

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: LPL-1111-07

Name: CITY OF PLYMOUTH: Wilm & Flux Modeling Phase II

Type: Lakes Grant

Subtype: Large Scale Lake Planning

Status: COMPLETE

Start Date: 10/1/2006

End Date: 12/31/2008

Purpose: A consultant for the City of Plymouth will provide watershed modeling, conduct an alternatives evaluation, and provide public information and involvement in the planning process for the Plymouth Millpond. Two paper copies and one electronic copy of the report will be provided to the Department. All details for deliverables are described in the project description. The report will contain the results of the following project deliverables:

- " WILMS modeling of the millpond to determine anticipated water quality conditions given existing watershed conditions.
- " Discussion of the methods, inputs and assumptions used in the WILMS model.
- " Calculation of the longevity of a dredging project.
- " Estimate of annual sediment loading
- " Specific lake water quality management objectives based on results of the WILMS modeling.
- " Identification and prioritization of the needs of the millpond and watershed relative to management activities
- " Alternatives analysis for both short and long term management of the millpond.
- " News releases and meeting minutes from public information meetings held to keep the public informed and involved in the planning process.

Objective:**Comments:** Grantee is CITY OF PLYMOUTH**Outcome:****Study Design:****QA Measures:**

People

Name	Role	Status	Start Date	End Date	Organization	Comments
City of Plymouth,	GRANT_RECIPIENT	ACTIVE	10/1/2006	12/31/2008	City of Plymouth	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Wisconsin Department of Natural Resources SWIMS Project Summary

Action	Detailed Description	Start Date	End Date	Status
Water Quality Modeling	A consultant for the City of Plymouth will provide watershed modeling, conduct an alternatives evaluation, and provide public information and involvement in the planning process for the Plymouth Millpond. WILMS modeling of the millpond to determine anticipated water quality conditions given existing watershed conditions. " Discussion of the methods, inputs and assumptions used in the WILMS model. " Calculation of the longevity of a dredging project. " Estimate of annual sediment loading " Specific lake water quality management objectives based on results of the WILMS modeling. " Identification and prioritization of the needs of the millpond and watershed relative to management activities	10/1/2006	12/31/2008	COMPLETE

Details: Parameter	Value/Amount	Units	Comments
BMP Implementation			
I & E Activities	Y		
PCBs			
Permit Modification			
Report Writeup	Y		
Total Nitrogen	Y		
Total Phosphorus	Y		
Total Suspended Solids	Y		
Watershed Outreach, Planning	Y		

Watershed Mapping or Assessment		10/1/2006	12/31/2008	COMPLETE
Informational Meetings	Specific lake water quality management objectives based on results of the WILMS modeling. Identification and prioritization of the needs of the millpond and watershed relative to management activities Alternatives analysis for both short and long term management of the millpond. News releases and meeting minutes from public information meetings held to keep the public informed and involved in the planning process.	10/1/2006	12/31/2008	COMPLETE
Grant Awarded	WILMS modeling of the millpond to determine anticipated water quality conditions given existing watershed conditions.Discussion of the methods, inputs and assumptions used in the WILMS model. " Calculation of the longevity of a dredging project. " Estimate of annual sediment loading " Specific lake water quality management objectives based on results of the WILMS modeling. " Identification and prioritization of the needs of the millpond and watershed relative to management activities	10/1/2006	12/31/2008	COMPLETE

Monitoring Stations

Station ID	Name	Comments
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Assessment Units			
WBIC	Segment	Local Name	Official Name
20	12	Lake Michigan	Lake Michigan
20	19	Deland Park Beach, Lake Michigan	Lake Michigan
20	21	General King Beach, Lake Michigan	Lake Michigan
20	24	Kohler Andrae Beach, Lake Michigan	Lake Michigan
20	33	Amsterdam Beach, Lake Michigan	Lake Michigan
20	34	KK Road Beach, Lake Michigan	Lake Michigan
20	37	Van Ess Road Beach, Lake Michigan	Lake Michigan
20	90	Blue Harbor Beach, Lake Michigan	Lake Michigan
36	1	Sheboygan Harbor	Sheboygan Harbor
8000	1	Beechwood Lake	Beechwood Lake
8400	1	Cedar Lake	Cedar Lake
9825	1	Kellings Lakes #1	Kellings Lakes
9825	2	Kellings Lakes #1	Kellings Lakes
9825	3	Kellings Lakes #1	Kellings Lakes
9850	1	Kellings Lakes #2	Kellings Lakes
9850	2	Kellings Lakes #2	Kellings Lakes
9900	1	Kelling Lakes	Kellings Lakes
11800	1	Sixteen Lake	Lake Sixteen
13500	1	Un Lake	Unnamed
13600	1	Un Lake	Unnamed
13700	1	Un Lake	Unnamed
13800	1	Un Lake	Unnamed
13900	1	Un Lake	Unnamed
14000	1	Un Lake	Unnamed
14200	1	Un Lake	Unnamed
27100	1	Milwaukee River North Branch	North Branch Milwaukee River
27100	2	Nichols Creek (N. B. Milw R)	North Branch Milwaukee River
28700	2	Stony Creek	Stony Creek
28800	1	Un. Creek (T12n R20e Sw Sw 3)	Unnamed
29300	1	Haack Lake	Haack Lake
29400	1	Un Lake	Unnamed
29900	1	Silver Creek	Silver Creek
30000	1	Un. Creek	Unnamed

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30200	1	Unnamed Creek	Unnamed
30200	2	Unnamed Creek	Unnamed
30300	1	Random Lake	Random Lake
30500	1	Spring Lake	Spring Lake
30600	1	Mink Creek	Mink Creek
30800	1	Un Spring	Un Spring
30900	1	Un. Creek	Unnamed
31100	1	Un Lake	Unnamed
31300	1	Un Lake	Unnamed
31400	1	Batavia Creek	Batavia Creek
31600	1	Batavia Pond	Batavis Pond
31900	1	Gooseville Millpond	Goosevelle Millpond
32000	1	Gooseville Creek	Gooseville Creek
32000	2	Gooseville Creek (South Branch)	Gooseville Creek
32100	1	Melius Creek	Melius Creek
32200	1	Chambers Creek	Chambers Creek
32400	1	Un Creek (T14n R21e Sw Ne 31)	Unnamed
32400	2	Un Creek (T14n R21e Sw Ne 31)	Unnamed
32500	1	Ellen Lake	Lake Ellen
32700	1	Un Lake	Unnamed
32800	1	Un Spring	Un Spring
33000	1	Adell Tributary	Unnamed
37300	1	Un. Creek (T13n R19e Sw Ne 14)	Unnamed
37700	1	Un. Creek (Lake Seven Outlet)	Unnamed
37800	1	Lake Seven	Lake Seven
37900	1	Crooked Lake	Crooked Lake
38000	1	Un Lake	Unnamed
38300	1	Un. Creek (T14n R19e Se Nw 36)	Unnamed
38400	1	Un. Creek (T14n R20e Ne Sw 20)	Unnamed
38500	1	Butler Lake	Butler Lake
38700	1	Long Lake	Long Lake
39000	1	Watercress Creek	Watercress Creek
44900	1	Bear Lake	Bear lake
45000	1	Bullet Lake	Bullet Lake
45200	1	Crystal Lake	Crystal Lake

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45300	1	Dollar Lake	Dollar Lake
45600	1	Grasser Lake	Grasser Lake
46000	1	Little Elkhart Lake	Little Elkhart Lake
46100	1	Little Round Lake	Little Round Lake
46500	1	Sheboygan Falls Quarry	Sheboygan Falls Quarry
46600	1	Sheboygan Quarry	Sheboygan Quarry
46900	1	Un Lake	Unnamed
47100	1	Un Lake	Unnamed
47200	1	Un Lake	Unnamed
47400	1	Un Lake	Unnamed
47500	1	Un Lake	Unnamed
47600	1	Un Lake	Unnamed
47700	1	Un Lake	Unnamed
47800	1	Un Lake	Unnamed
47900	1	Un Lake	Unnamed
47950	1	Un Lake	Unnamed
48000	1	Un Lake	Unnamed
48100	1	Un Lake	Unnamed
48200	1	Un Lake	Unnamed
49200	1	Un Spring	Un Spring
50100	1	Sucker Creek	Sucker Creek
50200	1	Barr Creek	Barr Creek
50300	1	Black River	Black River
50300	2	Black River	Black River
50400	1	FishermanS Creek Tributary To Black River At Rm 0.3	Unnamed
50430	1	Unnamed Trib To Black River	Unnamed
50450	1	Unnamed Trib To Black River	Unnamed
50500	1	Unnamed Stream	Unnamed
50600	1	Unnamed Stream	Unnamed
50700	1	Sheboygan River	Sheboygan River
50700	2	Sheboygan River	Sheboygan River
50700	3	Sheboygan River	Sheboygan River
50700	6	Sheboygan River	Sheboygan River
50740	1	Willow Creek (Greendale)	Unnamed
50740	2	Willow Creek	Unnamed

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50800	1	Weeden'S Creek	Weedens Creek
50950	1	Unnamed Trib To Sheboygan River	Unnamed
51200	2	Ben Nutt Creek	Onion River
51200	3	Onion River	Onion River
51300	1	Local Water	Unnamed
51400	1	Belgium Creek	Unnamed
51400	2	Belgium Creek	Unnamed
51500	1	East Branch Belgium Creek	Unnamed
51800	1	Local Water	Unnamed
51900	1	Unnamed Tributary To Onion River (Hand Creek) At Rm 19.2	Unnamed
52200	1	Hingham Millpond	Hingham Mill Pond
52300	1	Local Water	Unnamed
52500	1	Waldo Mill Pond	Waldo Mill Pond
52600	1	Unnamed Tributary To Onion River Through Waldo Impoundment	Unnamed
52600	2	Un. Trib. To Onion River via Waldo Impoundment	Unnamed
52700	1	Mill Creek	Mill Creek
52800	1	Unnamed Trib	Unnamed
52900	1	Un Lake	Unnamed
53000	1	Un Lake	Unnamed
53300	1	Sheboygan Falls Pond	Sheboygan Falls Millpond 312
53400	2	Mullet River	Mullet River
53400	6	Mullet River	Mullet River
53400	7	Mullet River	Mullet River
53500	1	Local Water	Unnamed
53550	1	Unnamed Trib To Mullet	Unnamed
53600	1	Unnamed Creek	Unnamed
53700	1	Local Water	Unnamed
53800	1	Local Water	Unnamed
53900	1	Local Water	Unnamed
54000	1	Unnamed	Unnamed
54100	1	Unnamed Tributary (Sumac Creek) To Mullet River, Rm 13.3	Unnamed
54200	1	Un Lake	Unnamed
54400	1	Meyer Pond	Meyer Pd No 3 T15n R21e S28-13b
54400	2	New Paris Impoundment	Meyer Pd No 3 T15n R21e S28-13b

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54600	1	Plymouth Millpond	Mill Pond
54700	1	Jackson Creek	Jackson Creek
54800	1	Labudde Creek	La Budde Creek
54800	2	Labudde Creek	La Budde Creek
55000	1	Camp Evelyn Impoundment	Unnamed
55300	1	Otter Pond	Otter Pond
55400	1	Glenbeulah Springs	Un Spring
55600	1	Glenbeulah Mill Pond	Mill Pond
55700	1	Unnamed	Unnamed
56300	1	Unnamed	Unnamed
56400	1	Otter Creek	Otter Creek
56410	1	Unnamed Trib To Otter Creek	Unnamed
56410	2	Local Water	Unnamed
56500	1	Local Water	Unnamed
56600	1	Big Gerber	Gerber Lake
56700	1	Little Gerber Lake	Gerber Lake
57150	1	Schuett Creek	Schuett Creek
57200	1	Millhome Creek	Millhome Creek
57200	2	Millhome Creek	Millhome Creek
58700	1	Mehles Springs, Sheboygan County	Muehl Springs
58900	1	Sheboygan Lake	Sheboygan Lake
59100	1	Unnamed Tributary To Sheboygan Marsh (Elkhart Lake Creek), Sheboygan County	Unnamed
59300	1	Elkhart Lake	Elkhart Lake
59600	1	Unnamed Trib to Sheboygan R	Unnamed
62300	1	Pigeon River	Pigeon River
62300	2	Pigeon River	Pigeon River
62400	1	Grandma Creek	Unnamed
62500	1	Fisher Creek	Fisher Creek
62600	1	Jetzers Creek Tributary	Unnamed
62700	1	Jetzers Lake	Jetzers Lake
64700	1	Fourmile Creek	Fourmile Creek
64800	1	Unnamed Trib to Fourmile Creek	Unnamed
65000	1	Local Water	Unnamed
65100	1	Sevenmile Creek	Sevenmile Creek
65200	1	Unnamed Trib (T16n, R23e, S15)	Unnamed

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65300	1	Meeme Creek	Meeme Creek
3000002	1	Unnamed Stream	Unnamed
3000100	1	Unnamed Tributary To Barr Creek At Rm 2.1	Unnamed
3000117	1	North Branch Gooseville Creek	Unnamed
3000451	1	Local Water	Unnamed
3000452	1	Local Water	Unnamed
3000453	1	Local Water	Unnamed
3000461	1	Unnamed Tributary To Fisherman S Creek At Rm 0.3	Unnamed
3000464	1	Unnamed Tributary To Onion River (Pinehurst Creek) At Rm 2.8	Unnamed
3000467	1	Local Water	Unnamed
3000467	2	Local Water	Unnamed
3000468	1	Unnamed Stream	Unnamed
3000469	1	Unnamed Stream	Unnamed
3000470	1	Unnamed Stream	Unnamed
3000478	1	Local Water	Unnamed
3000480	1	Unnamed Stream	Unnamed
3000481	1	Local Water	Unnamed
3000484	1	Local Water	Unnamed
3000485	1	Unnamed Stream	Unnamed
3000486	1	Unnamed Stream	Unnamed
3000487	1	Unnamed Stream	Unnamed
3000489	1	Unnamed Stream	Unnamed
3000492	1	Unnamed Stream	Unnamed Tributary
5026443	1	Local Water	Unnamed
5026466	1	Local Water	Unnamed
5026467	1	Schuett Creek	Unnamed
5026523	1	Local Water	Unnamed
5026607	1	Local Water	Unnamed
5026682	1	Local Water	Unnamed
5026723	1	Local Water	Unnamed
5026810	1	Local Water	Unnamed
5027059	1	Local Water	Unnamed
5027070	1	Otter Creek Tributary	Unnamed
5027129	1	Unnamed Creek	Unnamed

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5027180	1	Local Water	Unnamed
5027290	1	Local Water	Unnamed
5027488	1	Local Water	Unnamed
5027531	1	Local Water	Unnamed
5027585	1	Local Water	Unnamed
5027654	1	Local Water	Unnamed
5027810	1	Unnamed River	Unnamed
5027829	1	Local Water	Unnamed
5027838	1	Local Water	Unnamed
5027916	1	Local Water	Unnamed
5027920	1	Local Water	Unnamed
5027948	1	Unnamed Stream	Unnamed
5027958	1	Local Water	Unnamed
5027965	1	Local Water	Unnamed
5027988	1	Unnamed Stream	Unnamed
5028068	1	Local Water	Unnamed
5028089	1	Unnamed Stream	Unnamed
5028146	1	Unnamed Stream	Unnamed
5028160	1	Unnamed Stream	Unnamed
5028225	1	Unnamed Stream	Unnamed
5028257	1	Unnamed Stream	Unnamed
5028297	1	Unnamed Stream	Unnamed
5028321	1	Unnamed Stream	Unnamed
5028352	1	Unnamed Stream	Unnamed
5028373	1	Unnamed Stream	Unnamed
5028393	1	Unnamed Stream	Unnamed
5028400	1	Unnamed Stream	Unnamed
5028471	1	Unnamed Stream	Unnamed
5028503	1	Unnamed Stream	Unnamed
5028522	1	Unnamed Stream	Unnamed
5028540	1	Unnamed Stream	Unnamed
5028541	1	Unnamed Stream	Unnamed
5028604	1	Unnamed Stream	Unnamed
5028631	1	Unnamed Stream	Unnamed
5028633	1	Unnamed Stream	Unnamed

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5028676	1	Unnamed Stream	Unnamed
5028700	1	Unnamed Stream	Unnamed
5028710	1	Unnamed Stream	Unnamed
5028780	1	Trib to Barr Creek	Unnamed
5028959	1	Unnamed Stream	Unnamed
5029023	1	Unnamed Stream	Unnamed
5029055	1	Unnamed Stream	Unnamed
5029056	1	Unnamed Stream	Unnamed
5029070	1	Unnamed Stream	Unnamed
5029082	1	Unnamed Stream	Unnamed
5029085	1	Unnamed Stream	Unnamed
5029106	1	Unnamed Stream	Unnamed
5029118	1	Unnamed Stream	Unnamed
5029161	1	Unnamed Stream	Unnamed
5029263	1	Unnamed Stream	Unnamed
5029271	1	Unnamed Stream	Unnamed
5029322	1	Unnamed Stream	Unnamed
5029342	1	Unnamed Stream	Unnamed
5029416	1	Unnamed Stream	Unnamed
5029425	1	Unnamed Stream	Unnamed
5029493	1	Unnamed Stream	Unnamed
5029508	1	Unnamed Stream	Unnamed
5029569	1	Local Water	Unnamed
5029643	1	Unnamed Stream	Unnamed
5029884	1	Local Water	Unnamed
5029967	1	Unnamed Stream	Unnamed
5560830	1	Local Water	Unnamed
5561437	1	Local Water	Unnamed
5561521	1	Local Water	Unnamed
5561525	1	Local Water	Unnamed
5561532	1	Local Water	Unnamed
5561539	1	Local Water	Unnamed
5561541	1	Local Water	Unnamed
5561543	1	Local Water	Unnamed
5561818	1	Local Water	Unnamed

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5561853	1	Local Water	Unnamed
5561879	1	Local Water	Unnamed
5561908	1	Local Water	Unnamed
5561988	1	Local Water	Unnamed
5562102	1	Local Water	Unnamed
5562127	1	Local Water	Unnamed
5562135	1	Local Water	Unnamed
5562266	1	Local Water	Unnamed
5562270	1	Local Water	Unnamed
5562272	1	Local Water	Unnamed
5562293	1	Local Water	Unnamed
5562498	1	Local Water	Unnamed
5562509	1	Local Water	Unnamed
5562975	1	Local Water	Unnamed
5562976	1	Local Water	Unnamed
5562977	1	Local Water	Unnamed
5562990	1	Local Water	Unnamed
5563017	1	Local Water	Unnamed
5563048	1	Local Water	Unnamed
5563049	1	Local Water	Unnamed
5563056	1	Local Water	Unnamed
5563129	1	Local Water	Unnamed
5563147	1	Local Water	Unnamed
5563172	1	Local Water	Unnamed
5563181	1	Local Water	Unnamed
5563211	1	Local Water	Unnamed
5563212	1	Local Water	Unnamed
5563215	1	Local Water	Unnamed
5563228	1	Local Water	Unnamed
5563231	1	Local Water	Unnamed
5563285	1	Local Water	Unnamed
5563287	1	Local Water	Unnamed
5563336	1	Local Water	Unnamed
5563355	1	Local Water	Unnamed
5563356	1	Local Water	Unnamed

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5563366	1	Local Water	Unnamed
5563368	1	Local Water	Unnamed
5563404	1	Local Water	Unnamed
5563468	1	Local Water	Unnamed
5563477	1	Local Water	Unnamed
5563479	1	Local Water	Unnamed
5563485	1	Local Water	Unnamed
5563491	1	Local Water	Unnamed
5563492	1	Local Water	Unnamed
5563527	1	Local Water	Unnamed
5563538	1	Local Water	Unnamed
5563539	1	Local Water	Unnamed
5563542	1	Local Water	Unnamed
5563546	1	Local Water	Unnamed
5563553	1	Local Water	Unnamed
5563554	1	Local Water	Unnamed
5563565	1	Local Water	Unnamed
5563578	1	Local Water	Unnamed
5563583	1	Local Water	Unnamed
5563586	1	Local Water	Unnamed
5563598	2	Local Water	Unnamed
5563599	1	Local Water	Unnamed
5563604	1	Bear Lake	Bear Lake
5563617	1	Local Water	Unnamed
5563620	1	Bear Lake	Bear Lake
5563634	1	Bear Lake	Bear Lake
5563646	1	Local Water	Unnamed
5563654	1	Local Water	Unnamed
5563666	1	Local Water	Unnamed
5563672	1	Local Water	Unnamed
5563676	1	Local Water	Unnamed
5563681	1	Local Water	Unnamed
5563690	1	Local Water	Unnamed
5563788	1	Local Water	Unnamed
5563801	1	Local Water	Unnamed

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5563824	1	Local Water	Unnamed
5563836	1	Local Water	Unnamed
5563915	1	Local Water	Unnamed
5563921	1	Local Water	Unnamed
5563968	1	Local Water	Unnamed
5564018	1	Local Water	Unnamed
5564064	1	Local Water	Unnamed
5564097	1	Local Water	Unnamed
5564339	1	Local Water	Unnamed
5564604	1	Local Water	Unnamed
5564616	1	Local Water	Unnamed
5565119	1	Local Water	Unnamed
5565244	1	Local Water	Unnamed
5565307	1	Local Water	Unnamed
5565344	1	Local Water	Unnamed
5565575	1	Local Water	Unnamed
5565692	1	Local Water	Unnamed
5565887	1	Local Water	Unnamed
5565888	1	Local Water	Unnamed
5566326	1	Local Water	Unnamed
5566333	1	Local Water	Unnamed
5566589	1	Local Water	Unnamed
5566621	1	Local Water	Unnamed
5566689	1	Local Water	Unnamed
5566743	1	Local Water	Unnamed
5566774	1	Local Water	Unnamed
5566890	1	Local Water	Unnamed
5566924	1	Local Water	Unnamed
5567051	1	Local Water	Unnamed
5590563	1	Local Water	Unnamed
5591452	1	Trib of Milwaukee River	Unnamed

Lab Account Codes

Account Code	Description	Start Date	End Date
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Forms

Form Code	Form Name
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Methods

Method Code	Method Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

Title	Description	Author	Published	Comments
Alternative Analysis, Mill Pond, Plymouth, Wisconsin		Earth Tech, Inc.	10/31/2007	
Mill Pond Baseline Water Quality Assessment Technical Memorandum	Lake Plan	Steve Grumann, Earth Tech	5/8/2007	
Mill Pond Macrophyte and Sediment Thickness Survey	Lake Plan	Steve Grumann, Earth Tech	5/8/2007	
Plymouth Mill Pond - Sheboygan County, Wisconsin - Comprehensive Management Plan	Lake Plan	Earth Tech	1/31/2008	
Plymouth Mill Pond Background Watershed Assessment	Lake Plan	Steve Grumann, Earth Tech	5/8/2007	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date
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