant change order was made to remove two sampling sites - Bear Creek and Milliken Creek - from the work plan.

On May 3, 2010 a grant change order was submitted to change the timeframe for sampling to include 1 E. Coli sample in June 2011 and change the distribution of grant dollars to include $200 under Objective 1: Training and add $1,500 to Objective 2: Travel Reimbursement. These funds were taken from Objective 2: Other supplies (reduced by $500) and Objective 2: Lab Analysis (reduced by $1,200).

## Section II – Participants in Project

**6. Have there been any changes in project staff or contractors or has participation by companies or units of government changed? How many volunteers participated in monitoring activities during this project? Complete Table 2 by listing the contact information for your volunteers. Once your grant ends, the MPCA Citizen Lake/Stream Monitoring Program coordinators plan to contact these volunteers to see if they are interested in continuing to collect transparency data at their assigned sites.**

Since the Zumbro Watershed Partnership was awarded this grant in April 2009, its Watershed Coordinator has changed from Jennifer Ronnenberg to Lisa Eadens. Due to this change in staff and a short period in which the Zumbro Watershed Partnership did not have a coordinator, the Zumbro Watershed Partnership contracted with the Wabasha Soil and Water Conservation District for the field water monitoring in 2009 and data entry into STORET for 2009-2011.

There were no volunteers that participated in monitoring activities for this project.

**Note:** *You do not need to complete the volunteer table below if your volunteers have not changed from those you identified on your last interim report.*

**Table 2. Volunteer contact information**

Organization Name: _____

Grantee Contact: _____ Telephone Number: _____

| Waterbody | Site ID# | Contact name | Address | Telephone number | E-mail address |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

**7. Please describe training that you and/or an outside trainer provided to your project participants throughout the course of this grant. Include details on what the training covered, who administered this training and when it was offered (i.e., at the start of the grant, at the beginning of each field season, etc.).**

In April 2010, the Wabasha Soil and Water Conservation District provided training to Lisa Eadens, Coordinator for the Zumbro Watershed Partnership. This training included traveling to each sampling site and instruction in the proper collection of temperature, transparency, stage, Nitrate-N and E. Coli as well as documentation of stream appearance and recreational suitability.

## Section III – Evaluation Plan Results

**8. Was the project a success? Did you achieve your goals?**

This project was a success. Although we experienced a few changes and challenges throughout the grant contact period, we were able to achieve our goal of obtaining Nitrate-N and E. Coli data as well as data on transparency, temperature and stream stage for 12 stream reaches of the Zumbro River in Wabasha County for which there were no previous data. Results from our sampling have already been distributed and of interest to many parties throughout the Zumbro River Watershed.

**9. What would you recommend to others interested in attempting a project like yours?**

Based on our two years of water sampling experience, I would suggest to others interested in attempting a project like ours to be realistic about how many sites they can sample and how many samples are necessary for each parameter. Our original work plan included 18 sampling locations spread across two counties, which would have taken two days or two samplers to complete each time sampling was done since samples needed to be delivered to the shipper by early afternoon. Our original work plan also included 28 measurements of transparency and temperature each year. We later found that both the number of sampling locations and the goal for transparency and temperature measurements were unrealistic and impractical. I would also advise someone to double check all of their sampling locations to make sure they are safe and on public property before including them in the work plan.

**10. Distribution of the project information is a legislative requirement for all SWAGs. How do you plan to distribute project information to interested parties (the media, businesses, Local Unit of Government [LUGs] etc.)? Is this information to be posted on your Web site? Is so, please supply the link to your Web site.**

We have distributed results from our sampling at our monthly Zumbro Watershed Partnership Board of Director meetings and at two meetings of our Project Advisory Committee. This committee is composed of local and state government agenices as well as businesses, other nonprofits and interested citizens. Our results are presented on our website at www.zumbrowatershed.org.

**11 Please provide any suggestions you may have for improving the MPCA's SWAGs, particularly as they relate to the application process and grant administration.**

I was happy with the flexibility of the work plan once we found that changes were necessary. I also found that communication with our project manager was very good throughout the grant contract.

## Section IV – Budget

**12. Fill in Table 3. List below and identify any time extension amendments, any additional dollars incorporated into your project budget through an amendment and/or any dollars reallocated from one task to another through a change order after the original grant award.**

On May 3, 2010 a grant change order was submitted to change the distribution of grant dollars to include $200 under Objective 1: Training and add $1,500 to Objective 2: Travel Reimbursement. These funds were taken from Objective 2: Other supplies ( reduced by $500) and Objective 2: Lab Analysis (reduced by $1,200).

**Table 3. Project expenditures**

| Project budget | MPCA grant funds available | Total MPCA funds expended | Total remaining balance | Percent of budget expended |
|---|---|---|---|---|
| **Objective 1: (Title) Preparation, Planning and Training of Staff/Volunteers** | | | | |
| Task: Sampling locations | $0.00 | $0.00 | $ 0.00 | NA % |
| Task: Laboratory | $0.00 | $0.00 | $ 0.00 | NA % |
| Task: Training and Equipment (change order to increase by $200.00) | $200.00 | $175.20 | $ 24.80 | 88 % |
| Task: | | | $ 0.00 | % |
| **Objective 2: (Title) Data Collection and Monitoring of Streams** | | | | |
| Task: Personnel: Data Collection | $10,000.00 | $5,356.25 | $4,643.75 | 54 % |
| Task: Travel Reimbursement (change order to increase by $1,500) | $2,450.00 | $1,855.60 | $ 594.40 | 76 % |
| Task: Shipping and Other Supplies (change order to decrease by $500) | $2,800.00 | $284.97 | $2,515.03 | 10 % |
| Task: Lab Analysis (change order to decrease by $1,200) | $5,800.00 | $5,265.00 | $ 535.00 | 91 % |
| **Objective 3: (Title) Fiscal Management and Reporting** | | | | |
| Task: Track project grant funds and expenditures | $750.00 | $225.00 | $ 525.00 | 30 % |
| Task: Required reporting | $750.00 | $581.25 | $ 168.75 | 78 % |
| Task: Volunteer recognition and outreach | $500.00 | $0.00 | $ 500.00 | 0 % |
| Task: Printing | $500.00 | $18.00 | $ 482.00 | 3.6 % |
| **Objective 4: (Title) Electronically Submit Data for Storage in STORET** | | | | |
| Task: Prepare and submit data to STORET | $1,500.00 | $645.88 | $ 854.12 | 43 % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| **Objective 5: (Title)** | | | | |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| **Objective 6: (Title)** | | | | |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| Task: | | | $ 0.00 | % |
| **Column Total** | $25,250.00 | $14,407.15 | $10,842.85 | % |

## Instructions

The Minnesota Pollution Control Agency evaluates grants based on their contribution to the Minnesota Pollution Control Agency's (MPCA) mission. In preparing your Final report, please refer back to Exhibit A (the work plan and budget) in your grant contract and previous Interim reports.

The Final grant report should be a comprehensive report that includes results in the form of data and information that best demonstrates progress toward achieving the objectives as identified in your grant work plan. The MPCA will use the information from this grant contract and others to document progress toward meeting the objectives to external parties, such as taxpayers and the legislature. The MPCA staff (Project Manager) will work with the Grantee on what the best ways are to accomplish this information requirement.

Project grantees are required to complete and submit a draft and a final report as outlined in the grant contract and work plan, covering the entire grant budget period. **Failure to submit a complete Final report may result in the loss of grant funds, the withholding of additional grant disbursements or being removed from consideration for future grant funding**.

A grantee may fill in the blanks in the form provided, or **you may tailor the form to more accurately fit your project (work plan)**. Since projects are very diverse, the latter method may work best. This form is available electronically.

The report shall be sent to the attention of your MPCA Project Manager electronically.

***Example:***

**Table 1. Monitoring summary**

| | | Planned sampling | | Actual sampling | | |
|---|---|---|---|---|---|---|
| **Waterbody** | **Site ID#** | **Parameter** | **No.** | **Parameter** | **No.** | **Comments** |
| *Lake A* | *71-***)* | *Chl-A, TP, Secchi* | *10* | *Chl-A, TP, Secchi* | *10* | *All required sampling completed.* |
| *Stream A* | *S****)* | *TP, TSS, DO, pH,conductivity* | *22* | *TP, TSS, DO, pH,conductivity* | *15* | *Stream ran dry for several months and prevented us from obtaining planned samples* |
| | | | | | | |
| | | | | | | |