

ANNUAL REPORT

FOR

CALENDAR YEAR 2010

UPPER FOX RIVER WATERSHED COMMUNITIES GROUP MUNICIPAL STORMWATER DISCHARGE PERMIT WPDES PERMIT NO. WI-S050105-2

Introduction

This report has been prepared to meet the annual reporting requirement for the Town of Delafield undertaken pursuant to the Wisconsin Pollutant Discharge Elimination System Permit No. WI-S050105-2 for the Upper Fox River Watershed Group. Section notations refer to the permit document, effective date October 30, 2009.

Part I.G. Impaired Water Bodies

The WPDES permit identifies Zion Creek in the Town of Delafield as an impaired water body with sediment and phosphorus as listed pollutants of concern. As part of the permit requirements, the Town was required to "...develop a strategy to reduce the pollutants of concern entering impaired water bodies from the municipal storm sewer system" by March 31, 2011.

The revised Municipal Separate Storm Sewer System (MS4) Map described in Part II.H. shows that the only parts of the Town's MS4 that discharge to Zion Creek are the ditches on the south side of Oakton Road. The ditch on the north side of Oakton Road east of Zion Creek flows in a swale along Louis Avenue directly to Pewaukee Lake. The ditch on the north side of Oakton Road west of Zion Creek flows north in a swale along Angela Avenue and then east though undeveloped roadside to Pewaukee Lake.

The availability of monitoring data for Zion Creek was discussed with DNR at the Upper Fox River Group MS4 Permit Meeting on February 9, 2011. The DNR stated that data was available on their website. The information on the DNR Surface Water Data Viewer shows the monitoring "station with recent data" is at the mouth of Zion Creek. The map shows a symbol for a "new pending" station at Oakton Road. Details for Zion Creek on the DNR impaired waters section states only that it is impaired due to Total Phosphorus and Sediment/Total Suspended Solids.

The Upper Fox River Group stated that more information on the pollutant levels in impaired streams was required to properly develop plans to reduce the pollutants. The DNR was going to internally request additional details on the available monitoring information. After the monitoring data for Zion Creek is received by the Town of Delafield and reviewed, the Town will determine if more monitoring locations are required to better evaluate the source of the pollution.

The University of Wisconsin Extension service has been monitoring Zion Creek though the Water Action Volunteers program since 2000. The data includes dissolved oxygen and transparency and is available at http://www.uwex.edu/erc/wavdb/. The monitoring did not include sediment or phosphorus. If additional monitoring is required, the Town will contact the UW-Extension to see if their existing volunteers can obtain extra samples for the Town to have tested for phosphorus and suspended solids.

Review of the existing and/or proposed monitoring results will help determine the level of pollutant reduction required to remove Zion Creek from the impaired list. After that determination is made, the Town will determine a strategy to reduce pollutants from the Town's MS4 drainage to Zion Creek, if required.

Part II.A. Public Education and Outreach

The Upper Fox River Watershed Group have all contributed funds to support a staff position at Waukesha County to be the designated I&E person to implement an I&E program that meets the requirements of NR216 and the WPDES permit. The tasks and activities that were implemented by the Group's I&E Program in 2010 have been summarized by Waukesha County, but a copy has not been included as requested by the DNR reviewer.

Part II.B. Public Involvement and Participation

In addition to using the Waukesha County staff to educate contractors, builders, developers, the general public, teachers and students, the Town used its engineering consultant to provide the following activities:

- The Town Chairman was presented with the CY 2009 WPDES Permit Annual Report on March 26, 2010. No negative feedback was received by the Chairman during his review of the document.
- The Town Engineer has informally discussed storm water issues with the Town's Highway Superintendent and staff throughout 2010, specifically about the benefits of street sweeping, catch basin cleaning and erosion control. They have also been made aware of the procedures related to calls or concerns expressed by citizens concerning illicit discharges.
- The Town's website has been updated to include links to the storm water related articles distributed to the group by Jayne Jenks at Waukesha County, the Waukesha County storm water webpage, the WDNR BMP Tech standards, the Town's WPDES permit document, recycling and household hazardous waste disposal tips, the Town's annual reporting documents, and a document explaining some of the various storm water BMPs available and related benefits. See the Town's webpage for more details http://www.townofdelafield.org/towninfo stormwater.htm
- The Town is continuing to hand out an informational brochure explaining how pet waste negatively impacts storm water quality to residents applying for dog licensure.
- The Waukesha County Storm Drain Stenciling Program brochures are available to residents at the Town Hall.
- The Town Engineer met with the Planning Commission to review and discuss storm water and erosion control requirements related to the WPDES Permit on April 5, 2010.

It should also be noted that no Town of Delafield residents visited the Town Hall to review the WPDES annual report document in 2010, and therefore had no feedback regarding the annual report. No other inquiries were made by residents regarding the Town's storm water management practices.

Part II.C. Illicit Discharge Detection and Elimination

The annual dry weather field screening of the 26 outfalls designated as major outfalls as part of the Illicit Discharge, Detection and Elimination Program was completed in August of 2010. Locations of these 26 major outfalls have been submitted in previous annual reports. The dry weather field screening process included the following tasks:

- Visual inspection during dry weather periods.
- An inspection report was completed and a photograph was taken for each major outfall. A completed inspection report and photograph taken during these dry weather field screenings is provided in Exhibit A.
- Following completion of the field inspections, the results of the inspections were compiled and reviewed by the Highway Superintendant and any follow-up work was scheduled for completion. The Summary of Inspections is provided as Table 1 in Exhibit A.

As shown in Table 1, there were no illicit discharges/connections detected during the field screenings, but there were a number of maintenance items noted during the inspections. These maintenance issues were reviewed by the Highway Superintendant and are being scheduled for completion. The Town requested a modification in their permit requirements for the inspection frequency for this program from twice per year to once per year. This request was approved by Maureen McBroom on December 23, 2009.

Part II.D. Construction Site Pollutant Control

Waukesha County conducts the erosion control inspections for developments within the Town of Delafield. In 2010, Waukesha County reported that a total of 9 construction sites were inspected as seen below. On these 9 sites, a total of 28 erosion control inspections were conducted. No enforcement actions were taken

Sites Inspected in 2010

- 1. Beach Park Circle Repaying
- 2. Lakeview Lanes Demolition
- 3. Lapham Peak Snowmaking System
- 4. Oberhaus Basin and Waterway
- 5. Paradise Valley Fill
- 6. Ridge Pointe Center
- 7. Scuppernong Springs Condominiums
- 8. Shepards Pass South
- 9. Western Lakes Golf Club Basin Dredging

Permits in 2010

- 1. 2 Permits Issued
- 2. 2 Permit Extensions Issued
- 3. 4 Sites Passed Final Inspections
- 4. 6 Sites Failed Final Inspections
- 5. 3 Sites Received Permit Termination Letters

Enforcement Actions - None

Throughout the year the Town also completed a few small roadway type projects on their own that included erosion control measures. One example includes the emergency repair of a retaining wall abutting Zion Creek along Oakton Road. The highway department installed a turbidity barrier in the channel during the time of repair. The Town also did some minor ditching on Glacier Pass in 2010 after which they immediately installed erosion mat. The highway department has become more conscious that proper planning and erosion control is necessary for this type of work.

Part II.E. Post – Construction Storm Water Management

The Town continues to enforce the Post-Construction Storm Water Management program to control the quantity and quality of discharges from areas of new development and redevelopment for sites disturbing more than one acre. This program also establishes procedures to ensure long-term maintenance of all storm water management facilities.

Part II.F. Pollution Prevention

1. <u>Inspection, Maintenance and Inventory of Post-Construction Storm Water Management</u> Facilities

The WPDES permit requires that the Town prepare an inventory of all post-construction storm water management facilities. The inventory will be used to track maintenance of these facilities as well as inspection frequency. The existing Waukesha County BMP database includes much of the required information and links the data to the County GIS mapping. The County has stated that they will allow municipalities to enter data into the system.

The Town presented a proposal to DNR that the Town will work with the County to add categories into the County database to fulfill the DNR requirements. The existing database includes some of the required data including BMP type, location (provided in town/range/section format and GIS coordinates), age of facility (as-built verification date), owners ("maintained by"), and whether a Long-Term Maintenance Agreement exists (documents starting with a "3" have LTMA). The County database also includes other useful information like BMP description, project under which the BMP was built, contributing watershed area, and the names of the watershed and subwatershed where the BMP is located. The existing data for the Town of Delafield storm water facilities in the Waukesha County database are provided in Exhibit B.

Data proposed to be added to the database would include general condition, inspection results, required maintenance, date maintenance completed, and other comments. The Town anticipates inspecting a minimum of a third of the existing 36 facilities in 2011 and the remaining facilities in 2012. The inspection data will be summarized in future annual reports.

2. Catch Basin Cleaning Program

The majority of the Town is rural with roadside ditches. In some areas, the Town has allowed curb and gutter with storm sewer that, for the most part, drain into a storm water quality pond. The Town has 19 catch basins. In 2010, the Town's catch basin cleaning program included the following:

- Inspect all catch basins in spring and fall of each year.
- Clean by physical means (shovels) at least once per year.

The total amount of solids that were collected from the catch basin cleaning program in 2010 totaled less that 1 cubic yard of material. This was substantially less than the amount collected in 2009. This could be explained by the fact that the Town's Highway crew primarily used salt during this season. The solids collected were taken directly to the Veolia Environmental Services transfer station in Hartland, Wisconsin for proper disposal.

3. Street Sweeping Program

The Town of Delafield Highway Department has a skid loader with a mechanical sweeper attachment. All curbed streets were swept once during the year. Approximately 40 man hours were recorded in 2010 and less than 1 cubic yard of solids were collected by the highway crews. Town crews also performed some hand labor to pick up exposed stone and other debris left by the winter snows. A minimal amount of debris was collected from this process.

All solids collected were taken directly to the Veolia Environmental Services transfer station in Hartland, Wisconsin for proper disposal.

4. <u>Disposal of Street Sweeping and Catch Basin Waste</u>

All solids collected were taken directly to the Veolia Environmental Services transfer station in Hartland, Wisconsin for proper disposal.

5. Winter Road Management

The Town used only salt and did not use sand on the roads in 2010. The salt is loaded onto trucks and distributed using augers in the back of the trucks and spinners operated via levers in the trucks. The Town plows and de-ices all roads under Town jurisdiction. In 2010 the estimated amount of salt used was 858 tons. The salt usage in 2010 was a decrease compared to the approximate 2009 total salt usage of 1,062 tons.

The Town has updated their winter roadway management plan which will be submitted to DNR by March 31, 2011 to comply with the requirements set forth in the latest WPDES permit. The Town also submitted the seasonal winter roadway management data to DNR by April 30, 2010 as required in the latest WPDES permit.

6. Leaves and Grass Clipping Management

The Town has recently begun offering a Yard Waste Pick-Up program to residents through their waste hauler Veolia Environmental Services at a cost of \$1.90 per pick-up. There are 8 pick-ups offered throughout the year beginning in April through November. Resident participation is completely optional. Information on this program is available to residents on the Town's webpage under yard waste removal information.

7. Storm Water Pollution Prevention Planning for Municipal Garages

The Town has updated their Storm Water Pollution Prevention Plan for the Municipal Facilities which will be submitted to DNR by March 31, 2011 to comply with the requirements set forth in the latest WPDES permit.

8. <u>Lawn and Garden Fertilizer Application</u>

The Town uses very little fertilizer, and therefore they do not apply fertilizer to areas greater than 5 acres of continuous area. The Town does apply a herbicide product to 13.5 acres of the Sports Commons Park Complex near the intersection of Silvernail Road and Maple Avenue. This herbicide application is applied by a contracted agency (Frontier FS Cooperative) and is strictly a weed control product that does not contain fertilizer.

SUMMARY	
ITEM	AMOUNT
Number of Residents Providing Feedback	0
Number of Internal Staff Meetings with SW Education	1
Number of Meetings with SW Education	1
Waste Oil (from trucks)	200 gal
Illicit Connections Found / Eliminated	0 / 0
Storm Sewer Inlets Stenciled	0
Leaves Collected	16 CY
Solids from Catch Basin Cleaning	<1 CY
Solids from Street Sweeping	<1 CY
Street Sweeper Miles/Hours	40 Hours
Construction Erosion Control Inspections	9
Erosion Control Enforcement Actions	0
Erosion Control Plans Approved	0
BMP's Applied For	0
Salt Used	858 Tons

Part II.G. Storm Water Quality Management

The WinSLAMM pollutant loading analysis for the Town of Delafield was prepared and submitted to WDNR in 2005. The model will be revised and submitted to WDNR by the June 30, 2011 assessment of compliance deadline set forth in the WPDES permit. The analysis results for the 2005 analysis are summarized as follows:

- There was a 51% reduction in annual TSS pollutant loading from the No Controls scenario to the Existing Controls scenario for the cumulative major outfalls total.
- There was a 40% annual TSS pollutant loading reduction for the cumulative minor outfalls total.
- There was a 43% annual TSS pollutant loading reduction for the total analysis of the Town of Delafield.

Due to significant upgrades to the WinSLAMM model since 2005, the WDNR is requiring that all municipalities re-run this analysis with WinSLAMM version 9.2 or a subsequent version (currently 9.4.0) for compliance with the 40% TSS reduction goal in March of 2013. The current WPDES permit effective on October 30, 2009 requires the Town to conduct an assessment of compliance with the 40% total suspended solids reduction requirement to be submitted to WDNR by June 30, 2011.

As part of the WinSLAMM upgrade, the grass swales are being evaluated with new guidance from WDNR to assess and model existing grass swales, dated November 24, 2010. The swales were evaluated in the field and with GIS in summer and fall of 2010.

Part II.H. Storm Sewer System Map

The Town reviewed the current storm sewer system map to verify that it meets all WDNR requirements. The map was evaluated and revised with the most current WDNR swale and developed urban area guidance dated November 24, 2010.

A CD containing the revised map and the supporting GIS layers is provided in Exhibit C.

Part II.I.7. Fiscal Analysis of Annual Expenditures

Expenditures in 2010 included:

- a. \$8,456 related to preparation of the various programs noted above, meetings with the WDNR and the Upper Fox River Watershed Communities Group related to the permit, dry weather investigations of outfalls, and keeping elected officials and Town staff apprised of the WPDES permit requirements and associated programs.
- b. \$5,000 for Street sweeping charges (includes staff time, equipment costs and disposal of debris).
- c. \$2,100 payment to Waukesha county for the I&E program
- d. \$2,000 annual permit fee
- e. The Town Highway Department performs several tasks related to stormwater, such as picking up excess sand in the spring and random catch basin cleaning as part of their normal day to day duties; therefore the cost is included in their salaries.

The budget for 2011 includes:

- \$30,000 for the completion of the annual report, dry weather screening for illicit connection/discharges, updating the Storm Water Pollution Prevention Plan, updating the Winter Road Management Plan, mapping revisions required in the revised permit, re-running the WinSLAMM Analysis to meet the revised permit requirements, meetings with the WDNR and Upper Fox River Watershed Communities Group, and follow-up on the local information and education program.
- \$5,000 for street sweeping costs (includes staff time, equipment costs and disposal of debris).
- \$2,100 for payment to the County for the Education and Information program.
- \$2,000 for the annual permit fee.
- Catch basin cleaning will be performed by the highway crews during their normal duties. Erosion control inspection expenditures will be billed back to developers and are not included in a specific budget.

Part II.I.8. Identification of Water Quality Improvements or Degradation

At this time, there has been no evidence of water quality degradation or improvement for waters in the Town of Delafield.

Part II.I.9. Report Certification

The appropriate Town of Delafield staff members and elected officials have been, or will be, appraised of the content of this annual report.

The information above was gathered and prepared under the direction of the Town Board and based on inquiry of the people directly under their control, to the best of their knowledge, the information herein is true, accurate and complete.

Paul L. Kanter, Town Chairman

Date.

Tim Barbeau, P.E. RLS, Town Engineer

Date

c:

Town Board

Don Roberts, Highway Superintendent

Mary Elsner, CMC, Town Clerk

Tony Fockler, Building Inspector

Tim Barbeau, PE, RLS, Town Engineer

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Visual Inspection Form For Illegal Connection/Illicit Discharge WPDES Permit No. WI-S050105-2

Outfall ID				SCP2-	33-3-1		
Date of Last Rainfall					124/10	=> 80	ıc
Date Inspection Performed				,	8/10	7.00	
Name of Inspector			•	ВСН	DSC		
Receiving Water					ong Cree	\overline{k}	
M.H. or Outfall (Circle One)	N	Л.Н.	11		utfall))
Pipe Size			DUA	- 36"			
Dina Matarial (Cirola Ona)	RCP	Cl	MР	I	PVC	Н	IDPE
Pipe Material (Circle One)		Steel		DI	V	CP	Other
Color (Circle One)	Clear	Y	ellow		Gray	Or	ange
Color (Circle One)		Brown		Green	R	ed	Other
Turbidity (Circle One)	Clear	Slig	htly C	Cloudy	Cl	oudy	Opaque
Surface Sheen (Circle One)	None		(Oil			Gasoline
Surface Sheeff (Chefe Offe)		Scum			Unkno		
Odor (Circle One)	None				ing Vege		_
`					Metha		Unknown
Pipe Active (Circle One)	(No)	Tric	kle	N	Ioderate		Substantial
IF FLOW IS OBSERVED							
DETERMINE I							
	Expected			Actua	l Param	eter R	<u>eading</u>
pH Level*	6.0 -						
Total Chlorine Level*	< 0.2 r						
Total Copper Level*	< 0.1 r						
Total Phenol Level*	< 0.5 r						
Detergents Level*	< 0.25	mg/L					
Water Temperature	-				°F	i	

^{*} Expected ranges represent maximum readings as used by the City of Milwaukee in their Illicit Discharge Monitoring Program

NOTES	
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PHOTO #13 EAST



SCP2-33-3-1 W



SCP2-33-3-1 E

Exhibit A (3 of 3)

TABLE 1 - ILLICIT DISCHARGE INSPECTION SUMMARY 7/28/10

Sub Basin	Subwatershed	Pipe Material	Pipe Size	Sampled	Illicit Discharge?	Follow-up Work Required
BRD1-34-3-1	Brandy Brook	CMP	Dual 48" x 30" Ellipse	Yes	ON	
NMB1-30-3-2	Nemahbin Lake	CMP	42" x 30" Ellipse	No	ON	Clear weeds and soil from both inverts
PWK1-12-1-1	Pewaukee Lake	MH	09	No	ON	
PWK1-12-3-8	Pewaukee Lake	RCP	84" x 52" Ellipse	No	ON	Clear debris and vegetation from west invert
PWK1-14-1-1	Pewaukee Lake	RCP	42" Circle	No	ON	
PWK1-14-2-1	Pewaukee Lake	CMP	5' x 3.5' Ellipse	No	ON	Clear debris from north invert
PWK1-15-4-1	Pewaukee Lake	CMP	48" x 36" Ellipse	No	ON	Clear sand from east and west invert
PWK1-15-4-2	Pewaukee Lake	RCP	48" x 24" Ellipse	Yes	ON	Clear vegetation from around both inverts
PWK1-22-1-1	Pewaukee Lake	RCP	24" Circle	Yes	ON	
PWK1-22-2-1	Pewaukee Lake	RCP	Dual 36" Circle	Yes	ON	Clear vegetation and debris from west invert
PWK1-22-4-1	Pewaukee Lake	CMP	36" Circle	No	ON	Clear vegetation and debris from west invert
PWK1-23-1-1	Pewaukee Lake	RCP	Dual 24" Circle	Yes	ON	
PWK1-23-2-1	Pewaukee Lake	CMP	Dual 36" Circle	Yes	ON	Stablize slope around south invert to stop erosion
PWK1-23-4-1	Pewaukee Lake	CMP	30" x 36" Ellipse	Yes	ON	
PWK1-24-3-1	Pewaukee Lake	CMP	54" Circle	Yes	ON	
PWK1-24-4-2	Pewaukee Lake	RCP	6' x 6' Box	Yes	ON	
PWK1-26-1-1	Pewaukee Lake	CMP	Dual 45" Circle	Yes	ON	
PWK1-26-1-2	Pewaukee Lake	CMP	40" x 32" Ellipse	No	ON	
PWK1-26-2-1	Pewaukee Lake	CMP	Dual 36" Circle	Yes	ON	Remove tree from entrance of south invert on east side of outfall
PWK1-26-2-2	Pewaukee Lake	RCP	60" x 36" Ellipse	Yes	ON	
SCP1-31-3-1	Scuppernong Creek	CMP	40" x 16" Box + Tee 18	No	ON	Reconstruct N/S cuivert, existing culvert has crumbling headwalls
SCP2-28-1-1	Scuppernong Creek	CMP	Dual 36" x 24" Ellipse	Yes	ON	Clear vegetation from north invert
SCP2-28-1-2	Scuppernong Creek	CMP	Dual 36" x 24" Ellipse	No	ON	
SCP2-28-3-1	Scuppernong Creek	CMP	48" x 32" Ellipse	No	ON	Clear vegetation from both inverts
SCP2-33-3-1	Scuppernong Creek	RCP	Dual 36" Circle	No	ON	
SCP2-33-4-1	Scuppernong Creek	CMP	52" x 36" Ellipse	No	ON	Clear vegetation from east invert

		CONTRIB. WATERSHED		
СТ	BMP DESCRIPTION	(AC)	MAINTAINED BY	MUNICIPALITY
Of Delafield	Lined wet basin on west side	37.46	37.46 Owners of Lots 1 - 12 of Enclave of Delafield	Town of Delafielo
Of Delafield	Permanent Sediment B	10	10 Owners of Lots 1 - 12 of Enclave of Delafield	Town of Delafield
Of Delafield	Regional Rain Gardens	10	Owners of Lots 1 - 12 of Enclave of Delafield	Town of Delafield
e Conservancy Subdivision	Wet Detention in Outlot 7	30.11	Titleholders of Lots 1-32 of Lakeside Conservancy Subdivision	Town of Delafield
e Conservancy Subdivision	Natural Infiltration Area	27.62	Titleholders of Lots 1-32 of Lakeside Conservancy Subdivision	Town of Delafield
de Meadows Condos Phase I	Basin 1	11	11 Creekside Meadows Condominium Association, Inc.	Town of Delafield
de Meadows Condos Phase II	Basin 2	3	3 Creekside Meadows Condo Association	Town of Delafield
ointe Center	Water Quality Pond SE of Parking Lot	1.8	1.8 Titleholder	Town of Delafield
Pointe Center	Infiltration Basin SE of Wet Detention Basin	1.8	1.8 Titleholder	Town of Delafield
rds Pass South	Basin#1 in Outlot 5	10.89	10.89 Owners of Lots 1-12 of Shepards Pass South	Town of Delafield
rds Pass South	Basin#2 in Outlot 2	6.18	Owners of Lots 1-12 of Shepards Pass South	Town of Delafield
le Bank	Infiltration Basin NW of Bank	0.4	Titleholder	Town of Delafield
le Bank	Wet Detention Basin North of Proposed Bank	2.79	Titleholder	Town of Delafield
Wind Farm	Wet Detention Basin #1 North of Subdivision	14	Titleholders of Lots 1 - 24 and 31 - 50 of Prairie Wind Farm Subdivision	Town of Delafield
Wind Farm	Forebay to Wet Pond #3 NE of Subdivision	42.6	Titleholders of Lots 1 - 24 and 31 - 50 of Prairie Wind Farm Subdivision	Town of Delafield
Wind Farm	Wet Detention Basin#3	42.6	42.6 Titleholders of Lots 1 - 24 and 31 - 50 of Prairie Wind Farm Subdivision	Town of Delafield
aven	Infiltration Basin North Located in Outlot 2	3.9	9 Titleholders of Lots 1 - 12 of Grandhaven Subdivision	Town of Delafield
aven	Infiltration Basin South Located in Outlot 1	6.7	Titleholders of Lots 1 - 12 of Grandhaven Subdivision	Town of Delafield
Fields	Wet Basin East of Cul-de-sac	11.1	Titleholders of Lots 1 - 5 of Maplefields	Town of Delafield
ows Subdivision	Kettle on Lot 3	32.7		Town of Delafield
int Estates	Area 1 Basin in Outlot 3	2.57	Lots	Town of Delafield
int Estates	Area 2 Basin in Outlot 3	2.55	Lots	Town of Delafield
int Estates	Area 4 Basin in Outlot 1	5.4	Lots 1 - 25 of High Point Estates Subdivision	Town of Delafield
int Estates	Area 6 Basin in Outlot 2	8.77	Lots 1 - 25 of High Point Estates Subdivision	Town of Delafield
side	Detention Basin in NE corner of site	10		Town of Delafield
ony's Church	Basin in Northeast Corner	5.69	5.69 Titleholder of Basin	Town of Delafield
prook Senior Center Parking Lot Extension	Grass swale	0		Town of Delafield
rhill Subdivision	Basin in Outlot 3	90.19		Town of Delafield
rhill Subdivision	Basin in Outlot 2	13.67		Town of Delafield
et Moors Subdivision	Wet Pond South	40		Town of Delafield
et Moors Subdivision	Wet Pond North	64	Lake Pewaukee Sanitary District (owner)	Town of Delafield
rnong Springs Condominiums	Infiltration Basin	26.92	Owners of Buildings 1 - 22 of Scuppernong Springs Condominiums	Town of Delafield
rnong Springs Condominiums	Bioretention Device	14.5	14.5 Owners of Buildings 1 - 22 of Scuppernong Springs Condominiums	Town of Delafield
rd's Pass	Southwest Water Quality Basin #2	10.9	10.9 Owners of Lots 1 - 32 of Shepard's Pass Subdivision	Town of Delafield
rd's Pass	Bioswale	30.63	30.63 Owners of Lots 1 - 32 of Shepard's Pass Subdivision	Town of Delafield
rd's Pass	Northwest Water Quality Basin #1	27.31	27.31 Owners of Lots 1 - 32 of Shepard's Pass Subdivision	Town of Delafield

	VERIFICATION			LAST	BMP REFERENCE	AS BUILT				
Q:	DATE	VERIFYING ENGINEER VERIFYING COMPANY			NUMBER	SURVEY DATE	PROJECT ID	DOC. NUMBERS	GEONorthing	GEOI
	16-Feb-05	16-Feb-05 Igor Vaynberg, PE	Welch Hanson Associates	31-Jan-06		16-Feb-05	15	1000006, 3202627	397596.3	244
	16-Feb-05	16-Feb-05 Igor Vaynberg, PE	Welch Hanson Associates		2	16-Feb-05		1000006, 3202627	397476.16	244
	16-Feb-05	16-Feb-05 Igor Vaynberg, PE	Welch Hanson Associates		8	16-Feb-05		1000006, 3202627	397506.1	244
	18-Jan-04	18-Jan-04 Debra A. Tarnow, PE	Jahnke & Jahnke Associates Inc.		25		-	1000010, 3050076	398220.32	244
					52			1000010, 3050076	397079.19	244
	17-Oct-04	17-Oct-04 Robert Williams Jr	TDI Associates		30	30-Sep-04		1000019, 2867539	386604.07	244
	17-Oct-04	17-Oct-04 Rob Williams Jr	TDI Associates		31	21-Dec-04		1000003, 3229465	386134.43	244
					89			3452574	387266.47	243
					69			3452574	387232.64	243
					02			3576349	383058.12	244
					11			3576349	382593.64	244
	30-Oct-08	James P Hansen	Graef	10-Sep-10	98	30-t2O-08		1000146, 3420505, 3622131	387624.71	243
	30-Oct-08	30-Oct-08 James P Hansen	Graef		98	30-Oct-08	-	1000146, 3420505, 3622131	387570.92	243
	21-Mar-04	21-Mar-04 Hans D. Hollanger, PE	Jahnke & Jahnke Associates, Inc.		28	11-Mar-04		1000038	404027.89	244
	21-Mar-04	21-Mar-04 Hans D. Hollanger, PE	Jahnke & Jahnke Associates, Inc.		88	11-Mar-04	1	1000038	403226.85	244
	21-Mar-04	21-Mar-04∣Hans D. Hollanger, PE	Jahnke & Jahnke Associates, Inc.		68	11-Mar-04		1000038	403365.24	244
	17-Nov-05	17-Nov-05 Anthony Zanon, PE	Jahnke and Jahnke Associates, Inc.		140	17-Nov-05	10	1000037	394297.12	244
	17-Nov-05	17-Nov-05 Anthony Zanon, PE	Jahnke and Jahnke Associates, Inc.		141	17-Nov-05	15	1000037	394137.57	244
	30-Sep-03	30-Sep-03 Anthony S. Zannon, PE	Jahnke & Jahnke Associates, Inc.		219	21-Oct-03		1000030	382091.09	244
					258			1000031	384888.44	244
					259			1000032	387317.71	244
					260			1000032	387474.49	244
					261			1000032	387753	244
					262			1000032	388097.52	244
					263			1000036	400726.13	244
					264			1000033	390510.04	
					597			1000035	376517.97	244
					270			1000034	398540.42	244
					271			1000034	397593.22	24
					277			1000039, 2528235	402856.18	244
					278			1000039, 2528235	402901.89	245
sek					448			3534394	382025.06	243
sek					449			3534394	381361.45	24
	17-May-04	17-May-04 Igor Vaynberg, PE	Welch Hanson Associates		475	17-May-04		1000009	383576.11	244
	17-May-04	17-May-04 Igor Vaynberg, PE	Welch Hanson Associates		476			1000009	384325.78	7
	17-May-04	17-May-04 Igor Vaynberg, PE	Welch Hanson Associates		477	17-May-04		1000009	385362.57	24