

Appendix D: Additional Documentation of Reasonable Assurances

Appendix D presents further information which should reasonably assure the recommendations of the TMDL project will be implemented. This additional information includes

- a listing of the active participants and interested parties involved with the Watershed Improvement Group which is implementing the Upper Little Miami River TMDL;
- documentation for the current Upper Little Miami watershed 319-funded grant;
- documentation for the current Caesar Creek watershed 319-funded grant;
- the draft grant application for the 2002 319-funded grants for the entire Upper Little Miami River watershed

Table D1 lists the active members and the interested parties of the Upper Little Miami Watershed Improvement Group. Table D2 lists the original members of the workgroup formed to assist the Ohio EPA with this TMDL project. The original group (Table D2) formed the seed for the Watershed Improvement Group (Table D1). The current 319-funded project descriptions followed by the 2002 319-funded grant application completes this appendix.

Table D1. The Upper Little Miami Watershed Improvement Group Active Members and Interested Parties (as of 11/16/01)		
Last	First	Organization
Abel	Lisa	YSI Incorporated
Agricola	Mark	U.S. Army Corps of Engineers
Amon	Dr. James	Beavercreek Wetlands Association
Anderson	Stephen	Greene County RPCC
Andrew	Elwood	Village of Harveysburg
Anliot	Fred	
Arentsen	Scott	Dayton Power and Light Company
Arnold South	Pat	Warren Co. Board of Commissioners
Austria	Steve	District 10 Senator
Ayrsman	Tom	Antioch College
Babb	Dick	Ohio Farmers Union
Baird	Anne	OSU Extension, Southwest District
Bamberger	Mark	Miami Conservancy District
Bayes	Jack	Lebanon Water and Wastewater
Beach	David	City of Beavercreek Engineer
Berge	Fred	Farmer
Bertolini	Joe	US Army Corps of Engineers
Boeder	Steve	NRCS - District Conservationist
Boop	April	USDA - FSA
Brausch	Chris	Camp, Dresser, and McKee

**Table D1. The Upper Little Miami Watershed Improvement Group
Active Members and Interested Parties (as of 11/16/01)**

Last	First	Organization
Brueggeman	James	Montgomery Co. Sanitary Engr. Dept.
Buchberger	Steve	University of Cincinnati
Buckles	Heather	Greene SWCD 319 Grant Coordinator
Bulcher	Tim	Malcolm Pirnie
Burton	Dr. Allen	Wright State University
Campbell	Ed	NRCS
Campbell	Patricia	City of Bellbrook
Campbell	Virgil	NRCS
Case	Barbara	Landowner/ LMRP
Case	David	Landowner/ LMI
Coakley, Clerk	Sandra	New Jasper Township
Coblentz	Robert	NRCS
Cole	Larry	Greene Co. Sanitary Engineering
Collins	Daniel	Warren Co. Health Dept.
Conway	Barry	City Engineer
Council	Village	Village of Yellow Springs
Crabtree	Susie	Dayton Foundation
Craig	Bob	Warren Co. Planning
Crisenberg	Larry	Warren Co. Board of Commissioners
Cummings	George	NRCS
Curry	Mike	Clinton Co. Commissioner
Denger	Tim	Greene Co.
Denman	Al	Tecumseh Land Trust
DeWine	Kevin	District 76 Representative
Dillon	Jim	Montgomery SWCD
Dotson	Ben	Deerfield Township
Dubruiel	Daniel	City of Beavercreek
Everman	Ed	Program Specialist SWCD
Fackel	Kelly	Miami Conservancy District
Fassig	Carol	Little Miami Scenic State Park
Finan	Richard	District 7 Senator
Flax	Richard	Farmer
Fletcher	Scott	John Bryan State Park
Flowers	Kevin	Izaak Walton League of America

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Last	First	Organization
Freeze Stovall	Lois J.	Turtle Creek Township
Fremont	Mike	Rivers Unlimited
French	Ken	Greene Co. Sanitary Engr. Dept.
Fyffe	Freda	Clark Co. Health District
Gaskill	Erin	Ohio EPA
Gatton	Carl	Warren Co. Wasterwater Treatment Plant
Geyer	Robert	Greene Co. Engineer
Grady	Erin	Tetra Tech EM Inc.
Graff	Carol	Beavercreek Township Trustee
Graham	James	City of Kettering, Kettering Municipal Building
Guenther	Carl	Montgomery Co.
Hagenbuch	Bill	Beavercreek Wetlands Association
Hagler	Kathryn	Greene Co. Board of Commissioners
Hale	Dr. Nathan	
Hall	Steve	NRCS
Hamilton	David	City of Bellbrook
Hammond	Scott	Miami Valley Regional Planning Commission
Harner	Glenn	Greene SWCD
Harper	R. Kevin	Village of Waynesville
Hawk	Karen	Greene Co. Sanitary Engineering Dpt
Hayes	Tina	Camp, Dresser & McKee
Himmler	Brad	Vickers Electronic Systems
Hissong	Jeff	Greene Co.
Holdeman	Tim	Malcolm Pirnie
Holderman	Edd	Stoneliick Township
Hollister	Don	Glen Helen Ecology Institute
Hoover	Randy	ODNR DOW District 5
Huff	David	
Hurley	Dennis	Village of Spring Valley
Jackson	Donald	Massie Twp. Zoning Inspector
Johannes	Matt	Clinton Co. Health Dept.
Johnson	Doug	Deputy Director of Planning and Development
Johnson	Gary	City of Xenia POTW
Jordan	Randy	NRCS-Butler SWCD

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Last	First	Organization
Jurick	Bob	B-W Greenways
Kasle	Jim	Metropolitan Sewer District
Kearns	Merle G.	District 74 Representative
Keck	Yana	Warren Co. Regional Planning Comm.
Kellis	John	Miami Valley RC&D Coordinator
Kerdolf	Barbara	
Kilburn	C. Michael	Warren County Commissioner
Kipp Jr.	Carl	Paygro
Kolesar	Donald	Jamestown Mayor
Lee	Steven	U.S. Army Corps of Engineers
Leeds	Don	Greene SWCD
Leiwig	Tim	Greene Co. Parks
Leonard	Charles	City of Xenia
Leopold	Debbie	Greene Co. Health Dept.
Lewie	Chris	Clark Co. Planning Commission
Limbert	Bob	Beaver Creek Wetlands Association, Inc.
Linebaugh	Randy	Wayne Township
Lingg	Tim	Green Environmental Coalition
Linkhart	Dave	Farmer
Little	Richard	Beavercreek Township
Lucas	Don	Montgomery Co. Commissioners
Lucas	Mike	Miami Valley Regional Planning Commission
Lyon	Anne	Greenacres Foundation
Madden	W. Reed	Greene Co. Board of Commissioners
Mahan	Gerald	OSU Extension
Maloney	Doug	ODNR, Division of Wildlife
Manger	Patrick J.	Warren Co. Engineers Office
Mason	Kimberly	Greene Co. Sanitary Engineering
McClelland	R. John	Greene Co. Sanitary Engr. Dept.
McConkey	George	Clark Co. SWCD
McElroy	David	Warren SWCD
Miller	Michael	University of Cincinnati, Dept. of Bio Sciences
Miller	Steve	Effectiveness Plus
Montgomery	Richard	Xenia Township

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Last	First	Organization
Moran	Dave	Project GREEN - YMCA Camp Kern
Mutter	Dane	
Myers	Darleen	Clinton Co. Commissioner
Nedurini	Krishnakumav	Central State Professor
Nelson	Ray	Warren Co. Water Dept.
Niehaus	Tom	District 72 Representative
Nolan	Patrick J.	Warren Co. Water & Sewer Department
Nydegger	Jeanne R.	Sugarcreek Township
Nygaard	Eric	Ohio EPA - Division of Surface Water
O'Banion	Jill	Greene Co. SWCD
Partee	Eric	Little Miami Inc.
Patrick	James	City of Lebanon
Patton	Gregory L	ODOT, District
Pennewitt	Phyllis	Xenia City Council
Phillips	James	Combined General Health District of Mont.
Phipps	James	Cedarville University
Piirto	Cynthia	Caesar Creek Lake
Powell	Elmer	Wayne Twp. Zoning Administrator
Priest	Theodore	Warren Co. Zoning Inspection
Purkey, Jr.	Bill	Village of Corwin
Raga	Tom	District 2 Representative
Ratcliff	Mike	Mayors and Managers Assoc. Exec.
Rauche	Renee	
Renneke	Richard	Warren Co. Dept. of Water and Sewer
Roberts	Faymon	Vlg of Waynesville, Utility Superintendent
Rohrer	Rhett	Rivers Edge Outfitters
Rolph	Marsha	Warren Co. SWCD
Rostofer	Don	ODNR Scenic Rivers
Sanders	Randy	ODNR
Schaublin	Kenneth	Clinton Co. Regional Planning
Schroeder	Robert	Greene Co. Regional Planning Comm.
Schulze	Steve	Montgomery Co.
Simpson	Chris	Lower Mad River Watershed
Skalski	Frank	ODNR

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Last	First	Organization
Smith	Bruce	Ohio EPA
Smith	Doug	OKI Regional Council of Governments
Spitler	Jim R.	ODOT
Stanforth	Rick	Clinton Co. Commissioner
Sthulfauth	Gary	Ohio EPA - Division of Surface Water
Strieber	Joni	Morris Bean Company
Szlag	David	USEPA
Tackett	Roger	Clark Co. Commissioners
Taylor	Ray	Div. of Soil & Water Conservation
Taylor	Ryan	East Fork Watershed
Terrill	Paul	Village of Cedarville
Thieman	Chuck	Caesar Creek State Park
Thomas	Jeff	ODNR - Division of Soil & Water
Tkatschenko	John	NRCS
Townsend	Peter	Antioch College
Trimble	Hugh	OEPA SWDO
Venturini	Virginia	University of Cincinnati
Volkerding	Ron	Greene Co. Sanitary Engineering
Ware	Robert	Warren Co. Regional Planning
Westerfield	Rick	Montgomery Co. Sanitary Engr. Dept.
White	Doug	District 14 Senator
Wildman	Chuck	Farmer
Wildman	Sarah V.	Village of South Charleston
Wilke	Mark	Massie Township
Willeke	Gene	Miami University
Williams	John	NRCS
Wiser	Larry	Warren Co. Combined Health Dept.
Wolary	John	ODNR
Yager	Jill	Antioch College
Zimmerman	Mike	Ohio EPA
Zopf	Richard	Village of Yellow Springs

Table D2. Original Workgroup Members (as of July 13, 2001):		
Name	Business	Interest Area
Carl Kipp, Jr.	Paygro Division of Garick	Agriculture, Landowner
Carl Guenther	Montgomery County	Municipal POTW-County
Dave Mutter	Conservationist	Environmental
Dave Linkhart	Farmer/ Radio rep	Agriculture, Recreation
David Huff		Academic/ Municipal/ Environmental
Don Rostofer	ODNR SW Ohio Scenic Rivers	Government
Don Leeds	Greene SWCD & 319 ULMR proj.	Government
Eric Partee (<i>WIG Co-Chair</i>)	Little Miami, Inc. (LMI)	Environmental
Faymon Roberts	Waynesville Utility Superintendent	Municipal POTW-Village
Fred Berge	Roberts - Berge Farm	Agriculture
Gary Johnson	Public Service Director	Municipal POTW-City
George McConkey	District Adm. Clark SWCD	Government
Rhett Rohrer	Rivers Edge Canoe Livery	Recreation
Richard Flax	Farmer/ local co-op boardmember	Agriculture
Scott Hammond	Miami Valley Regional Planning Commission (MVRPC)	Regional Planner
Steve Hall	NRCS Little Miami River Partnership	Government, Landowner Environmental
Tim Lingg	Green Environmental Coalition	Environmental
Timothy Denger, PE	Greene County	Municipal POTW; Landowner
Stephen Anderson	Greene County RPCC	Planner
Anne Lyon	Greenacres Foundation	Environmental
Steve Miller	Effectiveness Plus, Inc.	Landowner; LMRP
Mike Zimmerman	Ohio EPA SWDO - Permits	Government (TMDL)
Eric Nygaard	Ohio EPA CO - Permits	Government (TMDL)
Erin Gaskill	Ohio EPA CO - TMDL	Government (TMDL)
Carol Graff	Beavercreek Township Trustee	
Barbara Case		Landowner/ LMRP
David Case	LMI	
Gerald Mahan	Greene County OSU Extension	

Table D2. Original Workgroup Members (as of July 13, 2001):		
Name	Business	Interest Area
Ron Volkerding <i>(WIG Co-Chair)</i>	Greene County	Municipal POTW-County; Environmental; LMRP; Landowner
Larry Cole	Greene County Public Works	Municipal POTW-County
Mike Lucas	MVRPC	Regional Planner
Steve Schulze	Montgomery County	Municipal POTW- County
Bruce Smith	OEPA SWDO	Government
Hugh Trimble	OEPA SWDO	Government
Gary Sthulfauth	OEPA CO	Government
Bob Miltner	OEPA CO	Government
Chris Brausch	Camp Dresser & McKee	Consultant Regional Planner
Tim Holdeman	Malcolm Pirnie	Consultant
Tom Bulcher	Malcolm Pirnie	Consultant
Virginia Venturini	University of Cincinnati	Academic
Dr. Stephen Buchberger	University of Cincinnati	Academic
Dr. Krishnakumav Knedunuri	Central State U. Asst. Prof	Academic / Modeling
Barbara Kerdolf		WQ Monitoring Env. Education
David Szlag	USEPA	Academic

Upper Little Miami River 319-Funded Watershed Project Description and Application Information

Each of the issues below are listed as sources of known or suspected impacts to the River and its tributaries. The facts that these are not among the long list of known sources are because most of them are just becoming a major problems with the fast development of the area with housing and commercial growth. Agriculture is still the major source of the runoff and sedimentation in the region taken as a whole.

Anecdotal discussions with Ohio EPA indicate that the studies completed in 1998 in the Little Miami River are expected to identify each of these three sources as concerns. The studies will also most likely identify them as sources of impairment to several of the stream segment involved in this project. Even if these are not identified as sources of impairment, the fact is, they are serious issues that need to be addressed, and this project strives to do so.

On-site Wastewater Systems – The health departments in each of the counties involved all agree that these septic systems have an impact on the receiving waters where they are located. Ohio EPA has reserved control of the on-site wastewater from the local health department one area of watershed around Caesar Creek Lake. The project aims at providing evidence to homeowners about how proper maintenance can add life to these systems and protect the environment at a reasonable cost. The wetland treatment demonstration is meant to show officials and homeowners that these wetland systems can be an effective and cost efficient method renovating old failing on-site wastewater systems.

Urban runoff – Urban runoff is a major concern of the entire region. Ohio EPA has indicated that the major factor leading to concern that the Little Miami River is showing signs of deterioration, is the unabated growth in residential development in its watershed. The upper Little Miami is no different. The western region of the watershed is being developed very quickly. On the northern edge of Xenia, there is a major effort to study the Oldtown Creek watershed to evaluate the occurrence and effectiveness of previously installed retention and detention basins. This survey is supported through this project and the project itself will be renovating two older basins with the intent of making them more pleasing to the eye and easier to maintain in the future. There will be incentives in the project aimed at the development of two subdivisions one showing temporary practice installation and the other highlighting permanent practices. Training sessions will be held to show the importance of the practices as well as the scrutiny that these sites are receiving.

Construction sites – Construction site erosion and runoff is perhaps the most mentioned source of new erosion and siltation in this watershed. Each of the Soil and Water Districts have personnel with their principal duty being the review of plats and the inspection of residential and commercial construction sites.

The Upper Little Miami Project will also take numerous steps to improve the implementation of erosion control on these construction sites. There will be two training site subdivisions designed for training contractors and their employees on the importance of this work. The project will hold three major workshops pertaining to this subject. One will be an elected officials workshop to provide officials with the tools they need to make adjustments in their policies and zoning regulation to help abate this growing problem. The other two will be major training sessions with developers and contractors concerning the importance of both temporary and permanent erosion control practices.

Summary

The three watersheds that make up the Upper Little Miami Watershed greatly influence the entire Little Miami River Watershed and in SW Ohio. An impressive group of organizations understand this significance and have come together to present this proposal to the 319 selection committee. The group has thoroughly discussed the needs within these watersheds. The known sources of impairment to these river systems include organic enrichment/D.O., Siltation, habitat alteration, nutrients, pathogens, metals, ammonia, and chlorine. These issues have all contributed to the designation of the two Little Miami River watersheds from the headwaters to below Beaver Creek as priority watersheds. The rationale of this project reaches beyond these areas to the impact it can have upon the larger 1700 sq. mi. watershed of the Little Miami State and National Scenic River.

This project is born from lessons that were learned during a previous project in the upper most watershed, the majority of which was in Clark County. The same concerns that led to the creation of the Little Miami River Partnership (LMRP) has heightened interest in these watersheds and brings the coalition to where it is today. The delineation of this project includes three 11 digit watershed, two of which (72%) are priority watersheds and the third smaller one (28%) that is a category one watershed. Together, they cover 265,142 acres. This delineation is consistent with the breakdown made by the LMRP when it divided the Little Miami watershed into five subwatersheds for planning and for implementing pollution prevention and watershed enhancement projects. This is also consistent with the watershed action plan being developed by the Miami Valley RC&D and the LMRP. The Planning Committee that developed this project consists of the Greene, Clark, Warren, and Montgomery SWCDs, OSU extension, the Miami Valley regional planning commission, FSA, ODNR Division of Forestry and Wildlife, ODNR Scenic Rivers office, Little Miami River Inc., and the Miami Valley RC&D Council. The LMRP is also a part of the effort and their coalition brings a variety of private industry, citizen and units of government into the discussion.

The focus of the project will be to accelerate the planning and application of needed conservation measures to abate non-point sources of pollution. The watershed action planning process and many discussions with concerned citizens and agencies have led to a consensus that has culminated with this application. Much of the discussion surrounded the almost unabated development and growth that the Little Miami Watershed is experiencing. This project will address this issue with direct assistance, education, and demonstration. Secondly, It has also been pointed out that many of the conservation practices needed in the watershed are not presently available for funding through other programs. Thirdly, a series of innovative practices and planning efforts have been identified and included in the project. Lastly, the extensive planning that will occur in this project will build upon and maximize the use of other existing conservation programs. These programs include the Conservation Reserve Program (CRP), the Wetland Reserve Program (WRP), the Environmental Incentive Program (EQIP), the Pollution abatement Program, and Ohio's NatureWorks program. A variety of other state and local forestry, land-use, educational, and erosion control initiatives are also involved. The planning committee believes that the program set forth in this application will make a direct impact upon how landusers, whether they farm, own a home, build homes, or run a business, conduct their daily life. They will be better-informed stewards of the land they manage. The plan accepts the reality that these landusers have to make the changes, we need to provide them information and technical assistance that allows them to do so.

Project Area Description – The Upper Little Miami River Watershed is located in SW Ohio and drains 414 Sq. Mi. of southern Clark, northern and central Greene, Southeastern Montgomery, and northeastern Warren Counties. It lies in the southern edge of the Indiana-Ohio Till Plain Resources Area that covers much west central Ohio. The watershed lies about 20 miles East of Dayton and ten miles south of Springfield. It continues to the South and West to within about 15 miles of Lebanon, Ohio and 35 miles north and East of Cincinnati. Major highways such as interstates 70 and 71, and State Routes 35, 73, 42, border and/or traverse this area making it a prime target for residential growth and future development.

Though the accessibility of this watershed to major urbanizing areas is increasing the rate of suburban and commercial development, the overwhelming land-use of the watershed is still agriculture. The dominant crops

grown in the area are soybeans, corn, and wheat. Agriculture makes up 200,000 acres or 75% of the land-use according to the 1994 Ohio land-use inventory. Other land-uses in the watershed are Urban – 6% (growing fast and the project will work with GIS sources to update this figure), Wooded – 16%, other – 3%. While the urban sector of these numbers seems small, the activities associated with this development are creating significant erosion and off-site damages. The Ohio Environmental Protection Agency notes that the general development and hardening of the Little Miami River Watershed is perhaps the number one threat to this State and National Scenic River. The increasing discharges from the regions treatment plants represent an associated point source concern related to the expanding development of the region. While the focus of this project is obviously nonpoint source pollution, the efforts of the Little Miami River Partnership focuses upon bringing ALL segments of the community to the table. The Partnership uses its position to allow frank and unbiased discussion of the mutual concerns and to provide support to abate pollution in this watershed.

Water Quality Description – The water quality of the Little Miami River is of major concern to the regulatory interests in Southwest Ohio. This pristine water body and resource is now showing signs of deterioration. This fact has been the focus of much debate and study in the recent past. The PAUSE study, conducted by the University of Cincinnati and underwritten by several of the point source contributors in the watershed, does rightly point out the non-point source components of the problems of the watershed. Many of the phosphorous concerns grow from an increasing growth in this watershed.

NRCS data shows that 83% of the cropland within this watershed is made up of soil types that are greater than 35% erosive. Similarly, 63% of the farmed soils in this watershed are of the type that are more than 66% erosive. These soil properties aggravate and complicate the job of abating runoff and the movement of pollutants to the receiving water bodies, the Little Miami River and its tributaries. Septic systems are stressed due to the impervious nature of the soil associations, all earth disturbing activities such as construction sites and farming result in polluted runoff and water quality impairment. A simple review of the list of the documented and suspected sources of water quality impairment in these stream segments shows the severity and broad range of sources of these pollutants.

Program Goal and Objectives

A. Project Goal Statement – The project goal for the Upper Little Miami River Water Quality 319 Project proposal is to assist area landusers in the development of water quality plans that address the impact that their activities have on the River and its associated tributaries. The project is also designed to provide information that will allow those land users to make good decisions, and offer incentives for the application of identified practices that will help abate that pollution. The targeted audiences for this effort include agricultural producers, elected officials that make policy related to zoning and land-use in their jurisdictions, and developers and contractors that control the implementation of practices that impact the water quality in these streams. The activities carried out during this project have been designed to address the impact identified activities have on: **1.)** the water quality within the Upper Little Miami River Watershed; **2.)** the productivity and quality of the soil and water resources on the farms, developments, and other sites in the watershed; **3.)** the protection of the Little Miami State and National Scenic River; and **4.)** the public’s inherent knowledge about their activities effect water quality of the surface water resources in the watershed.

The project will work to improve the awareness of landowners and operators concerning activities of important organizations in the area such as the Little Miami River Partnership, Little Miami Incorporated, the Upper little Miami Fund, Tecumseh Land Trust, Beaver creek Wetlands, and others. The Coordinator and cooperating staffs will work to increase the participation in other local, state, and national programs that will help the project accomplish the identified water quality protection objectives listed below.

OBJECTIVE DETAIL

Objective No. 1 ; Objective Statement: To establish a comprehensive information/education program within the Watershed targeted to the identified officials, landusers, and contractors that directly influence the application of conservation measures. The effort will include the establishment of a watershed newsletter highlighting and recognizing outstanding achievements in the watershed. Other efforts include on-site demonstrations, field days, and targeted mailings. The associated materials will be pre-printed guidebooks highlighting best management practices that homeowners and businesses such as landscapers, developers, and contractors can adopt to help improve the water quality of the Upper Little Miami River Watershed. The idea is to recognize those that agree to work in an environmentally friendly manner as “Friends of the Little Miami”.

PROJECT FUNCTION: INFORMATION/EDUCATION

Description	319 \$	Unit	319 \$/Unit
Fields Days	\$1,000	2	\$500
Workshops	\$ ----	4	\$----
Newsletters	\$1,500	6	\$250
News Media Releases \$ ---		6	\$ ---
Homeowner fact sheet \$1,000		1,000	\$1.00/bulletin
Cons Planning (urban) booklet \$2,500		1,000	\$2.50/booklet
319\$: 6,000			

Objective No.: 2 ; Objective Statement: To establish a series of urban water quality demonstrations sites that will provide opportunities for training and educational activities in the watershed. These demonstrations include urban sediment and erosion control training, on-site waste treatment, the proper use of silt fence on construction sites, and stormwater management. These educational efforts will target landusers, contractors and developers as well as elected officials and staff.

Cause(s): Siltation, habitat alteration, nutrients, pathogens, organic enrichment/D.O.

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

Description	319 \$	Unit	319 \$/Unit
Construction site erosion Control	\$20,000	2 sites	\$10,000
Urban Detention basin (upgrade & utilize)	\$ 5,000	2 sites	\$ 2,500
Silt Fence machine	\$ 4,500	1 ea.	\$ 4,500

319\$: **29,500**

***Specifications (NRCS, etc.): See Ohio’s Standards for Stormwater Mgt., Land Development, and Urban Protection**

*Cost share information (see instructions): 319 dollars are in the form of incentives to off-set the added costs of developing practice sites and practices that could be used as training sites. The incentives are 50% up to \$15,000 for the permanent practice site and \$5,000 for the temporary practice area. The detention renovations are 50% up to a maximum of \$2,500 per site.

*Silt fence machine will crimp netting from behind a tractor and ensure proper placement and layout of silt fence on sites where it is utilized. Staff will evaluate the impact this has on sites they review.

Objective No. 3: Objective Statement: To develop and implement conservation plans on 54,000 acres of targeted and/or Highly Erodible cropland and 150 water quality action plans with homeowners and targeted businesses to assist them in reducing the amount and improving the quality of runoff resulting from their activities. This objective is designed to ensure that landowners use All available program

opportunities to establish needed conservation systems on the land they manage. This objective will include a forestry pilot project called woodscaping aimed at home site of 5-20 acres in size. This project is designed to help these landowners better manage those acres in a manner that reduces labor, improves the diversity of plant community on these areas, and reduces the use of pesticides and other potential pollutants on these sites.

Cause(s): Siltation, organic enrichment, nutrients, habitat alteration

PROJECT FUNCTION: PLANNING

Description

- Whole Farm Planning
- Conservation Easements
- Watershed Management Planning
- Residue Management
- Animal Waste Utilization
- Nutrient Management
- Pesticide Management
- Woodland Improvement
- Pasture and Hayland Management

319 \$ ----

Objective No. 4 ; Objective Statement: To establish thirty (30) grassed waterways and thirty (30) water and sediment control basins and structures to reduce gully erosion, provide filtered transmittal of runoff water to a stable outlet, facilitate the adoption of conservation tillage, and to reduce the transport of sediment and nutrients to the receiving streams. The program will target sites in need of reconstruction that do not meet the qualifications of other available incentive programs such as EQIP and CRP.

Cause(s): Siltation, nutrients,

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

<u>Description</u>	<u>319 \$</u>	<u>Unit</u>	<u>319 \$/Unit</u>
Grassed Waterway or Outlet	\$60,000	30 acres	\$2,000/acre
Water and Sediment Control Basin	\$60,000	30 sites	\$2,000/site
319 \$ 120,000			

***Specifications (NRCS, etc.): 410, 412, 638**

***Cost share information (see instructions): Cost share will be limited to 50% of the cost not to exceed an average cost of \$2,000 per site. Landowners utilizing approved conservation plans and located in the targeted areas will receive priority for approval. These sites are not normally qualified for other c/s programs. 50% c/s should be an adequate incentive. Practice life shall be the same used by NRCS standards and specifications.**

Objective No. 5 ; Objective Statement: To develop and implement six (6) alternative pasture and watering systems within the upper little Miami River Watershed. The project will compensate

producers up to \$1,000 to offset costs incurred in developing the needed watering systems to improve these pastures. These practices are aimed at keeping livestock out of the stream, and improving the utilization of the pastured acres.

Cause(s): Organic enrichment/D.O., nutrients, Siltation

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

Description	319 \$	Unit	319 \$/Unit
Alternative Pasture Systems	\$6,000	6 systems	\$1,000/system

319 \$ 6,000

***Specifications (NRCS, etc.): 510 (pasture and hayland mgt.), 512 (pasture and hayland planting), 382 (fencing), and manufacturer’s information concerning commercial pasture pump systems.**

***Cost share information (see instructions): Cost share will be 50% of cost not to exceed \$1,000 per site. This includes exclusionary fencing and fencing for paddock utilization.**

Objective No. 6 ; Objective Statement: To develop a program that demonstrates alternative treatments and to promote the proper maintenance for on-site waste. This project will assist with the renovation of 4 non-discharging septic systems and establish maintenance agreements with 100 homeowners.

The project will demonstrate the use of wetlands for providing secondary treatment of waste. The program will also offer incentive payments to homeowners who agree to pump their septic tank, inspect their system, and carry out a maintenance program during the project.

Cause(s): Pathogens, nutrients, organic enrichment/D.O

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

Description	319 \$	Unit	319 \$/Unit
On-site Septic Disposal Systems (wetlands)	\$12,000	4	\$3,000
Onsite Septic Disposal Systems (maint. Agreements)	\$10,000	100	\$ 100

319 \$ 22,000

***Specifications (NRCS, etc.): See attached standards developed by the Lorain County Combined Health District.**

***Cost share information (see instructions): Cost share limited to 50% of cost not to exceed \$3,000 for the wetland renovations and \$100 per septic maintenance agreement.**

Objective No. 7 ; Objective Statement: To establish a tree planting effort within the watershed with the ODNR, Division of Wildlife to establish riparian corridor plantings, windbreaks, and wildlife plantings within the watershed. The project will purchase a planter that will be used throughout the watershed for such plantings in partnership with the ODNR Division of Wildlife.

Cause(s): Habitat Alteration

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

<u>Description</u>	<u>319\$</u>	<u>Unit</u>	<u>319 \$/Unit</u>
Forestry, other (Tree planter)	\$4,500	1 ea.	\$4,500
Forestry, other (tree plantings)	\$4,800	30 acres	\$ 160
319 \$ <u>9,300</u>			

***Specifications (NRCS, etc.): 612**

***Cost share information (see instructions): cost share for plantings is 50% of cost not to exceed \$160 per acre**

***The Division of Wildlife will oversee the scheduling and maintenance of the tree planter.**

Objective No. 8 ; Objective Statement: To demonstrate vegetative treatments to control streambank erosion innovative and effective techniques that maintain the natural integrity of the streams ecosystem.

Cause(s): Hydromodification, Siltation, habitat alteration

PROJECT FUNCTION: IMPLEMENTATION/DEMONSTRATION

<u>Description</u>	<u>319 \$</u>	<u>Unit</u>	<u>319 \$/Unit</u>
Streambank and Shoreline Protection/Stabilization	\$10,000	(2) 1,000 LF	\$10/LF
In-stream Fish Habitat	\$ 2,500	2 sites	\$1,250/site
319 \$ <u>12,500</u>			

319 \$ **12,500**

***Specifications (NRCS, etc.): NRCS Standard 580**

***Cost share information (see instructions): cost share is 50% of cost not to exceed**

Objective No. 9 ; Objective Statement: To establish a program to evaluate separate components of the project. This program will track the accomplishments of the implementation components. Surveys will be conducted throughout the watershed early in the project and again at the end of the project to measure the impact of the information/education effort of the project.

PROJECT FUNCTION: MONITORING/EVALUATION

<u>Description</u>	<u>319 \$</u>
Public perception survey	\$ ---
Activity tracking	\$ ---
Photographic evidence (perception inventory)	\$ ---
Land use tracking	\$ ---
319 \$ _____	

319 \$ _____

Caesar Creek 319-Funded Watershed Project Description and Application Information

Summary

The Caesar Creek Watershed is an important watershed in SW Ohio and within the larger Little Miami River Watershed. Caesar Creek Lake is being used for drinking water by the city of Wilmington, and utilization of the lake for this purpose will be expanding in the future. The lake is also a very active recreational resource for this area of Ohio. The focus of this particular project is to protect the Lake and its contributing streams and to protect the resource base of the watershed particularly the 112,000 acres of cropland in the watershed in Greene, Clinton, and Warren counties. Ultimately the proposal is aimed at protecting the larger watershed to which Caesar Creek contributes, that being the State and National Scenic Little Miami River.

This watershed has been of concern and the focus of several groups in the recent past. The Joint Board that will administer this project is just wrapping up a small 319 grant in this watershed. That project confirmed the need for this more comprehensive proposal. It also provided the technical agencies involved with an insight into the needs and interests of the landowners in the Caesar Creek Watershed. Another group working in this area is the Little Miami River Partnership. The Partnership is a coalition of agencies, governmental units, private industry, non-profit organizations, and citizens that have come together to form a watershed management group. They oversee and promote the protection of the entire watershed. Caesar Creek is one of five major subwatersheds making up the watershed of the Little Miami River.

This project will accelerate the planning and application of the essential BMPs to abate non-point sources of pollution. The organizing committee reviewed the needs within the watershed and identified the practices that were not presently being funded by existing programs. Several of the practices that will be planned and encouraged, but not funded with the 319 dollars in this proposal, include conservation tillage, filter strips, livestock and animal waste practices, tree plantings, and wildlife habitat establishment. It will be possible to accelerate the adoption of such practices through the Whole Farm Conservation Planning process that will be developed in the Caesar Creek Watershed. Funds for these will be acquired through other programs such as the Environmental Quality Incentive Program (**EQIP**), the Conservation Reserve Program (**CRP**), the Wetland Reserve Program (**WRP**). The Ohio Pollution Abatement Program, the Stewardship Incentive Program (**SIP**), the Forest Incentive Program (**FIP**), and several program encouraging the establishment of conservation, farmland protection, and riparian easements will also be encouraged by the staff planning the adoption of conservation practices in the watershed.

A primary interest of this project is the encouragement of improved development techniques in the Caesar Creek Watershed. OEPA has noted the continued expansion of residential development in the Little Miami Watershed, including Caesar Creek, is a major concern for this river system. It is viewed as pristine, but the concern is that this development is increasing and degrading the discharges to the river. The quality and quantity of these discharges are not being assimilated adequately by the stream segments involved. Although the primary financial incentives in this work plan are aimed at agriculture, on-site septic systems, and the lake, the project will work to strengthen the commitment to stormwater and erosion control measures in the watershed.

Project Area Description – The Caesar Creek watershed is located in southwestern Ohio and drains 242 Sq. Mi. in southeastern Greene, northern Clinton, and Warren Counties. It lies at the southern edge of the Indiana-Ohio Till Plain Resource Area that covers much of west central Ohio. The watershed is about 20 miles southeast of Dayton and 50 miles northeast of Cincinnati. Major highways through the watershed are I-71, US routes 35 and 68, and state routes 72, 73, and 380. The main channels of Caesar Creek, Anderson Fork, and North and South Branches of Caesar Creek make up some 84 miles of stream. Tributaries add another 43 stream miles for a total of 127 miles of perennial stream in the watershed.

Though the accessibility of the watershed from Cincinnati and Dayton and the numerous highways are rapidly increasing the rate of development in the area, the overwhelming land use in the watershed remains agriculture. Two-thirds of the area is cropland (105,000 ac.) with the average farm size being 220 acres. Forestland makes up another 12% (18,000 ac.). Caesar Creek Lake encompasses 2,500 acres with the park covering an additional 10,000 acres. Corn, soybeans, and wheat are the dominant crops being grown in the watershed. Livestock numbers and distribution are outlined and inventoried in the 1995 Caesar Creek Watershed Protection Plan.

The Little Miami is a State and National Scenic River, however, according to OEPA there are troubling indications that the River is being degraded. The members of the working committee, the Little Miami River Partnership, regulators, and citizens are all very concerned about the fact that the quality of this resource may be moving backward. Additional studies to identify the sources of this degradation and an accelerated effort to protect the water resources in the area are needed badly. This 319 proposal will be a key element in that strategy to protect this watershed and its resources.

The rapid urban sprawl in this region is increasing the demand for fresh water, and the use of water from Caesar Creek Lake as drinking water is expected to increase. Recreational demands in the area and at the Lake are also increasing. The ever-increasing demand for these services and resources reiterates the need for protecting the water resources in this watershed. Caesar Creek is one of five major subwatersheds making up the Little Miami River Watershed.

The more steeply rolling land (greater than 12% slopes) is generally found in the western areas of the watershed and in narrower bands in the eastern portions of the watershed. This land makes up about 75,000 of the farmed acres in the Caesar Creek watershed. These more sloping areas are a major feature along most of the streams in the watershed. These identified critical areas (see attached soils map with highlighted area) will be the targeted areas for conservation planning and practice application. Landowners in this area will be informed how their actions are key to the project's success.

Water Quality Description-The existing water quality of the streams in the Caesar Creek/Anderson Fork watersheds is of varying quality according to the 305b Water Resource Inventory. Most of the tributaries show signs of being impacted by non-point source pollution. The dominant impacting source of NPS pollution is agriculture production and livestock production. This project will directly impact both of these sources through the planning and application of conservation practices throughout the watershed. Livestock needs are not cost assisted through the grant, but will be included in the accelerated planning process that is undertaken in this proposal. Cost/Share will be prioritized to producers that complete plans along targeted stream sections and in the targeted (Highly Erodible) areas of the three counties.

Many, including Ohio EPA, are concerned that the sprawling residential development throughout these areas is loading the streams with discharges and increasing the volumes of discharges from the wastewater treatment plants in the area. Though the discharge quality may be acceptable, the sheer volume increases may be more than these streams can assimilate, thus degrading the streams. There is an effort to promote farmland preservation particularly in Clinton County. These efforts will be highlighted as this project strives to promote the protection and wise use of our farmland in the Caesar Creek Watershed.

Ohio EPA's Source Water Protection Plan for Caesar Creek identifies areas in the watershed that are the focus

of the assessment and protection strategy. The corridor management zone is identified as the areas 1,000 feet from top of bank along the principle streams and 500 feet from top of bank along tributaries. This delineation goes 10 miles upstream from the point of its entry to the source water, Caesar Creek Lake. This plan is very compatible with the targeted areas that this proposal has defined.

The Ohio Water resource Inventory has identified Siltation, nutrients, organic enrichment/DO, flow alteration, and habitat alteration all as causes of impairment. This is consistent with the agricultural character of the watershed. It also reiterates the planning committee's decision to focus on the BMPs that will best address these concerns.

While there are many concerns present, one identified by the Little Miami River Partnership (LMRP) and the advisory group for this project is the lack of data in Caesar Creek. The LMRP hopes to work with OEPA to expand and increase available data for this watershed. They also intend to request planning funds for Caesar Creek to continue the process of developing an effective watershed action plan. LMRP has completed the first steps of this process for the entire Little Miami River, and now want to carry out the remaining steps in one of the subwatersheds of the Little Miami, namely Caesar Creek.

Surprisingly there are fish advisories in the Little Miami for Sauger (Mercury) and Small Mouth Bass and Catfish (Lead). While not directly related to the sources of impairment identified for treatment in this project, the development of watershed action plans in the area will offer us the opportunity to take a closer look at many of the issues in question in the Caesar Creek and Little Miami River Watersheds. The hope is that implementation projects such as this one and the recently approved upper Little Miami will refocus efforts to protect the Little Miami from the apparent degradation that is occurring.

Urbanization in regions of the watershed is becoming a problem for the river. The project will strive to focus on development and zoning techniques that will minimize these impacts in the future. To that end, the project will conduct a major land-use planning conference early in the project. It will also utilize training sites for elected officials and contractors being established in the Upper Little Miami project to spread the use of cluster/open space developments into the Caesar Creek watershed.

Project Goal: To improve the water quality throughout the Caesar Creek Watershed by assisting landusers to adopt innovative and effective BMPs that will abate the impact their land disturbing activities have upon the areas within the Caesar Creek Watershed.

Objective #	1	Statement	To establish cultural and permanent conservation practices on cropland acres by developing and implementing conservation plans on 36,000 acres of targeted and highly erodible cropland, pastureland, and
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Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal	Total Federal 319 \$
Agriculture	Siltation, nutrients	Whole Farm Planning, nutrient mgt., waste utilization, conservation tillage, riparian corridor	36,000 acres	-0-

Name of BMP	Conservation Tillage	NRCS/State Specification Number	329
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Changes to the specification	
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Purpose	To prevent runoff and erosion	Target Audience	Agricultural producers
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BMP Critical Area(s)	Highly erodible soils, and in areas close to streams
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Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)
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Cost Share	N/A
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Objective #	2	Statement	To establish a complete and effective demonstration of shoreline and streambank protection techniques on Caesar Creek Lake and streams within the Caesar Creek Watershed.
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Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$
Streambank and shoreline erosion	Siltation	Streambank and shoreline protection / stabilization	3000 L.F.	\$30,000

Name of BMP	Streambank and shoreline protection and stabilization	NRCS/State Specification Number	580, Chapt. IX CCC training manual
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Changes to the specification			
Purpose	To prevent erosion on shoreline and streambank sites	Target Audience	Agencies responsible for maintenance of these sites
BMP Critical Area(s)	Caesar Creek Lake and streams entering lake		
Criteria for Participant Selection	On-site determination of most needed sites and sites available to use as demonstrations of the techniques		
Cost Share	65% of the cost up to a maximum of \$10.00 per foot		

Objective #	3	Statement	Design and install six (6) sites demonstrating the viability and effectiveness of alternative treatment methods for renovating on-site septic disposal systems in the Caesar Creek Watershed) particularly subsurface (non-discharging) wetlands.
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Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$
House lots	Organic enrichment/DO, pathogens	On-site septic disposal systems wetlands	6	\$24,000

Name of BMP	Constructed Wetland for on-site treatment of waste	NRCS/State Specification Number	N/A
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Changes to the specification	(see attached specification – attachment #)
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Purpose	To provide tertiary treatment of septic and renovate failing sites	Target Audience	Homeowners
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BMP Critical Area(s)	Areas of concentrated, non sewered houses
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Criteria for Participant Selection	Health departments identified problem sites
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Cost Share	50% up to \$4,000 per site
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Objective #	4	Statement	To implement needed permanent conservation practices on cropland throughout the Caesar Creek Watershed (where existing programs will not provide needed financial incentives).
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Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$
Agriculture	Siltation	Water and Sediment Control Basins	15	\$52,500	
"	"	Grassed Waterway reconstruction	21 acres	\$73,500	
"	"	Grade Stabilization Structures	14	\$21,000	

Name of BMP	Water and Sediment Control Basin	NRCS/State Specification Number	638
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Changes to the specification	
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Purpose	To prevent gully erosion and to filter out sediment from runoff	Target Audience	Agricultural producers
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BMP Critical Area(s)	Where Other assistance programs are not available, In areas containing highly erodible soils, and on fields that provide direct pollution potential to streams
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Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)
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Cost Share	75% of costs up to a maximum of \$3,500 per basin
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Name of BMP	Grassed Waterway	NRCS/State Specification Number	412
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Changes to the specification	
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Purpose	To control runoff and filter sediment	Target Audience	Agricultural producers
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BMP Critical Area(s)	Where Other assistance programs are not available, In areas containing highly erodible soils, and on fields that provide direct pollution potential to streams
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Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)
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Cost Share	75% up to \$3,500 per acre of waterway constructed
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Name of BMP	Grade Stabilization Structure	NRCS/State Specification Number	410
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Changes to the specification	
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Purpose	Prevent gully erosion and provide proper entry of runoff to receiving stream	Target Audience	Agricultural producers and landowners
BMP Critical Area(s)	Junctures of streams and areas of concentrated runoff		
Criteria for Participant Selection	Conservation plan developed and in an area of imminent threat to pollute a waterway or stream		
Cost Share	75% of cost up to a maximum of \$1,500 per structure		

Objective #	5	Statement	To effectively inform the public about the activities of the project and about the need to improve water quality and protect the resources in the Caesar Creek Watershed.
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Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$
All	All	Watershed newsletter	5 issues- 800 copies each	\$4,000	
All	All	Field Days	5	\$2,000	
All	All	Workshops	1	\$ 500	
All	All	Mailings	6	-0-	
All	All	Newspaper Articles	6	-0-	
All	All	Land-use conference	1	\$ 900	

Grant Application

To the

2002 319 Nonpoint Source Pollution Grants

For

THE UPPER LITTLE MIAMI RIVER WATERSHED

(Includes Upper Little Miami, Caesar Creek, and Anderson Fork Watersheds)

Submitted by

The Greene Soil and Water Conservation District

(Primary Sponsor with the Upper Little Miami River Joint Board of Supervisors)

July 2001

**Ohio Environmental Protection Agency
Section 319(h) Nonpoint Source Program
FY 2002 Project Grant Application**

LOCAL WATERSHED IMPLEMENTATION

(Refer to the Grant Application Instructions and Example during completion of this application)

Project Title	Upper Little Miami Watershed Water Quality Project
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Part I - Sponsor Information

Sponsor							
Organization Name		Greene Soil and Water Conservation District, Primary					
E-mail Address		Don-leeds@oh.nacdnet.org					
Street Address		1363 Burnett Drive					
City	Xenia	County	Greene	State	Ohio	Zip Code	45385-5681
Telephone Number		(937) 372-4478		FAX Number		(937) 372-8774	
Federal Tax ID Number							
Project Representative Name		Don Leeds					
Telephone Number	(937) 372-4478	E-Mail Address		don-leeds@oh.nacdnet.org			

Sponsor Authorization			
<i>To the best of my knowledge and belief, data in this project grant application are true, current and correct. This application package is duly authorized by the following Governing Body</i>		Greene Soil and Water Conservation District	
Name of Authorized Individual (print)		Charles P. Cooley	
Title (print)		Chairman	
Authorized Individual Signature (no black ink or pencil)		Date	
Assistance Team Member Signature (no black ink or pencil)		Date	

Part II - Project Information

Project Type							
Surface Water	X	Ground Water					
Does the project implement recommendations made in a completed Water-shed Management Plan, Wellhead Protection Plan, or Source Water Protection Plan?				Yes	X	No	
If yes, identify the agency/group that developed the Plan		ULM TMDL Implementation Plan			Year Developed	2001	
If yes, where can a copy of the Plan be obtained?			Available later this year				
Other Associated management Plans:			Little Miami River Watershed Action Plan – Being developed by the Little Miami River Partnership				
			Corps. Of Eng. Water Resource Study of Caesar Creek Lake – as a drinking water source - 1992				
			Wellhead Protection Plans - Waynesville				

Project Schedule					
Project Begins	July 1, 2002	Ends	June 30, 2005	Duration (in months)	36

Watershed Information				
Watershed Name(s)	USGS Hydrologic Unit Number(s) (11 digit)	Size (in acres)	TMDL Watershed? (Yes or No)	UWA Category 1 Watershed? (Yes or No)
Little Miami River (headwaters to Massies Cr.)	05090202 010	82,935 Acres	Y	Y
Little Miami River (Massies Cr. To Beaver Cr.)	05090202 020	105,925 Acres	Y	Y
Little Miami River (Beaver Cr. to Caesar Cr.)	05090202 030	76,292 Acres	Y	Y
Anderson Fork Caesar Cr.	05090202 040	60,682 Acres	Y	Y
Caesar Cr. (except Anderson Fork)	05090202 050	94,674 Acres	Y	Y
Total of the Upper Little Miami Watershed		420,508 Acres		

Project Narrative *(Narrative must be one page or less)*

Overall Watershed Water Quality Status

The existing water quality of the streams in the Upper Little Miami River Watersheds is of varying quality according to the 305b Water Resource Inventory. Most of the tributaries show signs of being impacted by non-point source pollution. The dominant impacting source of NPS pollution is agriculture production and livestock production. Other known sources of impairment include organic enrichment/D.O., Siltation, habitat alteration, nutrients, metals, ammonia, and chlorine. This is consistent with the agricultural character of the watershed. It also reiterates the planning committee's decision to focus on the BMPs that will best address these concerns. This project will directly impact these sources of pollution through the planning and application of conservation practices throughout the watershed. Livestock needs are not cost assisted through the grant, but will be included in the accelerated planning process that is undertaken in this proposal. Cost/Share will be prioritized to producers that complete plans along targeted stream sections and in the targeted highly erodible and riparian areas within the five counties involved.

Many, including Ohio EPA, are concerned that the sprawling residential development throughout these areas is loading the streams with discharges and increasing the volumes of discharges from the wastewater treatment plants in the area. Though the discharge quality may be acceptable, the sheer volume of increases may be more than these streams can assimilate, thus degrading the streams. There is also an effort to promote farmland preservation particularly in Greene, Clinton, and Warren Counties. These efforts will be highlighted as this project promotes the protection and wise use of our farmland in the Upper Little Miami Watershed. The partnering with the Upper River Fund to promote the availability of funds to acquire land outright or under easement will not only augment farmland preservation but also buffer the streams from agriculture production and other activities. The Plan of Work for this project will also focus on getting the available information to the public in a more effective manner. It will focus on letting the public know what the project is accomplishing and about the impact these efforts have upon water quality in the watershed.

Ohio EPA's Source Water Protection Plan for Caesar Creek identifies areas in the watershed that are the focus of the assessment and protection strategy. The corridor management zone is identified as the areas 1,000 feet from top of bank along the principle streams and 500 feet from top of bank along tributaries. This delineation goes 10 miles upstream from the point of its entry to the source water, Caesar Creek Lake. This plan is very compatible with the targeted areas that this proposal has defined.

While there are many concerns present, one identified by the Little Miami River Partnership (LMRP) and the advisory group for this project is the lack of data in Caesar Creek. The LMRP, working with the TMDL work group, hopes to work with OEPA to expand and increase available data for this watershed. They also intend to complete the process of developing an effective watershed action plan. LMRP has completed the first steps of this process for the entire Little Miami River. LMRP and their partners are now in the process of completing this plan through the ODNR Watershed Coordinator Program for each of the subwatersheds in the Little Miami River Basin, including Caesar Creek, Anderson Fork, and the Upper Little Miami.

Surprisingly to many, there are fish advisories in the Little Miami for Sauger (Mercury) and Small Mouth Bass and Catfish (Lead). While not directly related to the sources of impairment identified for treatment in this project, LMRP's development of watershed action plans in the area and their continued facilitation of the TMDL work group will offer the opportunity to take a closer look at many of the issues in question in the Upper little Miami River Watershed. The hope is that implementation projects such as this will help us remain focused on the efforts to protect the Little Miami from the apparent degradation that is occurring. The TMDL work group for the Upper Little Miami will serve as the advisory committee for this project, closely tying the two processes together working to ensure the success of both initiatives.

Urbanization in regions of the watershed is becoming a problem for the river. The project will strive to focus on development and zoning techniques that will minimize these impacts in the future. One of the previous 319 plans of work includes conducting a major land-use planning conference. It will also utilize training sites for elected officials and contractors being established in the Upper Little Miami project to spread the use of cluster/open space developments in the region. The planning committee has contacted the Clermont County Combined Health District and will be including substantial input from their alternative septic treatment 319 project into the design of the septic renovation efforts of this grant. This will help us overcome design and maintenance concerns, and will utilize information and data about the strengths, weaknesses, and costs of innovative systems that Clermont County piloted in a variety of soil types and landscape conditions.

The project proposes the use of septic pumping and maintenance agreements with homeowners. The plan o work will also provide incentive payments for the renovation of septic systems that utilize innovative technologies approved by area health departments, who will also complete Home Sewage Disposal Plans for the region. This allows for the introduction of low interest link deposit loans and DEFA loans for the completion of needed work.

Project Area *(Narrative description must be one page or less)*

Description *(Include land use descriptions)*

The Upper Little Miami, Anderson Fork, and Caesar Creek watersheds make up this project's definition of the Upper Little Miami watershed as defined by the Upper Little Miami TMDL watershed project (Southern Clark, Greene, Northern Clinton, north eastern Warren, and Eastern Montgomery Counties). These watersheds are located in SW Ohio and together drain 656 sq. miles of watersheds located in the southern edge of the Indiana-Ohio Till-Plain Resource Area that makes up much of West Central Ohio. The area lies roughly 20 miles East and South of Dayton, and 10 miles South of Springfield. It continues in a southerly direction to about 35 miles Northeast of Cincinnati very close to Lebanon, Ohio. Major highways traversing the region include I-71, I-75, US routes 68 and 35, and State Routes 73, 42, 22, and 380. This collection of major highways have made the watershed a prime area for residential growth and future development.

Although the accessibility of the watershed to major urbanizing areas is greatly increasing the rate of suburban sprawl and commercial development, the overwhelming land use within the watershed remains agricultural, making up about 78% of the watershed. The primary crops grown include soybeans, corn, and wheat. Sediment and nutrient delivery makes up the major non-point source pollutant for the watershed. Another 15% of the watershed is made up of Woodland, 5% Urban, and 2% other land. While the Urban sector of the watershed seems small, it is the fastest growing land use in the watershed and activities associated with this changing land use creates significant erosion and off-site damages, further increasing the sediment and nutrient delivery to the River and its tributaries. The Ohio EPA has stated that the general development and "hardening of the Little Miami River Watershed is perhaps the number one threat to this State and National Scenic River. The growing discharges from the region's treatment plants represent an associated point source concern related to this growing development in the watershed. Members of working committees, including the TMDL work group, the Little Miami River Partnership, regulators, and citizen groups have all expressed a concern that the quality of this state and national scenic river system is moving backward. Various indicators also point to the degradation of this water resource. The need for additional studies identified in the TMDL process point to a need for the acceleration of efforts including the abatement of non-point source pollution. This 319 proposal will be a key element in the TMDL implementation strategy to protect and improve the Little Miami River and its associated watershed resources.

The rapid influx of residential development is in turn increasing the demand for fresh water, and the use of Caesar Creek Lake as a source of drinking is expected to increase dramatically. The Corps of Engineers Water Resource Study, completed in 1992 identified the need for many of the initiatives contained in this 319 plan of work for the protection of Caesar Creek Lake as a source of drinking water, recreation, and fisheries resource. Caesar Creek Lake itself encompasses 2,500 acres.

Water Quality Impairment *(Narrative must be one page or less)*

Hydrologic Unit Water Quality Report Causes of Impairment or causes of groundwater impairment if a Ground Water proposal

5. Siltation
6. Organic Enrichment/D.O.
7. Nutrients
8. Pathogens and Bacteria
9. Habitat Alteration
10. Metals
11. Pesticides
12. General
13. Other – Ammonia, Chlorine, Flow Alteration

Water Quality Activities *(Narrative must be one page or less)*

Other Water Quality Projects

The Corps of Engineers completed the Water Resources Study and Reconnaissance Reports for the Caesar Creek Watershed in October of 1993. The Miami Valley Regional Planning Commission, NRCS, and Miami Valley RC&D Council completed the Caesar Creek Watershed Protection Plan in 1995. These studies initiated the efforts to prioritize and address the water quality needs of this portion of this important watershed. The on-going 319 projects are beginning to impact the watershed. This plan of work for the entire upper little Miami River Watershed will build upon these efforts to improve and protect the water and land resources in the watershed. One primary component of this plan of work will be to move remaining salary for the Coordinator included in the previously approved 319 grant to this grant. This will free up dollars for additional land treatment work. The previous 319 work is opening a dialog in the area about nonpoint source pollution and the need for these conservation practices. This project will ensure that those goals are realized.

The Little Miami River Partnership (LMRP) represents a very comprehensive effort to bring together and assist the five subwatersheds in the Little Miami River basin, including the Upper Little Miami, to implement water quality improvements. The Partnership is coordinating the efforts of all five Subwatersheds in the 1700 sq. mi. Little Miami River Watershed and is attempting to give local groups the sense that their local efforts can help protect the entire Little Miami Scenic River. LMRP has a standing technical committee that will be assisting with this proposed project in the Upper Little Miami Watershed. The Partnership started the process of developing a watershed action plan through another grant to pilot the OEPA's Guide to Local Watershed Planing. That effort includes Caesar Creek and the Upper Little Miami subwatersheds. Through the ODNr Watershed Coordinator Grant the LMRP and its Coordinator will be overseeing the completion of this watershed action plan.

The Upper Little Miami River Watershed is one of the first few watersheds in Ohio to begin the process of developing an Implementation Plan through the Total Maximum Daily Load studies. After initial studies and discussion by OEPA, the Little Miami River Partnership has taken the leadership role in the workgroup and is now facilitating the completion of the Implementation plan. The elements in the draft plan (scheduled for completion later this year) have been incorporated into this plan of work, and include stormwater management, septic system management, agricultural and riparian corridor protection and management, public education, and point source controls.

The Upper River Fund is a private trust established for the purpose of acquiring easements and fee simple purchases of riparian corridor areas along the identified length of designated scenic streams within Greene and Clark Counties. They have worked with a myriad of groups such as (LMI) Little Miami Inc. to acquire and protect these areas. The Board of the Fund is partnering with this project to better publicize the availability of this fund to purchase land or easements on land adjacent to the Upper Little Miami River. If approved, the 319 partners will provide technical and informational services to help carry out the Fund's efforts to acquire and protect land along the River and its tributaries. There is also an ODNr Streambanking Project in place covering the Little Miami River Watershed that will also be utilized to obtain easements along the streams in the watershed. This project is being administered through the Warren SWCD. A landowner's involvement in these programs will be a factor in their C/S applications to the 319. Planners will encourage the establishment of such easements in the watershed. The proposed land-use conference will publicize these alternatives as well.

The Clermont SWCD is administering an ODNr Watershed Protection Program through NatureWorks. This project can also provide assistance to landowners for easements, tree plantings, filter strips, livestock exclusion, animal waste practices, and stream habitat restoration. Landowners will be informed of methods of using these various programs during the planning process in the Upper Little Miami Watershed.

The working committee for this proposed project is interested in applying for priority watershed standing in USDA's proposed Conservation Farm Option if that becomes a reality. This program allows producers to document their entire conservation need for their farm, total that need, and receive a payment over ten years to help offset the cost of applying those needed conservation measures. These water quality efforts, along with other programs such as CRP, WRP, SIP, FIP, and EQIP, will be enhanced by this proposal. The Coordinator, Field Office Staff, and other partners will promote a whole range of program options available to producers and landowners in implementing their whole farm plans.

The five counties involved in this project each have strong urban sediment and erosion control programs. The most recent was the adoption of a county sediment and erosion control ordinance in Clinton County. These programs have the active support of all three Boards of Commissioners, SWCD Boards and staffs, and County Engineers. This watershed will offer the opportunity for the three counties to work together to further improve these programs and support each other. The land-use conference and stormwater and erosion control demonstrations in the previously approved Upper Little Miami Project will also be further highlighted.

Project Goal

“To improve water resource quality in the Upper Little Miami, Caesar Creek, and Anderson Fork Watersheds by reducing nonpoint source pollution.”

Objective Summary (Provide a summary for each objective in your project)

Objective #	1	Statement	To establish a comprehensive information/education program within the Upper Little Miami Watershed targeted to Landusers elected officials, agency representatives, and others impacting land management within the watershed.			
Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$	
All	All	Citizen Education Survey	County reliable to each of the 5 counties	\$38,000		
All	All	Public perception Survey	1 ea.	\$ 1,000		
All	All	TMDL Implementation Plan Publication	5,000 copies	\$10,000		
All	All	Little Miami River Watershed Action Plan Publication	5,000 copies	\$10,000		
All	All	Programmatic / informational brochures	6 brochures	\$12,000		

Objective Summary (Provide a summary for each objective in your project)

Objective #	2	Statement	To increase the planning and adoption of agricultural erosion control and cultural best management practices through an accelerated program of whole farm conservation planning			
Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$	
Agriculture, crop production	Silt, nutrients	Residue Management	30,000 acres	N/A		
Agriculture, Livestock	nutrients	Animal waste management	30 ea.	N/A		
Agriculture, crop production	Silt, nutrients	Nutrient Management	30,000 acres	N/A		
Agriculture, crop production	pesticides	Pesticide management	30,000 acres	N/A		

Objective Summary (Provide a summary for each objective in your project)					
Objective #	3	Statement	Increase the acreage of riparian corridor protected and improved through the purchase of land or easements along the designated scenic streams in Clark and Greene Counties utilizing The Upper River Fund working closely with SWCDs, and ODNR divisions of Forestry and Wildlife.		
<i>Specific Source(s) Generating the Pollutant(s)</i>	<i>Pollutant(s)</i>	<i>Name of Solution/BMP</i>	<i>Target Quantity (i.e., # systems, acres, lineal feet, etc.)</i>	<i>Total Federal 319 \$</i>	<i>Total State \$</i>
Habitat alteration	Sediment, nutrients	Riparian land purchases	100 acres	N/A	\$43,334
Habitat alteration	Sediment, nutrients	Conservation Easements	100 acres	N/A	\$21,666
Habitat alteration	Sediment, nutrients	Riparian Corridor Creation, Protection, or Enhancement	200 acres	N/A	N/A

Objective Summary (Provide a summary for each objective in your project)					
Objective #	4	Statement	To demonstrate the need and effectiveness of renovation of failing septic systems by encouraging proper maintenance and helping offset some of the cost of renovating failing on-site waste disposal systems in the watershed		
<i>Specific Source(s) Generating the Pollutant(s)</i>	<i>Pollutant(s)</i>	<i>Name of Solution/BMP</i>	<i>Target Quantity (i.e., # systems, acres, lineal feet, etc.)</i>	<i>Total Federal 319 \$</i>	<i>Total State \$</i>
On-site wastewater treatment systems	Organic enrichment, nutrients, Pathogens	Onsite Septic Disposal Systems	60 sites	\$90,000	
On-site wastewater treatment systems	Organic enrichment, nutrients, Pathogens	Septic pumping and maintenance agreements	200 ea.	\$20,000	

Objective Summary (Provide a summary for each objective in your project)					
Objective #	5	Statement	To demonstrate the effectiveness of shoreline protection methods along 2,500 linear feet of critical stream bank and shoreline in the Upper Little Miami River Watershed		
<i>Specific Source(s) Generating the Pollutant(s)</i>	<i>Pollutant(s)</i>	<i>Name of Solution/BMP</i>	<i>Target Quantity (i.e., # systems, acres, lineal feet, etc.)</i>	<i>Total Federal 319 \$</i>	<i>Total State \$</i>
Hydromodification, streambank modification	sediment	Streambank and shoreline protection/stabilization,	2,500 L.F.	\$31,250	
Hydromodification	sediment	bioengineering erosion control	2,500 L.F.	Included above	

Objective Summary (Provide a summary for each objective in your project)					
Objective #	6	Statement	To reduce the erosion and sediment transported off-site through the application of 30 acres of grassed waterways and 30 erosion control structures in the watershed		
Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$
Crop Production	Sediment, nutrients	Grassed Waterway of outlet	30 acres	\$52,500	\$52,500
Crop Production	Sediment, nutrients	Water and sediment control basins or Grade stabilization structures	30 each	\$45,000	\$45,000

Objective Summary (Provide a summary for each objective in your project)					
Objective #	7	Statement	To improve timber stands and filter strips within the watershed prioritizing the establishment of riparian zones along streams in the Upper Little Miami Watershed		
Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$
Agriculture, Urban, surface runoff, streambank mod.	Sediment, nutrients	Tree planting, Riparian corridor protection/creation	120 acres	\$20,000	
Habitat alteration	Sediment, nutrients	Woodland improvement	120 acres	N/A	

Objective Summary (Provide a summary for each objective in your project)					
Objective #	8	Statement	To employ a Coordinator to oversee the plan of work for the Upper Little Miami River 319 Grant Program		
Specific Source(s) Generating the Pollutant(s)	Pollutant(s)	Name of Solution/BMP	Target Quantity (i.e., # systems, acres, lineal feet, etc.)	Total Federal 319 \$	Total State \$
All	All	Personnel Support, Fringe, Technical Assistance, Project Coordination/management	3 FTEs plus benefits	\$120,348	
All	All	Provide Administrative and fiscal assistance to project.	.6 FTE	\$16,500	
All	All	Design, manage and maintain web site for project	.6 FTE	\$12,000	
All	All	Project Coordination by Joint Bd., LMRP, and the TMDL work group	Monthly meeting by each group	N/A	

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Grassed Waterway	NRCS/State Specification Number	412
Changes to the specification			
Purpose	To control runoff and filter sediment	Target Audience	Agricultural producers
BMP Critical Area(s)	Where Other assistance programs are not available, In areas containing highly erodible soils, and on fields that provide direct pollution potential to streams		
Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)		
Cost Share	75% up to \$3,500 per acre of waterway constructed. (Share C/S 50/50 with ODNR Pollution abatement program)		

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Water and Sediment Control Basin	NRCS/State Specification Number	638
Changes to the specification			
Purpose	To prevent gully erosion and to filter out sediment from runoff	Target Audience	Agricultural producers
BMP Critical Area(s)	Where Other assistance programs are not available, In areas containing highly erodible soils, and on fields that provide direct pollution potential to streams		
Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)		
Cost Share	75% of costs up to a maximum of \$3,500 per basin. (Share C/S 50/50 with ODNR Pollution abatement program)		

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Grade Stabilization Structure	NRCS/State Specification Number	410
Changes to the specification			
Purpose	Prevent gully erosion and provide proper entry of runoff to receiving stream	Target Audience	Agricultural producers and landowners
BMP Critical Area(s)	Junctures of streams and areas of concentrated runoff into drainageways and streams		
Criteria for Participant Selection	Whole farm plan developed and in an area of imminent threat to pollute a waterway or stream		
Cost Share	75% of cost up to a maximum of \$1,500 per structure. (Share C/S 50/50 with ODNR Pollution abatement program)		

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Conservation Tillage	NRCS/State Specification Number	329
Changes to the specification			
Purpose	To prevent runoff and erosion	Target Audience	Agricultural producers
BMP Critical Area(s)	Highly erodible soils, and in areas close to streams		
Criteria for Participant Selection	Producer having developed a whole farm plan (required). Located in targeted area in watershed (encouraged)		
Cost Share	N/A		

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Renovation of systems for on-site treatment of waste	NRCS/State Specification Number	See Clermont Co. work book – attachment # 7 b.
Changes to the specification		(see attached specification – attachment # 7 b.)	
Purpose	To provide treatment of septic and renovate failing sites	Target Audience	Homeowners
BMP Critical Area(s)	Areas of concentrated, non-sewered houses. Identified systems out of compliance by Health dept.		
Criteria for Participant Selection	Health departments identified problem sites. Results of Clermont Co. 319 alternative onsite sewage treatment project will be evaluated in design of this element. See attachment # 7 b.		
Cost Share	25% up to 1,500 per site		

BMP Detail Sheet (Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)			
Name of BMP	Streambank and shoreline protection and stabilization	NRCS/State Specification Number	580, also Chapt. IX CCC training manual (avail. upon request)
Changes to the specification		(see attached NRCS specification and Indian Lake brochure– attachment # 7a)	
Purpose	To prevent erosion on shoreline and streambank sites	Target Audience	Agencies responsible for maintenance of these sites
BMP Critical Area(s)	Caesar Creek Lake and streams entering lake		
Criteria for Participant Selection	On-site determination of most needed sites and sites available to use as demonstrations of the techniques		
Cost Share	65% of the cost up to a maximum of \$12.50 per foot		

BMP Detail Sheet <i>(Use a separate sheet for each BMP; each BMP Detail Sheet may be more than one page)</i>			
Name of BMP	Tree planting	NRCS/State Specification Number	612
Changes to the specification			
Purpose	Riparian habitat and erosion control	Target Audience	Riparian area landowners
BMP Critical Area(s)	Riparian areas primarily, focused on acreage being placed in easement etc..		
Criteria for Participant Selection	Areas previously denuded of natural vegetation and experiencing streambank and shoreline erosion		
Cost Share	50% up to \$167.00 per acre where other forms of c/s are not available		

Project Summary *(Narrative must be one page or less)*

The Upper Little Miami River is a high priority watershed in the State's Total Maximum Daily Load process. The work group is well into the process, qualifying it for that priority designation. The Little Miami is also the State's highest rated watershed for restoration and protection according to ODNR's recent study of 196 Ohio streams. The Little Miami contained 14 of the 17 possible attributes in categories of physical habitat, biological diversity, biological integrity, and recreational opportunity. This study adds additional incentive for the conservation community, and this project, to protect and improve this water resource.

Various coalitions of concerned agencies and organizations have been working diligently to establish permanent and on-going pollution abatement efforts in the Little Miami River Watershed. Their efforts include three 319 projects, showing an ability to utilize the programming funds wisely. The establishment of the Little Miami River Partnership (LMRP), a non-profit organizations representing area agencies, units of government, citizen groups, regulators, and private industry brings a strong non-profit advocate to this watershed. The LMRP has recently undertaken a leadership role in the Upper Little Miami River TMDL work group to keep these partners working together to develop an effective Implementation plan for the Upper Little Miami Watershed. The LMRP is a strong partner in this grant application. With their recent acquisition of a Coordinator through the ODNR/EPA Watershed Coordinator Program, the LMRP is in a position to provide strong leadership to 319 projects within the watershed.

The project is also entering into a working relationship with the Upper River Fund, which is a private trust that can purchase land or easements on land along the channel of the Little Miami River. The fund will purchase the land or easements and the project will offer technical assistance, c/s for establishing needed cover, and will promote the existence of the fund and its advantages to landowners in the watershed. This agreement will help stretch the available funds of the Upper River Fund and will greatly expand the plan of work and accomplishments of this 319-grant program.

The Joint Board, created to administer the Upper LMR, and the Caesar Creek 319 grants, has committed to take the lead in this grant application, working with a myriad of partners to take the NPS pollution abatement effort one step further. The Greene SWCD is presently employing a Coordinator that is working in two Upper Little Miami subwatersheds. In an effort to combine these previous efforts, and to be more in step with the TMDL work group, the Joint Board is proposing an application for this 2000 319-grant program. The Upper Little Miami is one of a select group of watersheds in the state that are poised to develop an implementation plan through the TMDL study process. The work group is committed to this grant as a main component of carrying out that implementation plan.

The project will strive to accomplish several tasks. First, the proposal funds the Coordinator through this new application, freeing up some remaining personnel dollars from the older grants for additional implementation work. Secondly, it would combine the two smaller projects into one effort in a watershed consistent with the TMDL work going on in the watershed. Thirdly, it will offer the opportunity to accomplish some more innovative information/educational work with the general public, units of government, private industry, and area agencies. Some of this will be accomplished by a comprehensive survey to be conducted by Wright State University, the same group that worked with the River Index project. Fourthly, the project will continue the effort to apply needed conservation on the land to reduce non-point sources of pollution to the receiving waters of the watershed. Lastly, the project will embark on a campaign to acquire the purchase and/or easements along the length of the River to filter runoff, reestablish or protect riparian habitat, and ultimately reduce non-point source pollution in the watershed.

A primary goal of this project is to be more proactive and effective in getting information and data into the hands of the public to raise their collective consciousness about the watershed and water quality concerns. The project will also strive to better inform the public about the successes of the 319 program and this grant in our efforts to protect the Little Miami State and National Scenic River. There will be a continuation of the application of conservation with landowners, but this will be muted a bit with the additional dollars gained by diverting some remaining salary from previous grants to implementation. These elements will include agricultural work, septic renovation, streambank and shoreline erosion abatement, and riparian tree planting and filter strip establishment.

One exciting addition to the coalition of partners, The Upper River Fund, will be providing dollars to Montgomery, Greene, Warren, and Clark Counties for the acquisition of land easements for the establishment of tree planting and filter strips in the riparian corridor. This will allow the project to help design and establish better riparian areas for landowners along the channels of the Upper Little Miami River.

The project will also strive to promote the renovation of problematic on-site septic systems in the watershed. The health departments will develop Home Sewage Disposal Plans, provide technical assistance to homeowners. This will also allow area residents to utilize link deposit and DEFA loans to fund the renovation, replacement, and sewerage problematic septic systems.

Current efforts of the LMRP to develop watershed action plans, and the TMDL work Group to finalize the Implementation plans for these watersheds will each work hand in hand with this project to further improved the water quality, land-use practices, and the public's knowledge about existing water quality conditions. Bringing all of these entities into the project's list of partners will allow for a more consistent and effective campaign to improve the knowledge base of the general public, and show them what citizens can do to make additional improvements to the watershed and the River.

Project Partners (List all that pertain)

Names	Roles & Responsibilities
Greene SWCD	Technical assistance, and project administration and coordination
Clinton, Clark, Warren, and Montgomery SWCDs	Technical assistance
Upper Little Miami/Caesar Creek Joint Board	Administrative oversight and C/s approval
Little Miami River Partnership (see attached list of membership)	Watershed Planning, project coord., education, and advisory
Upper Little Miami TMDL Workgroup (see list of participants)	Watershed planning, project coordination, and advisory
NRCS	Technical assistance and planning
Greene, Clinton, Clark, Warren, and Montgomery Combined Health Departments	Technical assistance
Upper River Fund	Financial assistance
Wright State University	Technical assistance and contract work
OSU Extension	Educational assistance and watershed planning
Miami Valley RC&D Council	Grantwriting, watershed planning, and administrative assistance
ODNR, Divisions of Soil and Water, Wildlife, and Forestry	Financial assistance and technical assistance
Village of Waynesville	Technical assistance to the Wright State Survey

Advisory Board (List all that pertain)

Member Names	Affiliation
Upper Little Miami TMDL Work Group:	<u><i>This group is continuing to expand its membership</i></u>
Ron Volkerding, Larry Cole	Greene County
Bruce Smith, Hugh Trimble, Mike Zimmerman	Ohio EPA – SW District office
Sarah Hippensteel	Little Miami River Partnership
Don Leeds, Heather Buckles	Greene SWCD/Upper Little Miami 319 Coordinator
Mike Lucas, Scott Hammond	Miami Valley RPC
Steve Hall	NRCS – Xenia
John Kellis	NRCS – Miami Valley RC&D Council
Tim Lingg	Green Environmental Coalition
Erin Gaskill	OEPA Columbus
Stephen Anderson	Greene County RPC
Eric Partee	Little Miami Inc.
Carol Graff	Beavercreek Twp. Trustee
Karl Kipp	Landowner and Paygro division of Garick Industries
David Linkhart	Greene SWCD Sup., Pres. Ohio Fed. SWCD, farmer
Don Rostopher	Director, SW Ohio Scenic Rivers Office
Steve Miller	LMRP/Effectiveness Plus Inc.
Dave McElroy / George McConkey,	Warren / Clark SWCDs

Ohio Nonpoint Source Management Program Document Reference

BMP/Program Cited in the 1988 Ohio Nonpoint Source Management Program	Page Number(s)
Planning	44
Agriculture / Sediment Control / Fertilizers / Livestock waste and resource planning / Pesticides	79 / 92-123 / 124-151 / 152-180 / 181-222
Construction site runoff – BMPs	223 – 226-230

Hydrologic/Habitat modification	251 275-285
Land Disposal – on-site wastewater systems	308 – 332, 356-368
Silviculture – non-structural BMPs	566 – 577-580

Part III - Project Activity Time Table (Use one sheet per semi-annual period; duplicate as needed)

Semi-Annual Time Table					
<u>Semi-annual period #</u>	<u>1</u>	<u>From (Month & Year)</u>	<u>7-1-02</u>	<u>Through (Month & Year)</u>	<u>12-31-02</u>
<u>Objective #</u>	<u>Activity Description (Quantify)</u>				<u>Federal 319 \$</u>
1	Develop design for citizen education survey with Wright State				\$12,000
1	Carry out survey in the five counties				\$14,000
1	Compile draft of survey results				\$12,000
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed				N/A
3	Hold a planning meeting with the Bd. of the River Fund and the field staff involved in the project to begin the process of integrating the 319 plan of work with the Upper River Fund and the NatureWorks program.				N/A
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks.				N/A
4	Hold a meeting with the five Health Districts and SWCDs with the Clermont County septic project to hear of their successes and failures. Organize the policies to be followed in this incentive program.				N/A
4	Enter into 10 renovation contracts and 35 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.				\$15,000 Renovations \$ 3,500 agreements
5	Hold meeting with the Corp of Engineers officials at Caesar Creek Lake to identify needed sites for shoreline and streambank protection projects. Complete 500 L.F. of treatment.				\$6,250
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.				\$8,750
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.				\$7,500
1	Create semi-annual educational insert for use in partner newsletters.				\$200
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position				\$20,058
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.				\$2,750
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.				\$2,000
8	Purchase website design and publishing software to ensure the professional and effective nature of the project's educational effort				\$1,600
8	Support project and Coordinator with travel, supplies, office rental, and web hosting fees.				\$1166
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities				N/A

Total Project Funding Allocation This Period

Federal 319 \$	\$106,774	State 319 Match \$	\$27,084	Local 319 Match \$	\$137,720
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Semi-Annual Time Table

<u>Semi-annual period #</u>	<u>2</u>	<u>From (Month & Year)</u>	<u>1-1-03</u>	<u>Through (Month & Year)</u>	<u>6-30-03</u>
Objective #	Activity Description (Quantify)				Federal 319 \$
1	Finalize results of the citizen educational survey and share these in a meeting of project partners to customize the educational plans for the remainder of the project				N/A
1	Hold a meeting to plan, and then design, publish and distribute the TMDL implementation plan				\$10,000
1	Create the newsletter inserts for use in area SWCD, Health department, and Extension etc. newsletters.				\$200
1	Create semi-annual educational insert for use in partner newsletters.				\$200
1	Carry out on-going informational and educational activities focused on the public, landusers, and agencies and groups in the watershed. Including first two printed brochures				\$4,000
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed				N/A
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks working closely with SWCDs, and ODNR divisions of Forestry and Wildlife.				N/A
4	Enter into 10 renovation contracts and 33 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.				\$15,000 Renovations \$ 3,300 agreements
5	Complete 500 L.F. of streambank and/or lakeshore treatment.				\$6,250
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.				\$8,750
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.				\$7,500
7	Complete 40 acres of tree plantings and filter strips primarily in the riparian corridor of the streams in the watershed.				\$6,666
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position				\$20,058
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.				\$2,750
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.				\$2,000
8	Support project and Coordinator with travel, supplies, office rental, and web hosting fees.				\$1167
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities				N/A

Total Project Funding Allocation This Period

Federal 319 \$	\$87,641	State 319 Match \$	\$27,083	Local 319 Match \$	\$124,720
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Semi-Annual Time Table					
<i>Semi-annual period #</i>	3	<i>From (Month & Year)</i>	7-1-03	<i>Through (Month & Year)</i>	12-31-03
<i>Objective #</i>	<i>Activity Description (Quantify)</i>			<i>Federal 319 \$</i>	
1	Maintain project website with links to and at other regional websites to promote the project and water quality efforts in the Little Miami River				
1	Complete the public perception inventory in the two major watersheds in the Upper Little Miami River Watershed.			\$1,000	
1	Hold a meeting to plan, and then design, publish and distribute the Watershed Action Plan sponsored by the Little Miami River Partnership.			\$10,000	
1	Create semi-annual educational insert for use in partner newsletters.			\$200	
1	Carry out on-going informational and educational activities focused on the public, landusers , and agencies and groups in the watershed. Print third brochure			\$2,000	
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed			N/A	
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks.			N/A	
4	Enter into 10 renovation contracts and 33 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.			\$15,000 Renovations \$ 3,300 agreements	
5	Complete 500 L.F. of streambank and/or lakeshore treatment.			\$6,250	
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.			\$8,750	
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.			\$7,500	
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position			\$20,058	
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.			\$2,750	
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.			\$2,000	
8	Support project and Coordinator with travel, supplies, office rental, and web hosting fees.			\$1167	
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities			N/A	

Total Project Funding Allocation This Period					
<i>Federal 319 \$</i>	\$79,975	<i>State 319 Match \$</i>	\$27,083	<i>Local 319 Match \$</i>	\$124,720

Semi-Annual Time Table

<u>Semi-annual period #</u>	<u>4</u>	<u>From (Month & Year)</u>	<u>1-1-04</u>	<u>Through (Month & Year)</u>	<u>6-30-04</u>
Objective #	Activity Description (Quantify)				Federal 319 \$
1	Create semi-annual educational insert for use in partner newsletters.				\$200
1	Maintain project website with links to and at other regional websites to promote the project and water quality efforts in the Little Miami River				
1	Carry out on-going informational and educational activities focused on the public, landusers , and agencies and groups in the watershed. Design and print fourth and fifth programmatic brochure.				\$4,000
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed				N/A
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks working closely with SWCDs, and ODNR divisions of Forestry and Wildlife.				N/A
4	Enter into 10 renovation contracts and 33 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.				\$15,000 Renovations \$ 3,300 agreements
5	Complete 500 L.F. of streambank and/or lakeshore treatment.				\$6,250
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.				\$8,750
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.				\$7,500
7	Complete 40 acres of tree plantings and filter strips primarily in the riparian corridor of the streams in the watershed.				\$6,667
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position				\$20,058
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.				\$2,750
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.				\$2,000
8	Support project and Coordinator with travel, supplies, and web hosting fees.				\$1166
8	Support project and Coordinator with office rental, vehicle lease, and computer lease upgrade.				\$2624
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities				N/A

Total Project Funding Allocation This Period

Federal 319 \$	\$80,265	State 319 Match \$	\$27,084	Local 319 Match \$	\$124,720
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Semi-Annual Time Table

<i>Semi-annual period #</i>	5	<i>From (Month & Year)</i>	7-1-04	<i>Through (Month & Year)</i>	12-31-04
<i>Objective #</i>	<i>Activity Description (Quantify)</i>				<i>Federal 319 \$</i>
1	Maintain project website with links to and at other regional websites to promote the project and water quality efforts in the Little Miami River				
1	Create semi-annual educational insert for use in partner newsletters.				\$200
1	Carry out on-going informational and educational activities focused on the public, landusers , and agencies and groups in the watershed. Print final brochure.				\$2,000
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed				N/A
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks working closely with SWCDs, and ODNR divisions of Forestry and Wildlife.				N/A
4	Enter into 10 renovation contracts and 33 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.				\$15,000 Renovations \$ 3,300 agreements
5	Complete 500 L.F. of streambank and/or lakeshore treatment.				\$6,250
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.				\$8,750
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.				\$7,500
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position				\$20,058
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.				\$2,750
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.				\$2,000
8	Support project and Coordinator with travel, supplies, office rental, and web hosting fees.				\$1167
8	Support project and Coordinator with office rental, vehicle lease, and computer lease upgrade.				\$2624
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities				N/A

Total Project Funding Allocation This Period

<i>Federal 319 \$</i>	\$71,599	<i>State 319 Match \$</i>	\$27,083	<i>Local 319 Match \$</i>	\$124,720
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Semi-Annual Time Table

<u>Semi-annual period #</u>	6	<u>From (Month & Year)</u>	1-1-05	<u>Through (Month & Year)</u>	6-30-05
<u>Objective #</u>	<u>Activity Description (Quantify)</u>				<u>Federal 319 \$</u>
1	Create semi-annual educational insert for use in partner newsletters.				\$200
1	Maintain project website with links to and at other regional websites to promote the project and water quality efforts in the Little Miami River				N/A
1	Carry out on-going informational and educational activities focused on the public, landusers , and agencies and groups in the watershed				N/A
2	Develop 5,000 acres of whole farm plans in the Upper Little Miami Watershed				N/A
3	Facilitate the purchase of 20 ac. and another 20 acres of easements along the Little Miami River and its tributaries through the Upper River Fund and NatureWorks.				N/A
4	Enter into 10 renovation contracts and 33 maintenance agreements with landowners to renovate failing septic systems. (\$1,500 max. for renovation - \$100 per maintenance agreement.				\$15,000 Renovations \$ 3,300 agreements
6	Construct 5 acres of grassed waterway to reduce the erosion on cropland and sediment offsite damages to lakes and streams in the watershed.				\$8,750
6	Construct 5 erosion control structure/ WASCObS to reduce sediment to the stream of the watershed.				\$7,500
7	Complete 40 acres of tree plantings and filter strips primarily in the riparian corridor of the streams in the watershed.				\$6,667
8	Provide administrative support, technical assistance, and oversight for the project through the funding of the Coordinator position				\$20,058
8	Provide administrative and fiscal support to project through the Miami Valley RC&D.				\$2,750
8	Hire a technician to design, manage and update project website working with the project TMDL work group and the Little Miami River Partnership.				\$2,000
8	Support project and Coordinator with travel, supplies, office rental, and web hosting fees.				\$1167
8	Support project and Coordinator with office rental, vehicle lease, and computer lease upgrade.				\$2624
8	Hold monthly discussions with TMDL advisory committee, Little Miami River Partnership Board, and Joint Bd. to coordinate information and project activities				N/A

Total Project Funding Allocation This Period

<u>Federal 319 \$</u>	\$70,016	<u>State 319 Match \$</u>	\$27,083	<u>Local 319 Match \$</u>	\$124,720
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Part IV - Financial Information

Budget Summary				
<i>Federal 319 \$</i>	\$ 496,270.00	<i>% of total project</i>		35%
<i>State & Local 319 Match \$</i>	\$ 923,820.00	<i>% of total project (at least 40%)</i>		65%
<i>Total \$ Cost</i>	\$1,420,090.00	<i>Total project %</i>		100%
Category	Federal \$	State \$	Local \$	Total \$
<i>Personnel</i>	\$ 98,069.00		\$ 206,320.00	\$ 304,389.00
<i>Fringe Benefits</i>	\$ 38,779.00			\$ 38,779.00
<i>Travel</i>	\$ 1,500.00			\$ 1,500.00
<i>Equipment</i>	\$ 3,372.00			\$ 3,372.00
<i>Supplies</i>	\$ 6,800.00			\$ 6,800.00
<i>Subcontractual</i>	\$ 72,500.00			\$ 72,500.00
<i>Other</i>	\$ 16,500.00			\$ 16,500.00
<i>Cost share</i>	\$ 258,750.00	\$ 162,500.00	\$ 555,000.00	\$ 976,250.00
<i>Indirect***</i>				
<i>Total</i>	\$ 496,270.00	\$162,500.00	\$ 761,320.00	\$1,420,090.00

*** Your organization is allowed to budget indirect cost if it has a negotiated federal indirect rate. If it does, please attach a copy of the signed Indirect Rate Agreement. Please indicate which budget categories are covered by the agreement.

Budget Justification		
Category	Total \$ Amount	Justification
<i>Personnel & Fringe Benefits</i>	\$136,848	3 FTE for Coordinator (\$120,348), and wages for clerical and fiscal assistance (\$16,500)
<i>Travel</i>	\$ 1,500	Travel to training and seminar
<i>Equipment</i>	\$ 3,372	Lease of a computer (\$672) and vehicle (\$2700) during the final 18. mo.
<i>Supplies</i>	\$ 6,800	Office supplies (\$3,000), paper for inserts (\$1,200), and materials for public perception inventory (\$1,000), and publishing and web maintenance software (\$1,600).
<i>Subcontractual</i>	\$ 72,500	Wright State Educational survey (\$38,000), for printing of watershed plan, TMDL impl. plan, 6 programmatic brochures (\$32,000), and web hosting fees (\$2,500)
<i>Other</i>	\$ 16,500	Office space rental, wages of a technician to update and manage project web site (\$12,000),
<i>Cost Share</i>	\$258,750	319 share of cost share 50% on tree planting, streambank/shoreline stabilization grassed waterways, structures, and 30% on septic tank renovations, and 200 maintenance septic agreements (\$100 ea.)

Local and State Match Summary

<i>Organization Name</i>	<i>Cash \$ Amount</i>	<i>In-Kind \$ Amount</i>	<i>Total \$ Amount</i>
Greene Soil and Water Conservation District		\$ 64,175.00	\$64,175.00
Clinton Soil and Water Conservation District		\$ 8,885.00	\$ 8,885.00
Warren Soil and Water Conservation District		\$ 9,610.00	\$ 9,610.00
Clark Soil and Water Conservation District		\$ 22,315.00	\$ 22,315.00
Montgomery Soil and Water Conservation District		\$ 4,015.00	\$ 4,015.00
Greene County Combined Health District		\$ 37,125.00	\$ 37,125.00
Clinton County Combined Health District		\$ 7,425.00	\$ 7,425.00
Warren County Combined Health District		\$ 8,100.00	\$ 8,100.00
Clark County Combined Health District		\$ 11,475.00	\$ 11,475.00
Montgomery County Combined Health District		\$ 3,375.00	\$ 3,375.00
Little Miami River Partnership		\$ 6,020.00	\$ 6,020.00
Landowners and project participants	\$255,000.00		\$255,000.00
The Upper River Fund	\$300,000.00		\$300,000.00
Little Miami River NatureWorks Grant	\$ 65,000.00		\$ 65,000.00
Upper Little Miami TMDL Workgroup		\$ 10,800.00	\$ 10,800.00
Village of Waynesville		\$ 13,000.00	\$ 13,000.00
ODNR, Pollution Abatement Program	\$ 97,500.00		\$ 97,500.00

Match Totals	\$717,500.00	\$206,320.00	\$923,820.00
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Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)

Project Title	Upper Little Miami Watershed Water Quality Project					
Matching Agency/ Organization Name	Greene Soil and Water Conservation District					
Street Address	1363 Burnett Drive					
City	Xenia	State	Ohio	Zip Code	45385-5681	
Telephone Number	(937) 372-4478					
Value of Match to be Provided	Cash \$					
	In-Kind Services \$			\$ 64,175		
	Total \$			\$ 64,175		

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)			
In-Kind match will be provided as	Administrative support, project planning, and technical assistance		
Name and Title of Authorized Individual (print)	Charles P. Cooley, Chairman		
Authorized Signature (no black ink or pencil)		Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
Project Title	Upper Little Miami Watershed Water Quality Project				
Matching Agency/ Organization Name	Clinton Soil and Water Conservation District				
Street Address	24 Randolph Street				
City	Wilmington	State	Ohio	Zip Code	45177-2731
Telephone Number	(937) 382-2461				
Value of Match to be Provided	Cash \$				
	In-Kind Services \$		\$ 8,885		
	Total \$		\$ 8,885		
In-Kind match will be provided as	Technical assistance, project planning, and administrative oversight				
Name and Title of Authorized Individual (print)	Don Speaight, Chairman				
Authorized Signature (no black ink or pencil)		Date			

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
Project Title	Upper Little Miami Watershed Water Quality Project				
Matching Agency/ Organization Name	Warren Soil and Water Conservation District				
Street Address	777 Columbus Ave. Suite. 7A				
City	Lebanon	State	Ohio	Zip Code	45036-1684
Telephone Number	(937) 695-1337				

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)			
Value of Match to be Provided	Cash \$		
	In-Kind Services \$		\$9,610
	Total \$		\$9,610
In-Kind match will be provided as	Technical assistance, project planning, and administrative oversight		
Name and Title of Authorized Individual (print)	Mark Steiner, Chairman Warren SWCD		
Authorized Signature (no black ink or pencil)		Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
Project Title	Upper Little Miami Watershed Water Quality Project				
Matching Agency/ Organization Name	Greene County Combined Health District				
Street Address	360 Wilson Drive				
City	Xenia	State	Ohio	Zip Code	45385
Telephone Number	(937) 374-5600				
Value of Match to be Provided	Cash \$				
	In-Kind Services \$		\$37,125		
	Total \$		\$37,125		
In-Kind match will be provided as	Technical Design and layout, and monitoring				
Name and Title of Authorized Individual (print)	Mark McDonnell, Commissioner				
Authorized Signature (no black ink or pencil)		Date			

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)	
Project Title	Upper Little Miami Watershed Water Quality Project
Matching Agency/	Clinton County Combined Health District

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
Organization Name					
Street Address		111 S. Nelson Street			
City	Wilmington	State	Ohio	Zip Code	45177
Telephone Number		(937) 382-3829			
Value of Match to be Provided		Cash \$			
		In-Kind Services \$		\$7,425	
		Total \$		\$7,425	
In-Kind match will be provided as		Technical Design and layout, and monitoring			
Name and Title of Authorized Individual (print)		Bob Derge, Director			
Authorized Signature (no black ink or pencil)			Date		

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
Project Title		Upper Little Miami Watershed Water Quality Project			
Matching Agency/ Organization Name		Warren County Combined Health District			
Street Address		416 S. East Street			
City	Lebanon	State	Ohio	Zip Code	45036
Telephone Number		(513) 695-1228			
Value of Match to be Provided		Cash \$			
		In-Kind Services \$		\$8,100	
		Total \$		\$8,100	
In-Kind match will be provided as		Technical Design and layout, and monitoring			
Name and Title of Authorized Individual (print)		Larry Wisner, Director			
Authorized Signature (no black ink or pencil)			Date		

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)						
Project Title	Upper Little Miami Watershed Water Quality Project					
Matching Agency/ Organization Name	Little Miami River Partnership					
Street Address	777 Columbus Ave. Suite. 5B					
City	Lebanon	State	Ohio	Zip Code	45036	
Telephone Number	(513) 695-1187					
Value of Match to be Provided	Cash \$					
	In-Kind Services \$		\$6,020			
	Total \$		\$6,020			
In-Kind match will be provided as	Watershed planning and technical oversight (Bd.), plus technical cmt. assistance					
Name and Title of Authorized Individual (print)	Sarah Hippensteel, Coordinator Little Miami River Partnership					
Authorized Signature (no black ink or pencil)					Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)						
Project Title	Upper Little Miami Watershed Water Quality Project					
Matching Agency/ Organization Name	Upper Little Miami Watershed Landowners					
Street Address	1363 Burnett Drive					
City	Xenia	State	Ohio	Zip Code	45385-5681	
Telephone Number	(937) 372-4478					
Value of Match to be Provided	Cash \$		\$255,000			
	In-Kind Services \$					
	Total \$		\$ 225,000			
In-Kind match will be provided as	Construction cost of Best Management Practices					
Name and Title of Authorized Individual (print)	David Linkhart, Chairman Upper Little Miami Joint SWCD Board (see cost/share contracts for individual signatures)					
Authorized Signature (no black ink or pencil)					Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)						
Project Title	Upper Little Miami Watershed Water Quality Project					
Matching Agency/ Organization Name	Clark County Combined Health District					
Street Address	416 S. East Street					
City	Lebanon	State	Ohio	Zip Code	45036	
Telephone Number	(513) 695-1228					
Value of Match to be Provided	Cash \$					
	In-Kind Services \$		\$11,475			
	Total \$		\$11,475			
In-Kind match will be provided as	Technical Design and layout, and monitoring					
Name and Title of Authorized Individual (print)	Charles Patterson, Health Commissioner					
Authorized Signature (no black ink or pencil)					Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)						
Project Title	Upper Little Miami Watershed Water Quality Project					
Matching Agency/ Organization Name	Montgomery County Combined Health District					
Street Address						
City	Lebanon	State	Ohio	Zip Code		
Telephone Number						
Value of Match to be Provided	Cash \$					
	In-Kind Services \$		\$3,375			
	Total \$		\$3,375			
In-Kind match will be provided as	Technical Design and layout, and monitoring					
Name and Title of Authorized Individual (print)	Director					

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)			
Authorized Signature (no black ink or pencil)		Date	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>	Upper Little Miami Watershed Water Quality Project				
<u>Sponsor Name</u>	Upper Little Miami Joint SWCD Board				
<u>Matching Agency/ Organization Name</u>	Clark Soil and Water Conservation District				
<u>Street Address</u>	4400 Gateway Drive, Suite 103				
<u>City</u>	Springfield	<u>State</u>	Ohio	<u>Zip Code</u>	45502
<u>Telephone Number</u>	(937) 329-4600				
—					
<u>Value of Match to be Provided</u>	Cash \$				
	<u>In-Kind Services \$</u>	\$22,315			
	<u>Total \$</u>	\$22,315			
<u>In-Kind match will be provided as</u>	Technical assistance, project planning, and administrative oversight				
<u>Name and Title of Authorized Individual (print)</u>	George McConkey, District Administrator for SWCD Bd.				
<u>Authorized Signature (no black ink or pencil)</u>		<u>Date</u>			

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>	Upper Little Miami Watershed Water Quality Project				
<u>Sponsor Name</u>	Upper Little Miami joint SWCD Board				
<u>Matching Agency/ Organization Name</u>	Montgomery Soil and Water Conservation District				
<u>Street Address</u>	10025 Amity Road				
<u>City</u>	Brookville	<u>State</u>	Ohio	<u>Zip Code</u>	45309
<u>Telephone Number</u>	(937) 854-7645				
—					
<u>Value of Match to be Provided</u>	Cash \$				
	<u>In-Kind Services \$</u>	\$4,015			
	<u>Total \$</u>	\$4,015			
<u>In-Kind match will be provided as</u>	Technical assistance, project planning, and administrative oversight				

<u>Name and Title of Authorized Individual (print)</u>		Fred Glander, Chairman	
<u>Authorized Signature (no black ink or pencil)</u>		<u>Date</u>	

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>		Upper Little Miami Watershed Water Quality Project			
<u>Sponsor Name</u>		Upper Little Miami SWCD Joint Board			
<u>Matching Agency/ Organization Name</u>		Upper River Fund			
<u>Street Address</u>		4191 River Ridge Road			
<u>City</u>	Dayton	<u>State</u>	Ohio	<u>Zip Code</u>	45415
<u>Telephone Number</u>		(937) 898-3421			
—					
<u>Value of Match to be Provided</u>		<u>Cash \$</u>		\$300,000	
		<u>In-Kind Services \$</u>			
		<u>Total \$</u>		\$300,000	
<u>In-Kind match will be provided as</u>		Funds to purchase land and/or easements along the designated scenic river in Clark and Greene Counties.			
<u>Name and Title of Authorized Individual (print)</u>		Irvin G. Bieser Jr., Chairman			
<u>Authorized Signature (no black ink or pencil)</u>		<u>Date</u>			

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>		Upper Little Miami Watershed Water Quality Project			
<u>Sponsor Name</u>		Upper Little Miami Joint SWCD Board			
<u>Matching Agency/ Organization Name</u>		Little Miami River NatureWorks Project			
<u>Street Address</u>		777 Columbus Ave. , Suite 7			
<u>City</u>	Lebanon	<u>State</u>	Ohio	<u>Zip Code</u>	45036
<u>Telephone Number</u>		(513) 695-1337			
—					
<u>Value of Match to be Provided</u>		<u>Cash \$</u>		\$65,000	
		<u>In-Kind Services \$</u>			

	<u>Total \$</u>	\$65,000
<u>In-Kind match will be provided as</u>	Funds to purchase land and/or easements in riparian areas of the watershed in Greene, Montgomery, Warren, and Clinton Counties	
<u>Name and Title of Authorized Individual (print)</u>	Mark Steiner, Chairman Warren SWCD	
<u>Authorized Signature (no black ink or pencil)</u>		<u>Date</u>

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>	Upper Little Miami Watershed Water Quality Project				
<u>Sponsor Name</u>	Upper Little Miami SWCD Joint Board				
<u>Matching Agency/ Organization Name</u>	Upper Little Miami River TMDL Work Group				
<u>Street Address</u>	777 Columbus Ave., Suite 5B				
<u>City</u>	Lebanon	<u>State</u>	Ohio	<u>Zip Code</u>	45036
<u>Telephone Number</u>	(513) 695-1187				
—					
<u>Value of Match to be Provided</u>	<u>Cash \$</u>				
	<u>In-Kind Services \$</u>		\$10,800		
	<u>Total \$</u>		\$10,800		
<u>In-Kind match will be provided as</u>	Watershed planning, project oversight , and advisory services				
<u>Name and Title of Authorized Individual (print)</u>	Sarah Hippensteel, facilitator of work group				
<u>Authorized Signature (no black ink or pencil)</u>			<u>Date</u>		

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>	Upper Little Miami Watershed Water Quality Project				
<u>Sponsor Name</u>	Upper Little Miami SWCD Joint Board				
<u>Matching Agency/ Organization Name</u>	Village of Waynesville				
<u>Street Address</u>	136 North U.S. Route 42 P.O. Box 657				
<u>City</u>	Waynesville	<u>State</u>	Ohio	<u>Zip Code</u>	45068
<u>Telephone Number</u>	(513) 897-8015				
—					
<u>Value of Match to be Provided</u>	<u>Cash \$</u>				

	<u>In-Kind Services \$</u>	\$13,000
	<u>Total \$</u>	\$13,000
<u>In-Kind match will be provided as</u>	Conducting Warren County portion of Citizen education survey	
<u>Name and Title of Authorized Individual (print)</u>	Kevin Harper, Village Manager	
<u>Authorized Signature (no black ink or pencil)</u>		<u>Date</u>

Match Commitment (Use one sheet per matching organization; duplicate electronically as needed)					
<u>Project Title</u>	Upper Little Miami Watershed Water Quality Project				
<u>Sponsor Name</u>	Upper Little Miami SWCD Joint Board				
<u>Matching Agency/ Organization Name</u>	ODNR, Pollution Abatement Program				
<u>Street Address</u>	10025 Amity Road				
<u>City</u>	Brookville	<u>State</u>	Ohio	<u>Zip Code</u>	45309
<u>Telephone Number</u>	(513) 695-1187				
—					
<u>Value of Match to be Provided</u>	<u>Cash \$</u>				
	<u>In-Kind Services \$</u>		\$97,500		
	<u>Total \$</u>		\$97,500		
<u>In-Kind match will be provided as</u>	Matching cost share on grassed waterways and structures				
<u>Name and Title of Authorized Individual (print)</u>	Jeff Thomas, Program Manager				
<u>Authorized Signature (no black ink or pencil)</u>			<u>Date</u>		