Lower Grand River Watershed

Developing a Watershed Management Plan

Final Project Evaluation

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Evaluation Team Review Draft

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Executive Summary

Partners in the Lower Grand River Watershed are collaborating in the development of a watershed management plan using a Section 319 grant from the Michigan Department of Environmental Quality (MDEQ) Surface Water Quality Division. This is an ambitious undertaking due to the size of the Lower Grand River Watershed – an area approximately 3,020 square miles that encompasses ten counties in western Michigan. It is a unique project that will establish sustainable organizational and informational infrastructure to support comprehensive watershed management in the Lower Grand River Watershed and, in the future, the entire Grand River Watershed.

The Lower Grand River Watershed Management Planning Project (the Project) was a two-year project that began in July 2002, conducted by three primary project partners Grand Valley Metro Council (GVMC), Grand Valley State University's Annis Water Resources Institute (AWRI), and Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H), with support from numerous watershed stakeholders. Through the Project, partners set out to accomplish ten tasks that would support existing and future watershed management efforts at the local level by developing a unique regional watershed management plan that provides techniques and tools for stakeholders in subwatersheds to use in conducting planning efforts at the local level. Products of the project include the Lower Grand River Watershed Management Plan, two subwatershed management plans, and a series of computer-based planning tools and electronic resources. In addition, partners and participating stakeholders generated a vision for the Lower Grand River Watershed and strategic elements necessary for creating a sustainable watershed organization.

An important component of the Project is a comprehensive project-level evaluation that serves as the vehicle for identifying, documenting, and distributing beneficial lessons learned. The project evaluation process involved several project partners and stakeholders who volunteered to participate on the Evaluation Team. To lead the evaluation process and facilitate the efforts of the Evaluation Team, AWRI hired Tetra Tech, Inc., a consulting firm experienced in developing, implementing and evaluating watershed management projects, to serve as the Project Evaluator. Together the Project Evaluator and the Evaluation Team identified a series of evaluation questions and evaluation tools to identify the successes and challenges associated with the Project.

The Evaluation Team and Project Evaluator continued to conduct evaluation activities during the final year of the Project. Final evaluation activities focused on addressing issues that were too premature to address during the first year of the Project, such as the quality and usefulness of products, and aspects of the Project that could not be addressed in the Mid-Project Evaluation due to time constraints. As a result, the final evaluation activities have focused on efforts of the Visioning Subcommittee and the Steering Committee, follow-up on implementation issues such as development of a watershed vision and goals, and final products. Findings of the Mid-Project Evaluation coupled with the findings from the final project evaluation activities have highlighted significant successes and challenges in each of the three evaluation categories. Overall project conclusions in each of the three evaluation categories are as follows:

Project Context

Findings in this evaluation category address the structure and function of the project partners, as well as how the project functions within the community.

Successes related to project context are as follows:

- Adapting project structure based on needs of the group by dividing the responsibilities of the Sustainability Subcommittee between the Steering Committee and the Visioning Subcommittee;
- Coordinating a watershed organization discussion panel to learn from existing watershed organizations in the Lower Grand River Watershed and the State of Michigan to inform the watershed organization development process;
- Creating the Grand River Forum as a mechanism specifically intended to generate stakeholder participation and involvement;
- Identifying and fulfilling the need for the primary grantee to take a more significant leadership role among project partners;
- Generating momentum among a core group of watershed stakeholders to sustain efforts of the planning phase through to the implementation phase.

Challenges related to project context are as follows:

- Creating a project structure that may have hampered communication among subcommittees, particularly for individuals that did not participate on more than one committee;
- Creating the perception of a Grand Rapids/Kent County focused project and a watershed stakeholder group with limited diversity;
- Defining a watershed vision and goals at the end of the project rather than the beginning;
- Initiating subcommittee activities without providing members the opportunity to contribute to the development of subcommittee goals and processes.

Project Implementation

Findings in this evaluation category address task implementation, the performance of project staff and partners, and the evolution of the project over time. Project implementation also takes into account project outputs (i.e., project deliverables required under the work plan) and deadlines.

Successes related to project implementation are as follows:

- Ensuring constant progress toward achieving work plan tasks through the use of dedicated project staff;
- Resolving facilitation issues within the I&E Subcommittee based on input from subcommittee members;
- Completing work plan requirements;
- Developing watershed vision and goals;
- Developing the Watershed Interactive Tool and related resources using stakeholder feedback throughout the development process;
- Creating strategic plan for creation of an appropriate watershed organization;

- Implementing additional tasks beyond work plan requirements;
- Providing a forum for information exchange among watershed stakeholders participating on subcommittees;
- Identifying and creating formalized product development processes as necessary.

Challenges related to project implementation are as follows:

- Fluctuating participation trends among Steering Committee, subcommittees, and the Grand River Forum;
- Developing I&E products with limited evaluation to assess effectiveness;
- Focusing on two specific pilot project areas that may have resulted in diminished participation from stakeholders with interests outside of the pilot project areas;
- Limiting Grand River Forum meetings to a specific time and location that does not allow a wide array of watershed stakeholders to participate.

Project Outcomes

Project outcomes focus on the impact that the Lower Grand River Watershed Planning Project has had in the short-, medium-, and long-term.

Successes related to project outcomes are as follows:

- Obtaining stakeholder approval on the Watershed Interactive Tool and related resources;
- Obtaining positive feedback from participating Phase II communities on the usefulness of Project products to fulfilling their Phase II storm water permitting requirements;
- Developing two MDEQ-approved watershed management plans for Sand Creek and Buck Creek watersheds;
- Acknowledging long-term project evaluation needs;
- Developing long-term project evaluation mechanisms.

Challenges related to project outcomes are as follows:

- Assessing future impact of products on watershed and storm water management efforts;
- Assessing increased awareness of watershed management issues as a result of I&E efforts;
- Assessing effectiveness of strategy to create a permanent watershed organization through the use of an interim watershed council comprised of Steering Committee members;
- Assessing effectiveness of the Lower Grand River Watershed Management Plan in achieving water quality improvements during the implementation phase.

SECTION ONE: INTRODUCTION

The Lower Grand River Watershed Management Planning Project (the Project) focuses on a portion of the larger Grand River Watershed in western Michigan. Draining approximately 3,020 square miles, the Lower Grand River Watershed encompasses ten counties and draws together a significant number of partners. The geographic scope of the Lower Grand River Watershed sets the stage for a complex watershed management planning process that requires the participation of numerous stakeholders representing multiple stakeholder interests. Three watershed stakeholders collaborated to develop and obtain funding to conduct the Project, a two-year effort initiated in July 2002 with Section 319 grant funding from Michigan Department of Environmental Quality (MDEQ). Grand Valley Metro Council (GVMC) served as the lead grantee, bringing on Grand Valley State University's Annis Water Resources Institute (AWRI) and Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H) as co-grantees. Table 1.1 describes the roles and responsibilities of the three collaborating project partners and MDEQ in conducting the Project.

Table 1.1 Roles and Responsibilities of Lower Grand River Watershed Management Planning Project Partners

Partner	Role(s)	Responsibility
Michigan Department of Environmental Quality (MDEQ)	Project Administrator	Ensure grantee spends grant funds according to workplan; Review products and quarterly reports; Participate on various subcommittees
Grand Valley Metro Council (GVMC)	Primary Grantee	Leading efforts of the Steering Committee and the Visioning Subcommittee (formerly the Sustainability Subcommittee)
Annis Water Resources Institute (AWRI)	Sub-grantee	Leading efforts of the Rural Subcommittee and the Information & Education Subcommittee
Fishbeck, Thompson, Carr & Huber, Inc. (FTC&H)	Sub-grantee	Leading efforts of the Urban Subcommittee and the Technical Subcommittee

One of the ten project tasks is a comprehensive project evaluation intended to capture the successes and challenges of the Project. AWRI hired Tetra Tech, Inc. to serve as the Project Evaluator, tasked with developing and implementing the project evaluation process as a neutral third-party experienced in watershed management planning and implementation. The Project Evaluator worked with project partners to assemble a group of watershed stakeholders participating in the Project through various subcommittees. The volunteer group of participants, referred to as the Evaluation Team, assisted the Project Evaluator in identifying appropriate evaluation questions and tools.

Like the Project, the project evaluation process spanned the two-year timeframe to allow partners and participating stakeholders the opportunity to provide continuous feedback on a variety aspects of the Project, including project context, implementation, and outcomes. The project evaluation process began in March 2003, requiring the Project Evaluator to assemble the Evaluation Team and conduct initial evaluation process development as the first year of the project drew to a close. Therefore, evaluation activities intended to focus only on the initial year of the Project actually took place during the second year of the Project. The Mid-Project Evaluation Report, completed in May 2004, addressed activities that took place from July 2002 to June 2003, as well as activities that took place during a portion of the second year. The initial year of the project focused on assembling

the organizational structure of the Project, comprised of a Steering Committee, five subcommittees, and the stakeholder group referred to as the Grand River Forum, as well as establishing processes for implementing the tasks of the Project. As a result, the Mid-Project Evaluation Report examined the organizational structures, project processes, participation trends, and progress toward achieving work plan requirements.

After completion of the Mid-Project Evaluation Report, the Project Evaluator and Evaluation Team focused on evaluating aspects of the project that took shape during the second year and were feasible to evaluate in the near-term. Aspects examined during the final project evaluation activities include the following:

- Efforts of the Steering Committee related to development of a sustainable watershed organization;
- Efforts of the Visioning Subcommittee to create a watershed vision;
- Perceptions of specific watershed stakeholders affected by the Project, including participants in the Grand River Forum, communities contributing matching funds due to storm water management issues, and sub-watershed organizations and projects;
- Perceptions related to final products, such as watershed management plans, computer-based tools and resources, strategic elements of the organizational structure, information and education (I&E) materials.

> "Success of this grant process should not be measured by the progress reached to date, but by what happens to the Lower Grand process post-grant."
> – Participant in the Lower Grand River Watershed Planning Project Evaluation Process

In addition to conducting evaluation activities, the Project Evaluator also identified long-term evaluation needs that will allow project partners to continue assessing the effectiveness of the Project beyond this cycle of grant funding. An important element of the project evaluation process is determining how to measure the long-term outcomes or impacts of the Project. Many of the outcomes of the Project will have a direct affect on implementation activities during the next phase of management efforts in the Lower Grand River Watershed.

The Mid-Project Evaluation Report contains detailed information on the Project and the evaluation process. The remainder of this report focuses on the evaluation activities, findings, and recommendations related to the second year of the Project. In addition, this report provides overall project conclusions and recommendations for evaluating project outcomes over the long-term – beyond this grant cycle and into the implementation phase. Section Two of this report presents findings related to final evaluation activities, including overall project conclusions and recommendations. Section Three of this report focuses on long-term evaluation considerations to assist project partners with follow-up

evaluation activities for the Project and evaluation mechanisms for evaluating implementation efforts.

SECTION TWO: EVALUATION FINDINGS

This section presents the information obtained through evaluation activities focused on aspects of the project not addressed in the Mid-Project Evaluation Report. Evaluation findings fall into the following categories: 1) project context; 2) project implementation; and 3) project outcomes.

Project Context

Findings in this category address the structure and function of project partners, as well as how the project functions within the community. The Mid-Project Evaluation Report focused on the structure and function of project partners. Evaluation activities for the final project evaluation focused on the function of the Lower Grand River Watershed Planning Project in the community. Stakeholders from communities within the watershed participated in the project through the Grand River Forum meetings. In addition, the Lower Grand River Watershed Planning Project has reached out to the community by providing an incentive for municipalities subject to Phase II National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permitting requirements to participate in watershed management planning activities. Several watershed groups are active at the local level in the Lower Grand River Watershed; these subwatershed groups are an important part of the community affected by the Lower Grand River Watershed Planning Project. Feedback generated through evaluations of Grand River Forum participants, Phase II municipalities, and subwatershed organization representatives is presented below.

Grand River Forum Evaluations

The Grand River Forum provided watershed stakeholders with the opportunity to become informed and involved in the Lower Grand River Watershed Planning Project. Grand River Forum meetings began in October 2002 and continued throughout the two-year project on a quarterly-basis. A total of seven Grand River Forum meetings took place over the course of the project. According to the meeting minutes available on the project web site, most Grand River Forum meetings employed a presentation format to provide participants with an update of activities related to the Lower Grand River Watershed Planning Project. However, a few meetings did provide opportunities for participants to become more actively involved. The second quarterly meeting provided participants with an opportunity to work in break-out sessions to address pilot project area selection. The sixth quarterly Grand River Forum meeting contained an interactive component during which participants brainstormed the needs of a successful watershed organization to aid in the development of a watershed strategic plan. The final Grand River Forum meeting also used an interactive format that provided participants with the opportunity to test the Watershed Interactive Tool and associated project products such as the Watershed Assessment Matrix and the Watershed Interactive Mapping tool.

Evaluations of Grand River Forum participants occurred at four of the seven meetings held during the course of the project. Initial evaluations, referred to as exit surveys,

focused on meeting logistics such as time, location, day of the week, meeting format, and room set-up. Exit survey summaries for meetings held on October 17, 2002, February 20, 2003, and March 15, 2004 indicate that a majority of participants responding to the exit survey were pleased with meeting logistics. The lowest score received related to room set-up during the October 17, 2002 meeting. Some written comments contained in the exits survey summaries reflect comments related to the focus of meetings (e.g., "[meetings should be] more progressively focused") and ways to increase participation (e.g., "send reminder email messages the Friday before a meeting").

Exits surveys also asked participants for suggestions for future meetings, organizations that project staff should encourage to participate, and programs that may collaborate with the Lower Grand River Watershed Planning Project. The exit survey for the March 15, 2004 meeting asked for feedback related to the Watershed Interactive Tool. Early feedback captured in the exit survey summary indicates positive feedback for the concept and function of the Watershed Interactive Tool; participants provided suggestions for promoting the tool and recommendations for changing the acronym.

In addition to the three exit surveys, project staff asked Grand River Forum participants to complete a final evaluation form. Project staff distributed the final evaluation form during the June 3, 2004 Grand River Forum meeting and sent the form via email to past Grand River Forum participants who did not attend the June meeting. The purpose of the final evaluation form was to determine how the level of participation in the Grand River Forum meetings has changed during the two-year project and to assess the usefulness of the Grand River Forum.

The evaluation form was distributed to approximately 31 participants at the June 3, 2004 meeting and approximately 83 individuals on an email distribution list; some overlap did exist between the meeting participants and the individuals contained on the email distribution list. Of the 31 participants attending the June 3, 2004 meeting, a total of 15 participants submitted evaluation forms. Of the approximately 83 individuals on the email distribution list, one individual completed and mailed an evaluation form to the Project Evaluator. Information from the 16 completed evaluation forms on participation and usefulness of the Grand River Forum meetings is summarized below.

The June 3, 2004 Grand River Forum meeting generated involvement from individuals who had never before participated in a Lower Grand River Watershed event. Nearly forty percent of the evaluations (6 of 16) reflect input from first-time participants. While the input of new participants is helpful and encouraged, the responses on some of the evaluations contain comments that reflect input relevant only to the June 3, 2004 Grand River Forum meeting. Responses provided by participants that have attended more than one meeting may reflect more accurately the trends of the Grand River Forum meetings. Therefore, it is helpful to interpret responses with an understanding of who – first-time participants or frequent participants – provided the response.

Questions and Findings

1) What prompted you to participate in the Grand River Forums?

The open-ended question resulted in a variety of factors, with most respondents listing more than just one. Factors listed by respondents fell into the following categories:

- Connection to job (4)
- Watershed management interests (3)
- Connection to regulatory issues (e.g., NPDES regulations) (3)
- Interest in the Grand River (3)
- Collecting information (3)
- Community or sub-watershed interest (2)
- Participation on other aspect of Lower Grand River Watershed project (1)
- Opportunity to network (1).

2) How many Grand River Forums have you participated in over the past 2 years?

According to both the evaluation forms, as well as the sign-up sheet, the June 3, 2004 meeting had several first-time participants. Six respondents indicated that they had not attended any of the Grand River Forum meetings prior to the June 2004 meeting. One respondent indicated that he attended only the first Grand River Forum meeting on October 17, 2002. Nine respondents indicated that they attended three or more of the six Grand River Forum meetings. Project staff attribute the number of first-time participants to the unique nature of the June 2004 meeting (i.e., workshop to demonstrate the Watershed Interactive Tool) and the number of personal invitations and reminder email messages and phone calls made by project staff. According to AWRI, the sign-up sheet for the June 3, 2004 meeting contained 31 names; 14 of the 31 attendees had never before attended a Lower Grand River Watershed event.

3) If you have not participated in all of the meetings, what factors would have increased your participation?

Of the 16 total respondents, only 10 individuals answered the question on factors affecting participation. Five of the responses related to multiple time demands and scheduling conflicts. Other responses included involvement in other watershed activities in other communities; lack of advanced notice; personal reasons; and hosting the meeting closer to home.

4) Do you feel the size of the group was adequate? Yes/No. Please explain.

Thirteen respondents answered yes. Explanations provided included:

- Size felt good, but seemed as if a lot of people were missing
- Proper size for sharing the computers (comment specific to June 3rd meeting)
- Not too big or small. Representatives/participants changed somewhat, but yet there seemed to be a core group providing continuity.

- We needed a diverse and interested group.
- Smaller groups can be more productive.
- Somewhat small but adequate. Could benefit from more diverse group of individuals.

Two respondents answered no. Explanations provided included:

- I wish we had more participation.
- There are interested people who did not participate at all. No business sector participation. Not enough people.

One respondent did not provide an answer.

5) Do you feel the composition of the group was representative of the watershed community? Yes/No. Please explain.

Eight respondents answered yes. Four of the respondents answering yes had not attended a Grand River Forum meeting prior to the June 2004 meeting. Six respondents are from within the watershed. One respondent represents the Upper Grand River Watershed. One affiliation is unknown. Explanations included:

- There appeared to be a broad mix in backgrounds.
- Seemed like a diverse group with several local agencies represented as well as MDEQ.
- But most in attendance were old die hards.
- It appeared to bring together a good diverse group.

Five respondents answered no. Three of the respondents answering no stated they had attended all Grand River Forum meetings and two had attended at least three meetings. All respondents represent communities and organizations within the watershed. Explanations included:

- Lacking Native Americans, business/industry, citizens at large, students, educators.
- I think we need new "members" or "players."
- Not completely. No representation of African American or Hispanic communities.
- Composition seemed more Grand Rapids/Kent County/Ottawa County with lesser participation from other interest groups.
- Needed more diversity.

Three respondents stated that it was difficult to discern the composition of the group at the June 2004 Grand River Forum meeting. Two of the respondents had not attended any prior Grand River Forum meetings, one of which represented a county located outside of the watershed. One respondent attended the first Grand River Forum meeting in October 2002 and represented a community located within the watershed.

6) Do you feel the meetings were held to optimize participation from the attendees? Yes/No. Please explain.

Eight respondents answered yes. Four respondents had never attended a Grand River Forum meeting prior to June 2004. Four respondents attended one or more meetings. Explanations included:

- It is a great start and it will be a major task to keep the ball rolling.
- Smaller groups/subcommittees were nice for those of us with a fear of speaking in large groups.

Two respondents answered no. One respondent attended all the Grand River Forum meetings and the other respondent had not attended any prior to the June 2004 meeting. Explanations included:

- A large amount of information to take in, difficult to process and formulate questions or input in short time period.
- Timing and location of meetings excluded many who would have participated.

Six respondents did not provide an answer. Despite the lack of a "Yes/No" answer, two of the respondents did provide written explanations:

- Unfortunately you will never be able to adjust meetings to everyone's schedule. You might consider more than one date for Forum.
- I feel the intent of Forum leaders was to foster participation and that results were mixed.

7) Do you feel your input was incorporated into the watershed management planning process? Yes/No. Please explain.

Nine respondents answered yes. Six respondents attended one or more Grand River Forum meetings, and the remaining two respondents had not attended any Grand River Forum meetings prior to June 2004. Explanations provided by respondents included:

- My actual input was limited due to my experience and knowledge.
- Our participation in the Sand Creek watershed was evident at this presentation.
- Absolutely.
- Enjoying participating on the sub-committee/committee level.

One respondent answered no and did not provide an explanation.

Six respondents did not provide a "Yes/No" answer to the question. Three respondents attended more than one Grand River Forum meetings, and the other three respondents had not attended a Grand River Forum meeting prior to June 2004. Two respondents provided the following written explanations:

- I feel that the skills and information I had to share did not connect/were not effective in this project. They are very effective in mine.
- I am newly involved in this program and am just learning about the project.

8) What do you think were the most useful aspects of the Grand River Forums?

Eleven respondents provided answers. Of those who answered, four had not attended a Grand River Forum meeting prior to June 2004. Respondents identified the following aspects as the most useful:

- Interaction with others interested in watershed initiatives; innovative ideas
- Keeping everyone connected and working toward implementation; working together to create a useable plan
- Brainstorming
- Bringing people together; break-out workshops
- Forums useful to educate and keep connected to outside, but the actual committees formed are the real pay-off in benefits to watershed activity
- Increasing awareness of the watershed we all live in
- Seeing where we are going and what we are doing
- The hands-on training was great for me.
- All aspects useful
- Access to, and information about, resources available to educate oneself about matters of community importance and the environment as they relate to the Grand River Watershed.
- Producing the watershed mapping and information tools; evaluation is something that has not been [pushed] for, and is essential. It is great that this will be used! Environmental education tools can help produce quality communication and products.

9) What do you think could have made the Grand River Forums more useful?

Eight respondents provided comments on how to make the Grand River Forums more useful. Four respondents had not attended Grand River Forum meetings prior to June 2004. Respondents provided the following input:

- Shorter presentations in the middle
- I have just started attending watershed meetings
- Although a great deal of work and resources are required, continued work in all directions needs to continue.
- More participation by affected communities.
- Parallel establishment of a watershed organization to maintain continued focus, attend to improvements and regulatory issues. Leadership after the grant and consultant assistance? Too many questionnaires – too much to write and not enough time to complete.
- Bring in people besides agencies and organizations. Time and location of meetings excluded many people. Better public awareness – we were preaching to the choir.
- Try to get more involvement – maybe more times in different locations.
- Getting people to come to the meetings – both the Forums and the committee meetings.

10) Would you like to be involved in future watershed protection efforts?

Nine respondents stated yes. Six evaluation forms did not contain an answer and one respondent answered no. Additional written comments included:

- Evaluate why so many people stopped coming – call them, ask them.
- Want to know more about the Steering and Visioning Committee – what's next? 1) Watershed organization – what is it, when? 2) Public awareness – has to be, how do we do that? We've known that public awareness is important for a long time, but it is generally the same core group of participants at watershed-type meetings. 3) Data management will become the responsibility of the organization.

Conclusions

The influx of new participants at the last Grand River Forum meeting is important to note, since increasing participation at Grand River Forum meetings appears to be important to both project staff and regular Forum attendees. According to AWRI, approximately 45 percent of attendees at the June 3, 2004 meeting were first-time participants. Increased participation beyond the usual core group of participants may be the result of the personal invitations made by the Project Administrator, as well as the reminder phone calls and email messages from project staff. When asked what motivated participation, first-time participants provided responses related to information collection and sharing. It is likely that this type of meeting – an interactive workshop providing participants with the opportunity to test new tools – sparked the interest of stakeholders because the agenda focused on interactive sessions as opposed to presentations focused on project updates. Although the last Grand River Forum meeting attracted new participants, respondents do not feel that the Forum meetings attract a representative group of stakeholders. Responses to Question Five about the composition of the Grand River Forum participants illustrates that those individuals in regular attendance of Forum meetings felt that the group was not diverse and did not fully represent stakeholders in the watershed.

Sustaining participation is also a concern for project staff and regular Forum attendees. The most cited reason for participating in the Grand River Forums was "connection to job." Despite the connection to jobs, respondents indicated that conflicts in schedule have the most significant affect on their personal participation – a factor that is often difficult to overcome because the people who participate the most are often the "old die hards" within the communities of the Lower Grand River Watershed that likely have multiple commitments. Some respondents stated that the timing and location of the meetings might adversely affect the growth and diversity of the overall group. The six Grand River Forum meetings took place at the Grand Valley State University Eberhard Center in Grand Rapids on a weekday from 9:00 or 9:30 am to 11:00 am or 12:00 pm. The June 3, 2004 meeting also took place in Grand Rapids, but took place from 1:00 pm to 5:00 pm. Although the standard location and time of the Grand River Forum meetings may provide reliability and assist some individuals with planning, these logistical factors may actually limit the type of stakeholders that are able to attend (e.g., excludes

stakeholders that must work during the day) and their geographic representation (e.g., promotes a Grand Rapids/Kent County focus).

Recommendations

Based on the increase in new participants and their responses regarding motivating factors, project staff should consider focusing future Grand River Forum meetings (or any meeting that seeks broad stakeholder involvement) on an innovative and interactive activity, such as training on a particular tool or a skill that will benefit stakeholders while promoting watershed management. In addition, project staff should consider exploring ways to continue personalizing invitations to attend meetings. For example, consider creating a membership team that is comprised of volunteers willing to send personalized email messages or make phone calls to remind and invite stakeholders within the watershed. Since a membership team could not contact every stakeholder, the team could identify and focus their efforts on a particular sub-set (i.e., teachers, business representatives, ethnic groups, etc.) for each meeting.

By scheduling meetings at multiple times in multiple locations on a particular day and/or during the course of a particular week, stakeholders within the watershed would have the opportunity to select a time and location that works best with their schedule. If successful, this approach will improve the diversity, size, and sustainability of the Grand River Forum participants.

Phase II Municipality Evaluations

Many communities participated in the Lower Grand River Watershed Management Planning Project because project partners approached communities and demonstrated how planning activities could assist them in meeting their NPDES Phase II MS4 permitting requirements. Sixteen communities subject to Phase II requirements in the Lower Grand River Watershed participated in the project by providing matching funds and encouraging municipal staff to participate on a subcommittee.

Questions and Findings

The Project Evaluator contacted representatives from the sixteen Phase II communities via telephone and email with four specific questions related to the impact the Lower Grand River Watershed Planning Project has had on Phase II storm water permitting related activities. Of the sixteen communities contacted, representatives from eight provided the Project Evaluator with responses via telephone or email. The questions and a summary of responses are provided below.

1) How does the Lower Grand River Watershed Management Plan, as well as other project products (e.g., Watershed Information Tool) address your community's Phase II storm water permitting needs?

Respondents provided mixed responses regarding the ways in which products from the Lower Grand River Watershed Planning Project will address storm water permitting needs, with the majority stating that one or more of the project's tools will prove helpful. Six of the eight respondents identified aspects of the project will prove

beneficial, including the urban best management practices (BMPs), the Buck Creek Watershed Management Plan, the Tool book, and the Lower Grand River Watershed Management Plan. One respondent stated that the Lower Grand River Watershed Management Plan and related products provide a regionally-consistent and approved message that the environment is important and the community is taking the initiative to be environmentally savvy. Two respondents commented that the project helped communities to meet permitting requirements more efficiently due to the group approach and the use of a consultant and Grand Valley Metro Council.

One respondent stated that storm water problems do not exist in his community and as a result, the various tools and plans will not be useful to his community. Another respondent stated that the products will partially address storm water permitting needs by providing a base for developing a jurisdictional SWPPI.

2) How has participating on the Lower Grand River Watershed Planning Project been beneficial to your community? If you do not feel that this project has been beneficial to your community, please state why.

A majority of respondents felt that participating on the Lower Grand River Watershed Planning Project has been beneficial to their community. Benefits listed by seven of the eight respondents included:

- Saved time and resources
- Promoted information and idea sharing among communities in the watershed
- Provided access to technical experts and exposure to diverse points of view
- Increased understanding of water quality issues, strategies for managing development, watershed management concepts
- Resulted in working knowledge of the benefits associated with storm water management that can be incorporated into daily practices and conveyed to community residents
- Prepared communities for the storm water permit application process and provided regulatory information necessary to remain in compliance.

Only one respondent stated that he had minimal participation in the project because he felt that it wasn't necessary given the lack of water quality problems in his community and that, if not for the link to regulatory requirements, his community would not have contributed or participated in the project at all.

3) What aspect of the Lower Grand River Watershed Planning Project will assist your community in managing storm water, as well as other water resources, more effectively?

A majority of respondents identified aspects of the project that will assist the community in effectively managing storm water and water resources. Three respondents listed the public education program as an aspect of the Lower Grand River Watershed Planning Project that, once implemented, will assist their community. One respondent stated that the project will assist his community because it promotes taking a holistic approach to ensure that upstream and downstream communities are making

efforts to improve water quality. Other respondents stated that the municipal operations component of the project, activities related to inspecting, locating, and identifying storm sewer system outfalls, and the BMP worksheets will assist their communities in effectively managing storm water and water resources. According to another respondent, knowing the hydrology and soil types of the sub-watershed provided information necessary to establish storm water management criteria to minimize flooding and erosion. One of eight respondents stated that no aspect of the project will assist his community because a recent assessment of storm water outfalls indicated that the community does not have a storm water problem.

4) Was the contribution of matching funds to the Lower Grand River Watershed Planning Project a worthwhile investment for your community? Why or why not?

Six of the eight respondents stated that contribution of matching funds to the Lower Grand River Watershed Planning Project was a worthwhile investment due to the opportunity to share costs with other communities. Respondents acknowledged that undertaking a similar project alone would have cost considerably more. One of the six respondents added that although it appears beneficial now, it would be necessary to look at the benefit relative to the cost over time.

One of the two remaining respondents stated that the value of contributing matching funds is unknown at this time. The only respondent to state that the contribution of matching funds was not a worthwhile investment explained that his community contributed because it was difficult to say no and that there was a desire to help out other participating communities affected by the Phase II storm water permitting requirements.

Conclusions

Many of the communities that contributed matching funds to the Lower Grand River Watershed Planning Project appear to have made this monetary commitment based on the project's connection to Phase II storm water permitting requirements. The majority of Phase II communities participating in the evaluation felt they gained much more from the project than assistance with their Phase II storm water permitting requirements. A few responses revealed the importance of moving from the project's planning phase to the implementation phase, particularly in terms of public education, although many respondents cited tools and products resulting from the planning phase that they can use immediately. Respondents placed a great deal of emphasis on the benefits of working as a consortium of communities, indicating that communities would support this type of group approach during the implementation phase.

Answers from a majority of respondents indicated an understanding of the difference between the Lower Grand River Watershed Planning Project and the simultaneous – but separate – Phase II storm water permitting project lead by FTC&H. The mid-project evaluation captured a concern by some project staff that communities did not have a clear understanding of each project (e.g., the fact that they were separate but related). The respondent who did not participate much on the Lower Grand River Watershed Planning

Project appeared to be the only respondent who initially provided answers specific to Phase II storm water permitting requirements, indicating that 1) he, and possibly other in his community, did not completely understand the difference between the two projects and 2) the connection to the Phase II storm water permitting requirements may have detracted from some communities' perception that the Lower Grand River Watershed Planning Project had value. Although assistance with regulatory requirements provided an incentive for some communities to participate, the connection to unpopular regulatory requirements may have also provided a disincentive for other communities to participate – particularly those that do not feel they should have to comply with regulations perceived as unnecessary or unfair.

Job title of the individuals participating in the evaluation potentially affected the survey responses. Although respondents were not asked to specify their job title, some respondents did indicate if they were departmental staff or if they were a local elected official. One respondent commented that a person's job title is likely to affect his or her perspective toward participation on watershed management projects. For example, a director of a public works department may look favorably on participation in a watershed management project because it results in tools that will ultimately benefit the effectiveness of department staff. However, a township supervisor may not have a positive attitude toward participating on a watershed management project because it results in diverting resources from other community priorities.

Recommendations

When seeking participation from a community – or any watershed stakeholder – it is important to understand their priorities, attitudes, and perceptions and identify ways to tailor recruitment strategies accordingly. For example, communities that hold a negative attitude toward the Phase II storm water permitting requirements and do not feel that they should have to conduct any activities related to meeting the requirements may not have felt motivated to participate in the Lower Grand River Watershed Planning Project because the link to the Phase II storm water permitting requirements were over-emphasized during recruitment activities.

Future implementation efforts should identify ways to involve more than staff-level representatives from local communities. While department staff will ultimately have implementation responsibilities, the success of implementation is likely to depend on the support of elected and appointed local officials that influence budget decisions for the community. One suggestion for obtaining broader support for implementation activities is to enlist the support from community representatives active during the planning phase that are willing to conduct peer-to-peer outreach and education among other communities. Ideally, a supportive township supervisor can share the benefits experienced by his or her community with other township supervisors, providing the perspective that other individuals in the same position can relate to.

Sub-Watershed Organization Evaluations

Until the advent of the Lower Grand River Watershed Planning Project, the Lower Grand River Watershed has primarily seen watershed activity at a smaller sub-watershed level.

Sub-watersheds in the Lower Grand River Watershed that have existing groups or activities, or have been the focus of past watershed projects, include the Coldwater River Watershed, the Bear Creek Watershed, the Rogue River Watershed, the Thornapple River Watershed, the York Creek Watershed, and the Sand Creek Watershed.

Questions and Findings

The Project Evaluator contacted a representative from each of the six sub-watershed organizations and projects via telephone and email for input regarding the potential impact of the Lower Grand River Watershed Planning Project on their respective sub-watershed. The three evaluation questions and a summary of responses from the six sub-watershed organization representatives are presented below.

1) How are you familiar with the Lower Grand River Watershed Project? In what capacity have you participated in the Lower Grand River Watershed project?

All respondents stated that they were very familiar with the Lower Grand River Watershed Project and involved to varying degrees. Half of the respondents stated that they are involved on the Visioning Subcommittee, the group responsible for crafting the vision and goals for the Lower Grand River Watershed. Two respondents stated that they are involved on the Steering Committee, the group responsible for considering options for developing a sustainable watershed organization. Three respondents mentioned attending Grand River Forum meetings. Two respondents participated on the Rural Subcommittee, one participated on the Urban Subcommittee, and one mentioned involvement with the I&E Subcommittee. Two respondents mentioned that their participation in the Project has recently decreased. One respondent mentioned that the sub-watershed group's board members were also generally aware of the Lower Grand River Watershed Planning Project.

2) What is your understanding of the purpose and function of a Lower Grand River Watershed group that has the potential to evolve from the Lower Grand River Watershed project?

Most respondents had limited knowledge of what the Lower Grand River Watershed group's purpose and function will be, although they could clearly articulate what they ***hoped*** the purpose and function would be. One respondent stated that the group formed as a result of this project should have real authority pursuant to a statute, that it should include representatives from the general population and all counties without having too large a membership. Two respondents described their vision of the group that would evolve from the project as an umbrella organization in the watershed with the sub-watershed groups taking action. The survey revealed that concerns related to the purpose and function of the evolving organization do exist; one respondent expressed a concern that the group will be primarily a Kent County or Grand Rapids or metro initiative and another stated that the geographic size of the watershed might create coordination challenges – but has the potential to make water quality and land use connections.

3) In what ways do you think that a Lower Grand River Watershed organization could help or hinder the activities of your sub-watershed group?

Two of the six respondents stated that their respective sub-watershed groups are either no longer active or have limited activity and did not specify how the Lower Grand River Watershed organization might affect efforts at the sub-watershed level. The remaining four respondents stated that the organization evolving from the Lower Grand River Watershed Planning Project could help their sub-watershed groups in a variety of ways. One respondent stated that a Lower Grand River Watershed organization could provide professional assistance to sub-watershed organizations in developing specific watershed management plans and implementing these plans, including assistance in seeking grants. This respondent added that it would be very important for the individual sub-watershed organizations to retain the ability to set their own agenda. Another respondent actively involved in both the Visioning and Steering Committee activities listed very specific ways that a Lower Grand River Watershed organization could help activities of sub-watershed groups. The list included giving citizens the big-picture by generating a link to the Great Lakes, pooling resources for activities, creating relationships with local government, obtaining assistance in land use planning, and setting priorities in the watershed to ensure more effective use of funding.

Conclusions

Representatives from sub-watershed groups participated on the Steering Committee and Visioning Subcommittee, the groups responsible for defining and crafting the umbrella organization that will evolve from the Lower Grand River Watershed Planning Project. Given their participation, it is likely that representatives shared the concerns and priorities of their sub-watershed groups during the organizational structure discussions. Responses from sub-watershed group representatives indicate that they are uncertain about the structure and function of the organization evolving from the Lower Grand River Watershed Planning Project. However, sub-watershed representatives appear to be optimistic that this organization will come to fruition. Although one respondent emphasized the importance for sub-watershed organizations to remain in control of their own priorities, responses do not indicate that local organizations feel threatened by or a sense of competition with an umbrella organization that focuses on coordinating watershed activities at a more regional level.

Recommendations

The umbrella watershed organization evolving out of the Lower Grand River Watershed Planning Project will take shape with the assistance of Steering Committee members who volunteer to remain involved. It is important that representatives from sub-watershed groups continue to play a role in the development of the watershed organization, given their organizations will be affected by the structure and functions performed by the umbrella watershed organization that evolves. Not all sub-watershed groups had representation on the Steering Committee; therefore, it is important that project staff maintain constant communication with sub-watershed groups about progress toward developing the umbrella watershed organization. Constant communication, that

incorporates a feedback mechanism, will ensure sub-watershed groups feel connected to the process and support the final outcome.

Findings from the final project evaluation activities illustrate that key stakeholder groups in the watershed have positive attitudes toward the Lower Grand River Watershed Planning Project as it draws to a close. Those who participated in the evaluation process perceive the Project to have benefited the watershed communities and appear supportive of future efforts related to implementation. A summary of conclusions related to project context issues over the course of the two-year project is available at the end of this Section. Section Three provides recommendations for follow-up evaluation activities that will assess project context issues over the long-term.

Project Implementation

This category focuses on task implementation, the performance of project staff and partners, and the evolution of the project over time. Project implementation also takes into account project outputs (i.e., project deliverables required under the work plan) and deadlines. The Mid-Project Evaluation Report focused on project implementation at the subcommittee and committee level, providing an analysis of the factors that affected participation and the ability to accomplish respective tasks. In addition, the Mid-Project Evaluation Report provided a brief analysis of the processes used to complete work plan requirements and the status of product development.

Evaluation activities for the final project evaluation focused on project implementation issues that the Project Evaluator could not analyze until the project neared completion. Project implementation issues addressed in the final project evaluation include Visioning Subcommittee activities and products, Steering Committee activities related to defining an organizational structure for a Lower Grand River Watershed group, and insights related to the quality of final project products (e.g., watershed management plans, tools, information and education materials).

Project Implementation at the Subcommittee and Committee Level

The Mid-Project Evaluation examined facilitation, participation, and processes to complete tasks for the Steering Committee and each of the five Subcommittees: Technical, Urban, Rural, Information and Education (I&E), and Sustainability. As discussed in the Mid-Project Evaluation, the Sustainability Subcommittee evolved into the Visioning Subcommittee in May 2003. The Steering Committee took on the responsibilities of the Sustainability Subcommittee related to defining an organizational structure and the Visioning Subcommittee focused on developing a vision and mission for the Lower Grand River Watershed. The final project evaluation focuses on the progress of the Steering Committee and the Visioning Subcommittee toward developing a vision and identifying an organizational structure.

Steering Committee

During the second year of the Project, the Steering Committee focused its efforts on identifying an appropriate organizational structure for the Lower Grand River Watershed. The Steering Committee recognized that several types of watershed organizations exist in

the Lower Grand River Watershed, as well as in the State of Michigan. To draw upon the experiences of existing watershed organizations, the Steering Committee co-sponsored a watershed organization discussion panel with the help of the Rogue River Watershed Council, a sub-watershed group located in the Lower Grand River Watershed.

Section 6 of the draft Lower Grand River Watershed Management Plan articulates the purpose and functions of a watershed organization for the Lower Grand River Watershed as envisioned by the Steering Committee, the Visioning Subcommittee and the Grand River Forum. According to the draft Lower Grand River Watershed Management Plan, the purpose of the new watershed organization "would be to identify priorities within the Grand River Watershed and to facilitate projects that address high priority concerns." The organization would serve as an umbrella that would encompass the entire Lower Grand River Watershed, providing basin-wide oversight and building capacity for the formation of sub-watershed groups that would create and implement watershed management plans at the sub-watershed level. The umbrella organization would not absorb sub-watershed organizations.

The Project Evaluator asked GVMC to provide information about the current status of the Lower Grand River Watershed organization to include in the final project evaluation. GVMC provided a copy of the May 2004 memorandum to the Steering Committee that outlines key points about the organizational structure. According to the memorandum, the Visioning Subcommittee proposed the creation of a provisional organization within GVMC intended to 1) plan and implement measures necessary to establish an appropriate watershed organization for the Lower Grand and 2) maintain marginal watershed council functions as needed while work to develop the watershed organization is ongoing. According to GVMC's correspondence with the Project Evaluator, the interim watershed council housed at GVMC capitalizes on the current momentum generated through the Project. GVMC offered an extension to any members of the Steering Committee, as well as additional watershed stakeholders, to remain as a functioning group to help create a primary bridge to an interim watershed council. In addition to formulating a strategy for developing an interim and permanent watershed organization, the Steering Committee also developed a prioritization process for use by the interim watershed organization when evaluating implementation projects.

Visioning Subcommittee

As described in the Mid-Project Evaluation Report, the Visioning Subcommittee was formed out of the Sustainability Committee. According to the draft Lower Grand River Watershed Management Plan, the Vision Subcommittee was "charged with developing key elements of a strategic plan including a vision, mission, core values, and other components that would be necessary to place the Lower Grand River Watershed Management Plan initiative in a much larger context of long-term success over the entire watershed." To develop the key elements of a strategic plan, GVMC and MDEQ planned and facilitated a focus group process with members of the Grand River Forum.

The Project Evaluator asked GVMC to provide a description of the process used to develop the elements of the strategic plan. According to GVMC, the focus groups

involved selected experts from the Grand River Forum in three vision-strategy components: public awareness, data management, and organization. Each focus group session addressed 10 to 20 questions aimed at what would need to happen to move the Lower Grand River Watershed toward the vision and mission adopted by the Visioning Subcommittee. Answers captured during the focus group sessions became the elements for initial strategies and the Visioning Subcommittee further determined "Strategic Needs" for the identified elements in several categories such as Partnerships, Communications, Technology, Infrastructure, Financing, Skills, and Evaluation.

The work of the Visioning Subcommittee has resulted in a vision, mission statement, core values, and strategic components for the Lower Grand River Watershed crafted through the stakeholder-based focus group process and reflected in the draft Lower Grand River Watershed Management Plan. In addition, the Visioning Subcommittee has significantly contributed to the characteristics of the interim and permanent watershed organizations as articulated in the draft Lower Grand River Watershed Management Plan.

Project Implementation at the Overall Project-Level

The Mid-Project Evaluation Report identifies three issues related to overall project implementation: 1) defining the vision and setting goals; 2) sustaining participation; and 3) fulfilling workplan requirements. For the final project evaluation, the Project Evaluator considered each issue and provided new information where available.

Defining the Vision and Setting Goals

Defining the vision and setting goals later in the project caused some frustrations among Subcommittee members and had the potential to impede activities of some Subcommittees, such as the I&E Subcommittee, that was in the process of finalizing their respective tasks without the benefit of a watershed vision or goal. As previously discussed, the Visioning Subcommittee was able to articulate a vision, mission statement, core values and strategic components during the last quarter of the project. Although the vision and related elements were not available to Subcommittees throughout the planning process, project staff were able to integrate the vision and related elements into the draft Lower Grand River Watershed Management Plan as the planning phase draws to a close. Specifically, the I&E Strategy developed by the I&E Subcommittee states that all I&E tasks conducted during the implementation phase will reflect the vision and mission developed for the Lower Grand River Watershed.

Sustaining Participation

The Mid-Project Evaluation Report highlights participation trends for the Steering Committee and each of the Subcommittees. Meetings for most of the Subcommittees ended in mid- to late-April 2004. The last meeting for the I&E Subcommittee took place in May 2004. Given the limited number of meetings that took place between the Mid-Project Evaluation Report and the final evaluation activities, the Project Evaluator determined that additional analysis into participation trends beyond the Mid-Project Evaluation would not provide new insights.

Fulfilling Workplan Requirements

Through evaluation activities for the Mid-Project Evaluation Report, the Project Evaluator examined the processes used to develop work products and the status of work plan tasks compared to the work plan schedule. Products listed under each work plan task are nearly complete, according to the Quarterly Report -Y2Q3 and recent meeting minutes available on the Lower Grand River Watershed Project web site. As mentioned in the Mid-Project Evaluation Report, the I&E Subcommittee determined that completing the third newsletter specified in the work plan, the first two having been completed, would not benefit the project; instead, the I&E Subcommittee identified and produced other outreach products (e.g., the project web site) that would add value. Other tasks not completed as of the Mid-Project Evaluation Report have since been completed or will be complete when the project officially ends. Per recent conversations with project staff, AWRI has submitted an amendment to the original contract requesting a two month extension to enhance the Lower Grand River Watershed Management Plan and components of the Watershed Information Tool based on recent input from the Grand River Forum meeting.

Counting the number of completed tasks and products required under the work plan is one way to measure project progress; however, simply counting the number of completed products does not provide information to gauge product quality and usefulness. Feedback from target audiences is a more meaningful type of information to determine if a product is – or will be – effective. Primary products of the Lower Grand River Watershed Planning Project include watershed management plans, tools, and I&E materials (planning phase). As discussed in the Mid-Project Evaluation Report, I&E products developed through the Project incorporated limited evaluation mechanisms to generate feedback from the target audience. However, the I&E Strategy for the implementation phase does place a stronger emphasis on product evaluation. Evaluation activities for the final project evaluation examined recent feedback on tools and watershed management plans.

Lower Grand River Watershed Workshop

The June 3, 2004 Grand River Forum meeting provided participants with an opportunity to test components of the Watershed Interactive Tool through a hands-on workshop. The workshop took place at Grand Valley State University's Pew Campus in Grand Rapids. In addition to testing the Watershed Interactive Tool, the workshop provided participants with the opportunity to provide feedback on the features and functions of the tools using tailored evaluation forms. Approximately 36 individuals registered for the workshop and nearly all attended, although the sign-in sheet reflects 31 participants. Nearly half of the participants completed evaluation forms for three tools: the Watershed Interactive Tool, the Watershed Action Plan, the Watershed Assessment Matrix, and the Watershed Interactive Mapping. A summary of the evaluation questions and associated findings for each tool is presented below.

Questions and Findings

Project staff developed and distributed three evaluation forms to evaluate each tool demonstrated during the June 3, 2004 Grand River Forum meeting.

Watershed Interactive Tool (WIT)

The evaluation form for the WIT shows the links to the nine components of the WIT on the left-hand side of the form, providing space for participants to make written comments in the center column and rank components of the WIT according to usefulness in the right-hand column. A total of 17 participants submitted evaluation forms for the WIT. Comments were generally editorial in nature, identifying changes to web addresses or corrections in spelling. Other comments indicated support for a particular component of the WIT. Some participants provided feedback on the format and function of the WIT and specific components. Overall, comments were positive in nature. In terms of ranking components of the WIT according to usefulness, participants did not consistently rank using the instructions on the evaluation form; only five participants submitted evaluation forms with WIT components correctly and consistently ranked. Of the five evaluation forms with components correctly ranked, three forms had the Watershed Interactive Mapping component ranked as the most useful and two forms had the Water Science Education K-12 component ranked as the second most useful and the Nonpoint Source Pollutants component as the third most useful.

Watershed Interactive Mapping (WIM)

The evaluation form developed to obtain feedback on the WIM asked participants nine questions related to ease of finding on the WIT, data usefulness, functions, training and future use. A total of 16 participants submitted the WIM evaluation form. All respondents felt that finding the WIM page on the WIT was not difficult, with over 60 percent of respondents indicating it was easy. Respondents identified several data layers as most useful, including hydrology, percent imperviousness, basins, sub-basins and density. Five respondents stated that all or most data layers were useful. Over 40 percent of respondents stated that the step-by-step handout helped in navigating the WIM and that they would like to be notified of additional training for this tool. Respondents provided additional written comments either indicating support for the WIM or providing suggestions to improve functions for future users.

Watershed Action Plan (WAP)/Watershed Assessment Matrix (WAM)

The evaluation form developed to obtain feedback on the WAP and the WAM asked participants eight questions related to the most useful component of the tool, organization, future training, and ease of use. A total of 16 participants submitted the WAP/WAM evaluation form. Respondents identified the drop-down menus (7), pop-up explanations (5), and printable summary sheets (4) as the most useful tools available on the WAP. Over 80 percent of respondents made a statement that the WAP is organized in a manner that would be conducive to developing watershed management plans in other communities. All respondents indicated that the WAP was a relatively simple tool, with over half of the respondents indicating that it is an easy tool to use. Half of the respondents stated that using a computer-based hands-on approach was the most useful aspect of the session focusing on the WAP and theWAM. Nearly 70 percent of respondents stated that they would be interested in future training sessions for the WAP and the WAM, particularly for other staff or if developers add new features. Written

comments from respondents focused on recommendations for improving the functionality and indicated support for the WAP and the WAM.

Conclusions

Participants at the June 3, 2004 Grand River Forum meeting that evaluated the workshop provided positive feedback about the format and functionality of the WIT, the WIM, and the WAP, with minor suggestions to improve the tools. Respondents also indicated that using the tools in a hands-on workshop setting was helpful. Participants provided additional comments specifically related to the workshop on the Grand River Forum evaluation forms intended to obtain feedback on all seven meetings; feedback also supported the use of a hands-on training approach. Participant feedback indicates that, after making corrections and adjustments, the tools developed through the Lower Grand River Watershed Planning Project are easy to use and provide useful information. Project staff should address modifications that are appropriate and feasible based on participant input. Some participants stated that they may have additional feedback after taking the time to further experiment with the tools; therefore, project staff should prepare another evaluation mechanism to solicit additional feedback from workshop participants after a short period of time.

Recommendations

Obtaining input during the planning and development phase is essential to ensure that the target audience finds each tool easy-to-use and effective. An indicator of success is not completion of each tool, but evidence that the target audience is using each tool to make informed decisions that will benefit the health of the Lower Grand River Watershed. Therefore, project staff will need to continually evaluate factors related to tool application during the implementation phase. The Project Evaluator recommends that project staff develop evaluation mechanisms to assess the following factors: 1) marketing to raise awareness and promote the widespread use of each tool; 2) training to increase self-efficacy that will promote widespread use of each tool; 3) frequency of use and applications of each tool by categories of user groups; and 4) effectiveness of each tool in achieving progress toward watershed goals. Section Three provides specific recommendations for further evaluating each tool during the implementation phase.

Watershed Management Plans

The Lower Grand River Watershed Planning Project will produce a total of three watershed management plans: 1) the Sand Creek Watershed Management Plan that represents agricultural and developing rural areas; 2) the Buck Creek Watershed Management Plan that represents urban and urbanizing areas; and 3) the Lower Grand River Watershed Management Plan that provides a vision and a broad strategic plan for the entire watershed. Evaluation of the watershed management plans centers on two factors: 1) participation and buy-in from watershed stakeholders who will eventually implement the actions contained in the plan and 2) formal review and approval from Michigan Department of Environmental Quality to ensure plans meet required criteria. Both factors are key in generating a watershed management plan that is eligible for state and federal funding and has a high probability for implementation at the local level.

The watershed management plans for Sand Creek and Buck Creek were not part of the original work plan, but evolved from the process of identifying and selecting pilot project areas as specified in the work plan. The Sand Creek Watershed Partners, an existing sub-watershed group, and the Rural Subcommittee developed the Sand Creek Watershed Management Plan, therefore ensuring that the final product had local input before project staff submitted the final product to Michigan Department of Environmental Quality for review and approval. The Urban Subcommittee and individual communities in the Lower Grand River Watershed provided input on the Buck Creek Watershed Management Plan before going to Michigan Department of Environmental Quality for review and approval. After project staff addressed minor comments, Michigan Department of Environmental Quality approved both watershed management plans in January 2004.

The Lower Grand River Watershed Management Plan serves as a broad, reference-oriented document for other sub-watersheds and communities to use when conducting local watershed management and storm water planning activities. Unlike the watershed management plans for Buck Creek and Sand Creek, the Lower Grand River Watershed Management Plan will provide tools and techniques rather than specific implementation recommendations to address water quality concerns. Watershed stakeholders have had an opportunity to provide input and feedback on the Lower Grand River Watershed Management Plan concept by participating on any one of the Subcommittees or in the Grand River Forum meetings. The Project Administrator representing the Michigan Department of Environmental Quality has also been involved throughout the development of the Lower Grand River Watershed Management Plan. This level of involvement should ensure that the final product has stakeholder and agency support. Once the Lower Grand River Watershed Management Plan has been completed, project staff will submit the product to Michigan Department of Environmental Quality for review and approval. The interview conducted with Grand Valley Metro Council reflected in the Mid-Project Evaluation Report indicated potential concern about the final approval process because the Lower Grand River Watershed Management Plan is unlike any other watershed management plan and may not appear to meet the standard criteria. An approvable watershed management plan for the Lower Grand River Watershed would indicate a successful planning process.

Project Outcomes

Project outcomes focus on the impact that the Lower Grand River Watershed Planning Project has had in the short-, medium-, and long-term. Project outcomes should relate to project goals. According to the draft Lower Grand Watershed Management Plan, “this project was the result of the momentum stimulated by watershed projects and initiatives occurring within the LGRW. One goal for this project is to continue this momentum and help provide support to generate future watershed projects that would sustain success and have greater water quality benefits.”

At the end of the Mid-Project Evaluation Report, the Project evaluator listed several project outcomes that would help to define the impact of the Lower Grand River Watershed Planning Project in the short-, medium- and long-term. In a very narrow

sense, outcomes from the Lower Grand River Watershed Planning Project can focus solely on the development of products and tools required in the work plan (administrative impacts). However, in a very holistic sense, outcomes from the Lower Grand River Watershed Planning Project should focus on generating local watershed projects and initiatives (social impacts) that will produce water quality benefits (environmental impacts). Over time, the Lower Grand River Watershed Planning Project should lead to implementation activities that improve conditions in the watershed.

Based on the culmination of project evaluation activities, the Project Evaluator has modified the list of project outcomes contained in the Mid-Project Evaluation Report. The list has been expanded to include immediate project outcomes, as well as short-, medium-, and long-term outcomes. Immediate project outcomes represent tangible results from the Lower Grand River Watershed Planning Project that may not have a measurable impact now, but are intended to have a measurable impact on awareness, behavior, and water quality in the long-term. Short-term project outcomes represent anticipated results of the Lower Grand River Watershed Planning Project that are likely to occur within the next year. Medium-term project outcomes represent anticipated results that are likely to occur within the next two to five years. Long-term outcomes represent anticipated results that are likely to occur five years and beyond.

Immediate Project Outcomes

- Approved Buck Creek and Sand Creek watershed management plans, including I&E Strategies
- Submitted final Lower Grand River Watershed Management Plan, including I&E Strategy, for Michigan Department of Environmental Quality review
- Promoting local watershed and storm water management planning and implementation through functional web-based tools (i.e., Decision Support System)
- Created Grand Vision to help Lower Grand River Watershed move into implementation phase
- Developed strategy for creating a sustainable organizational structure that capitalizes on existing momentum
- Increased awareness of the Lower Grand River Watershed Planning Project and watershed issues among project participants
- Generated core group of supporters willing to move from the planning phase to the implementation phase

Anticipated Short-Term Project Outcomes (within next twelve months)

- Obtain approval on the Lower Grand River Watershed Management Plan, including I&E strategy, from Michigan Department of Environmental Quality
- Initiate implementation of approved Buck Creek and Sand Creek Watershed Management Plans
- Initiate implementation of Lower Grand River Watershed Management Plan, including I&E strategy
- Develop watershed and storm water management plans using web-based tools and resources

- Continue to develop organizational structure with support from Steering Committee volunteers

Anticipated Medium-Term Project Outcomes (one to five years)

- Continue to implement approved Buck Creek and Sand Creek Watershed Management Plans
- Continue to develop and implement watershed and storm water management plans using web-based tools and resources
- Establish sustainable Lower Grand River Watershed organization
- Increase watershed awareness among target audiences linked to I&E material development and distribution
- Increase participation in local watershed events in connection with Lower Grand River Watershed efforts
- Coordinate collection and management of Lower Grand River Watershed data and information

Anticipated Long-Term Project Outcomes (five years and beyond)

- Modify targeted behaviors of specific target audiences to reduce nonpoint source pollution in the Lower Grand River Watershed
- Increase the number of local watershed projects and organizations supported by the Lower Grand River Watershed organization
- Improve water quality within the Lower Grand River Watershed
- Achieve the vision for the Lower Grand River Watershed

Any project outcomes beyond those in the immediate category will realistically transcend the planning phase and enter into the implementation phase. Therefore, implementation related activities – and the success of those activities – are indicators for ongoing evaluation of the planning phase. In other words, the successes and challenges experienced during the implementation phase may provide useful information about the effectiveness of the watershed management plans and tools on which implementation is based.

Overall Project Conclusions

The Lower Grand River Watershed Planning Project has demonstrated successes and challenges during the two-year project timeframe, as reflected in the Mid-Project Evaluation Report and the findings of final project evaluation activities described earlier in this Section. The Project Evaluator has reviewed conclusions contained in the Mid-Project Evaluation Report and findings of the final project evaluation activities to identify the most significant project successes and challenges in each of the three evaluation categories. The overall project conclusions in each of the three evaluation categories are presented below.

Project Context

Findings in this evaluation category address the structure and function of the project partners, as well as how the project functions within the community.

Successes related to project context are as follows:

- Adapting project structure based on needs of the group by dividing the responsibilities of the Sustainability Subcommittee between the Steering Committee and the Visioning Subcommittee;
- Coordinating a watershed organization discussion panel to learn from existing watershed organizations in the Lower Grand River Watershed and the State of Michigan to inform the watershed organization development process;
- Creating the Grand River Forum as a mechanism specifically intended to generate stakeholder participation and involvement;
- Identifying and fulfilling the need for the primary grantee to take a more significant leadership role among project partners;
- Generating momentum among a core group of watershed stakeholders to sustain efforts of the planning phase through to the implementation phase.

Challenges related to project context are as follows:

- Creating a project structure that may have hampered communication among subcommittees, particularly for individuals that did not participate on more than one committee;
- Creating the perception of a Grand Rapids/Kent County focused project and a watershed stakeholder group with limited diversity;
- Defining a watershed vision and goals at the end of the project rather than the beginning;
- Initiating subcommittee activities without providing members the opportunity to contribute to the development of subcommittee goals and processes.

Project Implementation

Findings in this evaluation category address task implementation, the performance of project staff and partners, and the evolution of the project over time. Project implementation also takes into account project outputs (i.e., project deliverables required under the work plan) and deadlines.

Successes related to project implementation are as follows:

- Ensuring constant progress toward achieving work plan tasks through the use of dedicated project staff;
- Resolving facilitation issues within the I&E Subcommittee based on input from subcommittee members;
- Completing work plan requirements;
- Developing watershed vision and goals;
- Developing the Watershed Interactive Tool and related resources using stakeholder feedback throughout the development process;
- Creating strategic plan for creation of an appropriate watershed organization; Implementing additional tasks beyond work plan requirements;
- Providing forum for information exchange among watershed stakeholders participating on subcommittees;
- Identifying and creating formalized product development processes as necessary.

Challenges related to project implementation are as follows:

- Fluctuating participation trends among Steering Committee, subcommittees, and the Grand River Forum;
- Developing I&E products with limited evaluation to assess effectiveness;
- Focusing on two specific pilot project areas that may have resulted in diminished participation from stakeholders with interests outside of the pilot project areas;
- Limiting Grand River Forum meetings to a specific time and location that does not allow a wide array of watershed stakeholders to participate.

Project Outcomes

Project outcomes focus on the impact that the Lower Grand River Watershed Planning Project has had in the short-, medium-, and long-term.

Successes related to project outcomes are as follows:

- Obtaining stakeholder approval on the Watershed Interactive Tool and related resources;
- Obtaining positive feedback from participating Phase II communities on the usefulness of Project products to fulfilling their Phase II storm water permitting requirements;
- Developing two MDEQ-approved watershed management plans for Sand Creek and Buck Creek watersheds;
- Acknowledging long-term project evaluation needs;
- Developing long-term project evaluation mechanisms.

Challenges related to project outcomes are as follows:

- Assessing future impact of products on watershed and storm water management efforts;
- Assessing increased awareness of watershed management issues as a result of I&E efforts;
- Assessing effectiveness of strategy to create a permanent watershed organization through the use of an interim watershed council comprised of Steering Committee members;
- Assessing effectiveness of watershed management plans in achieving water quality improvements during the implementation phase.

SECTION THREE: CONSIDERATIONS FOR LONG-TERM PROJECT EVALUATION DURING THE IMPLEMENTATION PHASE

This section addresses recommendations for developing evaluation mechanisms that will help to track short-, medium-, and long-term project outcomes from the planning phase, as well as evaluate efforts conducted during the implementation phase. As discussed in the previous section, project staff cannot measure many of the project outcomes at this point in time because outcomes are linked to various stages of implementation. Thinking about evaluation before the implementation phase begins will allow project staff to develop evaluation mechanisms that track both project outcomes related to planning and

implementation efforts simultaneously. The remainder of this section provides recommendations related to developing an evaluation process to track implementation project success for any watershed project, and provides specific recommendations for evaluating implementation of the Lower Grand River Watershed Management Plan and associated products developed through the Lower Grand River Watershed Management Planning Project.

Recommended Evaluation Process for Implementation

The Lower Grand River Watershed Management Plan is unique in that it does not provide a list of implementation activities to conduct throughout the watershed; instead, the Lower Grand River Watershed Management Plan and related resources (e.g., Watershed Interactive Tool) serve as resources for stakeholders that want to develop and implement watershed management plans at the local level. Therefore, successful implementation of the Lower Grand River Watershed Management Plan is related to the successful development of sub-watershed management plans.

Watershed management plans developed for implementation at the local-level using the Lower Grand Watershed Management Plan and related products (e.g., the Watershed Interactive Tool) should include a strategy for evaluation. An evaluation strategy should be tailored to the specific goals of the sub-watershed management plan, or other implementation project, while providing the necessary information to track improvements in the overall Lower Grand River Watershed. Like watershed management, evaluation is an iterative process that requires stakeholder involvement at the outset. Evaluation strategies should include goal identification, indicator selection, evaluation tool identification and selection, evaluation information collection and analysis, and project augmentation.

Rather than organizing evaluation efforts according to context, implementation, and outcomes, the Project Evaluator recommends organizing the evaluation process for the implementation phase around three types of indicators: 1) administrative; 2) social; and 3) environmental. Administrative indicators and some social indicators will address issues related to project context and project implementation. Other social indicators and environmental indicators will address project outcomes. The Project Evaluator suggests that project staff and watershed stakeholders consider developing a common suite of indicators that all sub-watershed groups can track that will help measure successes at the larger Lower Grand River Watershed scale.

Evaluating Implementation of the Lower Grand River Watershed Management Plan

Evaluation is usually thought of as an activity conducted at the end of a project. However, the effectiveness of an evaluation is dependent on a well thought-out evaluation strategy at the beginning of a project. By considering evaluation mechanisms to assess the long-term impacts of this project, project staff and watershed stakeholders in the Lower Grand River Watershed are actually planning evaluation activities for the implementation activities. Many of the long-term project outcomes are related to the successful use of the products developed through the Lower Grand River Watershed

Planning Project. Provided below are recommendations and ideas for evaluating the products beyond the end of the current grant and into the implementation phase. Recommendations focus on the Watershed Interactive Tool and related resources, watershed management plans, and the Lower Grand River Watershed organization. Table 3.1 below presents ideas for administrative, social, and environmental indicators that project staff and watershed stakeholders can consider using to measure the long-term project outcomes.

Watershed Interactive Tool and Related Resources

To date, the web sites for the tools developed through the Lower Grand River Watershed Planning Project (e.g., WIT, WIM, WAP) do not include any evaluation mechanisms. The Project Evaluator suggests selecting indicator(s) from Table 3.1 below, or developing alternate indicators, to evaluate the tools. After selecting appropriate indicators, staff should identify associated mechanisms for collecting information to support each indicator. Indicators and evaluation mechanisms will vary, depending on how the project staff and stakeholders articulate the goals associated with the tools. For example, if the goal of the WIT is to increase awareness on watershed issues, the indicator for evaluating effectiveness might be a user's level of awareness before and after using the WIT. The evaluation mechanism for measuring a user's level of awareness could be a quiz that a user takes before and after using the WIT. If the goal of the WIT is to change behavior of a particular target audience, project staff should select indicators and evaluation mechanisms that measure behaviors before and after using the WIT.

The Project Evaluator recommends developing a quiz to serve as one possible evaluation mechanism on the main WIT web site. The quiz is a low-cost evaluation mechanism that will reach WIT users as they access tools. In addition, a quiz can assist project staff in collecting a wide range of information in a short period of time, such as users' knowledge of watershed facts before and after using the WIT (e.g., nonpoint source pollutants, history of the watershed, Lower Grand 319 Project), users' current behaviors and anticipated use of the information obtained through the WIT, and users' characteristics (age, affiliation, sub-watershed of interest, how they heard about the WIT). Project staff may have to overcome the challenge associated with encouraging users to take a voluntary quiz and should consider providing an incentive (e.g., free giveaway that has the LGRW logo or name).

In addition to the quiz, the Project Evaluator also recommends developing a page specifically intended to generate feedback on the WIT. The feedback web page could explain the importance of obtaining input from users and provide a feedback mechanism (e.g., email comment box that goes to a central email in-box or a brief survey) to determine what users like and don't like, as well as recommendations for improving the WIT.

Watershed Management Plans

Section 5 of the draft Lower Grand River Watershed Management Plan addresses evaluation with a focus on quantitative measurements to assess water quality

improvements achieved through implementation efforts. The quantitative measurements relate to pollutants identified as impairments to designated uses within the Lower Grand River Watershed and serve as environmental indicators for assessing the effectiveness implementation activities. Given the link to water quality conditions and water quality standards, the quantitative measurements highlighted in Section 5 of the draft Lower Grand Watershed Management Plan are the most desirable way to determine if implementation activities are meeting water quality goals and watershed management goals. However, other types of indicators can also prove useful in assessing the effectiveness of the watershed management planning and implementation process over the long-term. Table 3.1 below lists potential administrative and social indicators, as well as additional environmental indicators, the project staff can consider in tracking long-term effectiveness of watershed management plans.

Organizational and Strategic Elements

Evaluating the effectiveness of the interim and permanent watershed organizational structure, as well as the strategic elements related to the watershed vision, evolving from the Lower Grand River Watershed Management Planning Project will require assessing all three types of indicators. Given the purpose and mission of the umbrella watershed organization will be to promote and sustain watershed management activities at the local level, measuring success of the organization will most likely rely on measuring the success of the sub-watershed organizations that seek financial and technical support under that umbrella. Table 3.1 provides potential indicators in all three categories that project staff can consider when determining how to evaluate success of the watershed vision and the interim/permanent watershed organization. Techniques for evaluating the organizational structure and the strategic elements could include administrative tracking procedures (e.g., sign-up sheets for meetings, maintaining a comprehensive participants database to track participation trends), surveys to assess perceptions and attitudes over time, as well as organizational reporting that will occur if a formal non-profit watershed organization is established.

Additional Evaluation Recommendations

The final project evaluation activities highlighted other evaluation activities that project staff can consider during the implementation phase to assess the effectiveness of the Project in the long-term. Evaluation activities relate to the Grand River Forum meetings, Phase II communities, and sub-watershed groups.

Grand River Forum Follow-Up Evaluation Recommendations

The evaluation of Grand River Forum participants on June 3, 2004 was limited to those individuals attending on that particular day, resulting in answers that do not reflect input from other individuals who have attended one or more meetings over the course of the two-year project. As one respondent stated at the end of the evaluation form, it is important to understand why other participants stopped attending meetings. The Project Evaluator recommends conducting a follow-up evaluation activity with other Grand River Forum participants that can also serve as a tool for planning stakeholder meetings during the implementation phase. The evaluation activity should involve generating a spreadsheet of all past Grand River Forum participants using old sign-up sheets. For

each participant, track the number of meetings attended and identify participants that show a decline in participation over time (e.g, attended initial two meetings and didn't attend remaining five or attended any four meetings except the last three). Project staff should develop a brief list of questions that attempt to discern the causes for changes in participation and their relationship to factors such as meeting logistics (e.g., day, time, location) and agenda/meeting format (e.g., presentation-oriented rather than activity-oriented). The questions should also assess how individuals hear about meetings, how far in advance they need to schedule meetings, and what factors help to make a meeting a priority. In addition, all future meetings should have a sign-up sheet and a thorough (but succinct) evaluation form that asks questions about factors affecting participation and perceptions of participants toward meeting and/or project progress.

Phase II Community Follow-Up Evaluation Recommendations
Two respondents alluded to the need for evaluating the benefits related to the contribution of matching funds and participation in the Lower Grand River Watershed Planning Project over time. Their responses highlight the need for future evaluation activities during the implementation phase to further assess the success of the project. It is likely that communities contributing matching funds to the project will continue to measure success of this project by numerous factors, including the ability to use tools generated by the project to comply with storm water permit requirements. The Project Evaluator recommends conducting a brief follow-up survey with the communities that contributed matching funds to the Lower Grand River Watershed Planning Project during the period of time communities should be implementing measures to comply with their storm water permitting requirements. Questions used in the survey should focus on the degree to which communities used tools and products resulting from the project to meet their storm water permitting requirements and assess if the tools and products adequately met their needs. Future evaluation efforts should request job title information to determine if there is a connection to individuals' perspectives toward watershed management.

Another consideration for a follow-up evaluation is to measure the change in community participation from the planning phase to the implementation phase. This will be particularly interesting if project partners use different recruitment strategies to encourage continued participation and to generate new participation. In addition to measuring the change in participation (e.g., number of communities contributing funds during the planning phase compared to number of communities contributing funds during the implementation phase), the Project Evaluator also recommends conducting a pre-project evaluation with contributing communities as an initial activity. The pre-project survey can assess information such as 1) initial level of awareness, attitudes and perceptions related to watershed management; 2) project expectations; 3) factors that will promote or hinder continuous participation; and 4) geographic areas of concern. Information collected in the pre-project survey can help gauge project effectiveness, as well as assist with project planning (e.g., where and when to schedule meetings) to promote continuous participation. Phase II communities were a primary target audience of urban BMP related tools; therefore, long-term evaluation activities should attempt to track the use of the Watershed Information Tool and other resources by this particular target audience.

Sub-Watershed Group Follow-Up Evaluation Recommendations

As the organization evolving from the Lower Grand River Watershed Planning Project begins to take shape, the Project Evaluator recommends conducting a brief follow-up survey with representatives from sub-watershed groups to determine if there is a change in perception or attitude toward the umbrella organization and the potential affect on local organizations. The current evaluation focused on obtaining input from individuals that participate in the Lower Grand River Watershed Planning Project as well as a sub-watershed organization or group. To ensure that the evaluation assesses the perceptions of a wider stakeholder group, the Project Evaluator recommends surveying sub-watershed organization members that do not actively participate in the Lower Grand River Watershed management efforts (i.e., the planning project, ongoing organizational development activities or future implementation-phase activities) to gauge perceptions of those active at the local level that may or may not have buy-in to the larger-scale watershed approach.

Table 3.1 Implementation Phase Evaluation Recommendations: Potential Indicators

Project Element	Evaluation Indicators		
	Administrative	**Social**	**Environmental**
Tools			
Watershed Interactive Tool (WIT)	Number of hits on the web site per month Number of people attending WIT demo/trainings	Number of classrooms integrating educational materials into curriculum Number of watershed stakeholders that are 1) aware of what the WIT is and the resources available on the WIT; and 2) can describe how they have applied information from the WIT Number of users that obtain a high score on a watershed quiz available on the WIT web page Number of users developing watershed action plans using WIT information Number of users assisting sub-watershed activities using WIT information Number of implemented watershed projects that used WIT in project development	Improved riparian conditions Improved instream habitat Water quality improvements
Watershed Interactive Mapping (WIM)	Number of hits on the web site Number of people attending WIM trainings	Number of plans incorporating WIM maps Number of implemented protection/restoration projects and plans incorporating WIM maps	Improved riparian conditions Improved instream habitat Water quality improvements
Watershed Action Plan (WAP)	Number of hits on the web site Number of people attending WAP trainings	Number of developed/implemented watershed action plans Number of plans maintained in an active status (i.e., reviewed, updated regularly)	Improved riparian conditions Improved instream habitat Water quality improvements

Project Element	Evaluation Indicators		
	Administrative	**Social**	**Environmental**
Watershed Assessment Matrix	Number of subwatersheds in assessment matrix with updated assessment information Number of updates made to the matrix with new assessment information	Number of people contributing to watershed assessment information contained in matrix Number of implemented watershed projects recorded in assessment matrix	Improved riparian conditions Improved instream habitat Water quality improvements
Management Plans			
Lower Grand River Watershed Management Plan	Plan developed Plan maintained in active status (i.e., reviewed, updated regularly) Funding level associated with planning and projects Number of subwatershed management plans developed using information and resources generated through the planning project Number of Phase II storm water management plans developed using information and resources generated through the planning project	Number of partners involved in the planning phase continuing into implementation phase Number of new participants recruited for the implementation phase by partners involved in the planning phase Number of plan-linked projects underway Media coverage of plan-linked projects and partners	Improved riparian conditions Improved instream habitat Water quality improvements
Buck Creek Watershed Management Plan	Plan developed Plan maintained in active status (i.e., reviewed, updated regularly) Funding level associated with planning and projects	Number of partners involved in planning Number of plan-linked projects underway Media coverage of plan-linked projects and partners Plan implementation	Improved riparian conditions Improved instream habitat Water quality improvements

Project Element	Evaluation Indicators		
	Administrative	**Social**	**Environmental**
Sand Creek Watershed Management Plan	Plan developed Plan maintained in active status (i.e., reviewed, updated regularly) Funding level associated with planning and projects	Number of partners involved in planning Number of plan-linked projects underway Media coverage of plan-linked projects and partners Plan implementation	Improved riparian conditions Improved instream habitat Water quality improvements
Organizational and Strategic Elements			
Watershed Vision	Vision statement created and adopted Number of projects and plans citing watershed vision	Number of partners involved in visioning, planning/management Number of stakeholders aware of watershed vision Number of stakeholders that cite change in behavior due to desire to achieve the watershed vision (or related aspect)	Improved riparian conditions Improved instream habitat Water quality improvements
Organizational Structure	Number of staff and partners involved in planning/management Creation of permanent watershed organizational structure that fulfills watershed strategic elements Number of projects reviewed and funded by the interim/permanent watershed organization Number of participants at watershed organization meetings	Perceptions of existing subwatershed groups of permanent organizational structure Number of watershed stakeholder categories represented in organization versus total number of watershed stakeholder categories (diversity indicator) Number of successfully implemented projects funded by the interim/permanent watershed organization Number of subwatersheds seeking technical assistance from interim/permanent watershed organization to establish subwatershed group	Changes in riparian conditions, instream habitat, and water quality conditions in subwatersheds with subwatershed organizations supported by the interim/permanent watershed organization

Project Element	Evaluation Indicators		
	Administrative	Social	Environmental
		Changes in awareness of the existence of a Lower Grand River Watershed organization among watershed stakeholders on an annual basis Changes in participation trends of the permanent watershed organization	