

Great Lakes Basin Program GLRI Project

A Unique Approach to Sediment Reduction in the Blue Creek and St. Mary's River

Size: watershed

Est. Soil savings: 51,786 tons

Grant Amount: \$448,115

Year Awarded: 2010

Sponsor Name: Adams County SWCD c/o St. Marys River Watershed Group

Address 1: 975 S 11th Street

City: Decatur

State: IN

Zip: 46733

Telephone: 260.724.4124 x3

Information Contact: Project Manager, John Friedt

E-mail: john.friedt@in.nacdnet.net

Submitted Project:

II. Project Background

Erosion and Sediment Goal

Estimate the total amount of **erosion**, in tons, your project will save: **51,786 tons**

Estimate the total amount of **sediment**, in tons, your project will save: **22,469 tons**

The St. Marys Watershed Management Plan (WMP)'s sediment goal is to "Reduce sediment in all monitored streams to an average concentration of 30 mg/l by 2028".

Estimated loading reductions were calculated at 20 monitoring stations across the watershed. These reductions estimated the percentage that loading would need to be reduced by in order to meet the 30 mg/l target. Reductions between 27.3% and 69.5% will be needed to achieve the aforementioned goal. Complete results can be found in Table 1.

TSS Loading Reductions	
Monitoring Station	% Reduction to Meet TMDL Target (30 mg/l)
Habegger Ditch	53.2%
Gates Ditch	54.4%
Little Blue Creek	51.4%
Blue Creek	68.4%
St. Marys River – Wilshire, OH	47.1%
Martz Ditch	59.1%
Yellow Creek	54.5%
Borum Run	68.0%
Holthouse Ditch	57.2%

This project was funded by the Great Lakes Restoration Initiative, and is maintained through the Great Lakes Basin Program for Soil Erosion and Sediment Control at the Great Lakes Commission.



Gerke Ditch	60.8%
Nickelson Creek	54.8%
St. Marys River – Poe	53.4%
Upper Gates Ditch	63.9%
Upper Blue Creek	69.5%
Twentyseven Mile Creek	35.8%
Houk Ditch	65.0%
Snyder Ditch	31.2%
Harber Ditch	37.0%
Junk Ditch	27.3%
Spy Run Creek	32.1%

Table 1. Estimated TSS loading reductions needed to achieve WMP/TMDL sediment goal.

Predicted soil loss savings (or total erosion) and sediment loading reductions were calculated for the proposed three year project using the Region 5 Model. Results of the analysis demonstrate that the proposed suite of BMP's will save approximately 51,786 tons of erosion off the landscape with an estimated sediment reduction of 22,469 tons. All BMPs were calculated for soil loss savings and sediment loading reductions based on the three year grant period.

*Describe the major **sources** of sediment in your watershed and the types of sources you will be reducing (cropland, streambank).*

Lake Erie is the shallowest, warmest, and most biologically productive lake in the Great Lakes system. Abundant recreational, commercial and tourism opportunities are being threatened by excessive sediment loadings. The Western Lake Erie Basin Water Resources Protection Plan estimates that Lake Erie tourism exceeds \$7.4 billion annually. Additionally, Lake Erie ports generate an estimated \$1 billion annually and sport fishing brings in hundreds of millions annually. The Western Lake Erie Basin (WLEB) watershed is also the most heavily agricultural Great Lakes Watershed, with 71% of land under agricultural production. As sediment continues to impact Lake Erie, agriculture operations in the upper reaches of the Western Lake Erie Basin are under the microscope.

The Lower St. Marys River basin encompasses 240,366 acres in northeastern Indiana, with 85.37% of land use classified as agriculture, 8.39% urban, 5.10% as forest, and 0.08% wetlands and water (NASS, 2006). Due to the high percentage of agricultural land in the watershed, the primary focus of the project will be on targeting agricultural landowners and producers with the proposed BMP cost-share options. Intensive row crop production under conventional methods has led to widespread sheet, rill, and gully erosion. Producers in the watershed, specifically the Blue Creek subwatershed, have been reluctant to adopt conservation tillage farming practices due to historical and cultural tendencies. The St. Marys River Watershed is also home to a large Amish population where conventional farming and livestock production is common.

Numerous livestock operations dot the landscape of the St. Marys River Watershed. A windshield survey during the summer of 2008 identified over 1,000 locations with livestock. Many of these are Amish locations which utilize nearby streams as watering sources and riparian areas as a source of shade, therefore causing severe stream bank sedimentation and erosion.

Lack of stream buffers and a riparian corridor are also common across the watershed as producers utilize every available acre for production. An inventory of existing buffers was created using aerial photography. Approximately 50% of the parcels adjacent to a stream or ditch were found to have an existing buffer or riparian corridor of 50 feet or less.

Sediment related water-quality degradation resulting from nonpoint source pollution has been and continues to be pronounced in the St. Marys River Watershed. Sampling conducted by the St. Marys River Watershed Group, the Indiana Department of Environmental Management (IDEM) and the City of Fort Wayne have all shown excessive levels of suspended sediments. Specifically, excessive sediment levels have been observed in the Blue Creek subwatershed. The land use in the Blue Creek subwatershed is heavily agricultural. Data from the Gap Analysis Program (GAP) shows that 94% of the land use in the Blue Creek is agricultural. The remaining land use consists of 5% forest, 0.4% wetlands, and 0.7% urban.

Throughout the development and implementation of the St. Marys River Watershed Management Plan (WMP), reductions in sediment loading have been a primary target. The WMP identifies sediment reduction as one of its seven goals. Sediment and runoff were listed as the number one water quality concern by watershed stakeholders.

Excessive sediment levels have historically, and continue to impact the St. Marys River and its tributaries. Furthermore, the St. Marys River is a primary contributor to the Maumee River sediment load and to the Western Lake Erie Basin. The implementation of an innovative package of BMP's within the St. Marys River Watershed has the potential to have a lasting effect on sediment reduction and water quality in the WLEB.

Watershed/ Project Work Area

Name of your watershed plan and the agency that approved the plan.

The St. Marys River Watershed Management Plan was approved by IDEM to meet USEPA and the 2003 Indiana Watershed Management Plan Checklist on July 20, 2009.

Watershed: list all 12 digit USGS HUC codes that compromise your watershed

HUC 8 No.	HUC 10 No.	HUC 12 No.	HUC Name	Acres
04100004	0410000406	041000040605	Spy Run Creek	9776.54037025
04100004	0410000406	041000040606	Junk Ditch-St Marys River	11471.63692574
04100004	0410000406	041000040603	Fairfield Ditch	15642.23332314
04100004	0410000406	041000040604	Snyder Ditch-St Marys River	12656.07581087
04100004	0410000403	041000040302	Black Creek	18885.00000000
04100004	0410000403	041000040304	Duck Creek	10165.00000000
04100004	0410000404	041000040402	Gates Ditch	12557.00000000
04100004	0410000404	041000040404	Little Blue Creek	10628.00000000
04100004	0410000404	041000040403	Headwaters Blue Creek	15639.00000000
04100004	0410000404	041000040405	Blue Creek	13493.00000000
04100004	0410000403	041000040305	Town of Willshire-St Marys River	8570.00000000
04100004	0410000404	041000040406	Martz Creek	17325.00000000
04100004	0410000404	041000040407	Borum Run	9166.00000000
04100004	0410000405	041000040501	Holthouse Ditch	22034.00000000
04100004	0410000404	041000040401	Twentyseven Mile Creek	18358.00000000
04100004	0410000404	041000040408	City of Decatur-St Marys River	19726.00000000
04100004	0410000405	041000040502	Weber Ditch-St Marys River	11414.00000000
04100004	0410000405	041000040503	Nicklesen Creek	16491.00000000
04100004	0410000405	041000040504	Buhlman Ditch-St Marys River	15086.00000000
04100004	0410000406	041000040602	Simmerman Ditch-St Marys River	13800.00000000
04100004	0410000406	041000040601	Houk Ditch	11034.00000000

This project was funded by the Great Lakes Restoration Initiative, and is maintained through the Great Lakes Basin Program for Soil Erosion and Sediment Control at the Great Lakes Commission.



Describe the **Priority Areas** within the watershed where you are going to concentrate your efforts. List by area or narrative description of specific conditions.

The St. Marys River Watershed is designated by the 8 digit HUC code 04100004. The Blue Creek subwatershed, which will be a focus area, consists of the following four 12 digit HUC's; Blue Creek (041000040405), Little Blue Creek (041000040404), Gates Ditch (041000040402), and Headwaters Blue Creek (041000040403). This area will be targeted in an attempt to reach the Blue Creek's large Amish population, who still predominantly practice conventional farming and livestock production.

Throughout the other subwatersheds of the St. Marys River Watershed Amish and English farmers will be targeted in the following areas:

- Conventionally tilled agricultural fields adjacent to a stream or ditch
- Areas of significant erosion resulting in large gullies
- Unbuffered stream reaches
- Critical livestock operations

How many acres are in the watershed?

The 2006 USDA National Ag Statistics Service indicates there are approximately 240,366 acres in the Indiana portion of the St. Marys River Watershed.

How many acres are in:

- *Agriculture including pasture landuse?* 205,200 acres or approximately 85.37%
- *Forest including brushland landuse?* 12,265 acres or approximately 5.10%
- *Urban, suburban, industrial, commercial and rural residential landuse?* 20,168 acres or approximately 8.39%

U.S. **Congressional District(s)** where project is located, as listed at www.house.gov/writerep/.

Indiana 3rd (Vacant) and 6th Districts (Mike Pence)

III. Implementation

A written contract will be required between you and the landusers/landowners to fund conservation practices with GLBP funds. The contract will include among other items, the type, number and location of each practice to be installed as well as the cost-share/incentive rate to be paid for each practice. (We will also use the signed contract as proof of commitment of funding for reimbursement of your expenses.)

Implementation Strategy

The implementation strategy of the proposed project features a multi-faceted approach and is designed to target critical areas in the watershed for sediment reduction. The tasks associated with the implementation efforts of this project have been selected in a manner to work together to achieve the maximum benefit of the GLC funds and sediment reduction goals.

The proposed project will take into account the vast assortment of State and Federal cost share programs aimed at improving water quality and reducing non-point source pollution in the Western Lake Erie Basin. In many cases, a landowner or producer would be better served to use an existing program, e.g. CRP and EQIP, and the St. Marys staff will encourage them to do so. However, the proposed project aims to target BMP's on land not meeting the requirements (e.g. a cropping history) for other cost-share programs or for individuals not interested in entering into long term contracts required with Federal conservation programs. A good example of this is the Amish community. To the extent possible, existing funds such as EPA Clean Water Act Section 319 and NRCS EQIP will be used primary for producers who are eligible and willing to accept the terms associated with those funds. This will also allow a greater number of producers in the watershed to receive funding.

The part-time technician hired for implementation of the project may promote other existing programs such as Section 319 and EQIP alongside the GLC funds based on individual producer needs, but will not participate in any planning, design, installation, or maintenance of BMPs paid for with cost-share dollars from agencies separate from the Great Lakes Commission.

As a result of the collected water quality sampling data and a ranking analysis, the Blue Creek subwatershed has been selected as the priority subwatershed. Implementation activities will be limited to this watershed for the first year of the three year grant period. At the beginning of the second grant year, activities will be opened up to the entire portion of the lower St. Marys River Watershed. It is anticipated that limiting activities to the Blue Creek subwatershed for the first year will garner two outcomes. First, by concentrating activities in this critical area, there will be a measurable impact on sediment loading to the St. Marys River and ultimately to Lake Erie. Second, the producers in the Blue Creek subwatershed have historically been reluctant to adopt innovative approaches in agriculture. By creating a deadline where funding will be opened to other watersheds, we hope to create a "now or never" mentality with the producers in the Blue Creek and entice them to implement BMP's within the first year of the grant period.

Four tasks have been developed and will be implemented to reduce sediment loading the St. Marys River Watershed. The tasks are described in detail below.

Task I. Agricultural Cost-Share Program and Bundling Option

A cost-share program will be developed to provide financial assistance to producers who implement agricultural BMP's. Cost-share rates of 75% will be provided when BMP's are applied on land adjacent to or intersected by an open ditch or stream. A rate of 65% will be provided on land not meeting these criteria. Cost-share will be offered on the following BMP's listed in Table 2.

St. Marys River Watershed Project Cost-Share BMP's		
Practice	Cost-share	Payment Cap
Equipment Modifications	65%/75%	\$3000/\$4000*
Pasture / Hay Planting	65%/75%	\$75/acre or \$3000
Cover Crops	65%/75%	\$20/\$30 /acre** or \$3000
Stream Buffer / Filter Strip	65%/75%	\$3000
Grassed Waterway	65%/75%	\$3000
Critical Area Seeding	65%/75%	\$3000
Fencing	65%/75%	\$3000
Alt. Water Supply System	65%/75%	\$3000
Stream Crossing	65%/75%	\$3000
Rotational Grazing	65%/75%	\$3000
*A cap of \$4,000 will be used when producers are purchasing a 1-2 inch accuracy GPS system.		
**If the producer will harvest the cover crop for a forage, a rate of \$20/acre will be used.		

This project was funded by the Great Lakes Restoration Initiative, and is maintained through the Great Lakes Basin Program for Soil Erosion and Sediment Control at the Great Lakes Commission.



Table 2. St. Marys River Watershed Project Cost-Share BMP's

As part of the cost-share program, a bundling option will be available for producers who implement residue and tillage management, cover crops, stream buffers/ filter strips, and nutrient management. Producers implementing these practices will be eligible for a \$20/acre incentive. A payment cap of 200 acres or \$4000 will be adhered to.

NOTE: While nutrient management is not a priority for the Great Lakes Commission, producers will be required to complete the NRCS nutrient management checklist to be eligible to receive the bundling incentive.

Task II. Strip-Till Tool Rental

Many producers in the watershed are keen on the idea of strip-till, but are not ready to make a large investment into the complete package of equipment needed to successfully implement a strip-till system. To allow producers to try and experiment with strip-till, the project will work with a local ag retailer to provide a strip-till unit and RTK guidance equipped tractor to be available to producers in the watershed on a per acre rental basis. To offset the cost of the producer, GLC funds will be applied in order to limit producer cost to approximately \$10.00 per acre.

Task III. Amish On-Farm Demonstration Site

The St. Marys River Watershed is home to a large Amish population, with the majority having at least horses on pasture. Due to small pasture size and mismanagement of the pastures, many lots become over grazed and turn into a mud lot, creating opportunities for sediment erosion. When streams are present, animals are allowed free access to the stream as a watering source and in riparian areas as a source of shade. In these cases, stream banks become barren of vegetation and become extremely susceptible to erosion.

The alternative to the scenarios mentioned above include implementing a suite of BMP's including pasture planting and renovation, livestock exclusion fencing, stream crossings, off stream watering sources, and rotational grazing.

Using GLC funds, a side by side comparison will be set up on an Amish farm to show the true benefits of a proper pasture system compared to the traditional methods. 90% cost-share will be provided to implement a demonstration site to showcase these livestock BMP's. Once implemented, this will also provide an excellent resource for pasture walks and field days.

Task IV. Amish No-Till Drill

Traditionally, the Amish community has strictly farmed using conventional tillage methods. Using GLC funds, this task will purchase a horse drawn no-till drill. The drill will be available to plant a variety of crops (corn, soybeans, wheat) as well as hay and forage crops. The no-till drill will be available to Amish in the watershed at no cost for the first 5 acres. A charge of \$5.00/acre will be applied for additional acres to cover drill maintenance costs.

Fill out all that apply:

A. Agronomic/Cover-based Practices installed by Landowners/Landusers with incentives paid for with this grant (ex. Cover Crops, conservation tillage, no-till.) If you have more than three BMPAs, copy and paste BMAP1 section and change the number as appropriate.

BMAP1 Equipment Modifications (Level 1)

Description: Equipment modifications to allow producers to effectively implement conservation tillage on their farms.

- Planter attachments that allow producers to implement no-till, strip-till or high residue

- conservation tillage
- GPS systems
- Light bars
- Vertical tillage equipment attachments (i.e. coulters, rolling baskets, spring harrows)

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X										X	

Number of acres/units of BMP to be installed during project: 1,500 acres with 5 year commitment to continuous no-till

Incentive method and rates: 15 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: 8,033 tons reduced erosion, 3,032 tons reduced sediment load

BMPA2 Equipment Modifications (RTK) for no-till or strip-till (Level 2)

Description: Assistance to producers who purchase a 1-2 inch accuracy GPS system.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X										X	

Number of acres/units of BMP to be installed during project: 1,400 acres with 5 year commitment to continuous no-till

Incentive method and rates: 7 participants at 75% cost-share with a maximum cost-share payment of \$4000

Expected soil savings in total tons: 7,497 tons reduced erosion, 2,855 tons reduced sediment load

BMPA3 Pasture/Hay Planting

Description: Assistance for pasture/hay planting in areas adjacent to unbuffered stream reaches to decrease soil erosion and nutrient and bacteria loading. Livestock may be rotationally grazed. However, the effectiveness of the hay or pasture to act as a filter strip cannot be altered.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres/units of BMP to be installed during project: 280 acres

Incentive method and rates: 7 participants at \$75 per acre cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: 3,856 tons reduced erosion, 1,794 tons reduced sediment load

BMPA3 Cover Crops

Description: Assistance to producers who utilize cover crops to improve soil quality, reduce erosion, and increase soil water holding capacity.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres/units of BMP to be installed during project: 1500 acres

Incentive method and rates: 15 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: 2,219 tons reduced erosion, 1,119 tons reduced sediment load

B. Engineering Practices installed by Landowners/Landusers with Financial Assistance provided by this grant (ex. Grass Waterway, Streambank Stabilization.) If you have more than three BMPs, copy and paste BMPE1 section and change the number as appropriate. (NRCS equivalent or PE sign-off.)

BMPE1 Stream Buffer/Filter Strip

Description: Assistance for producers to install stream buffers/filter strips to reduce sediment and nutrient loading.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X							X				

Number of acres/units of BMP to be installed during project: 46 acres

Incentive method and rates: 10 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: Stream buffer/filter strips do not address erosion soil savings, but will provide an estimated sediment load reduction of 258 tons

BMPE2 Grassed Waterway

Description: Assistance to producers for the installation of grassed waterways to reduce soil erosion.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X							X				

Number of acres/units of BMP to be installed during project: 2.6 acres

Incentive method and rates: 2 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: Grass waterways do not address erosion soil savings, but will provide an estimated sediment load reduction of 435 tons

BMPE3 Critical Area Seeding

Description: Assistance to producers for permanent seeding of critical areas to reduce soil erosion.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X							X				

Number of acres/units of BMP to be installed during project: 4.62 acres

Incentive method and rates: 2 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: Critical area seedings for areas with small gullies do not address erosion soil savings, but will provide an estimated sediment load reduction of 150 tons

BMPE4 Livestock Exclusion Fencing

Description: Assistance to producers to install fencing to exclude livestock from streams.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres/units of BMP to be installed during project: Estimated total length of 5 wire livestock exclusion fencing is 7,317 feet.

Incentive method and rates: 2 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: Livestock exclusion fencing reduces streambank erosion but does not address cropland erosion soil savings, but will provide an estimated sediment load reduction of 1,306 tons

BMPE5 Alternative Water Supply System

Description: Assistance to producers for the installation of an alternative water supply system.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres/units of BMP to be installed during project: An estimated 60.2 acres of cropland will be converted to pastures with capability of rotational grazing with an alternative underground watering system.

Incentive method and rates: 2 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: 878 tons reduced erosion, 495 tons reduced sediment load

BMPE6 Stream Crossing

Description: Assistance to producers for the installation of a stream crossing.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X										X	

Number of acres/units of BMP to be installed during project: An estimated 7,320 feet of streambank will be protected

Incentive method and rates: 2 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: Stream crossing do not reduce cropland erosion but will provide an estimated sediment load reduction of 1,306 tons

BMPE7 Rotational Grazing

Description: Assistance to producers to implement a rotational grazing system on their operation.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X										X	

Number of acres/units of BMP to be installed during project: 840 acres

Incentive method and rates: 7 participants at 75% cost-share with a maximum cost-share payment of \$3000

Expected soil savings in total tons: 680 tons reduced erosion, 279 tons reduced sediment load

C. Agronomic/Plant-based Practices installed by Landowners/Landusers with the use of equipment purchased by this grant for which you retain ownership (ex. no-till planters or drills, residue

management machines, mulchers.) If you have more than two Equipments, copy and paste Equipment 1 section and change the number as appropriate. Cost-share on equipment

Equipment1 Strip-till Tool

Description: Many producers in the watershed are keen on the idea of strip-till, but are not ready to make a large investment into the complete package of equipment needed to successfully implement a strip-till system. To allow producers to try and experiment with strip-till, the project will work with a local ag retailer to provide a strip-till unit and RTK guidance equipped tractor to be available to producers in the watershed on a per acre rental basis.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres equipment will be used on during project: 27 participants with a maximum of 200 acres each = 5400 acres total

Incentive method and rates: To offset the cost of the producer, GLC funds will be applied at a rate of \$12.00 per acre in order to limit the producer’s rental cost to approximately \$10.00 per acre.

Expected soil savings in total tons: 27,540 tons reduced erosion, 8,856 tons reduced sediment load

Equipment2 Amish No-till Drill

Description: Using GLC funds, the project will purchase a horse drawn no-till drill. The drill will be available to plant a variety of crops (corn, soybeans, wheat) as well as hay and forage crops.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X											X

Number of acres equipment will be used on during project: Due to the very limited exposure of no-till to the Amish we have a conservative estimate of 5 producers using the drill on 20 acres each year of the project.

Incentive method and rates: The no-till drill will be available to Amish in the watershed at no cost for the first 5 acres. A charge of \$5.00/acre will be applied for additional acres to cover drill maintenance costs.

Expected soil savings in total tons: 612 tons reduced erosion, 297 tons reduced sediment load

D. Alternate Incentive Methods (ex. pay per ton/unit reduced/increased) List each unit separately (ex. Pay per ton of sediment reduced rather than pay for a particular BMP.) If you have more than one ALT, copy and paste the ALT1 section and change the number as appropriate.

ALT1 Bundle Incentive

Description: A bundling option will be available for producers who implement residue and tillage management, cover crops, stream buffers/ filter strips through the GLC program. Producers qualifying for the Bundle Incentive will also be required to have an approved Nutrient Management Plan (not funded thru GLC or other federal program).

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X							X				

Number of acres/units of BMP to be installed during project: 10 participants with a maximum of 200 acres each = 2000 acres total

Incentive method and rates: Producers implementing these practices will be eligible for a \$20 per acre incentive. A payment cap of 200 acres or \$4000 will be adhered to.

Expected soil savings in total tons: To qualify for the Bundle Incentive the producer will be participating in the Equipment Modification or Strip-till BMP along with the Cover Crop and Filter Strip BMPs therefore the soil erosion and soil saving calculations are included in those BMPs listed earlier.

ALT2 Amish On-Farm Demo Site

Description: Using GLC funds, a “Demonstration Farm” will be set up on an Amish farm to show the true benefits of a proper pasture system compared to traditional methods. 90% cost-share will be provided to implement a demonstration site to showcase a suite of BMP’s including pasture planting and renovation, livestock exclusion fencing, stream crossings, off stream watering sources, and rotational grazing. Once implemented, this will also provide an excellent resource for pasture walks and field days.

Check the quarters the task is to be started and completed:

Quarter	1	2	3	4	5	6	7	8	9	10	11	12
Start/Complete	X							X				

Number of acres/units of BMP to be installed during project: An estimated 32 acres will be set up on the Amish Demonstration Farm

Incentive method and rates: 90% cost-share to showcase a suite of BMP’s including pasture planting and renovation, livestock exclusion fencing, stream crossings, off stream watering sources, and rotational grazing.

Expected soil savings in total tons: 472 tons reduced erosion, 288 tons reduced sediment load

E. Easements, purchased in part or whole with grant funds, over which you or your assignees retain ownership. If you have more than one type of EAS, copy and paste the EAS1 section and change the number as appropriate. (NRCS Equiv or state standards.)

This project will not include easements.

IV. Media Campaign

A. You will be required to conduct a kickoff event in the first quarter of the project. *You are specifically to invite, among others, all members of Congress who have a portion of their district within your watershed project boundaries, the media and the chair of the Great Lakes Commission delegation from your state. Describe how and what you will do to meet this requirement.*

Assuming the first quarter of the three year grant period will begin in October of 2010, a kickoff event will be incorporated into the project's regularly scheduled winter farmer meeting. The St. Marys Watershed Project Manager and/or the staff technician will introduce the project goals, activities, and the cost-share program. The project will also contact an influential member of the local government (ex. the Decatur, IN Mayor) to speak about the benefits of the project on conservation efforts in the area. All Congressional representatives for the project area along with local media, the chair of the Great Lakes Commission and other local officials will be invited to attend the kickoff event as well as the general public, particularly local landowners and producers.

B. You are also required to establish an on-going outreach campaign. Describe your on-going outreach campaign strategy for:

1. The general public/media,

Project activities and updates will be presented via quarterly newsletters and pres releases to local media. Any project meetings or special events will be widely publicized through these two avenues to encourage the participation and involvement of the public and local media outlets.

2. Landowners/landusers,

Landowners will be encouraged to participate in a variety of ways. A watershed technician will be employed to work with producers one on one and guide them through all phases of BMP implementation. An up to date and extensive newsletter mailing list will be developed for direct mailings to landowners and producers. Publications (brochures, press releases, newsletters, etc.) will be developed and submitted to local businesses, offices, and media outlets. A series of winter farmer meetings and summer field days will also be held to demonstrate practices and give producers the information needed to implement these practices. Furthermore, a cost share plan will be developed to offset a portion of the cost associated with implementing these innovative BMP's.

3. Elected officials

The newsletter mailing list will be expanded to include elected officials, government officials, and to any interested stakeholders. These individuals and agencies will also be invited to attend all farmer meetings and summer field days.