

***September 29, 2004  
Public Meeting***

Press Release

Elkhart County Commissioners Puterbaugh Creek - Heaton Lake  
Watershed Management Plan

Elkhart County Commissioners have received a \$60,000 Federal Fiscal Year 2002 205(j) Water Quality Planning Grant from the US Environmental Protection Agency for the development of a Watershed Management Plan for the Puterbaugh Creek - Heaton Lake Watershed. The Puterbaugh Creek - Heaton Lake Watershed encompasses an area of approximately 17 square miles. Its northern boundary extends into the State of Michigan and south to include the Heaton Lake and Puterbaugh Creek. This watershed study area encompasses nearly all of Osolo Township and the western portion of Washington Township.

A Joint Stakeholder Meeting is scheduled for 6:00 PM on Wednesday, September 29, 2004 at Eastwood Elementary School located at 53215 CR 15 North, Elkhart, Indiana. The purpose of the meeting is to inform the public about the Watershed Management Plan Project and invite participation in the Watershed Planning process.

Questions concerning this meeting should be directed to Mr. Christopher J. Jeter at Lawson-Fisher Associates (574) 234-3167 or Ms. Kristine Krueger at the Elkhart County Commissioners Office (574) 535-6746.

Welcome Guest.

Log



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# Local News

\*New\* Truth Story Tools

## Local Digest

Published: Monday, September 20, 2004 -- The Truth, A3  
Last updated: 9/19/2004 11:42:00 PM

### Patrollers report on gas price highs and lows

Gasoline prices ranged between \$1.82 and \$1.93 a gallon across The Truth readership area on Sunday, according to Pump Patrol reports.

The station on M-60 in Vandalia took low honors at \$1.82, while the Shell station at Bittersweet and McKinley Highway in Osceola took high honors with \$1.93.

In between, the Citgo at Franklin and Indiana was "remaining steady" with the Speedway station at S.R. 19 and Mishawaka, each posting \$1.85.

The BP station at S.R. 13 and S.R. 120 in Middlebury posted \$1.89, while the Phillips 66 on S.R. 933 near Beech Road in Osceola posted \$1.91.

### Goshen: Water main flushing begins today

GOSHEN -- The Goshen water department will be flushing mains in the center and south parts of the city from 10 p.m. today to 6 a.m. Tuesday. The area is from Pike Street and the railroad tracks south between the Elkhart River and Ninth Street.

Residents there are asked to avoid doing laundry during that time. If you have a problem with your laundry, you can get special soap from the water department at 534-5306.

### Elkhart: Plan to protect watershed to be discussed

ELKHART -- The plan for protecting the Heaton Lake and Puterbaugh Creek watershed will be covered during a Sept. 29 meeting.

Public participation is encouraged at the 6 p.m. event in Eastwood Elementary School, 53215 C.R. 15, Elkhart. Studies of the 17-mile watershed were funded with grants from the U.S. Environmental Protection Agency.

For more information about the plan and the meeting, call Kris Krueger with the Elkhart County commissioners, 534-3541, or Christopher Jeter of Lawson-Fisher Associates, 234-3167.

### Goshen: Testing slated for sheriff's department jobs

GOSHEN -- Testing for available positions at the Elkhart County Sheriff's Department will take place at 10 a.m. Saturday in the county's Administration Building.

## Today's News

- » [Bayer plant closing](#)
- » [Weighing In](#)
- » [Parents, schools team up](#)
- » [Crowd favors Central](#)
- » [Reeves jury to decide](#)
- » [Meeting addresses health of minorities](#)
- » [Wellfield garden has director](#)
- » [Local Digest](#)
- » [Where's fall?](#)
- » [Government At A Glance](#)
- » [Eatery damaged by fire](#)

## Week's Most Popular

- » [Boarding house operated illegally](#)
- » [Family, friends mourn](#)
- » [The road untraveled](#)
- » [Before it's too late](#)
- » [Strong takes stand](#)

The county is hiring several corrections officers to be trained and working by the time new inmate housing opens by early 2007.

Applicants must fill out an application, have basic math, grammar and writing skills and successfully complete interviews and background checks, including a polygraph examination.

For more information about the jobs, visit the county's personnel office at 117 N. Second St. in Goshen -- the testing site -- or call 535-6725. Forms also are available on the Internet at [www.elkhartcountyindiana.com](http://www.elkhartcountyindiana.com).

Future testing dates are Oct. 21, Nov. 17 and Dec. 15.

Union: Benefit to raise funds for medical costs

UNION -- A benefit for 3-year-old Noah Mikel will be at 5 p.m. (Michigan time) Saturday at the Cass County Conservation Club on U.S. 12.

The youngster, son of Lee and Malena Mikel of Nappanee, received a kidney transplant Aug. 11 at Riley Hospital for Children in Indianapolis. His cousin, Julie Crane, was the donor.

The benefit is to raise money for medical and family expenses of trips to Indianapolis. Donations may be made to Noah Mikel at KeyBank in Nappanee.

The benefit will feature a hog roast, dancing and raffles.

Mishawaka: Program for seizure treatment planned

MISHAWAKA -- A free education program for people with seizures and their families will be presented from 6:30 to 8 p.m. Wednesday at To Your Health, next to Sears in University Park Mall.

The program will focus on treatment-resistant epilepsy, including available treatment options. A health-care provider and a patient will discuss experiences with VNS therapy.

Registration is being accepted by calling To Your Health at 273-5534.

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DANIEL R. LAWSON, P.E.  
JOHN E. FISHER, P.E.

GREGORY L. HOLDEN, P.E.  
PAUL A. HUMMEL, P.E.

200406.00

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PIPER C. TITTLE, P.E.  
THOMAS S. SHARP, P.E.  
THERESA E. HARRISON, P.E.  
JON E. RIEMKE, P.E.  
JEFFREY L. MCKEAN, P.E.  
RANDOLPH J. LINDLEY, P.E.  
SKY K. MEDORS, P.E.  
→ CHRISTOPHER J. JETER, P.E.  
DENNIS A. ZEBELL, P.E.  
BENJAMIN P. HOLDEN, P.E.  
DAN G. DELGADO, P.E.  
MARK H. FOSTER, P.E.  
CHARLES F. FARRELL, P.E.  
ADIN M. McCANN, P.E.  
MICHAEL J. GUZIK, P.E.

September 16, 2004

Ms. Nancy Brown, Program Manager  
Elkhart County SWCD  
17746-B C.R. 34  
Goshen, IN 46528

RE: Elkhart County Commissioners  
Section 205(j) Watershed Management Plan Grant  
Puterbaugh Creek – Heaton Lake Watershed  
Watershed Steering Committee Meeting

Dear Ms. Brown:

The following letter is to inform you that a Watershed Steering Committee Meeting is scheduled for the above referenced project. The meeting is scheduled for 6:00 P.M. on Wednesday, September 29, 2004, at Eastwood Elementary School located at 53215 County Road 15 North, Elkhart, Indiana. The purpose of the meeting is to inform the public about the Watershed Management Plan Project and invite participation in the Watershed Planning process.

Please do not hesitate to contact us should you have any questions or comments.

Very truly yours,

LAWSON-FISHER ASSOCIATES P.C.



Christopher J. Jeter, P.E.  
Civil Engineer

CJJ/bsa

c: Kristine Krueger  
John E. Fisher, P.E.  
Piper C. Tittle, P.E.

**Elkhart County Commissioners  
Section 205(j) Watershed Management Plan Grant  
Puterbaugh Creek – Heaton Lake  
Watershed Steering Committee Meeting**

Ms. Kristine Krueger  
Elkhart County Government  
117 North Second Street  
Goshen, IN 46526

Mr. Robert Watkins  
Elkhart County Health Department  
4230 Elkhart Road  
Goshen, IN 46526

Mr. John Hulewicz  
Elkhart County Health Department  
4230 Elkhart Road  
Goshen, IN 46526

Mr. Denny Lyon  
Elkhart County Surveyor's Office  
4230 Elkhart Road  
Goshen, IN 46526

Mr. Blake Doriot  
Elkhart County Surveyor's Office  
4230 Elkhart Road  
Goshen, IN 46526

Mr. Steve Schweisberger  
Elkhart County Surveyor's Office  
4230 Elkhart Road  
Goshen, IN 46526

Ms. Nancy Brown  
Elkhart County SWCD  
17746-B C.R. 34  
Goshen, IN 46528

Ms. Bev Stevenson  
Elkhart County SWCD  
17746-B C.R. 34  
Goshen, IN 46528

Mr. Donald Parker  
2101 Grant Street  
Elkhart, IN 46514

Mr. Everett Lienhart  
22541 Lakeshore Drive  
Elkhart, IN 46514

Mr. Scott Robinia  
22880 Lakeshore Drive  
Elkhart, IN 46514

Mr. Bill West  
23170 Heaton Vista  
Elkhart, IN 46514

Ms. Bonnie Shanholt  
23197 Heaton Vista  
Elkhart, IN 46514

Mr. Don West  
52352 C.R. 13  
Elkhart, IN

Mary Sproull  
23173 Heaton Vista  
Elkhart, IN 46514

Mr. James Riley  
22886 Lake Shore Drive  
Elkhart, IN 46514

Mr. and Mrs. Ty Miller  
29893 Olin Court  
Elkhart, IN 46514

Mr. Ben Russo  
25600 County Road 4  
Elkhart, IN 46514

Mr. Kyle Hannon  
5 Kim Court  
Elkhart, IN 46514

Mr. Bob Stone  
23019 Lakeshore Drive  
Elkhart, IN 46514

**Elkhart County Commissioners  
Section 205(j) Watershed Management Plan Grant  
Puterbaugh Creek – Heaton Lake  
Watershed Steering Committee Meeting**

Mr. Dave Simmons  
22892 Lakeshore Drive  
Elkhart, IN 46514-9571

Mr. John Hardy  
54507 David Drive  
Elkhart, IN 46514

Mr. and Ms. Tom Davis  
52860 County Road 15  
Elkhart, IN 46514

Mr. Nathan Rice, Grant Project Manager  
Indiana Dept. of Environ. Mgmt.  
Watershed Management Section  
100 North Senate Avenue  
Indianapolis, IN 46204



## MEMORANDUM

October 13, 2004

TO: LFA Project File No. 200406.00

FROM: Christopher J. Jeter, P.E. *Chris J J*

RE: Elkhart County Commissioners  
Section 205(j) Watershed Planning Grant  
Puterbaugh Creek – Heaton Lake Watershed Management Plan  
Stakeholder Meeting No. 2  
Public Meeting No. 3

The second stakeholder meeting for the above referenced project was conducted at Eastwood Elementary School on September 29, 2004. This meeting was the third in a series of eight (8) public meetings being conducted for the project. Copies of the agenda, sign-in sheet and handouts are included with this memorandum.

The meeting began with an introduction and a brief overview of the Watershed Planning Project by Mr. Chris Jeter. Mr. Jeter provided an overview of the following four (4) items which were requested by the Steering Committee in the June 16, 2004 Stakeholder Meeting:

- Land Use Areas – separated by State and Type
- Refined listing of Best Management Practices (BMPs)
- Water Quality Testing Results
- List of Existing Data Sources

After completing the overview and project updates, the stakeholders were given an opportunity to ask questions and/or comment on the four (4) items listed above and the 205(j) Project. The following items were discussed:

- The attendees found the separation of land use area by State and type to be informative. One attendee was particularly interested in the drainage area of Heaton Lake. Per the USGS Water Resources Data for Indiana publication, the drainage area for Heaton Lake is 9.33 square miles.
- The refined list of BMPs was reviewed by the Steering Committee. Mr. John Fisher explained that the City of Elkhart, under the Municipal Separate Storm Sewer (MS4) program, will be implementing a number of BMPs within the corporate limits of the City and the urbanized area of the County. A portion of the MS4 area is located within the Puterbaugh Creek – Heaton Lake Watershed.
- The results of the water quality testing within the watershed were presented to the Steering Committee. Mr. Jeter explained that sampling had occurred during two (2) wet weather events and two (2) dry weather events and this completes the sampling requirement for the 205(j) Project. The laboratory results had been completed for the June 10, 2004 wet weather event and the laboratory results are pending for the other three (3) sampling events.



LFA Project File 200406.00  
October 13, 2004  
Page 2

- One of the attendees noted that Sampling Location No. 5, Jacob Myers Ditch, is actually Puterbaugh Creek. The stream name north of County Road 6 is Jacob Myers Ditch and south of County Road 6 is Puterbaugh Creek. Sampling Location No. 5 is south of County Road 6.
- Mr. Jeter explained that the high level of surfactants at Sampling Location No. 3, Mather Ditch, is indicative of laundry detergent in the creek. One of the attendees noted that soap suds can be seen at this location at the end of many weekends.
- Mr. Jeter reviewed the list of existing data sources with the attendees. One of the attendees brought Secchi disk data that he had compiled on Heaton Lake. In addition, one of the attendees recommended that Karen Mackowiak at the Michiana Area Council of Governments (MACOG) be contacted to determine if she knew of any existing water quality data that had been collected within the watershed.
- The educational brochure and crossword puzzle for children that was produced by Lawson-Fisher was distributed to each attendee. In addition, a number of other educational/outreach items from the Environmental Protection Agency (EPA) were presented to the attendees. Mr. Jeter asked the attendees to review the material. In addition, Mr. Jeter will be contacting the agencies listed as additional contacts on the brochure to obtain their approval.
- The next stakeholder meeting will be conducted in late December. Lawson-Fisher will be bringing a summary of the water quality sampling results for each of the Steering Committee members to review.

CJJ/cas  
Encls.





**Elkhart County Commissioners  
205(j) Watershed Planning Grant  
Puterbaugh Creek – Heaton Lake Watershed Management Plan**

**Joint Stakeholder Committee Meeting**

September 29, 2004 at 6:00 P.M.

**Agenda**

1. Welcome and Introduction
2. Previous Stakeholder Meeting Issues
  - *Land Use Areas*
  - *Refined List of Best Management Practices (BMPs)*
  - *Water Quality Testing*
  - *Existing Data Sources*
3. Puterbaugh Creek – Heaton Lake Watershed Management Plan Project
  - *Project Brochure and Outreach Materials*
  - *Planning Tasks*
  - *Schedule*
4. Conclusion
5. Discussion
6. Future Meetings

**Elkhart County 205(j) Grant Project  
Puterbaugh Creek/Heaton Lake Watershed Land Use Summary**

Land Use Type	Indiana Area of Land Use acres	Indiana Percent of Total Land Use	Michigan Area of Land Use acres	Michigan Percent of Total Land Use	Total Area of Land Use acres	Percent of Total Land Use
Undeveloped	1756.9	16.0%	492.3	4.5%	2249.2	20.5%
Agricultural	2531.0	23.0%	2402	21.8%	4933.0	44.9%
Residential	2045.0	18.6%	825.7	7.5%	2870.7	26.1%
Commercial	81.8	0.7%			81.8	0.7%
Manufacturing	727.2	6.6%			727.2	6.6%
Institutional - School	15.9	0.1%			15.9	0.1%
Institutional - Church	1.8	0.0%			1.8	0.0%
Ideal Beach	26.8	0.2%			26.8	0.2%
Heaton Lake	87.6	0.8%			87.6	0.8%
Total	7274.0	66.2%	3720	33.8%	10994.0	100.0%

Note: Land use digitized by Lawson-Fisher Associates P.C.

**Elkhart County Commissioners**  
**Section 205(j) Watershed Management Plan Grant**  
**Puterbaugh Creek - Heaton Lake Watershed**  
**Existing Data Sources**

<b>Data Source</b>	<b>Data Type</b>	<b>Notes</b>
USGS	Heaton Lake water level	Available
Elkhart County	Septic Database 2000 - 2004	Available
Elkhart County	Surface Water Data	Available
watershed residents	Heaton Lake - Secchi disk readings	Available
LFA	C.R. 17 bog data	Available
IDNR	Chemical and Biological data	No data available - per Neil Ledet
City of Elkhart	Chemical and Biological data	No chemical data available - per Joe Foy Only fish related work performed in watershed
City of Elkhart	Data from new wellfield	Data outside watershed limits - per Art Umble
City of Elkhart	Water Quality sampling	No testing in watershed or Heaton Lake per Mark Salee
City of Elkhart	Water Quality sampling	No sampling performed yet; sampling will be performed soon as part of Phase II requirements per Lyn Newvine
Cass County	Water Quality data	No existing data available
MDEQ	Water Quality data	No existing data available

**Elkhart County Commissioners  
Section 205(j) Watershed Management Plan Grant  
Puterbaugh Creek - Heaton Lake Watershed**

**MASTER LIST - BMP's (Existing and Proposed)**

	MS4	205(j)		MS4	205(j)
<b>MCM #1 - Public Education &amp; Outreach</b>			<b>MCM #5 - Post Construction Storm Water Management</b>		
1 Classroom Education on Storm Water			<i>STRUCTURAL BMP's</i>		
2 Education/Outreach for Commercial Activities			1 Grassed Filter Strip		
3 Educational Displays, Pamphlets, Booklets, Utility Stuffers			2 Grassed Swale / Channel		
4 Storm Water Educational Materials			3 Storm Water Wetlands / Plantings		
<b>MCM #2 - Public Involvement/Participation</b>			<i>NONSTRUCTURAL BMP's</i>		
1 Stakeholder & Public Meetings			1 BMP Inspection and Maintenance		
2 Storm Drain Stenciling			2 Stormwater Land Use Controls (Buffer Zones)		
3 Stream Cleanup and Monitoring			<b>MCM #6 - Pollution Prevention/Good Housekeeping</b>		
<b>MCM #3 - Illicit Discharge Detection &amp; Elimination</b>			1 Landscaping and Lawn Care Practices		
1 Control of Runoff From Confinement Areas			2 Litter and Debris Control		
2 Septic System Inspection and Maintenance			3 Parking Lot and Street Cleaning		
3 Identifying Illicit Connections (Sanitary Surveys, Mapping, WQ Testing)			4 Septic System Controls		
4 Proper Disposal of Recreational Vehicle & Marine Sewage			5 Storm Drain System Cleaning		
<b>MCM #4 - Construction Site Storm Water Runoff Control</b>					
<i>STRUCTURAL BMPs</i>					
<i>RUNOFF CONTROL</i>					
1 Proper Construction Entrances					
2 Riprap					
<i>EROSION CONTROL (SOIL RETENTION)</i>					
1 Construction Sequencing					
2 Geotextiles					
3 Permanent Seeding					
4 Sodding					
<i>SEDIMENT CONTROL</i>					
1 Silt Fence					
2 Storm Drain Inlet Protection					
3 Straw Bale Check Dams					
<i>NONSTRUCTURAL BMPs</i>					
1 Construction Review / Procedure					
2 Construction Site Inspection and Maintenance					
3 Contractor Certification and Inspector Training					
4 General Construction Site Waste Management					
5 Regulatory Controls for Construction Site Runoff					

Elkhart County 205(j) Grant Project  
Water Quality Monitoring Results

DRAFT 9-29-04

Water Quality Guidelines						6 - 9	Varies by month		750 mg/L		5 mg/L		235 CFU/100 mL		Varies with pH and Temperature	10 ppm				
No.	Sampling Location	Date	Time	Ambient Temp. (°C)	Weather Condition	pH	Water Temp. (°C)	Cond. (µS/cm)	TDS	Color	DO (mg/L)	DO (%)	E. Coli	TKN (mg/L)	Ammonia (mg/L)	Nitrate (mg/L)	Orthophosphorus (mg/L)	Total Phosphorus (mg/L)	TSS (mg/L)	MBAS (Surfactants) (mg/L)
Wet Weather Sample	1 Rhineheart Lateral	6/10/2004				7.72	19.2	373	190	Light Brown	6.97	75.1	11000	1.8	0.3	2.5	<0.05	0.37	35	<0.1
	2 Kindig/Kellog	6/10/2004	2:45 PM	21.7	Light Rain	7.22	21.3	210	107	Rust/Brown	1.35	15.1	1360	1.6	0.2	<0.1	<0.05	0.27	6	0.21
	3 Mather Ditch	6/10/2004	3:00 PM	21.7	Overcast	8.07	23.2	388	197	Clear	6.85	74.6	280	0.49	<0.05	<0.1	<0.05	<0.05	18	20
	4 Bishop Ditch	6/10/2004		21.7	Light Rain	7.57	20.5	361	184	Light Brown	3.88	43.8	1640	1.3	0.3	<0.1	<0.05	<0.05	5	0.14
	5 Jacob Myers Ditch	6/10/2004		21.7	Overcast	7.97	21.5	385	196	Clear	7.01	79.6	360	0.99	<0.05	<0.1	<0.05	0.24	8	<0.1
	6 Puterbaugh Creek	6/10/2004	3:00 PM	21.7	Overcast	8.08	21.2	396	201	Clear	7.95	89.2	900	1.1	0.4	0.12	<0.05	0.34	2	0.12
	Duplicate Trip Blank	Rhineheart Lateral	6/10/2004	2:25 PM		Light Rain	7.72	19.2	373	190	Light Brown	6.97	75.1	11000	1.8	0.4	2.5	<0.05	0.26	32
		6/10/2004											<1	0.72	0.2	0.23	<0.05	<0.1	<1	<0.1
Dry Weather Sample	1 Rhineheart Lateral	9/13/2004	9:00 AM	24.5	Sunny	8.1	14.9			Light Brown	7.27	72								
	2 Kindig/Kellog	9/13/2004	9:10 AM	24.5	Sunny	7.4	16.3			Light Brown	0.26	2.6								
	3 Mather Ditch	9/13/2004	9:40 AM	24.5	Sunny	8.2	22.1			Clear	9.9	113.5								
	4 Bishop Ditch	9/13/2004	9:30 AM	24.5	Sunny	7.7	14.8			Yellowish - Green	1.12	10.9								
	5 Jacob Myers Ditch	9/13/2004	9:55 AM	24.5	Sunny	8	18.3			Clear	7.04	74.8								
	6 Puterbaugh Creek	9/13/2004	10:10 AM	24.5	Sunny	8	16.9			Clear	7.59	78.3								
	Duplicate Trip Blank	Kindig/Kellog	9/13/2004	9:10 AM	24.5	Sunny	7.4	16.3			Light Brown	0.26	2.6							
Wet Weather Sample	1 Rhineheart Lateral	9/16/2004	7:30 AM	21.1	Sunny	8.4	18.6			Light Brown	4.7	50.6								
	2 Kindig/Kellog	9/16/2004	8:00 AM	21.1	Sunny	7.6	19.2			Light Brown	0.26	2.8								
	3 Mather Ditch	9/16/2004	8:35 AM	21.1	Sunny	8.4	23.4			Clear	8.3	97.2								
	4 Bishop Ditch	9/16/2004	8:15 AM	21.1	Sunny	7.8	18.1			Light Green	1.92	16.6								
	5 Jacob Myers Ditch	9/16/2004	8:55 AM	21.1	Sunny	8	17.6			Clear - Light Green	6.48	67.5								
	6 Puterbaugh Creek	9/16/2004	9:10 AM	21.1	Sunny	8.1	17.1			Clear - Light Green	6.98	72.8								
	Duplicate Trip Blank	Bishop Ditch	9/16/2004	8:15 AM	21.1	Sunny	7.8	18.1			Light Green	1.92	16.6							
Dry Weather Sample	1 Rhineheart Lateral	9/21/2004	7:00 AM	15.6	Sunny	8.2	10.6			Light Brown	6.86	66.5								
	2 Kindig/Kellog	9/21/2004	7:10 AM	15.6	Sunny	8.1	12.6			Brown	1.01	9.6								
	3 Mather Ditch	9/21/2004	7:40 AM	15.6	Sunny	8.4	18.5			Clear	8.98	95.6								
	4 Bishop Ditch	9/21/2004	7:30 AM	15.6	Sunny	8	12.4			Light Brown	2.46	21.5								
	5 Jacob Myers Ditch	9/21/2004	8:00 AM	15.6	Sunny	8.2	12.3			Light Green	7.84	73.2								
	6 Puterbaugh Creek	9/21/2004	8:15 AM	15.6	Sunny	8.2	12.7			Clear - Light Green	8.47	79.7								
	Duplicate Trip Blank	Rhineheart Lateral	9/21/2004	7:00 AM	15.6	Sunny	8.2	10.6			Light Brown	6.86	66.5							

**Additional Contact Information:**

Elkhart County Soil & Water  
Conservation District  
17746-B C.R. 34  
Goshen, Indiana 46528

Elkhart County Health Department  
4230 Elkhart Road  
Goshen, Indiana 46526

Elkhart County MS4 Operator  
Duane Burrow, Stormwater Manager  
4230 Elkhart Road  
Goshen, Indiana 46526

Elkhart County Solid Waste  
Management District  
500 North Nappanee  
Elkhart, Indiana 46514

Indiana Department of  
Environmental Management  
Watershed Management Section  
100 North Senate Avenue  
Indianapolis, Indiana 46204

**Elkhart County  
Commissioners**

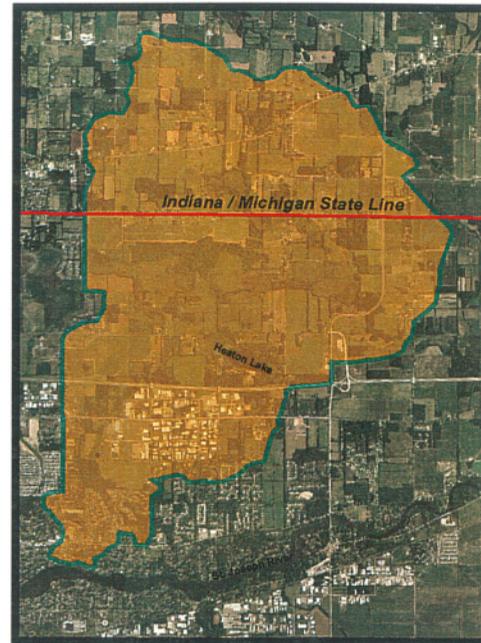
117 N. Second Street  
Goshen, IN 46526  
574-534-3541

Published September 27, 2004



**Puterbaugh Creek-  
Heaton Lake  
Watershed Issues**

**Elkhart County Commissioners**



Elkhart County Heaton Lake Watershed

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement (C697575-02) to the Indiana Department of Environmental Management. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

**Water Quality Issues Within Your  
Watershed**

*No matter where we live,  
we all live in a watershed.*

*Why Should I Care About My  
Watershed?*

*What is a watershed?*

*A watershed is the area of  
land that water moves across or  
under while flowing to a stream,  
spring, pond, lake, or river.*

*The name of the water-  
shed you live in is the Puterbaugh  
Creek—Heaton Lake Watershed.  
This watershed mainly consists of  
agricultural, undeveloped, and  
residential land uses.*



*All of our daily activities  
within the Puterbaugh Creek—  
Heaton Lake Watershed have a  
direct effect upon the water  
quality of the entire watershed.  
When it rains or snowmelt occurs,  
runoff from farmland, impervious  
roadways, construction sites, and  
suburban lawns, roofs, and drive-  
ways enters the network of wa-  
terways in the watershed. This  
runoff can contain harmful sub-  
stances such as pesticides, bac-  
teria, salts, sediment, oil, grease,  
and chemicals. Since many of  
these pollutants do not originate  
from a single source, they are  
considered non-point source pol-  
lution.*

# What are the Major Sources of Non-Point Source Pollution?

## Agriculture Pollution

Livestock waste, fertilizers, pesticides, oil from farm equipment, soil and sediment can be carried away by stormwater runoff from barnyards, feedlots, and cropland.

Non-point source pollution from agricultural runoff can effect the aquatic habitat of streams and rivers by reducing the oxygen content of the water.

In addition, bacteria from animal waste can enter into drinking water and cause illness and death.



## Residential Pollution

Stormwater runoff from residential property may include fertilizers, weed killer, grass clippings and leaves, pet waste, pollution from poorly maintained septic systems, household cleaners, and detergents from washing your car.

Fertilizers and detergents can cause plant and algae growth in creeks and streams, thus depleting the water's oxygen and endangering

water's oxygen content. Runoff containing pet droppings and septic tank overflows can cause diseases by entering the drinking water and our recreation areas.

## Construction Pollution

As the clearing of land for construction projects continues in the Puterbaugh Creek—Heaton Lake watershed, stormwater runoff from these sites has the potential to effect water quality within the watershed.

Undeveloped land that is cleared for construction has the potential to allow stormwater runoff from the site to carry soil and sediment to various waterbodies. This runoff from newly cleared land can effect our drinking water and the aquatic habitat in the waterbodies within the watershed.

# What Can We Do to Control Non-Point Source Pollution?

## Agricultural Land Use

- Don't fertilize the land before a rain storm and only use the amount of fertilizer that is needed for the crop.
- Control runoff from feedlots and barnyards so that the runoff does not enter the drinking water or other waterbodies. The runoff may be controlled with the use of silt fences or straw bales around the perimeter of the property.
- Recycle oil, antifreeze, and other chemicals from farm equipment.
- Maintain proper storage of pesticides and other

chemicals to prevent them from entering the drinking water.

## Residential Land Use

- Perform regular maintenance on your septic system. This includes cleaning and removing all solids every 1-3 years.
- Plant grass or plants in exposed soil areas.
- Properly dispose of pet waste.
- Use commercial car washes to clean your vehicle.
- Keep the roadways clear of grass clippings, leaves, and debris.



## Construction Land Use

- Control runoff from construction with Best Management Practices (BMP's). These include the use of silt fences around the perimeter of the site and the use of vegetative buffers along waterbodies to filter stormwater runoff.
- Perform construction in phases to reduce the length of time that the soil is exposed.
- Install gravel entrances to construction sites to remove dirt from construction vehicles that enter and leave the site.



- Contact the Elkhart County Soil and Water Conservation District for additional information regarding construction BMP's.

For more Information check out these websites:

EPA Surf Your Watershed:

[www.epa.gov/surf](http://www.epa.gov/surf)

St. Joseph River Basin Commission

[www.sjrbc.com](http://www.sjrbc.com)

IDEM-Office of Water Quality

[www.in.gov/idem/water](http://www.in.gov/idem/water)

# Elkhart County, Indiana Heaton Lake Watershed

Indiana / Michigan State Line

## Word Search Puzzle

W	A	T	E	R	S	H	E	D	A	S	D	F	G	H	W	Y	U	J	A
A	B	H	Q	W	T	E	R	T	R	Y	U	I	O	P	I	A	S	B	D
O	P	E	Z	X	O	C	V	B	N	A	M	L	K	J	L	H	C	G	F
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J	B	V	T	V	F	G	Y	H	J	I	K	M	N	B	V	H	C	X	A
R	M	I	L	K	J	H	S	M	R	A	F	B	C	V	H	Y	A	U	U
F	O	V	B	G	R	Q	W	E	R	T	Y	U	I	O	P	K	J	R	H
N	Z	X	C	V	B	N	M	Q	W	E	R	T	Y	U	I	O	P	L	T

Watershed

Rainfall

Creek

Drainage

Heaton Lake

Heaton Lake

Runoff

Elkhart

Farms

Pollution

Wildlife

Stormwater

Basins

St. Joseph River

Elkhart County Commissioners