

1995 Project Abstract
For the Period Ending June 30, 1997
This project was supported by Minnesota Future Resources Fund.

Project Title: Nonpoint Source Pollution Public Education Demonstration Project

Program Manager: Anne Weber

Organization: City of St. Paul

Mail Address: Department of Public Works
1000 CHA, 25 West Fourth Street
St. Paul, MN 55102

Phone: (612) 266-6245

Fax: (612) 298-5621

E-Mail: anne.weber@stpaul.gov

Legal Citation: ML 95, Ch. 220, Sec. 19, Subd. 6(o)

Appropriation amount: \$100,000

Statement of Objectives

The goal of this project was to demonstrate how cooperative efforts between local government and organizations such as neighborhood, business, and environmental groups, can effectively address nonpoint source pollution. This unique collaborative effort, between the St. Paul and Minneapolis Public Works Departments and Citizens for a Better Environment (CBE), combined the cities' technical resources with CBE's experience in community outreach.

The project focused on Twin Cities' neighborhoods with storm drainage areas going to the Mississippi River. Five neighborhoods in two watersheds, Minneapolis' Bassett and St. Paul's Lower Phalen Creek, were targeted. The neighborhoods included a diverse demographic mix and a variety of residential, commercial and industrial land uses. Working with local partners, we had five key objectives:

1. Compile watershed profiles of Bassett and Lower Phalen Creek watersheds using data on runoff, surface waters, land use, existing and historic natural systems, watershed plans, and population.
2. Develop a draft action plan for each watershed which addresses nonpoint source pollution based on issues identified in the profiles and input from a multistakeholder process.
3. Survey understanding of nonpoint issues with a random sample taken from the five neighborhoods we targeted in the Bassett and Lower Phalen Creek watersheds.
4. Distribute educational materials in the target neighborhoods which fill educational needs identified through the survey.
5. Coordinate an urban watershed advisory board that brings together governmental, academic, and neighborhood groups around the issue of nonpoint source pollution.

Overall Project Results

Compile watershed profiles - Extensive research on storm sewer infrastructure, water quality, hydrology, impervious surface types and amounts, and demographics was completed in both watersheds. Based on this research, a preliminary assessment of needs for each watershed was completed. Community, business and agency people provided input. Analyses for both watersheds were published in reports. (See attachments A. & B.)

Develop two draft action plans - Building on research done for the profiles and a review of work going on throughout the nation, draft action plans were completed which outline specific steps that can be taken at the neighborhood level to reduce nonpoint source pollution. A series of meetings were held with more than 90 stakeholders in the target watersheds as an integral part of this planning process. In

Lower Phalen Creek watershed the plan focuses on reestablishing the creek's above ground course to the Mississippi River which includes a floodplain wetland, and implementing further educational programs. The Bassett Creek plan proposes five design scenarios for recreating a section of the creek which is now underground and incorporating it into planned greenways. Further education is also recommended. (See attachments C. & D.)

Survey understanding of nonpoint point source pollution - Working in partnership with St. Paul Neighborhood Energy Consortium, we completed two random sample surveys of 600 people in six neighborhoods. This exceeded our initial goal of 400 people in five neighborhoods. We developed the 10-minute survey with the University of Minnesota Center for Survey Research. Results showed a high level of concern for having clean water across all income and education levels. While respondents generally understood that water was polluted there was a lack of awareness of the factors that contribute to this pollution. Factsheets were developed covering three areas in which a need for education was clearly indicated: the role of yard waste and auto care in nonpoint source pollution; and how watersheds are managed. (See attachment E.)

Distribute educational materials - Resources supplied through LCMR for this project made it possible to leverage distribution of more than 76,000 factsheets - five times the number of educational materials set in our original goals. This was done in partnership with the St. Paul Neighborhood Energy Consortium, Ramsey-Washington Watershed, National Park Service, and a coalition of groups called the WaterShed Partners. Of these, 61,400 went to all the residents in four St. Paul and four Minneapolis neighborhoods, as well as the Ramsey-Washington watershed. The WaterShed Partners will be distributing 5,000 copies of each brochure through the WaterShed Tent display in 1997. (See attachment F.) In addition, three more mailings of 2,500 each are planned for 1997 by Seward Neighborhood Group, Trout Unlimited, and Ramsey-Washington watershed.

Coordinate advisory board - Board members were recruited from a broad diversity of stakeholder groups including, academia, business, elected officials, environmental and neighborhood organizations, watershed districts, and local, state, and federal government. This was the first time that this combination of people gathered. The board greatly enriched the quality of our watershed profiles and draft action plans, phone survey, and educational materials. Working with many of the board members we sponsored the region's first conference on urban nonpoint issues, "Restoring Our Urban Waters." More than 250 people attended 2 ½ days of workshops. (See attachment G.)

Project Results Use and Dissemination

Results from this project have been so well received that we won American River's "Going the Extra River Mile" award in 1996, and the Governor's Minnesota Partnerships award in April 1997. (See attachment H.)

Watershed Profiles and Draft Action Plans - These documents, and the process used to create them, lay the foundation for two core-city watersheds to address nonpoint source pollution. Sixty copies of the Lower Phalen and 50 copies of the Bassett profiles were disseminated. Resources to implement the plans in both watersheds are now being identified. Just as importantly, this work demonstrates for communities around Minnesota the types of data collection and public process needed to develop programs which address nonpoint source pollution while building a local constituency.

Survey and educational materials - Survey results can be useful to many Minnesota communities because of the diverse cross section of population they cover. The educational materials are specially designed in a template form so that they can be customized to fit any watershed.

Advisory board - The network of people brought together through this project has decided to continue to work together on a regular basis. It can provide an excellent source of review for a wide range of projects and an invaluable network of expertise. Plans for a second conference on community-based approaches to nonpoint source pollution are also being discussed.

Date of Report: July 1, 1997
LCMR Final Work Program Update Report

I. Project Title and Project Number: Nonpoint Source Pollution Public Education
Demonstration Project. F22

Program Manager: Anne Weber
Agency Affiliation: City of St. Paul
Mail Address: Department of Public Works
1000 CHA, 25 West Fourth Street
St. Paul, MN 55102
Phone: (612) 266-6245 **E-Mail:** anne.weber@stpaul.gov
Fax: (612) 298-5621

A. Legal Citation: ML 95, Ch. 220, Sec. 19, Subd. 6(o).
Total biennial LCMR appropriation: \$100,000
Balance: \$0

Appropriation Language: This appropriation is from the future resources fund to the commissioner of the pollution control agency for an agreement with the city of St. Paul for a joint project with the city of Minneapolis to conduct surveys and develop and implement nonpoint source pollution public education. This appropriation must be matched by at least \$12,000 of nonstate money.

B. Status of Match Requirement:
Match Required: \$12,000
Amount Committed to Date: \$12,000
Match Spent to Date: \$13,692

I. Project Summary: The goal of this project was to demonstrate how cooperative efforts between local government and organizations such as neighborhood, business, and environmental groups, can effectively address nonpoint source pollution. This unique collaborative effort, between the St. Paul and Minneapolis Public Works Departments and Citizens for a Better Environment (CBE), combines the cities' technical resources with CBE's experience in community outreach.

With Minnesota's efforts on point pollution and combined sewer overflow resulting in improved river water quality, managers are now calling for a reorientation toward nonpoint pollution. In urban areas, this pollution comes from stormwater runoff which contains high levels of sediments, nutrients, oil and grease, and heavy metals.

The project will focus on Twin Cities' neighborhoods with storm drainage areas going to the Mississippi River. Five areas representing a diverse demographic mix and a variety of residential, commercial and industrial land uses will be targeted. Working with local partners, we will use a three-pronged strategy to:

- 1.) Survey the understanding of nonpoint issues within a diverse sample of Twin Cities' neighborhoods;
- 2.) Develop and distribute materials that broaden that understanding; and

3.) Develop action plans with existing local institutions to address nonpoint pollution.

The survey and its results, educational materials, and action plans will serve as models to other Minnesota communities looking to: Think watershed, act locally!

III. Six Month Work Program Update Summary: January 1, 1996 Excellent progress has been made to date on each of the objectives set for this project. These activities have made it possible to leverage more support for nonpoint pollution issues and expand work to include additional Minneapolis communities and to convene a 1997 Urban Watershed Conference. Support for this expanded work is coming from the McKnight Foundation and Citizens for a Better Environment (CBE).

Project collaborators began work in July 1995 finalizing operational details and recruiting members for the project advisory board. The response from potential board members to the project has been extremely positive and points to the need for this work. We currently have a board made up of 18 members from a broad range of stakeholder groups including, academia, business, elected officials, environmental and neighborhood organizations, watershed districts, and local, state, and federal government. The board met in September and December and individual members have provided ongoing advice to staff on a variety of issues.

As part of the process for determining which neighborhoods we will work with on the project, we developed a set of selection criteria using staff research and input from advisory board members. We have also met with 12 neighborhoods. While there is generally a very limited understanding of nonpoint issues and other issues such as crime and housing are of top concern in these neighborhoods, the response to this project has been excellent. People are very highly motivated to improve water quality. Four neighborhoods have already indicated their interest in participating. Using the criteria and neighborhood response, we now have a list of ten target neighborhoods to pursue for project partners.

In addition to our work at the neighborhood level, we are developing partnerships for program implementation with the Mississippi National River and Recreation Area, Minneapolis Park and Recreation Board, and the Minnesota Science Museum.

Research efforts for this project have gone very well. Working with advisory board members and partners, staff are collecting information through the Internet and from urban watershed projects around the country. Initial discussions with the University of Minnesota Center for Survey Research on the survey are completed and we are on their time line. Draft survey questions were compiled by staff based on discussions with advisory committee members and research of other surveys.

July 1, 1996: Work from January to July, 1996 focused in three major areas:

- 1.) Selecting our five target neighborhoods and building strong ties within them;
- 2.) Developing and implementing a phone survey of these neighborhoods; and
- 3.) Developing complete profiles of target neighborhoods and educational materials.

With the help of our advisory board and project collaborators, we chose to target Westside and Dayton's Bluff neighborhoods in St. Paul and Sumner Olson, Harrison, and Bryn Mawr in Minneapolis. These neighborhoods represent a diversity of income, race, education, and environmental factors such as contamination and the amount of impervious surfaces. We held meetings, presented lectures, and attended a variety of events in these neighborhoods in an effort to build a strong base of support for our work on nonpoint issues. We also helped create the "Friends of Bassett Creek," working with three Minneapolis neighborhoods.

In an effort to better gauge the level of knowledge on nonpoint issues, we developed and implemented a phone survey of our target neighborhoods. This survey was done in partnership with the St. Paul Neighborhood Energy Consortium as part of nonpoint education which they are doing with support from the Metropolitan Council. The survey tool and sample size were developed with the expertise of the Minnesota Center for Survey Research, which also provided the analysis of findings. Four hundred 10-minute surveys were completed between March 26 and April 19, 1996. Findings from the survey are being used to better target educational efforts.

We developed profiles of all five neighborhoods based on extensive research on such areas as storm sewer infrastructure, water quality, hydrology, impervious surface types and amounts, and demographics. These profiles will provide fundamental data as we develop plans in the coming year for future action to improve nonpoint water quality. Development of educational materials also progressed with design and selection of topics such as the impact of organic materials on nonpoint, designing sites to minimize nonpoint runoff, and organizing locally to improve nonpoint water quality.

In addition to our work in the three major areas summarized above, staff worked in partnership with our advisory board members to develop and distribute several educational outreach projects. These include: an educational "WaterShed" tent with interactive exhibits and experiences; a 1997 Nonpoint Pollution conference; and a lecture series on nonpoint issues that kicked off with the national Watershed '96 satellite downlink.

January 1, 1997: Our efforts from July 1, 1996 to January 1, 1997 were focused in several areas:

- 1.) Designing and distributing more than 46,000 educational brochures on nonpoint source pollution in Minneapolis and St. Paul neighborhoods;
- 2.) Working with our partners in the Swede Hollow and Bassett Creek watersheds to develop an assessment of needs and potential actions for these neighborhoods;
- 3.) Conducting a series of outreach programs in our target neighborhoods in conjunction with the WaterShed Partners;
- 4.) Garnering additional work for these efforts from the US Environmental Protection Agency (EPA) and the Carolyn Foundation.

Using results from the phone survey and input from our advisory group, we developed a series of three factsheets on nonpoint source pollution and what individuals can do to make a difference. The topic areas covered included yard waste, automobiles, and taking action in your watershed. By partnering with the St. Paul Neighborhood Energy Consortium, we were able to distribute more than 40,000 of these factsheets. That is four times more than our

original goal. We have also received requests from several watershed districts to use the materials in their areas.

Additional resources for the project from the McKnight Foundation made it possible for us to hire two graduate level interns to develop an initial assessment of needs in our target watersheds. These were done in partnership with a diversity of stakeholders and provide the information needed to develop action plans for them.

Working with the WaterShed Partners, project staff provided programs from July through September on nonpoint issues. The partners include a wide range of governmental and non-profit groups which pool resources on nonpoint issues. We also helped organize a cleanup of Bassett Creek as well as a stenciling project for north Minneapolis kids.

Finally, we continued to leverage LCMR resources by winning grants from the US EPA to provide additional technical support in the Bassett Creek watershed and from the Carolyn Foundation in the Bridal Veil watershed.

July 1, 1997: Overall project results are outlined below in four areas:

Compile watershed profiles - Extensive research on storm sewer infrastructure, water quality, hydrology, impervious surface types and amounts, and demographics was completed in both watersheds. Based on this research, a preliminary assessment of needs for each watershed was completed. Community, business and agency people provided input. Analyses for both watersheds were published in reports entitled "Urban Watershed Profile: A look at Bassett Creek" and "Urban Watershed Profile: A Look at Lower Phalen Creek."

Develop two draft action plans - Building on research done for the profiles and a review of work going on throughout the nation, draft action plans were completed which outline specific steps that can be taken at the neighborhood level to reduce nonpoint source pollution. A series of meetings were held with more than 90 stakeholders in the target watersheds as an integral part of this planning process. In Lower Phalen Creek watershed the plan focuses reestablishing the creek above ground course to the Mississippi River on reconnecting to the Mississippi River which includes a floodplain wetland, and implementing further educational programs. The Bassett Creek plan proposes five design scenarios for recreating a section of the creek which is now underground and incorporating it into planned greenways. Further education is also recommended.

Survey understanding of nonpoint point source pollution - By leveraging our support from LCMR we were able to go beyond our initial project goals for this survey. Working in partnership with St. Paul Neighborhood Energy Consortium, we completed two random sample surveys of 600 people in eight neighborhoods instead of our initial goal of 400 in five. We developed the 10-minute survey with the University of Minnesota Center for Survey Research. Results showed a high level of concern for having clean water across all income and education levels. While respondents generally understood that water was polluted there was a lack of awareness of the factors that contribute to this pollution. Factsheets were developed covering three areas in which a need for education was clearly indicated: the role of yard waste and auto care in nonpoint source pollution; and how watersheds are managed.

Develop and distribute educational materials - Resources supplied through LCMR for this project made it possible to leverage distribution of more than 76,000 educational materials - five times the number of educational materials set in our original goals. This was done in partnership with the St. Paul Neighborhood Energy Consortium, Ramsey-Washington Watershed, National Park Service, and a coalition of groups called the WaterShed Partners. Based on survey results, we developed three brochures for distribution by all the partners. Of these, 61,400 went to all the residents in four St. Paul and four Minneapolis neighborhoods, as well as the Ramsey-Washington watershed. The WaterShed Partners will be distributing 5,000 copies of each brochure through the WaterShed Tent display in 1997. That is five times more than the 15,000 we had initially planned to send to our five target neighborhoods. In addition, three more mailings of 2,500 each are planned for 1997 by Seward Neighborhood Group, Trout Unlimited, and Ramsey-Washington watershed.

Coordinate advisory board - Board members were recruited from a broad diversity of stakeholder groups including, academia, business, elected officials, environmental and neighborhood organizations, watershed districts, and local, state, and federal government. This was the first time that this combination of people gathered. The board greatly enriched the quality of our watershed profiles and draft action plans, phone survey, and educational materials. Working with many of the board members we sponsored the region's first conference on urban nonpoint issues, "Restoring Our Urban Waters." More than 250 people attended 2 ½ days of workshops.

Project Results Use and Dissemination

Watershed Profiles and Draft Action Plans - These documents, and the process used to create them, lay the foundation for two core-city watersheds to address nonpoint source pollution. Sixty copies of the Lower Phalen and 50 copies of the Bassett profiles were disseminated. Resources to implement the plans in both watersheds are now being identified. Just as importantly, this work demonstrates for communities around Minnesota the types of data collection and public process needed to develop programs which address nonpoint source pollution while building a local constituency.

Survey and educational materials - Survey results can be useful to many Minnesota communities because of the diverse cross section of population that it includes. The educational materials are especially designed in a template form so that they can be customized to fit any watershed.

Advisory board - The network of people brought together through this project has decided to continue to work together on a regular basis. It can provide an excellent source of review for a wide range of projects and an invaluable network of expertise. Plans for a second conference on community-based approaches to nonpoint source pollution are also being discussed.

V. Statement of Objectives:

A. Administration: Setup the systems needed to operate a two year collaborative project. This includes developing an accounting system, staff descriptions, contracts, and an advisory board, as well as report writing.

B. Select Target Neighborhoods: Design criteria for neighborhood selection and apply these criteria to pick 10 draft neighborhoods in which we can work. Review with advisory board and meet with residential, political, business, and commercial leaders to select final five neighborhoods

C. Develop and Conduct Survey, Analyze Data: Develop survey questions to assess understanding of nonpoint sources, pollution with input from advisory board and University of Minnesota Center for Survey Research. Compile database, train callers, complete at least 400 surveys, and analyze data.

D. Community Organizing: Identify partners within at least two of the targeted communities interested in developing action plans which address nonpoint pollution. Analyze needs and potential actions. Follow-up with meetings to provide community input for a written document which lays out draft action plans.

E. Develop and Distribute Educational Materials: Compile profiles of each of the five neighborhoods using data such as: quality and quantity of runoff; types of surface waters; land use; existing and historic natural systems; watershed plans; and population. Use profiles for community organizing. In addition, develop a series of three factsheets on nonpoint pollution which broaden understanding of the issues based on results from the survey. Distribute these materials to 5,000 households in the five targeted neighborhoods.

F. Develop and Conduct Followup Survey, Analyze Data: Develop and implement survey to assess effectiveness of educational materials and community organizing.

Time line for Completion of Objectives:

	7/95	1/96	6/96	1/97	6/97
A. Administration	xxx x		x x x x x x		
B. Select Neighborhoods	xxxxxxx				
C. Survey		xxxxxxxxxxxx			
D. Community Organizing	xx				
E. Educational Materials	xxxxxxxxxxxxxxxxxxxx				
F. Followup Survey					xxxxx

V. Objectives/Outcomes:

A. Administration:

A.1 Activity: Collaborator meetings. Three start up and seven quarterly followup meetings between project collaborators from St. Paul, Minneapolis, and CBE. Additional time to finalize contracts, staff descriptions, and other start up details.

A.1.a. Context within the project: These activities put into place the systems needed to run this two year collaborative project.

A.1.b. Methods: N/A

A.1.c. Materials: N/A

A.1.d. Budget

Total Biennial LCMR Budget: \$1,373

LCMR Balance: \$0

MATCH:

MATCH BALANCE:

A.1.e. Timeline:

Year 1	7/95	9/95	11/95	1/96	3/96	5/96		
PRODUCT #1		xxxx			xx		xx	xx
Collaborator meetings								
PRODUCT #2		xx						
Staff description								
PRODUCT #3		xxxx						
Contracts								
Year 2	7/96	9/96	11/96	1/97	3/97	5/97		
PRODUCT #1		xx	xx	xx	xx			
Collaborator meetings								

A.1.f. Update on Status: Project collaborators met in July 1995 to work on contract and other startup issues. However, both Anne Weber and Jody Polzin began maternity leave in August so further interaction between collaborators was completed through phone calls with their designated replacements. Staff descriptions were completed for Anne Weber, Jody Polzin, Amy Middleton, Lisa Doerr, and Wendy Kelly in August. Contracts between St. Paul and the LCMR and St. Paul and CBE were completed in July 1995. Project collaborators worked closely together from January 1996 to January 1997 implementing workprogram objectives such as the phone survey, and factsheet, and profile development. In 1997, we focused action plan components and future funding resources through phone calls and meetings in May and June.

A.2 Activity: Advisory board. Recruit board members from a variety of expertises including: business; academia; federal, state, and local government; neighborhood groups; watershed managers; and foundations.

A.2.a. Context within the project: This board will help connect the project to many sectors of the community, while providing important expertise to project collaborators.

A.2.b. Methods: N/A

A.2.c. Materials: N/A

A.2.d. Budget

Total Biennial LCMR Budget: \$2,451

LCMR Balance: \$348.75

MATCH: 0

MATCH BALANCE: 0

A.2.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1		xxxxxx					
Advisory board recruited							
PRODUCT #2				xx	xx	xx	xx
Advisory board meetings							

	Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #2		xx	xx	xx	xx		
Advisory board meetings							

A.2.f. Update on status: Recruitment of board members went very well. We currently have a board made up of 18 members, with representatives from a broad diversity of stakeholder groups including, academia, business, elected officials, environmental and neighborhood organizations, watershed districts, and local, state, and federal government. The board met in September and December, 1995 and individual members have provided ongoing advice to staff on a variety of issues. Advisory board members met in February and May, 1996 to review the neighborhood selection process and phone survey development, and provide input on factsheet topics and design. With additional resources brought into the project, several advisory board members are also working on development of a 1997 Watershed Conference and a speakers' series. The advisory board met in July and November 1996. In addition to providing ongoing input on the project they provided extra assistance on the development of the educational brochures. The final two meetings of the advisory board were held in February and June 1997.

A.3 Activity: Accounting and report writing. Setup the accounting and report writing systems.

A.3.a. Context within the project: The accounting system will be established so that all work can be billed by St. Paul to the Minnesota Pollution Control Agency on a bi-monthly basis. Reports will be done, as required, bi-annually.

A.3.b. Methods: N/A

A.3.c. Materials: N/A

A.3.d. Budget

Total Biennial LCMR Budget: \$3,803

LCMR Balance: \$0

MATCH: 0

MATCH BALANCE: 0

A.3.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1	xxxx	xx		xx	xx	xx	xx
Accounting system, ongoing billing							
PRODUCT #2				xx			xx
Reports							

	Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #1	xx	xx		xx	xx	xx	xx
Accounting system, ongoing billing							
PRODUCT #2				xx			xx
Reports							

A.3.f. Update on status: Billing for the project on a bimonthly basis was not necessary. Instead we billed for the first six months of the project in January, 1996. With adequate cash flow in place for project collaborators, billing was not needed until May 1996. The second and third billings were done in September 1996 and February 1997. A final billing was submitted on July 1, 1997 for the project.

B. Select Neighborhoods

B.1 Activity: Design neighborhood selection criteria.

B.1.a. Context within the project: Criteria are needed to determine which five neighborhoods to work with on this project. Possibilities include: demographic diversity; quality and quantity of runoff; types of surface waters; land use; existing and historic natural systems; watershed plans; and community interest.

B.1.b. Methods: Collect information from census data, existing or projected stormwater quality data, city land use analyses developed for Clean Water Act permits, historic maps and oral histories, and watershed management organizations.

B.3 Activity: Neighborhood meetings. Meet with business, political, government, and residential leaders in a broad variety of neighborhoods.

B.3.a. Context within the project: This series of at least 20 meetings will serve two purposes. First, they will help us build interest and support around nonpoint pollution issues. In addition, they will help us determine where we could build the partnerships needed to make our community organizing effective.

B.3.b. Methods: Meet in a variety of forums from monthly neighborhood group agendas to public information meetings and one-on-ones with business and political leaders.

B.3.c. Materials: N/A

B.3.d. Budget

Total Biennial LCMR Budget: \$2,958

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: 0

B.3.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1			xxxx				
Completed 6 meetings							
PRODUCT #2			xxxx				
Completed 6 meetings							
PRODUCT #3			xx	xxxx			
Completed 8 meetings							

B.3.f. Update on status: Meetings in 12 Minneapolis and St. Paul neighborhoods were completed from July, 1995 to January, 1996. From these meetings four neighborhoods have indicated their interest in participating in this project. These four include Bryn Mawr and Seward in Minneapolis, and Railroad Island and Upper Swede Hollow in St. Paul. In addition, we have met with government, non-profit, and academic stakeholders and are pursuing partnerships for program implementation with them. These include the Mississippi National River and Recreation Area, Minneapolis Park and Recreation Board, and the Minnesota Science Museum.

From January to July, 1996, 20 meetings with a broad variety of neighborhood stakeholders were completed. We met with St. Paul stakeholders and also presented the project at the College of St. Thomas in April and the West Side St. Paul Beating of the Bounds event in May, 1996. In Minneapolis, our outreach included two community meetings in the Bassett Creek watershed that were held to gather input from community members about future land-use/Bassett Creek and housing decisions. We also held three meetings with "Friends of Bassett Creek", a group made up of representatives from three Minneapolis neighborhoods, which we helped form. In addition, we spent a full day in June at Harrison Park as part of their summer youth programming, and met with the Sumner-Olsen Residents Council, and Bryn Mawr Neighborhood citizens and staff.

Meetings and presentations were also completed with representatives from the following agencies: Harrison Neighborhood Business Committee, Minneapolis Sewer Design, St. Paul Public Works, St. Paul Planning Economic Department, Minnesota Department of Health, Minnesota Pollution Control Agency, Department of Natural Resources, Hennepin County Extension, and Audubon Society.

B.4 Activity: Final selection of 5 neighborhoods.

B.4.a. Context within the project: From the initial list of 10, staff will work with advisory board and neighborhood leaders to determine the five neighborhoods we will work in.

B.4.b. Methods: N/A

B.4.c. Materials: N/A

B.4.d. Budget

Total Biennial LCMR Budget: \$1,479

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

B.4.e. Timeline:

Year 1 7/95 9/95 11/95 1/96 3/96 5/96

PRODUCT #1 xx xxxx xxxx

List of 5 neighborhoods

B.4.F. Update on status: With selection of the ten neighborhoods completed in activity B.2. and our series of outreach meetings planned for completion at the end of January, 1996, we have begun focusing on cutting that list down. This involves gathering more data on the neighborhoods, negotiating with stakeholders, and consulting with our advisory board. This activity was completed in February, 1996. With the help of our advisory board and project collaborators, we chose to target Westside and Dayton's Bluff in St. Paul and Sumner Olson, Harrison, and Bryn Mawr in Minneapolis. These neighborhoods represent a diversity of income, race, education, and environmental factors such as contamination and the amount of impervious surfaces.

C. Develop and Conduct Survey, Analyze Data

C.1 Activity: Draft questions. Begin developing survey tool to be used to assess the understanding of nonpoint issues.

C.1.b. Methods: Standard guidelines for survey tool development will be applied.

C.1.d. Budget

LCMR Balance: \$0

MATCH: \$0

C.1.e. Timeline:

PRODUCT #1 XXXX XXXX XX

C.1.f. Update on status: Draft questions were compiled by staff based on initial discussions with advisory committee members and research of other surveys on water quality and nonpoint source issues.

C.2.a. Context within the project: All of the front end work needed to execute the survey will be done during this phase.

C.2.b. Methods: Survey professionals will determine sample size. Either the survey consultant or the cities will provide database from which we draw the sample. CBE and survey consultant will train paid phone staff to complete the calls.

C.2.d. Budget

LCMR Balance: \$0

MATCH: \$0

C.2.e. Timeline:

PRODUCT #1

13

PRODUCT #2	xx	xx
Sample size		
PRODUCT #3		xxxx
Database completed		
PRODUCT #4		xx
Train callers		

C.2.f. Report on status: We had initial discussions with the University of Minnesota Center for Survey Research (MCSR) about the survey project and are on their timeline. In an effort to leverage resources, project staff developed a partnership with the St. Paul Neighborhood Energy Consortium (NEC) to develop and complete the survey. This was possible because NEC was interested in surveying St. Paul neighborhoods on nonpoint issues as part of a nonpoint project they are completing with the Metropolitan Council. Development of the survey questions was completed from January to March 1996, based on input from collaborators and advisory board members, and research done on similar surveys completed in Dakota County and Portland, Oregon. The survey was about 10 minutes long. We contracted with MCSR to pull a 200 sample for us in each of our targeted neighborhoods. MCSR also helped train the survey callers the week of March 18, 1996.

C.3 Activity: Conduct survey.

C.3.a. Context within the project: With this survey we will assess residents' knowledge of nonpoint pollution. This information will help us develop educational materials which enhance that knowledge.

C.3.b. Methods: Using a questionnaire no more than 10 minutes long, paid phone staff will complete the survey calls over a period of eight weeks.

C.3.c. Materials: N/A

C.3.d. Budget

Total Biennial LCMR Budget: \$3,351

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

C.3.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1					xx	xxxx	
Complete calls							

C.3.f. Report on status: Survey calls were completed from March 26 through April 19, 1996.

C.4 Activity: Analyze data.

C.4.a. Context within the project: Results from the survey sample will be compiled and analyzed to provide findings that can be used in educational materials and publically distributed.

C.4.b. Methods: Data will be coded, edited, and processed by the survey consultant. Further analysis will be made by project staff with input from the advisory board.

C.4.c. Materials: N/A

C.4.d. Budget

Total Biennial LCMR Budget: \$4,384

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

C.4.e. Timeline:

Year 1 7/95 9/95 11/95 1/96 3/96 5/96

PRODUCT #1

xx xx

Analysis of findings

C.4.f. Report on status: This activity is complete. We contracted with the Minnesota Center for Survey Research to analyze the survey findings. This analysis was completed and delivered to project staff in June, 1996.

D. Community Organizing

D.1 Activity: Identify partners within five target neighborhoods. Establish ties within the neighborhoods with existing institutions such as resident and business groups, block clubs, and government. Create partnerships in at least two neighborhoods which will commit to development of draft action plans.

D.1.a. Context within the project: Connect with existing institutions so that we can begin education on nonpoint issues. At the same time we will build the partnerships needed to develop community-based action plans which address the issues.

D.1.b. Methods: Meet in a variety of forums ranging from monthly neighborhood group meetings to public information meetings and one-on-ones with business and political leaders.

D.1.c. Materials: N/A

D.1.d. Budget

Total Biennial LCMR Budget: \$4,648

LCMR Balance: \$0
MATCH: \$0
MATCH BALANCE: \$0

D.1.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1		xx		xxxx	xxxx	xxxx	
Commitment from partners in at least one neighborhood							
PRODUCT #2					xxxx		
Commitment from partners in at least a second neighborhood							

	Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #2		xxxx	xx				
Commitment from partners in at least a second neighborhood							

D.1.f. Report on status: Working with the four communities mentioned in B.3.f. and several others, we are continuing to finalize negotiations for a commitment to develop action plans with two partners. While there is generally a very limited understanding of nonpoint issues and other issues such as crime and housing are of top concern in these neighborhoods, the response to this project has been excellent. People are very highly motivated to improve water quality. This work was completed between January and July 1996 by establishing committed partnerships with two Minneapolis neighborhoods: Bryn Mawr and Harrison. In addition, we are nearing completion of a partnership with the St. Paul Dayton's Bluff neighborhood and the resident group working on Swede Hollow. We have also developed partnerships with several other organizations in the Twin Cities which are working on nonpoint issues. This includes working with the St. Paul Neighborhood Energy Consortium in the Dayton's Bluff and West Side neighborhoods, and the Mississippi National River and Recreation Area (MNRRA) as part of the "WaterShed" tent. The "WaterShed" is an educational tent that contains interactive exhibits and experiences designed to use at community celebrations and river events. Several partners are also working with us to develop a 1997 Watershed Conference and a lecture series on nonpoint issues which was kicked off in June with a satellite downlink as part of the national "Watershed 96."

D.2 Activity: Analyze needs and potential actions. Use research and information compiled from neighborhood profiles and educational materials to identify neighborhood needs and potential actions to address them.

D.2.a. Context within the project: This product will be a first cut which will then be used to elicit input from community stakeholders, the advisory board, and other interested parties.

D.2.b. Methods: Use information collected to develop neighborhood selection criteria and profiles. Research efforts nationally and locally to improve stormwater quality.

D.2.c. Materials: N/A

D.2.d. Budget

Total Biennial LCMR Budget: \$10,986
LCMR Balance: \$0
MATCH: \$0
MATCH BALANCE: \$0

D.2.e. Timeline:

	Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #1			xxxx		xxxx		
Analysis of needs and actions in at least one neighborhood							
PRODUCT #2			xxxx	xxxx	xx		
Analysis of needs and actions in at least two neighborhoods							

D.2.f. Report on status: Work on this activity started between January and July 1996.

We conducted extensive research in each of our target neighborhoods on storm sewer infrastructure, water quality, hydrology, impervious surface types and amounts, and demographics. We also studied what other groups are doing throughout the nation to address urban runoff pollution that can be applied to our project. Based on this research, we developed a preliminary assessment of the needs and potential actions for Harrison and Sumner Olson neighborhoods.

During the summer of 1996 CBE hired a landscape architect graduate student from the University of Minnesota to research and compile information on the water quality of Phalen Creek in Swede Hollow. Community, business and agency people provided input into the scope of this report and critiqued the final draft. Based on this, CBE is focusing our work on how Phalen Creek could be connected to the Mississippi River. All of this work is being completed in partnership with the Friends of Swede Hollow.

To help complete the analysis for the Bassett Creek neighborhoods of Harrison and Bryn Mawr, CBE hired graduate of the Humphrey Institute of Public Affairs, Chao Lee, to conduct outreach and help write our action plan. He drafted this document. We have been begun identifying neighborhood needs and continue to gather input from a broad range of stakeholders such as, residents, business owners and agency staff. Like our work in Swede Hollow, this work is being done in partnership with the Friends of Bassett Creek, which has representation from the Harrison and Bryn Mawr neighborhoods.

Analyses for both watersheds were published in reports entitled Urban Watershed Profile: A look at Bassett Creek and Urban Watershed Profile: A Look at Lower Phalen Creek. Sixty copies of the Lower Phalen and 50 copies of the Bassett profiles have been disseminated.

D.3 Activity: Meetings on analysis of needs and potential actions.

D.3.a. Context within the project: It is important to get input from neighborhood, city, and state stakeholders to help ensure support for any draft action plans.

D.3.b. Methods: Forums, one-on-one meetings, written input on drafts.

D.3.c. Materials: N/A

D.3.d. Budget

Total Biennial LCMR Budget: \$3,592

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

D.3.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1 xx xxxx xx

Completed 5 meetings on first neighborhood analysis

PRODUCT #2 xx xxxx xx

Completed 5 meetings on second neighborhood analysis

D.3.f. Report on status: In the Swede Hollow neighborhoods, we completed 14 meetings with residents, St. Paul staff, Eastside Business Association members, neighborhood association staff, and other environmental organizations. We also met monthly with the Friends of Swede Hollow, which has representation from the Dayton's Bluff Neighborhood Association, Railroad Island Neighborhood Association, and the Upper Swede Hollow Neighborhood Association.

In the Bassett Creek neighborhoods we held eight meetings with residents, city and state staff, businesses, and neighborhood association staff, as well as ongoing meetings with Friends of Bassett Creek.

D.4 Activity: Draft neighborhood action plans. Plans broadly outlining the actions that could be taken at the neighborhood level to improve stormwater quality.

D.4.a. Context within the project: With completion of these draft plans, neighborhoods will have a blueprint in place to pursue specific actions which can improve stormwater quality.

D.4.b. Methods: N/A

D.4.c. Materials: N/A

D.4.d. Budget

Total Biennial LCMR Budget: \$14,895

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

D.4.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1 xxxx xxxx xx

Draft action plan for one neighborhood

PRODUCT #2

xxxx xxxx xx

Draft action plan for second neighborhood

D.4.f. Report on status: We began to map out draft action plans based on the needs analysis completed for both watersheds in late 1996. Both plans were completed in June 1997. In the Swede Hollow neighborhoods, the focus is on a creek connection to the Mississippi River, reestablishing a floodplain wetland and implementing further educational programs. Sixty copies of the plan have been disseminated to interested parties. The Bassett Creek plan proposes five design scenarios for recreating a section of the creek which is now culverted and incorporating it into planned greenways. Further education is also recommended. Thirty-five copies of this plan have been distributed.

E. Develop and Distribute Education Materials

E.1 Activity: Research educational materials. Two types of materials will be developed -- neighborhood profiles and factsheets on nonpoint pollution.

E.1.a. Context within the project: The profiles will be used as part of the community organizing process described in objective D. The educational materials will help broaden the understanding of nonpoint pollution issues based on results from the survey.

E.1.b. Methods: Much of the information compiled during the neighborhood selection process will be used in the profiles, including: quality and quantity of runoff; types of surface waters; land use; existing and historic natural systems; watershed plans; and population. Research on nonpoint pollution will look at major pollutants, legal structures, and methods used to address the problem locally.

E.1.c. Materials: N/A

E.1.d. Budget

Total Biennial LCMR Budget: \$9,718

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

E.1.e. Timeline:

Year 1 7/95 9/95 11/95 1/96 3/96 5/96

PRODUCT #1 xx xxxx xxxx

Research two neighborhood profiles

PRODUCT #2 xx xxxx xxxx xx

Research three neighborhood profiles

PRODUCT #3 xx xxxx xxxx xxxx xx

Research nonpoint factsheets

E.1.f. Report on status: Research efforts for this project went very well. Staff used a variety of sources to collect information including E-Mail access to RiverNet, a national

nonpoint source list server. RiverNet has ongoing conversations on urban nonpoint issues, and excellent resource lists. We collected educational materials from projects around the country such as Portland, Oregon, Santa Clara Valley, California, Delaware Coastal Management Program, and the Wisconsin Department of Natural Resources. This activity was completed in May, 1996. In addition to the research discussed above, staff reviewed public works plans, historic maps, and census data as part of the neighborhood profiles. In addition, project staff attended a national conference on urban nonpoint and watershed issues.

E.2 Activity: Write neighborhood profiles. Compile all relevant information on each of the five neighborhoods into individual profiles.

E.2.a. Context within the project: These profiles will be used to educate partners in the five neighborhoods and as a basis for the analysis of needs and draft action plans.

E.2.b. Methods: N/A

E.2.c. Materials: N/A

E.2.d. Budget

Total Biennial LCMR Budget: \$5,704

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

E.2.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96
PRODUCT #1			xx	xxxxx	xxxx		
Five draft neighborhood profiles							
PRODUCT #2				xxxx	xx		
Two final neighborhood profiles							
PRODUCT #3				xxxx	xx		
Three final neighborhood profiles							

E.2.f. Report on status: Work on this activity focused on gathering data defined by our criteria development process. These include percentage of impermeable surfaces, demographics, land use, community capacity, transferability, and existing efforts on watershed issues. While most of the data gathering has gone smoothly, information on permeable surfaces has been more challenging than we expected to assemble. All of the neighborhood profiles were completed between January and July 1996. These profiles are serving well as a starting point for the development of neighborhood action plans. We have also secured additional funding to hire an intern from the University of Minnesota to begin tying data from the profiles together for draft action plans.

E.3 Activity: Write and design nonpoint pollution factsheets.

E.3.a. Context within the project: Final production of factsheets. We are projecting that we will develop a series of three nonpoint pollution information brochures/factsheets.

E.3.b. Methods: Project staff will draft the narrative and then seek input from advisory board and stakeholders. Design will be provided by St. Paul and Minneapolis. Survey results will also be incorporated into the materials.

E.3.c. Materials: N/A

E.3.d. Budget

Total Biennial LCMR Budget: \$6,127

LCMR Balance: \$0

MATCH: \$2,500

MATCH BALANCE: \$0

E.3.e. Timeline:

	Year 1	7/95	9/95	11/95	1/96	3/96	5/96	
PRODUCT #1								xxxx xxxx
Draft narratives								
PRODUCT #2					xx			
Final narratives								
PRODUCT #3								xxxx
Design layout								
PRODUCT #4								xx
Incorporate survey results								
	Year 2	7/96	9/96	11/96	1/97	3/97	5/97	
PRODUCT #2	xxxx							
Final narratives								
PRODUCT #4	xx							
Incorporate survey results								

E.3.f. Report on status: Work on this activity started between January and July 1996. Draft factsheet design and narratives on several topics were compiled. These topics include the impact of organic materials and fertilizer on nonpoint pollution, designing sites to minimize nonpoint runoff, and organizing locally to improve nonpoint water quality. With input from the advisory group and results from the first survey three final topics were chosen: impact of yard waste, impact of automobiles, and getting to know your watershed. In addition, each of the factsheets were customized for the neighborhoods' own watershed. The city of St. Paul paid \$3,309 for the design of the factsheets.

E.4 Activity: Print factsheets. Print a series of three nonpoint pollution factsheets. Five thousand copies of each.

E.4.a. Context within the project: See activity E.1.

E.4.b. Methods: N/A

E.4.c. Materials: N/A

E.4.d. Budget

Total Biennial LCMR Budget: \$1,056

LCMR Balance: \$0

MATCH: \$3,500

MATCH BALANCE: \$0

E.4.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1 xxxx

Printing

E.4.f. Report on status: The city of St. Paul paid \$4,192 to print the brochures which were mailed to our target neighborhoods in St. Paul and Minneapolis.

E.5 Activity: Mail. Send out a series of three mailings to 5,000 households in the five targeted neighborhoods.

E.5.a. Context within the project: These factsheets will provide information to individual households based on survey results and research done.

E.5.b. Methods: N/A

E.5.c. Materials: N/A

E.5.d. Budget

Total Biennial LCMR Budget: \$3,169

LCMR Balance: \$0

MATCH: \$6,000

MATCH BALANCE: \$0

E.5.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1 xx

Printing labels

PRODUCT #2 xxxx xx

Mailing

E.5.f. Report on status: The brochures were mailed in October 1996, and January and February 1997. Through partnerships with the St. Paul Neighborhood Energy Consortium, Ramsey-Washington Watershed, and the WaterShed Partners we were able to distribute a total of 76,400 brochures. Of these, 61,400 went to all the residents in four St.

Paul and four Minneapolis neighborhoods, as well as the Ramsey-Washington watershed. The WaterShed Partners will be distributing 5,000 copies of each brochure through the WaterShed Tent display in 1997. That is five times more than the 15,000 we had initially planned to send to our five target neighborhoods. Three more mailings of 2,500 each are planned for 1997 by Seward Neighborhood Group, Trout Unlimited, and Ramsey-Washington watershed. The City of Minneapolis paid \$6,191 to mail the brochures to Minneapolis and St. Paul neighborhoods.

F. Develop and Conduct Followup Survey, Analyze Data

F.1 Activity: Draft followup survey questions.

F.1.a. Context within the project: Develop a survey product which helps us measure the effectiveness of the factsheets and neighborhood organizing.

F.1.b. Methods: Standard guidelines for survey tool development will be applied.

F.1.c. Materials: N/A

F.1.d. Budget

Total Biennial LCMR Budget: \$951

LCMR Balance: \$0

MATCH: \$0

MATCH BALANCE: \$0

F.1.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1 xxxx xxx

Draft followup survey questions

F.1.f. Report on status: Draft questions for the followup survey were designed to see what impact the educational materials and outreach had.

F.2 Activity: Final followup survey preparations. Includes working with advisory board and survey professionals to finalize questions, determining sample size, compiling database, and training callers.

F.2.a. Context within the project: Coordinate all of the front end work needed to execute the followup survey.

F.2.b. Methods: Survey professionals will determine sample size. Either the survey consultant or the cities will provide database from which we draw the sample. CBE and survey consultant will train paid phone staff to complete the calls.

F.2.c. Materials: N/A

F.2.d. Budget

Total Biennial LCMR Budget: \$1,268

LCMR Balance: \$1,268

MATCH: 0

MATCH BALANCE: 0

F.2.e. Timeline:

Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #1				xx		
Final followup survey questions						
PRODUCT #2			xx			
Followup survey sample size						
PRODUCT #3			xx			
Database completed						
PRODUCT #4				xx		
Train callers						

F.2.f. Report on status: CBE worked in partnership with the St. Paul Neighborhood Energy Consortium and the Minnesota Center for Survey Research finalize preparations for the followup survey in early 1997.

F.3 Activity: Conduct followup survey.

F.3.a. Context within the project: Make calls within the five target neighborhoods to assess the effectiveness of educational materials and community organizing.

F.3.b. Methods: Using a questionnaire no more than 10 minutes long, paid phone staff will complete the followup survey calls over a period of eight weeks.

F.3.c. Materials: N/A

F.3.d. Budget

Total Biennial LCMR Budget: \$3,595

LCMR Balance: \$0

MATCH: 0

MATCH BALANCE: 0

F.3.e. Timeline:

Year 2	7/96	9/96	11/96	1/97	3/97	5/97
PRODUCT #1					xx	xx
Complete followup survey calls						

F.3.f. Report on status: Survey calls were completed in March 1997.

F.4 Activity: Analyze data.

F.4.a. Context within the project: Results from the survey will be compiled and analyzed to provide a comparison with original survey results.

F.4.b. Methods: Data will be coded, edited, and processed by the survey consultant. Further analysis will be made by project staff with input from the advisory board. Staff will prepare a comparison of the two survey findings as part of the project evaluation.

F.4.c. Materials: N/A

F.4.d. Budget

Total Biennial LCMR Budget: \$5,440

LCMR Balance: \$0

MATCH: 0

MATCH BALANCE: 0

F.4.e. Timeline:

Year 2 7/96 9/96 11/96 1/97 3/97 5/97

PRODUCT #1

xx xxxx

Analysis of findings

F.4.f. Report on status: Results from the followup survey showed few significant increases in the understanding of issues by respondents. This was true for the issues which we targeted with educational materials -- lawn care, auto care, and watershed management -- as well as others.

VI. Evaluation: The following criteria will be used to measure the effectiveness of this project:

- * Five neighborhoods with diverse characteristics included in the education project.
- * Production and distribution of five neighborhood profiles.
- * Production and distribution of nonpoint source pollution education materials to 5,000 households.
- * Completion of at least 400 initial surveys.
- * Partners in two or more neighborhoods participating in drafting action plans.
- * Coordinating work by neighborhood and environmental groups, and government in creating and issuing a common message about the problems and solutions of nonpoint source pollution.
- * Completion of at least 400 followup surveys.
- * Followup survey shows an increase in knowledge of nonpoint source pollution.

VII. Context within field: This project integrates well with efforts at the national, state, and local level to address nonpoint pollution issues. For example, under the federal Clean Water Act, both St. Paul and Minneapolis are required to implement public education programs as part of the stormwater permitting process. At the same time the urban watershed restoration

movement is gaining momentum and stature nationally. Groups such as the Coalition to Restore Urban Waters and the Urban Creeks Council are educating people at the local level on how they can restore and protect their urban waters using stormwater management, stream bank restoration, and storm drain stenciling. One inner-city neighborhood in Berkeley, California is reclaiming a stream by redesigning a local park.

State policy on nonpoint source pollution has focused mostly on rural sources such as septic tanks, feedlots and field runoff. However, urban projects in the Twin Cities are finding support from the state. The Metropolitan Council started a multi-year nonpoint pollution education program this year with funding from the state. Efforts by the Lake Phalen neighborhood in St. Paul to restore wetlands have also gotten strong support. This effort has also been helped greatly by William Moorish through the University of Minnesota.

Our project also connects well with the National Park Service through its activities on the new Mississippi National River and Recreation Area (MNRRA). Nonpoint pollution is one of MNRRA's key foci. Another group of players whose goals match well with ours are the Twin Cities Watershed Management Organizations. These organizations are very interested in building stronger local support for improving nonpoint water quality and will be valuable partners for this program.

Finally, Minneapolis' Neighborhood Revitalization Program (NRP) is another important piece of the puzzle for this project. Minneapolis neighborhoods may be able to use resources from the NRP process to deal with environmental issues such as nonpoint source pollution.

VIII. Budget context: Each of the three collaborators have budgets for work on activities similar to those in the project.

Both St. Paul and Minneapolis have stormwater management budgets which fund staff time, consultant contracts, stormwater monitoring fees, printing costs, postage, materials, and equipment purchase. Matching dollars for this project will come from these dedicated funds.

St. Paul Stormwater Management Budget

1994 - \$205,616
1995 - \$233,917 - proposed
1996 - \$250,000 - projected
1997 - \$250,000 - projected

Minneapolis Stormwater Management Budget

1994 - \$350,000
1995 - \$400,000 - projected
1996 - \$600,000 - projected
1997 - \$700,000 - projected

CBE has done community organizing in both Minneapolis and St. Paul since 1988. Our work has focused on water quality pollution issues. Current plans involve community organizing around nonpoint pollution and other environmental issues during 1995 and 1996 through our Environmental Visions Program.

CBE Environmental Visions Program Budget

1995 - \$100,000

1996 - \$114,000

IX. Dissemination: A final report will be prepared showing initial and final survey results. Included in the report will be an explanation of the education program with examples of materials developed and the neighborhood draft action plans. This report will be distributed to advisory board members, project participants, and the media. All three collaborators will also make the report available to any interested parties.

X. Time: N/A

XI. Cooperation:

St. Paul - As project manager, Anne Weber will coordinate the bi-monthly billing for completed work based on deliverable products and negotiate the agreement with the state. She will provide input on work products, in addition to quarterly meetings with staff from Minneapolis and CBE and the advisory board to track progress. The city will provide, as needed, input from public works or other staff on project workproducts as they develop. St. Paul will also supply a portion of the \$12,000 required match for designing, printing, mailing educational materials.

Minneapolis - Minneapolis staff Jody Polzin will play a role similar to Anne's in the project, with the exception of the billing responsibilities. Jody will provide expertise on workproducts and meet on a quarterly basis with collaborators and the advisory board to track progress. Minneapolis will also supply its portion of the \$12,000 required match for designing, printing, mailing educational materials.

Citizens for a Better Environment (CBE) - Working closely with the cities and advisory board, Minnesota program director, Lisa Doerr, and Mississippi River project coordinator, Amy Middleton, will staff this project for CBE. As project coordinator, Amy will play the major role in implementing the project. Lisa will provide management and technical oversight.

Staff time put into the project by Anne Weber as project manager and Jody Polzin as technical support has not been quantified at this point because it will be donated as in-kind and is not part of the LCMR budget. The \$12,000 match committed for the project will be for payment of services. However, both cities will track staff time to provide information to other parties interested in the staffing requirements of similar projects.

CBE

A. Administration	8%
B. Select Neighborhoods	9%
C. Survey	9%
D. Community Organizing	34%
E. Educational Materials	26%
F. Followup Survey	7%

XII. Reporting Requirements: Semiannual six-month workprogram update reports will be submitted not later than January 1, 1996, July 1, 1996, January 1, 1997, and a final six-month workprogram update and final report by June 30, 1997.

XIII. Required attachments:

1. Qualifications

Anne Weber
City of St. Paul, Department of Public Works
Civil Engineer

Anne is the civil engineer responsible for developing St. Paul's Municipal Storm Water Discharge permit, which is required under the federal Clean Water Act. The permitting process involves completing a two part process. Part 1 included researching existing legal authority, water quality data, and storm water management programs. Watershed mapping and conducting a field screening program for illicit discharges were also included. Part 2 focused on storm water quality monitoring and developing a storm water management program for the permit.

Jody Polzin
City of Minneapolis, Department of Public Works
Engineer II

Jody has been assigned since October, 1990 to Minneapolis' Sewer Design Section as an engineer II. Responsibilities include reports, design, and the planning of projects to improve the quality of stormwater runoff. Primary projects include:

- * Planning, budgeting, and reports required to meet the US Environmental Protection Agency's stormwater regulations;

- * Providing technical assistance as needed for the Minneapolis Chain of Lakes Clean Water Partnership Project;

- * Staffing the Minneapolis Water Quality citizens Advisory Committee; and

- * Assisting staff on other projects such as Combined Sewer Overflow.

Major reports authored or co-authored since 1990 include:

- * Minneapolis Stormwater Discharge NPDES Permit Application, November, 1991;

- * Minneapolis Stormwater Discharge NPDES Permit Application, November, 1992; and

- * Minneapolis Chain of Lakes Clean Water Partnership Project, Implementation Report, October, 1993

Lisa Doerr
Citizens for a Better Environment (CBE)
Minnesota Program Director

Lisa joined CBE in June, 1990 after serving for three years as public outreach director for the Minnesota Public Interest Research Group (MPIRG). She has overseen extensive community organizing work by CBE throughout the Twin Cities and Greater Minnesota. Lisa has also done legislative and legal work on a wide variety of issues. Recent accomplishments include:

- * Helping to organize the Mississippi Corridor Neighborhood Coalition and compile an Environmental Inventory of the area;

- * Authoring the 1993 report, Get To Know Your Local Polluter: Profiles of Minnesota's Top 40 Toxic Polluters;

- * Writing and passing legislation creating the nation's first state-run community assistance program on pollution prevention; and

- * Helping the Metropolitan Waste Control Commission establish a pollution prevention program within its industrial discharger permit system.

Amy Middleton
Citizens for a Better Environment (CBE)
Mississippi River Project Coordinator

Amy worked at CBE for two years between 1987 to 1989 and joined our staff again in January, 1993 coordinating our Mississippi River Project. She specializes in providing technical support to river communities from Anoka to Winona, Minnesota as part of CBE's Good Neighbor project. She has a Bachelor of Science degree in Land and Water Management from Michigan State University.

Recent accomplishments include:

- * Authoring a report, From Point to Nonpoint: Protecting the Mississippi River's Future, a review of Clean Water Act compliance by all of the Mississippi River point polluters from Minneapolis to the headwaters;

- * Coordinating input from local communities and environmental groups on the management plan of the Mississippi National River and Recreational Area; and

- * Publishing a report, Mississippi River: A Tarnished Present and Uncertain Future, documenting toxic mass loadings to the river in the Twin Cities.