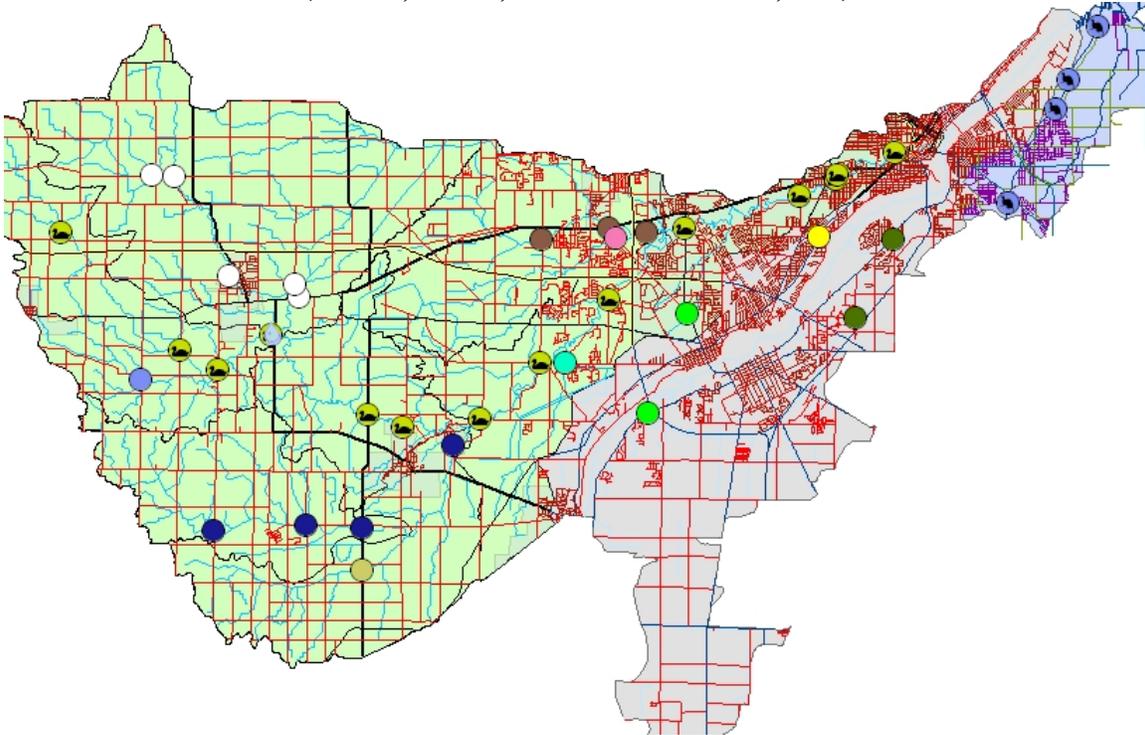


**2006 Final Study Plan for the Swan Creek Watershed and  
Lower Maumee River tributaries  
(Fulton, Lucas, and Wood counties, OH)**



State of Ohio Environmental Protection Agency  
Division of Surface Water  
Lazarus Government Center  
122 South Front St., Columbus, OH 43215  
Mail to:  
P.O. Box 1049, Columbus, OH 43216-1049  
&  
Monitoring and Assessment Section  
4675 Homer Ohio Lane  
Groveport, OH 43125  
&  
Surface Water Section  
Northwest District Office  
347 N. Dunbridge Rd.  
Bowling Green, OH 43402

## **Introduction**

As part of the five-year basin approach for NPDES permitting and the TMDL process, an intensive ambient assessment will be conducted during the 2006 field sampling season within the Swan Creek and lower Maumee River basins. The study area will include the entire length of Swan Creek and all tributaries possessing a drainage area greater than 5.0 miles<sup>2</sup>. It will also include five tributaries of the lower Maumee River: Delaware Creek, Grassy Creek, Grassy Creek Diversion (RM 17.07), Otter Creek, and Heilman Ditch. A total of 31 sampling stations will be completed in the Swan Creek basin and a total of 9 sampling stations will be completed in the lower Maumee tributaries. Table 1 contains a list of all the NPDES facilities within the study area. These facilities will be targeted for evaluation of their potential aquatic influences. Ambient biology, macrohabitat quality, water column chemistry, and bacteriological data will be collected from every site.

A geometric site selection methodology was employed to derive the initial station list. This method has proved efficient in generating an objective and comprehensive collection of potential sampling sites where an assessment of an entire catchment is desired. However, a negative and unavoidable consequence of the geometric selection method includes substantial data gaps in lower or larger stream segments. It was therefore necessary to directly target these higher order segments (or tributaries) to ensure an even distribution of sampling effort. Lastly, areas that have been previously sampled and evaluated by the Ohio EPA will be revisited for the purposes of trends assessment. A list of field sampling stations can be found in Table 2.

## **Sampling Objectives**

- 1 Systematically sample and assess the principal drainage networks of Swan Creek and the lower Maumee River tributaries in support of the TMDL process,
- 2 Gather ambient environmental information (biological, chemical, and physical) from undesignated water bodies, to recommend an appropriate suite of Beneficial Uses (e.g., aquatic life, recreational, water supply),
- 3 Collect fish tissue samples at selected stations as listed in Table 3,
- 4 Verify the appropriateness of existing, unverified, Beneficial Use Designations,
- 5 Establish baseline ambient biological conditions at selected reference stations to evaluate the effectiveness of future pollution abatement efforts, and
- 6 Document any changes in the biological, chemical, and physical conditions of the study areas where historical information exists, thus expanding the Ohio EPA data base for statewide trends analysis (e.g., 305[b]).

## **Total Maximum Daily Load (TMDL)**

Information collected as part of this survey will support TMDL development for the study areas. The objectives of the TMDL process are to estimate pollutant loads from the various sources within the basin, define or characterize allowable loads to support the various beneficial uses, and to allocate pollutant loads among different pollutant sources through appropriate controls (e.g., NPDES permitting, storm water management, 319 proposals, NPS controls or other abatement strategies).

The components of the TMDL process supported by this survey are primarily the identification of impaired waters, verification (and redesignating if necessary) of beneficial use designations, and sources of use impairment. These data are necessary precursors to the development of effective control or abatement strategies.

### **Aquatic Life Use Designations**

Many of the streams contained within the study area are unassessed. Many of the Aquatic Life Use Designations for these waters were made prior to standardized approaches to the collection of instream biological data or numerical biological criteria. As a result, many of the existing Aquatic Life Use Designations for streams within the study area are classified as unverified. Further more, many water bodies within the study area are unclassified with no existing Beneficial Use Designations assigned. The Ohio EPA is obligated to review, evaluate, or recommend (where appropriate) Beneficial Uses prior to basing any permitting actions on existing, unverified designations, or entirely unclassified water bodies. Much of the sampling effort for this survey is allocated to fulfill this obligation.

### **Study Planning Team: Assigned DSW Staff**

Cherie Blair: (419) 373-3010.....Team Leader/RAP/TMDL Editor

Joseph Bishop: (614) 644-2874..... Modeling

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Lynette Hablitzel: (419) 373-3009.....District, Storm Water

Darla Peelle: (614) 728-0035.....Public Involvement Coordinator

\*Please contact Ben Rich for any updates to this study plan\*

Swan Creek and Lower Maumee River Tributary Study Plan 2006

**Table 1.** Facilities regulated by the National Pollutant Discharge elimination system in the Northwest District portion of the Swan Creek watershed and the lower Maumee River tributaries.

<b>Facility Name</b>	<b>Ohio EPA Permit No.</b>	<b>Receiving Stream</b>	<b>River Mile</b>	<b>Type of Treatment</b>
Country Court MHP	2PY00060	Swan Creek	37.6	extended aeration/sand filtered/Cl
Forest MPH	2PY00019	Trib. to Fewless Ck. Trib	0.03	extended aeration/sand filtered /Cl/deCl
Peaceful Acres MPH	2PY00064	Blue Creek	7.9	Topco sys/settling /skimmer
Swanton Meadows MHP	2PY00022	Ai Creek	10.75	package plant w/Cl/ settling pond
Village of Swanton	2PB00025	Ai Creek	3.5	digester/trickling filters/clarifier/sand filters
Buckeye Pipe Line Company	2II00019	Otter Creek	2.38	hydrostatic pressure test water

Swan Creek and Lower Maumee River Tributary Study Plan 2006

**Table 2.** Geometric and Historic sample sites for the Swan Creek basin and lower Maumee River tributaries, 2006.

<u>RIVER CODE</u>	<u>RIVER</u>	<u>RM</u>	<u>LOCATION</u>	<u>DRAINAGE Area</u>	<u>LATITUDE D</u>	<u>LONGITUDE</u>	<u>USGS QUAD</u>	<u>SAMPLING</u>
04-003-000	Swan Creek	40.68	Fulton Co. Rd. 6-1	7.5	41.6061	-83.9828	Swanton	F, Mq, C, P
04-003-000	Swan Creek	34.41	Fulton Co. Rd. 3	14.6	41.5615	-83.9213	Swanton	F, Mq, C, P
04-003-000	Swan Creek	32.82	TWP Rd 2.	25.7	41.5546	-83.9019	Swanton	F, M, C, OC, S, P
04-003-000	Swan Creek	30.90	Upst. St. Rt. 64 (drive into facility)	28.2	41.5679	-83.8748	Swanton	F, M, C, P
04-003-000	Swan Creek	25.99	@ ST. RT. 295	88.0	41.5381	-83.825	Whitehouse	C, P
04-003-000	Swan Creek	24.70	@ Spencer Rd	89.0	41.5336	-83.8069	Whitehouse	F, M, C, P
04-003-000	Swan Creek	21.60	NE of Whitehouse @ Stitt R	140.0	41.5372	-83.7678	Whitehouse	F, M, C, P, FT
04-003-000	Swan Creek	18.50	Monclova @ albon	146.0	41.5581	-83.7367	Maumee	F, M, C, P
04-003-000	Swan Creek	15.30	Upst. Salsbury Rd.	160.0	41.5833	-83.7028	Maumee	F, M, C, P, FT
04-003-000	Swan Creek	10.84	St Rt 20/ Reynolds Rd	192.0	41.6114	-83.6647	Maumee	F, M, C, P
04-003-000	Swan Creek	6.00	adj. Arlington Ave	199.0	41.6228	-83.5365	Rossford	C, OC, S, P
04-003-000	Swan Creek	4.40	Upst. South Ave	200.0	41.6297	-83.5883	Toledo	F, M
04-003-000	Swan Creek	4.20	Dst. South Avenue	200.0	41.6306	-83.5875	Toledo	F, M, C, OC, S, P
04-003-000	Swan Creek	1.58	@ City Park Avenue	203.0	41.6414	-83.5575	Toledo	F, M, C, OC, S, P
04-003-000	Swan Creek	0.19	OC Bridge	204.0	41.6464	-83.5365	Toledo	OC, S, P
04-003-002	Blystone Ditch	0.54	Monclova Rd.	6.5	41.5590	-83.7248	Maumee	F, Mq, C, P
04-003-003	Fewless Creek	1.80	Fulton County Rd. 4 (Utah)	5.9	41.5500	-83.9407	Swanton	F, Mq, C, P
04-004-000	Wolf Creek	4.06	Albon Rd.	7.9	41.6064	-83.7375	Maumee	F, Mq, C, P
04-004-000	Wolf Creek	1.96	Perrysburg-Holland Rd.	12.9	41.6106	-83.7034	Maumee	F, Mq, C, P
04-004-000	Wolf Creek	0.48	Holland-Sylvania Rd.	26.1	41.6094	-83.6842	Maumee	F, M, C, OC, S, P
04-005-000	Cairl Creek	1.32	Pilliad Rd.	10.6	41.6072	-83.6995	Maumee	F, Mq, C, P
04-006-000	Blue Creek	9.97	Fulton Co. Rd. 3	7.4	41.4928	-83.9026	Colton	F, Mq, C, P
04-006-000	Blue Creek	7.80	Manore Rd.	12.9	41.4953	-83.8557	Grand Rapids	F, Mq, C, P
04-006-000	Blue Creek	5.57	St. Rt. 295	27.0	41.4947	-83.8266	Grand Rapids	F, M, C, P
04-006-000	Blue Creek	0.73	Finzel Rd.	44.5	41.5269	-83.7810	Whitehouse	F, M, C, OC, S, P
04-008-000	Harris Ditch	1.55	St. Rt. 295	7.7	41.4786	-83.8263	Grand Rapids	F, Mq, C, P
04-010-000	Ai Creek	10.44	Co. Rd. L (in town of Ai)	6.8	41.6284	-83.9365	Assumption	F, Mq, C, P
04-010-000	Ai Creek	8.29	Co. Rd. L (east of town of Ai)	12.5	41.6284	-83.9253	Assumption	F, Mq, C, P
04-010-000	Ai Creek	3.50	Swanton WWTP effluent	17.5	41.5910	-83.9022	Swanton	C, OC, P, E
04-010-000	Ai Creek	2.10	Scott Rd.	19.5	41.5877	-83.8633	Whitehouse	F, Mq, C, P
04-010-000	Ai Creek	1.66	St. Rt. 2	49.3	41.5826	-83.8611	Whitehouse	F, M, C, OC, S, P

Swan Creek and Lower Maumee River Tributary Study Plan 2006

<u>RIVER CODE</u>	<u>RIVER</u>	<u>RM</u>	<u>LOCATION</u>	<u>DRAINAGE Area</u>	<u>LATITUDE D</u>	<u>LONGITUDE</u>	<u>USGS QUAD</u>	<u>SAMPLING</u>
04-011-000	Delaware Creek	0.38	Rohr Drive	2.5	41.6083	-83.5964	Rossford	F, Mq, C, OC, S, P
04-012-000	Grassy Creek	4.85	Ford Rd.	7.9	41.5775	-83.5775	Rossford	F, Mq, C, P
04-012-000	Grassy Creek	1.48	Glenwood Rd.	11.7	41.6076	-83.5580	Rossford	C, OC, S, P
04-012-001	Grassy Cr diversion (RM 17.07)	0.28	Grand Rapids Rd.	approx. 14.0	41.5406	-83.682	Maumee	F, Mq, C, P
16-200-000	Otter Creek	6.00	Oakdale Ave.	3.6	41.3719	-83.3000	Oregon	F, Mq, C, OC, S, P
16-200-000	Otter Creek	2.13	Millard Rd.	6.5	41.67	-83.4694	Oregon	F, Mq, C, OC, S, P
16-200-000	Otter Creek	3.10	Consaul Rd	5.4	41.3925	-83.2840	Elmore	F, Mq, C, OC, S, P
16-200-000	Otter Creek	0.50	CSX bridge	7.4	41.4126	-83.2720	Elmore	FT
04-003-001	Heilman Ditch	1.76	St Rt 20/ Conant Rd	10.8	41.5782	-83.6624	Maumee	C, Mq, P

<u>Sites</u>	<u>Sampling Methods</u>
Grey=Historical Site	F Fish
White=Geometric Site	M Macroinvertebrate quantitative
	Mq Macroinvertebrate qualitative
	C Water Chemistry
	CO Water Chemistry Organics
	E WWTP effluent chemistry
	S Sediment chemistry
	P Pathogen
	FT Fish Tissue

**Table 3.** Sampling locations selected for Fish Tissue on Swan, Delaware, Grassy, and Otter Creeks, 2006.

**2006 Swan Creek & Lower Maumee River Tributary**  
**Fish Tissue Sampling Locations**

<b><u>Sampling Location</u></b>	<b><u>River Mile</u></b>
<b><u>Swan Creek</u></b>	
Stitt Rd.	21.6
Strayer Rd. (Fish Kill Site)	15.3
Swan Creek Park (Close to the Airport)	9.0
Dst. Hawley Rd.	2.6
Dst. St. Clair Rd.	0.5
<b><u>Delaware Creek</u></b>	
US 24	0.4
<b><u>Grassy Creek</u></b>	
Lime City Rd.	0.4
<b><u>Otter Creek</u></b>	
Otter Creek Rd.	0.5

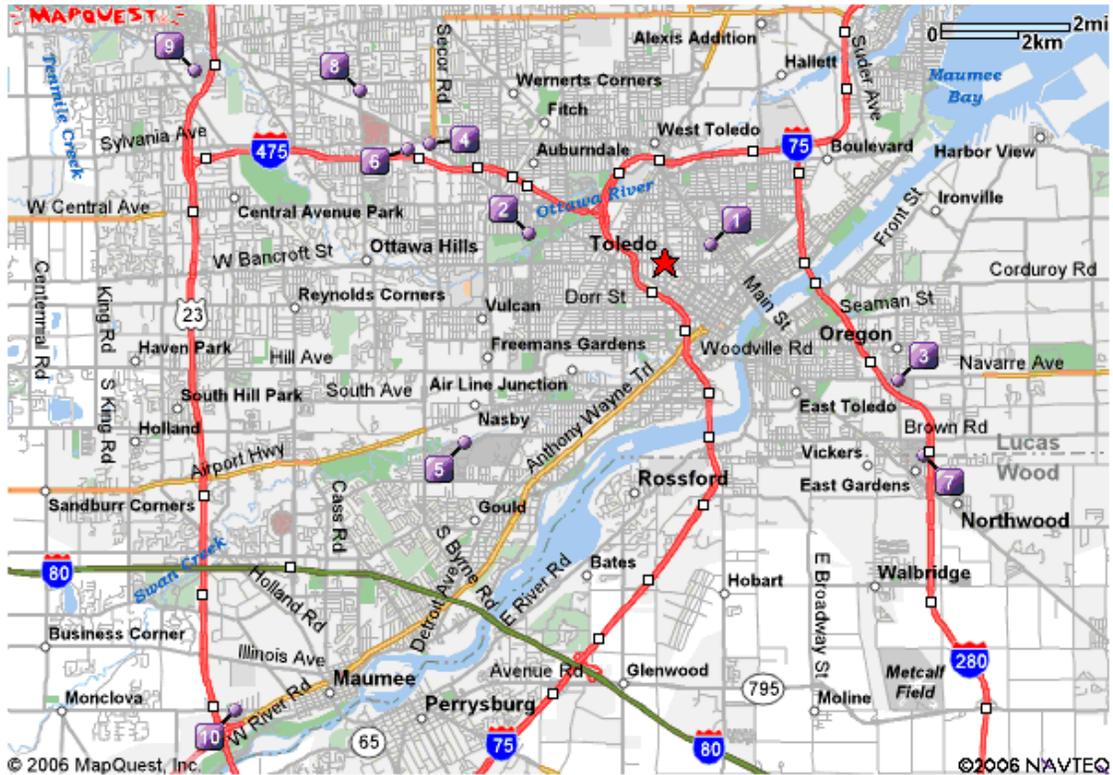
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**BELOW IS A LIST OF IMPORTANT AND FREQUENTLY CALLED PHONE NUMBERS FOR THE TOLEDO POLICE DEPARTMENT.**

**\*NOTE\* ALL NUMBERS ARE 419 AREA CODE.**

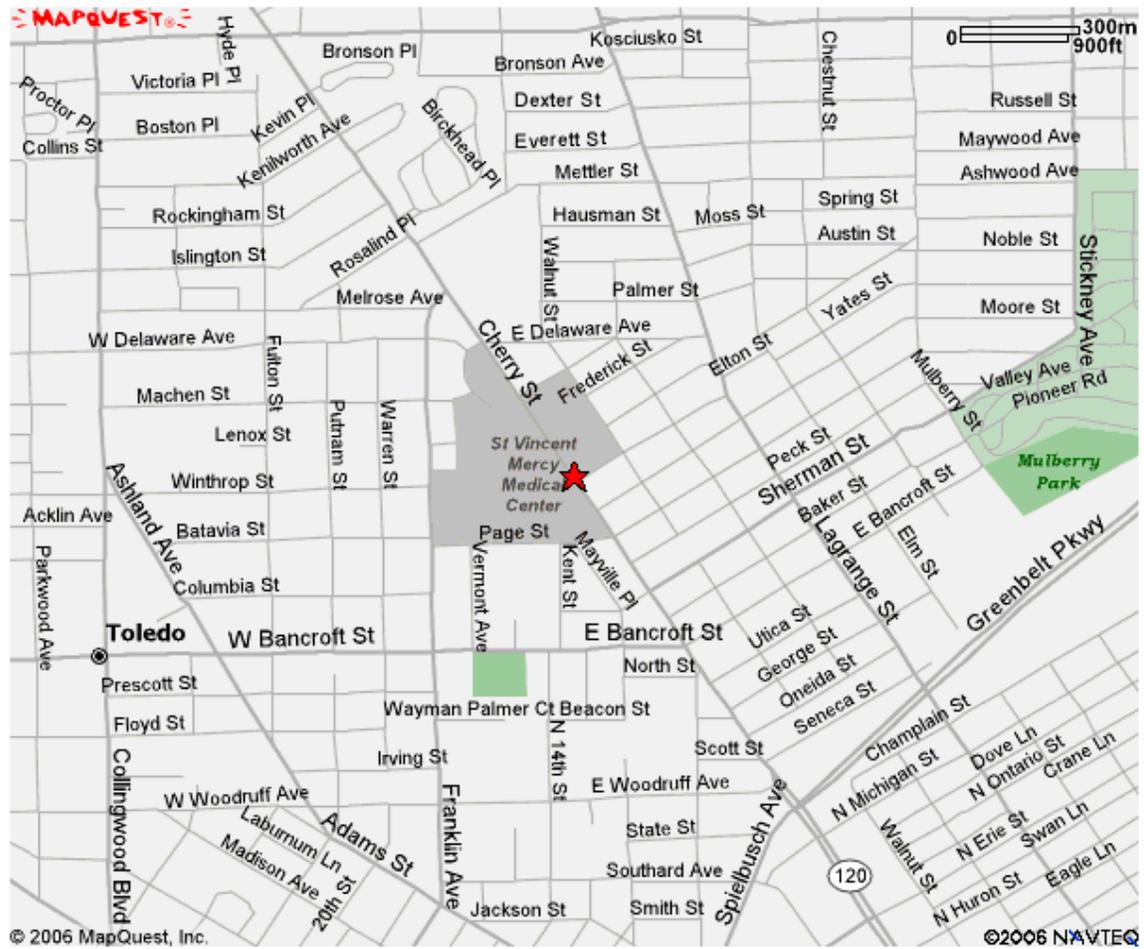
<b><u>Non-Emergency</u></b> .....	<b>245-3340</b>
<b><u>*Emergency Number for callers outside Toledo...</u></b>	<b>1-419-936-8990</b>
<b><u>Police Headquarters:</u></b>	
<b>Administration</b> .....	<b>245-3200</b>
<b>Public Affairs/Personnel</b> .....	<b>245-3205</b>
<b>Records Section/Traffic Accidents</b> .....	<b>245-3100</b>
<b>Telecommunication Device for the Deaf (T.D.D.)</b> ....	<b>936-2529</b>
<b>Towed/Stolen Vehicle Information</b> .....	<b>245-3105</b>
<b>Parking Tickets</b> .....	<b>245-3241</b>
<b><u>Central District Station:</u></b>	
<b>Information Desk</b> .....	<b>245-3246</b>
<b>Investigations Section</b> .....	<b>245-3142</b>
<b>Missing Persons</b> .....	<b>245-3313</b>
<b>Check Unit</b> .....	<b>245-3153</b>
<b>Watch Commander</b> .....	<b>245-3242</b>
<b>Neighborhood Crime Prevention</b> .....	<b>245-1160</b>
<b>School Resource Officers (Schools)</b> .....	<b>245-3186</b>
<b>Traffic Section</b> .....	<b>245-3254</b>
<b><u>Scott Park District Station:</u></b>	
<b>Information Desk</b> .....	<b>936-2000</b>
<b>Community Services</b> .....	<b>936-2933</b>
<b>Watch Commander</b> .....	<b>936-3449</b>
<b>School Resource Officers (Schools)</b> .....	<b>936-2992</b>
<b><u>Northwest District Station</u></b>	
<b>Information Desk</b> .....	<b>936-3800</b>
<b>Watch Commander</b> .....	<b>936-3813</b>
<b>Ottawa Park Substation</b> .....	<b>936-3850</b>
<b>Traffic-Ottawa Park</b> .....	<b>936-3854</b>
<b><u>Miscellaneous Number:</u></b>	
<b>CrimeStopper</b> .....	<b>255-1111</b>

## HOSPITALS NEAR TOLEDO



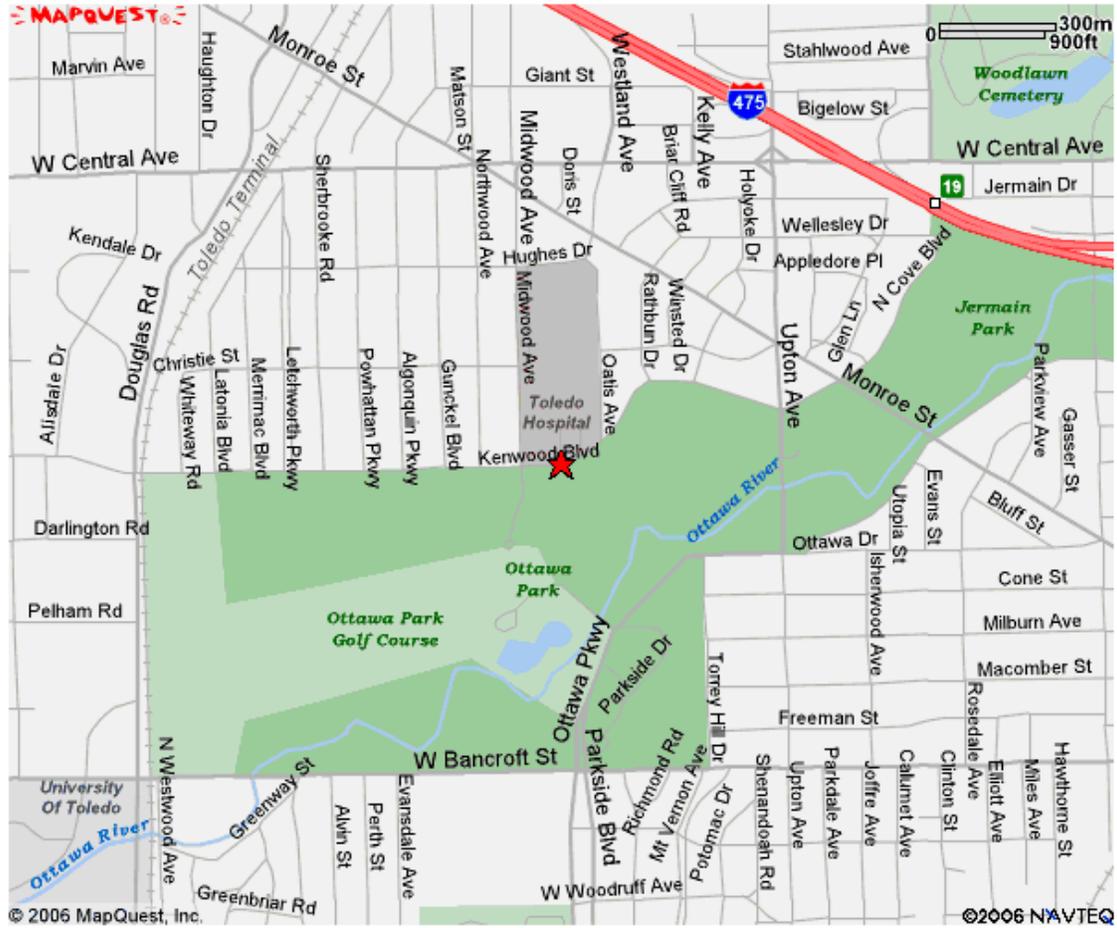
1. **St Vincent Mercy Medical Ctr**  
2213 Cherry St, Toledo, OH (0.78 miles away)  
419-251-3232
2. **Toledo Hospital**  
2142 N Cove Blvd, Toledo, OH (2.14 miles away)  
419-291-4000
3. **St Charles Mercy Hospital**  
2600 Navarre Ave, Oregon, OH (4.03 miles away)  
419-696-7200
4. **St Anne Mercy Hospital**  
3404 W Sylvania Ave, Toledo, OH (4.12 miles away)  
419-407-2663
5. **Medical College of Ohio**  
3000 Arlington Ave # 12, Toledo, OH (4.28 miles away)  
419-383-4000
6. **St Vincent Medical Ctr**  
3930 Sunforest Ct, Toledo, OH (4.38 miles away)  
419-475-2430
7. **Bay Park Community Hospital**  
2801 Bay Park Dr, Oregon, OH (5.08 miles away)  
419-690-7900
8. **Surgery Center At Regency Park**  
Rosa Perez  
2000 Regency Ct # 101, Toledo, OH (5.47 miles away)  
419-882-0003
9. **Flower Hospital**  
5200 Harroun Rd, Sylvania, OH (7.88 miles away)  
419-824-1444
10. **St Luke's Hospital**  
5901 Mondclova Rd, Maumee, OH (9.84 miles away)  
419-893-5911

**St Vincent Mercy Medical Ctr:** 419-251-3232  
2213 Cherry St  
Toledo OH  
43608 US

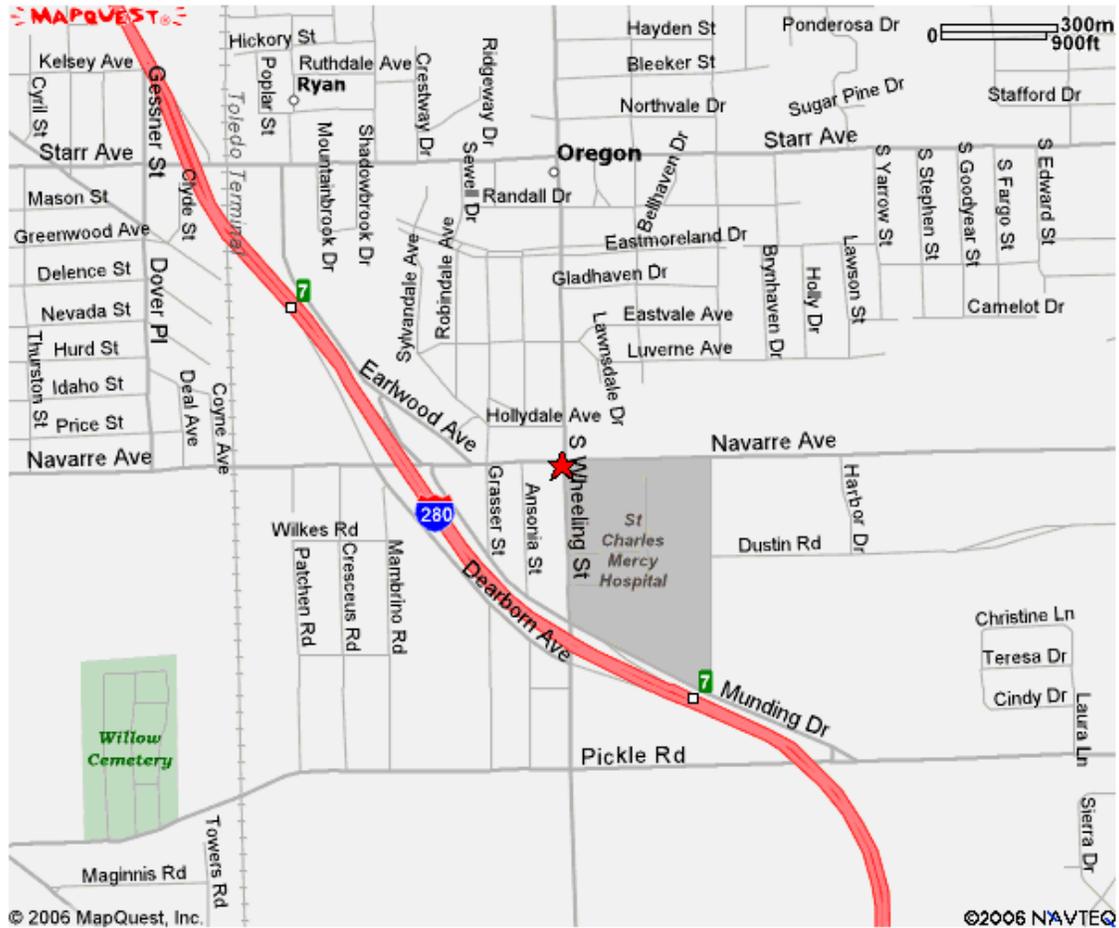


Swan Creek and Lower Maumee River Tributary Study Plan 2006

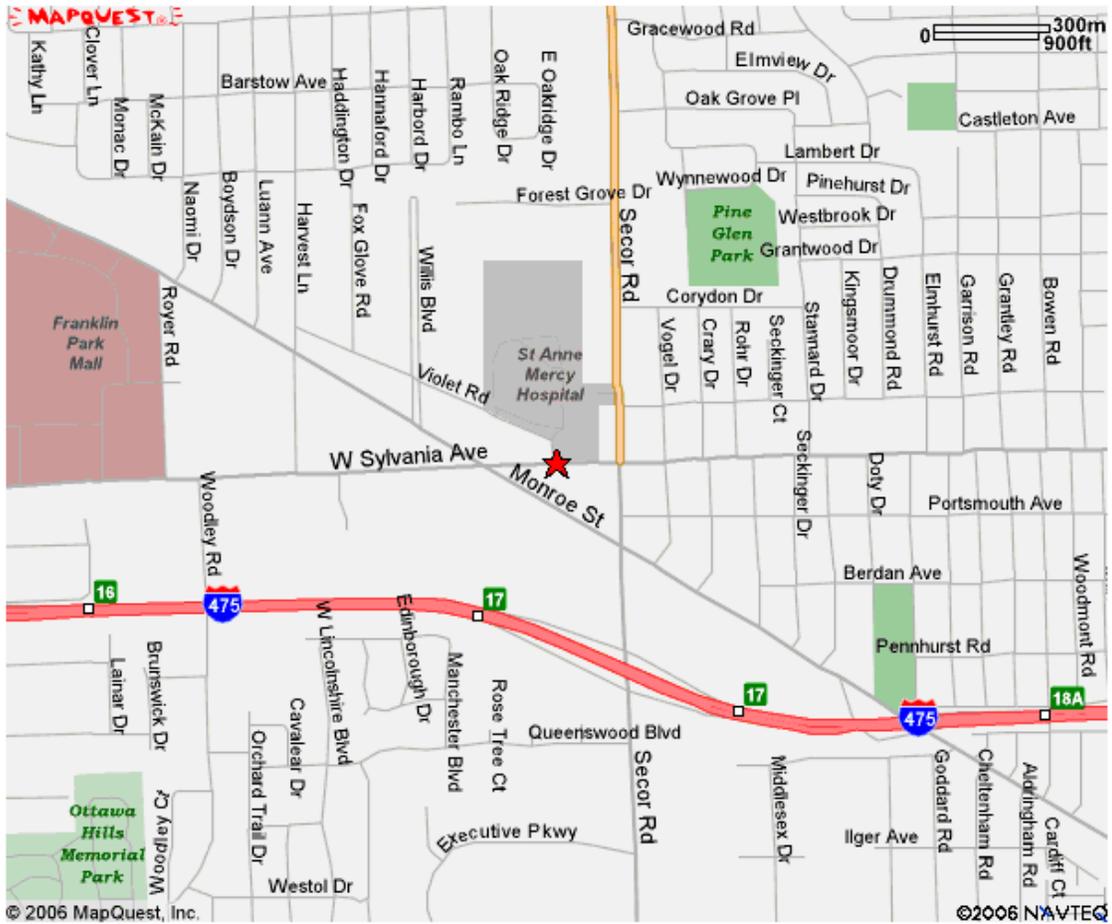
**Toledo Hospital:** 419-291-4000  
2142 N Cove Blvd  
Toledo OH  
43606 US



**St Charles Mercy Hospital:** 419-696-7200  
2600 Navarre Ave  
Oregon OH  
43616 US



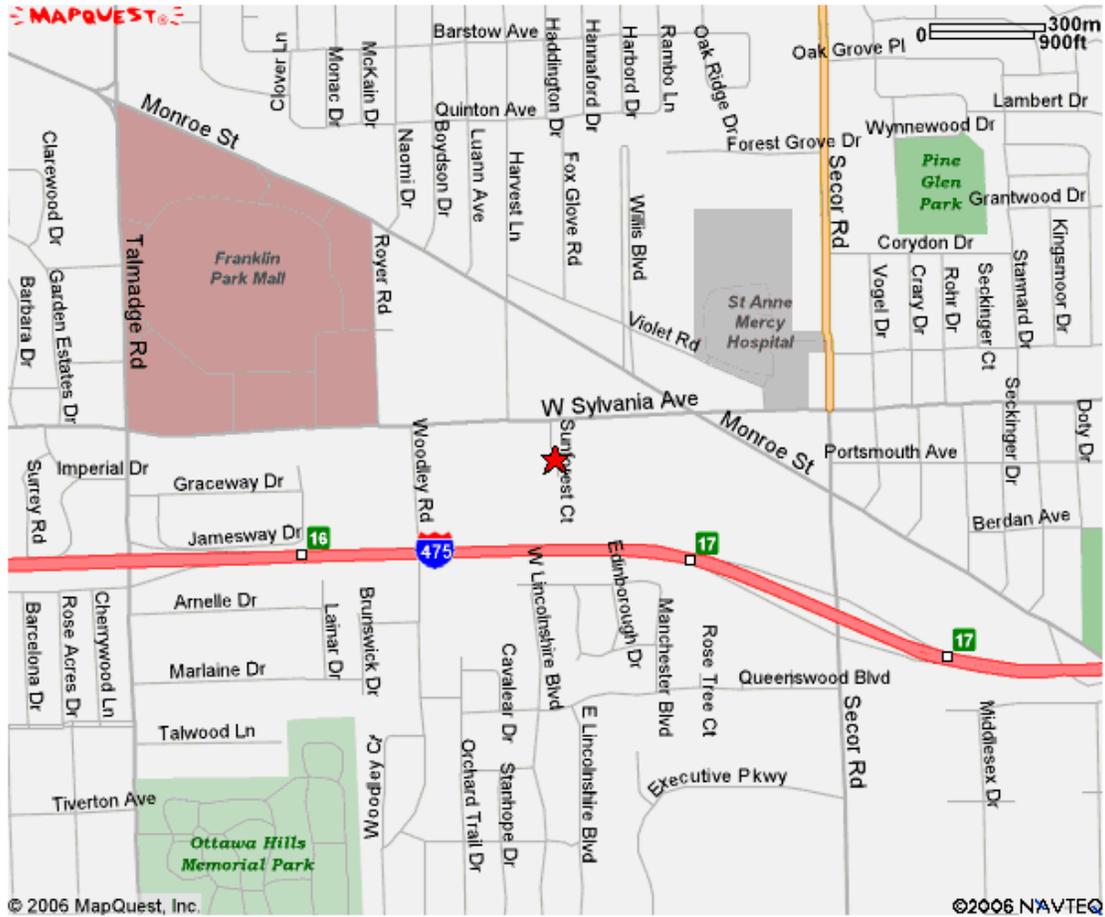
**St Anne Mercy Hospital:** 419-407-2663  
3404 W Sylvania Ave  
Toledo OH  
43623 US



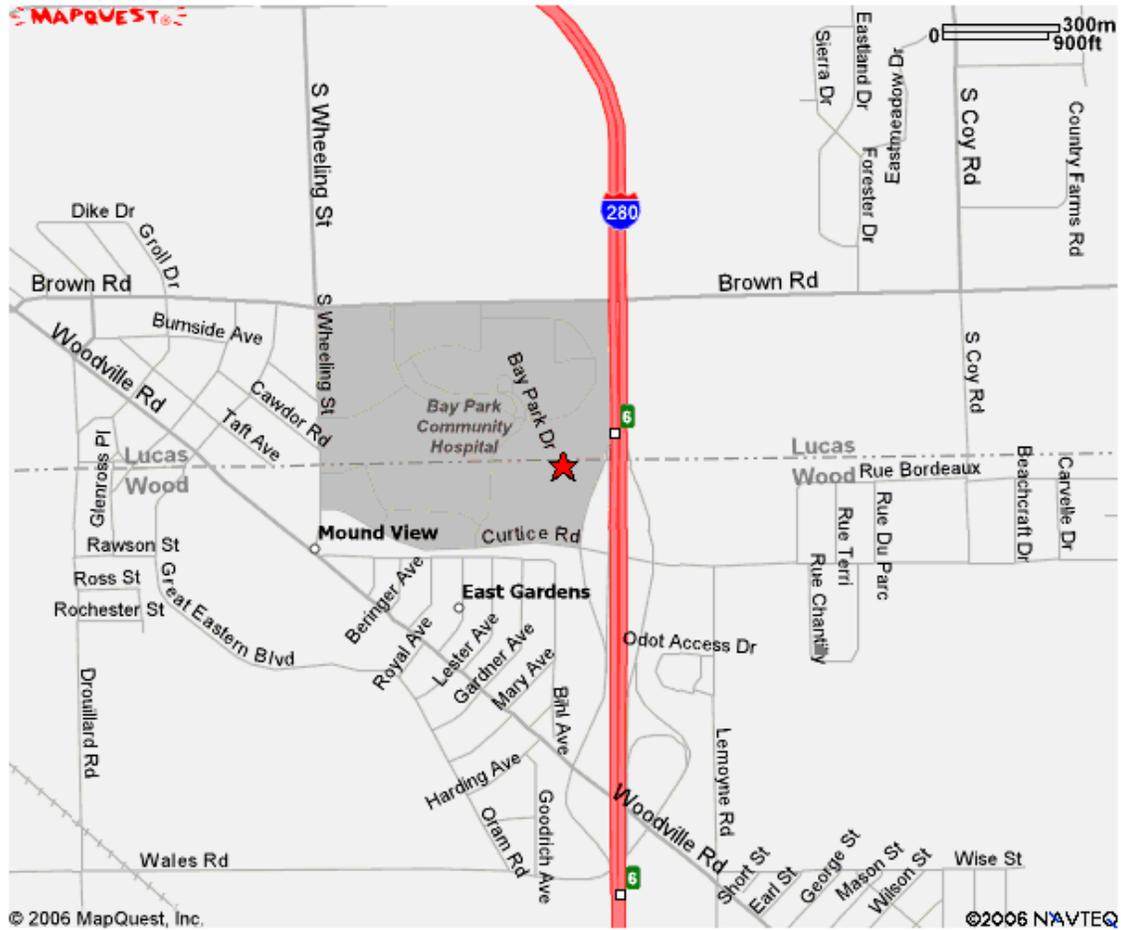


Swan Creek and Lower Maumee River Tributary Study Plan 2006

**St Vincent Medical Ctr:** 419-475-2430  
3930 Sunforest Ct  
Toledo OH  
43623 US

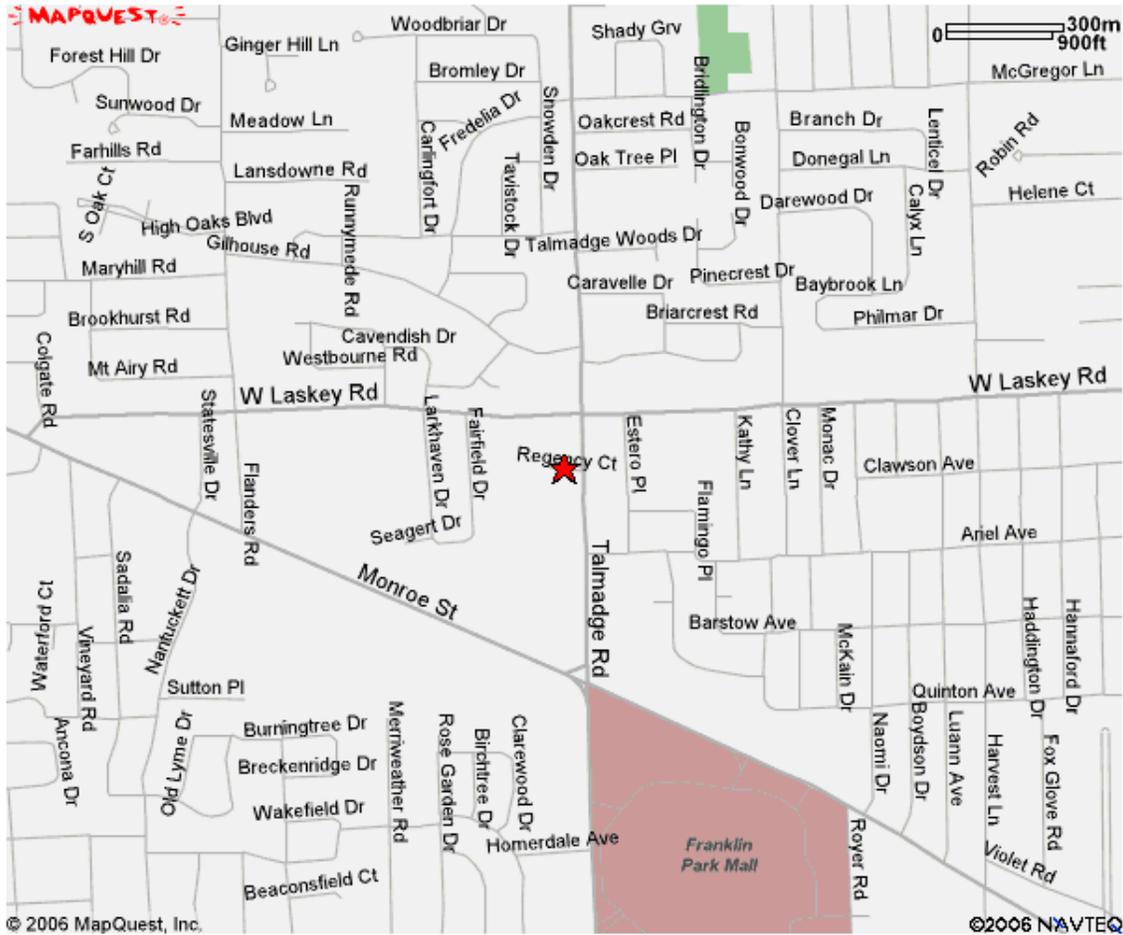


**Bay Park Community Hospital:** 419-690-7900  
2801 Bay Park Dr  
Oregon OH  
43616 US

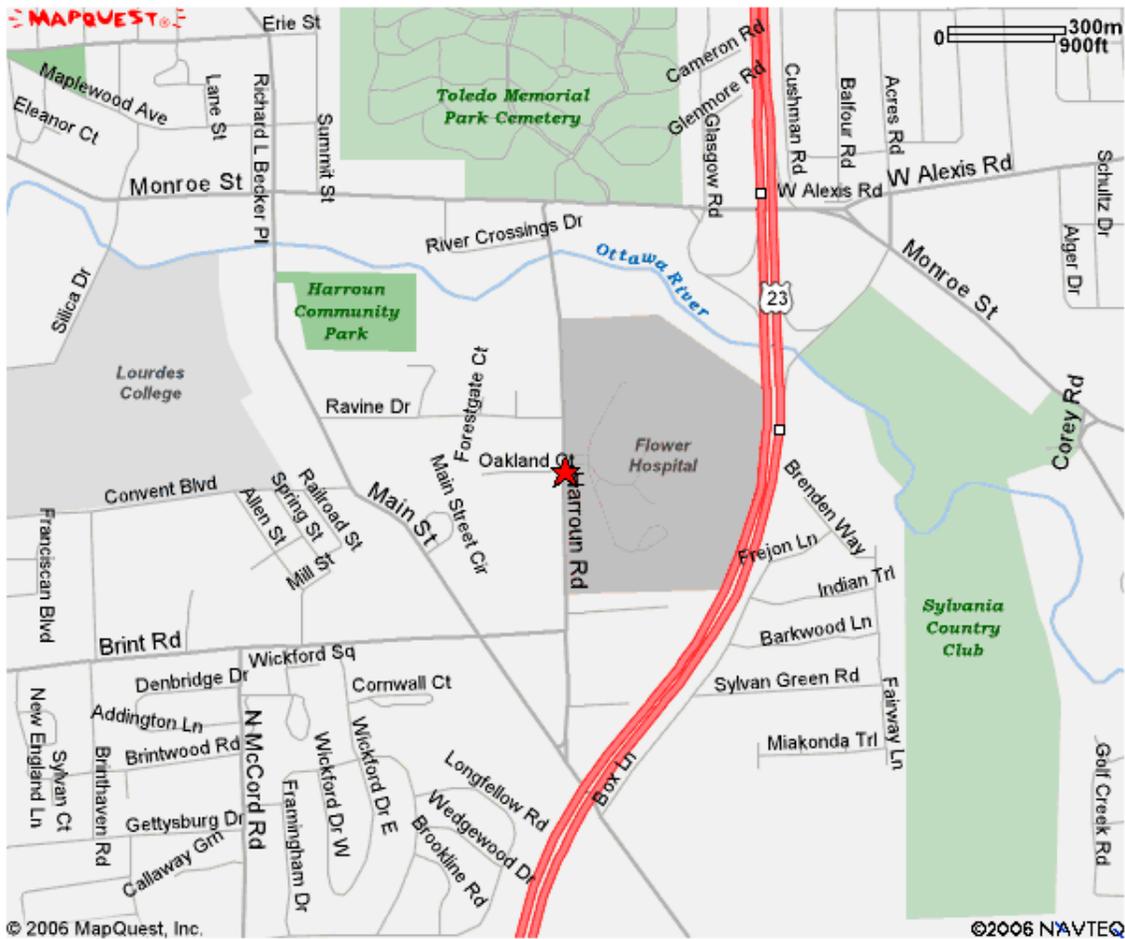


Swan Creek and Lower Maumee River Tributary Study Plan 2006

**Surgery Center At Regency Park:** 419-882-0003  
2000 Regency Ct # 101  
Toledo OH  
43623 US



**Flower Hospital:** 419-824-1444  
5200 Harroun Rd  
Sylvania OH  
43560 US



Swan Creek and Lower Maumee River Tributary Study Plan 2006

**St Luke's Hospital:** 419-893-5911  
5901 Monclova Rd  
Maumee OH  
43537 US

