Table 3

LCD 6/6/07

SUMMARY OF AGENCY RESPONSIBILITIES TO SUPPORT CONSTRUCTION SITE POLLUTION CONTROL AND POST CONSTRUCTION STORMWATER ORDINANCES

	STATE			COUNTY			MUNICIPALITIES			DEVELOPER
PROGRAM AREA AND ACTIVITY	DNR	COM.	DOT	Zoning	LCC	Highway	C.F.	L. Hallie	Towns	
Stormwater Permit Administration & Enforcement										
Permit Adm./Enforcement	X			X						
Stormwater Plan Development										X
Stormwater Plan Review	X				X					
Stormwater BMP Installation										
Layout										X
Construction	X				X					X
As-Built Inspection					X					X
Stormwater Infrastructure Management										
BMP Inspection					X					X
BMP Maintenance										X
Illicit Discharge and Outfall Monitoring										
Road Ditch Network					X	X	X	X	X	
Major Outfalls					X					
Enforcement				X						
Administration	X				X					

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POLLUTION PREVENTION

Each affected municipality, subject to terms of the WPDES permit, will develop and implement a pollution prevention program.

The program will be developed following a standardized format and will include procedures for the following:

1. Routine inspection and maintenance of municipal-owned or operated structural storm water management facilities to maintain their pollutant removal operating efficiency.

2. Routine street sweeping and catch basin cleaning.

3. Proper disposal of street sweeping and catch basin cleaning waste.

4. Application of road salt, sand, and other deicers at the minimum rate necessary to maintain public safety.

5. Proper management of leaves and grass clippings.

6. Storm water pollution prevention planning for municipal garages, storage areas, and other municipal sources of storm water pollution.

To meet WPDES permit requirements, the municipal pollution prevention program will be drafted before September 30, 2007, and implemented before January 1, 2008.

STORM WATER MANAGEMENT RECOMMENDATIONS

COMMON MANAGEMENT GUIDELINES

It is the intent of the cooperating municipalities to pursue a consistent approach toward managing storm water runoff in the Chippewa Falls Urban Area. This will be done by implementing a common joint storm water management program. This program will be used to address a broad range of water management issues, including those related to storm water routing, municipal flood control, groundwater recharge, and nonpoint pollution control.

In pursing this program effort, it is recognized that the municipalities have already achieved compliance with the pollution reduction standards for the developed urban area, as established in s. NR151.13(2), Wisconsin Administrative Rule. Given this compliance, the water quality component of this joint storm water program will be implemented to maintain this status and to assure that new development in developing areas meet the water quality based performance standards of s. NR151.12 or 151.24.

To encourage a comprehensive approach toward storm water management, the following guidelines will be applied:

1. **Municipality Responsibilities:** Each municipality will be responsible for managing storm water runoff generated within its jurisdiction. This responsibility will be carried out using its municipal authority for land use planning, zoning, land division and development review, and infrastructure management.

2. **Watershed Priorities:** Storm water runoff and associated pollutant loads will be managed on a watershed basis recognizing the susceptibility and management objectives of the end-receiving waters.

   When possible, storm water runoff will be managed to maximize infiltration and improve groundwater recharge.

   In pursuing this concept, management priority will be assigned to watersheds that contribute runoff to surface waters designated by the State as outstanding, exceptional, or impaired, and to watersheds that provide direct groundwater recharge to public water supplies.

   General management areas of priority interest are shown on Map 6. They include the following:

   A. Watersheds that are located within a designed municipal wellhead protection area, or

   B. Watersheds that contain internally drained areas with documented sites of ponding and groundwater infiltration, or

Map 6

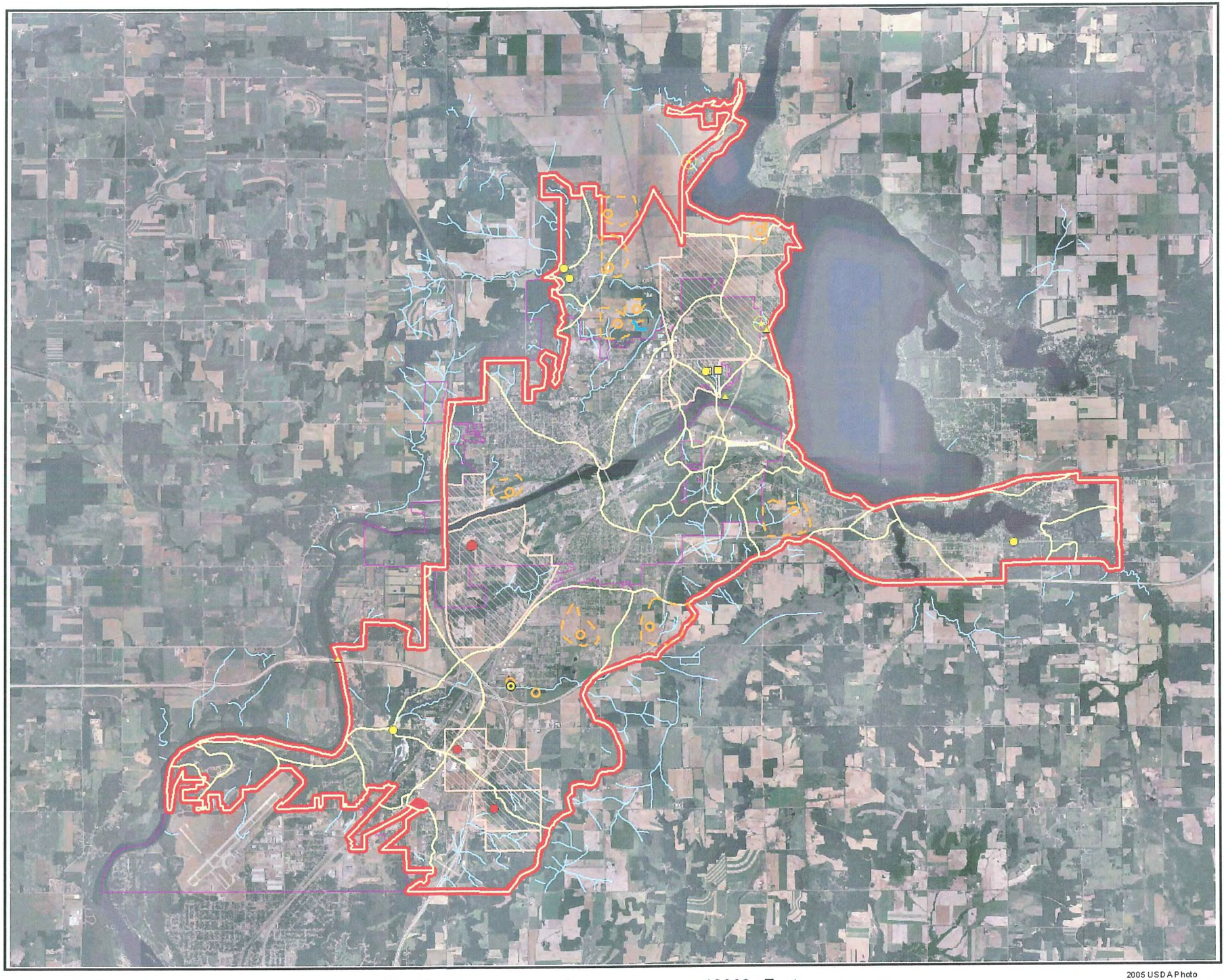
Watershed Management Areas of Priority Interest, Critical Drainage Features , and Stormwater Management Areas

N

Outfalls Subject to Monitoring

- Major - BMP Outlet
- Major - Groundwater
- Major - Surface Water
- Potential Future Outfall
- WPDES Permit

- Stormwater Management Area
- Subwatersheds
- City Limits
- Internally Drained Watershed Areas
- Seasonally ponded areas
- Wellhead Protection Zones
- Municipal Wells
- Drainageways



10000 0 10000 Feet

2005 USDA Photo

Chippewa County
Land Conservation Dept

December 5, 2006

h:\Pub\Dan\Hallie-Lafayette\Map 7 apr (Joan's 11x17)

C. Watersheds that discharge runoff to surface waters that have been classified by the State of Wisconsin as impaired (303d) waters (Little Lake Wissota), or as outstanding and exceptional waters (Lake Hallie); or

D. Watersheds that discharge runoff to undisturbed wetlands with high functional value or biotic diversity.

3. **Maintenance of Natural Drainage Patterns:** Irrespective of watershed location, storm water runoff in undeveloped and developing areas will be managed to maintain the existing pattern of surface drainage, and the area's existing capacity for depressional storage and groundwater infiltration.

This will be done by maintaining the integrity of the natural drainage network and by maintaining the storage and infiltration capacity of natural depressions where surface ponding and groundwater infiltration now occur.

To accomplish this, a storm water management overlay approach will be used to identify and manage sites that are critical to storm water routing, depressional flood storage, and groundwater recharge.

Critical drainage features and site specific management areas are shown on Map 6. They include the following:

a. Areas of concentrated flow which convey surface runoff to the road ditch network or directly to water resources. This includes areas of surface drainage shown on the Soil Survey of Chippewa County, USGS 7.5 minute quads, and areas which have been observed to convey seasonal runoff during the spring snowmelt events.

b. The ponded areas of closed surface depressions that serve as sites of ponding and provide groundwater infiltration and recharge during the spring snowmelt and rain event.

c. The contributing watershed area of small, internally drained watersheds without outlets, that contribute localized runoff to sites where ponding routinely occurs.

It is proposed that these sites be prioritized by each municipality and be considered as candidate sites for targeted land acquisition programs to protect their natural functions.

It is further proposed that a zoning-based conditional use process be applied to these sites so that design conditions might be considered to maintain or replace the natural storage and infiltration capacity of each affected site, as development occurs.

4. **Development and Management of Storm Water Infrastructure:** In pursuing these concepts, it is the intent of the municipalities to limit the creation and proliferation of a municipality-owned storm water infrastructure and to defer the establishment of an area-wide storm water utility.

Instead, storm water runoff will be planned and managed on a site-by-site basis, as sites in the storm water management area are developed or redeveloped. Under this approach, the responsibility for meeting prescribed storm water standards will be assigned directly to the developer. These standards will be met through site design and use of best management practices, which rely on surface infiltration and on-site detention.

Unless otherwise negotiated by a municipality, the custodial responsibility for maintaining storm water management practices will be retained by the developer, or will be assigned to future property owners by way of a recorded title conveyance.

The municipalities will assure that storm water management practices are properly maintained. This will be accomplished by retaining maintenance easements and by instituting a publicly administered storm water facility inspection program to monitor the condition of the privately owned facilities. Requirements for operational maintenance will be enforced by Chippewa County and each municipality through the maintenance provisions of a joint storm water management ordinance.

MANAGEMENT RECOMMENDATIONS FOR MAJOR OUTFALLS

Each municipality is responsible for managing storm water runoff, and for pursuing broader water management objectives within its jurisdiction.

The following site specific storm water management recommendations are provided for consideration as land use planning and infrastructure management decisions are made. These recommendations are summarized by municipalities for each major outfall.

TOWN OF EAGLE POINT

DC-GL2-3 - Road channel outfall to Duncan Creek via CTH S - south road ditch.

•Document the current routing of storm water runoff that is conveyed through the highway ditch network located at the STH 124 - CTH S roundabout.

•Evaluate the feasibility of altering the existing STH 124, CTH S, and town road ditch network to expand the seasonal storage capacity within the existing public right-of-ways. Potential locations include the NE and NW corners of the STH 124 - CTH S roundabout, and the internal junction of STH 124 and Greenfield Street.

•Evaluate the feasibility of preserving sites to install regional stormwater infiltration practices on parcels located adjacent the STH 124 - CTH S roundabout.

Parcel Location	Tax Parcels
T29N, R8W, Sec. 29, NW 1/4 T29N, R8W, Sec. 30, NE 1/4	22908-3014-00020000; 22908-2923-04250000

•Evaluate the feasibility of preserving sites, mapped as critical storm water management areas, where seasonable ponding and infiltration now occurs.

Parcel Location	Tax Parcels
T29N, R8W, Sec. 20, SW 1/4	#22908-2033-00000000; 22908-2034-00020000

DC-GL2-1 - Pipe outfall to Duncan Creek, 80th Street storm water main.

•Evaluate the capacity of the 80th Street 36" storm water main to transfer runoff from the existing residential road network, and the additional runoff which will be routed from new development, planned north of CTH S.

•Inform residents of the existence of the drop inlets and the closed pipe storm water system on 80th Street and implement a targeted homeowner educational effort.

•Evaluate the condition and extent of surface road connections to the 80th Street drainage network. If necessary, implement custodial management practices to limit nonpoint pollutants, including street sweeping and salt management.

CH2-3 - CTH I open channel outfall to Lake Wissota.
CH2-5 - Pipe outfall to Lake Wissota Embayment, Village Green storm water overflow conveyances.
CF10-2 - Pipe outfall to Chippewa River via CTH I, St. Joe's Hospital, Wissota Terrace Ravine.

•Seek clarification regarding the town's jurisdictional authority and responsibility to monitor runoff which is generated within the City of Chippewa Falls and conveyed to outlets located in the Town of Eagle Point.

•Evaluate the size, current capacity, and outlet evaluations of the road culverts which convey storm runoff from the County Farm Development, located in T29N, R8W, Section 33. Verify that the existing outlets are stable and adequately sized to convey runoff from the new development which is planned.

TOWN OF LAFAYETTE

LW3-5 - Pipe outfall to Little Lake Wissota, 54th Avenue
LW3-6 - Pipe outfall to Little Lake Wissota, 54th Avenue
LW3-7 - Pipe outfall to Little Lake Wissota, 54th Avenue

•Evaluate the size, capacity, and outlet evaluations of culverts which convey storm water north across 54th Avenue to open channel outfalls to Little Lake Wissota.

•As part of Little Lake Wissota 303d TMDL planning process, evaluate the feasibility of adopting a zero discharge storm water standard to eliminate the potential for pollutant loads generated from new development located in and outside of the storm water planning area.

VILLAGE OF LAKE HALLIE

HA2-1 - Natural depression and groundwater infiltration pond; T28N, R9W, Section 24.

•Monitor the frequency and duration of seasonal runoff conveyed to this site. Document the water chemistry of seasonal runoff.

•Evaluate the feasibility of site alterations to maintain infiltration and storage functions through construction of a forebay to facilitate site maintenance.

•Evaluate the feasibility of constructing a series of infiltration ponds to intercept, store, and infiltrate groundwater upgradient of the main groundwater infiltration pond.

Parcel Location	Tax Parcel
T28N, R8W, Sec. 19	22808-1931-00020000; 22908-1931-02000000; 22808-1932-00020000; 22808-1932-02000000; 22808-1913-00020000; 22808-1913-03750000; 22808-1912-72048004; 22808-1912-72040006

•Evaluate the engineering design, maintenance history, and infiltration capacity of all storm water facilities located in the Village of Lake Hallie Wellhead Protection Zone. As appropriate, implement structural improvements and accelerated management practices to reduce runoff pollutants conveyed to groundwater from these storm water retention facilities.

•Evaluate the feasibility of preserving sites, mapped as critical storm water management areas, where seasonal ponding and infiltration now occurs.

Parcel Location	Tax Parcel
T28N, R8W, Sec. 17, NW 1/4 of SE 1/4	#22808-1742-00000000
T28N, R8W, Sec. 17, SW 1/4 of SE 1/4	#22808-1743-00020000
T28N, R8W, Sec. 18, SW 1/4 of SE 1/4	#22808-1843-66760081; #22808-1843-66760082
T28N, R8W, Sec. 18, SE 1/4 of SE 1/4	#22808-1844-00020000

LH2-1 - 30th Avenue road culvert conveyance to Lake Hallie.

•Visually monitor storm water conveyance during spring snowmelt and major runoff events to determine the potential for storm water discharge to Lake Hallie.

•As development occurs in Lake Hallie watershed (LH2), conduct an analysis, and evaluate the feasibility of installing municipal storm water infiltration facilities upgradient of 30th Avenue, to intercept and infiltrate runoff before reaching Lake Hallie.

Parcel Location	Tax Parcel
T28N, R9W, Sec. 23	#22809-2343-71707003

BC9-1 - Storm water pond pipe outlet - STH 29 north ditch line to Chippewa River.

•Monitor storm water facility condition and function.

IMPLEMENTATION PLAN

PROGRAM STRUCTURE AND RESPONSIBILITIES

The cooperating municipalities will operate under a joint WPDES storm water permit to implement a joint storm water management program. This program will be used to pursue a consistent approach toward managing storm water runoff and flooding in the Chippewa Falls Urban Area.

The responsibilities of the municipalities and supporting agencies under this storm water management program are summarized in Table 4.

ACTIVITY SCHEDULE

Core elements of the storm water management plan will be systematically implemented following the activity schedule established in the WPDES permit. The status of each program element and the proposed dates of implementation are provided in Table 5.

MUNICIPAL COORDINATION

To assure structured communication, the following measures will be used to coordinate program efforts:

1. A Chapter 66.03 intermunicipal agreement will be developed to formally define the responsibilities of the County and those of the cooperating municipalities for the purpose of implementing the storm water management program and fulfilling obligations under the joint WPDES permit.

2. An annual meeting will be held between the County, the participating municipalities, and DNR. The meeting will be sponsored by the County and will be used to review WPDES permit requirements, and the status of storm water management activities. Additional meetings of the group will be sponsored upon request on an as-needed basis.

3. An annual joint report of permit-related activities will be prepared by the County, as required under the WPDES permit. This report will be distributed to the municipalities.

4. The County and cooperating municipalities will communicate with other municipalities in the Chippewa Falls/Eau Claire area that are also subject to State WPDES storm water permit requirements, including the City of Chippewa Falls, the City of Eau Claire, the City of Altoona, and the towns of Union and Washington in Eau Claire County.

   To accomplish this, the municipalities will coordinate the group's information and outreach efforts with those of other WPDES permit holders, using existing Chapter 66.03 intermunicipal agreements that have been created for that purpose.

Table 4

LCD 6/6/07

SUMMARY OF CORE RESPONSIBILITIES OF COOPERATING MUNICIPALITIES AND AGENCIES UNDER THE JOINT PERMIT AND ASSOCIATED STORMWATER MANAGEMENT PROGRAM

	COUNTY			MUNICIPALITIES		
PROGRAM AREA AND ACTIVITY	Zoning	LCC	Highway	Lake Hallie	L. Hallie/Eagle Point	Lafayette
Public Education and Outreach						
Public Information/Outreach		X				
Targeted Education		X				
Chippewa Valley Stormwater Forum		X		X	X	X
Public Participation						
Public Meetings		X				
Stormwater Coordinating Committee	X	X	X	X	X	X
Illicit Discharge Detection and Elimination						
Annual Training			X	X	X	X
Annual Ditchline Inspection			X	X	X	X
Annual Outfall Inspection		X				
Regulatory Response/Enforcement	X					
Construction Site/Stormwater Ordinance						
Permit Administration	X					
Plan Review		X				
Construction Inspection		X				
Regulatory Enforcement	X					
Pollution Prevention/Water Quality Model						
Annual BMP Inspection		X				
Storm Sewer System Map						
Collect/Maintain Data (BMP'S)		X				
Update/Maintain Drainage System Map/GIS		X				
Permit Reporting and Administration						
WPDES Permit Admin/Reporting		X		X	X	X

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SUMMARY OF PERMIT COMPLIANCE SCHEDULE AND PLANNED IMPLEMENTATION OF STORMWATER PROGRAM COMPONENTS

PERMIT CONDITION	ACTIVITY	WPDES REQUIREMENT		SCHEDULED PROGRAM IMPLEMENTATION	
		SUBMIT	IMPLEMENT	SUBMIT	IMPLEMENT
Public Education and Outreach	Submit public education and outreach program*	9/30/07	3/31/08	1/1/07	1/1/07
Public Involvement and Participation	Submit public involvement and participation program*	9/30/07	3/31/08	1/1/07	1/1/07
Illicit Discharge Detection and Elimination	1. Submit illicit discharge ordinance	3/31/08	9/30/08	9/30/07	1/1/08
	2. Submit illicit discharge response procedures	3/31/08	9/30/08	9/30/07	1/1/08
	3. Complete initial field screening*		3/31/09	1/1/07	1/1/07
	4. Submit on-going field screening*	3/31/09	3/31/10	1/1/07	1/1/07
Construction Site Pollutant Control	1. Submit construction site pollutant control ordinance	9/30/07	3/31/08	9/30/07	1/1/08
	2. Submit construction site inspection and enforcement procedures	9/30/07	3/31/08	9/30/07	1/1/08
	3. Request erosion control regulatory authority (if necessary) from Dept. of Commerce	9/30/07		9/30/07	1/1/08
Post-Construction Storm Water Management	1. Submit post-construction storm water management ordinance	9/30/07	3/31/08	9/30/07	1/1/08
	2. Submit long-term maintenance procedures	9/30/07	3/31/08	9/30/07	1/1/08
Pollution Prevention	Submit pollution prevention program	3/31/08	9/30/08	9/30/07	1/1/08
Storm Water Quality Management	1. Submit evaluation of flood control structures*	3/31/08			
	2. Achieve compliance with S.NR151.13(2), Wis. Adm. Code*	3/10/08		1/1/07	
MS4 Map	Submit MS4 map*	3/31/08		1/1/07	1/1/07
Annual Report	Submit annual report	3/31/07		12/1/07	
Reapplication for Permit Coverage	Submit reapplication	By 9/30/10			

*Activity completed and implementated through the stormwater planning process, as documented in the joint stormwater plan.

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PROGRAM BUDGET

There are new public costs associated with meeting the WPDES permit requirements. To limit these costs, the participating municipalities have agreed to implement a joint coordinated storm water program.

To finance and distribute the costs of this program, each municipality will budget and account for all facets of the joint storm water program by establishing a segregated storm water program budget. To assure consistency, the municipalities will be encouraged to use a standardized set of expenditures and related revenue accounts.

An annual program budget has been projected for the 2008 calendar year using the program implementation schedule outlined in Table 5. This budget is provided as Figure 1.

DISTRIBUTION OF PROGRAM COSTS

The new public costs associated with implementing this joint storm water program can be characterized as either capital expenses or operational expenses.

Capital expenses will include those associated with planning and installing publicly owned storm water infrastructure, including the costs of land acquisition, engineering, and site improvements. These capital expenses will be incurred solely by the municipality that intends to acquire the land or develop storm water facilities to control storm water within its boundaries.

Operational expenses will include the costs of activities, which are conducted to implement the joint storm water program and comply with WPDES Permit number #WI-S050121-1. This includes the costs of implementing a public education program, site specific storm water plan review and facility construction inspection, illicit discharge detection, outfall monitoring, storm water facility monitoring, ordinance administration and enforcement, and WPDES permit administration.

In assuming these new operational costs, Chippewa County and the participants will seek to limit property tax impacts by establishing service fees that will be charged directly to permit applicants subject to requirements of the storm water ordinance. Service fees will be charged by the County to offset the full public costs of storm water ordinance administration, plan review, and the County's storm water construction inspection.

The remaining operational expenses will be distributed between the parties based upon the program duties and responsibilities defined in Table 4.

The costs of WPDES permit administration, maintaining the storm water system map, and implementing the public education and community outreach components of the storm water program will be distributed equally between the County and the cooperating municipalities (50% County, and 50% Village of Lake Hallie, Town of Eagle Point, Town of Lafayette). The village and towns' share of these program costs will be distributed proportionately on a per capita basis.

The public costs of implementing an illicit discharge detection program and a joint storm water facility inspection program will be assumed fully by the Village of Lake Hallie, the Town of Eagle Point, and the Town of Lafayette. Annual payments will be made to the County by each municipality for annual inspections of storm water facilities and storm water outfalls, based upon the location of inspections and the number of inspections conducted. The County will bill each municipality on an annual basis. Using these assumptions, the proposed distribution of annual program costs for 2008 can be estimated as follows:

Estimated Annual Tax Levy
Budget Contribution

Municipality	Proportion of Program Costs	Operating Expenses	Capital Expenses	Total
Village of Lake Hallie	25%	$ 3,250	-0-	$ 3,250
Town of Lafayette	25%	$ 3,250	-0-	$ 3,250
Town of Eagle Point	20%	$ 2,600	-0-	$ 2,000
Chippewa County	30%	$ 4,000	-0-	$ 4,000
	100%	**$13,100**		**$13,100**

Figure 1

LCD 08/10/07

2008 JOINT MUNICIPAL STORMWATER PROGRAM BUDGET SUMMARY

EXPENDITURES	Municipalities**			County			Project
	Lake Hallie	Eagle Point	Lafayette	Highway	Zoning	LCD	Cost/Revenue
Public Education and Outreach							
-Public Information/Outreach	$100	$50	$100			$250	$500
-Targeted Education***	$500	$250	$500			$1,250	$2,500
-Chippewa Valley Stormwater Forum	$100	$50	$100			$250	$500
Public Participation							
-Public Meetings	$100	$50	$100				$250
-Stormwater Coordinating Committee	$100	$100	$100	$100	$100	$800	$1,300
Illicit Discharge Detection and Elimination							
-Annual Training	$100	$100	$100	$300	$100	$100	$800
-Annual Ditchline Inspection	$250	$250	$250	$500			$1,250
-Annual Outfall Inspection***	$500	$500	$500			$1,500	$3,000
-Regulatory Response/Enforcement					$500		$500
Construction Site/Stormwater Ordinance							
-Permit Administration*					$500		$500
-Plan Review*						$5,000	$5,000
-Construction Inspection*						$3,000	$3,000
-Regulatory Response/Enforcement					$500	$500	$1,000
Pollution Prevention/Water Quality Model							
-Remodeling of Pollutant Loads							
Storm Sewer System Map							
-Annual BMP Inspection***	$500	$500	$500			$1,500	$3,000
-Update/Maintain Drainage System Map/GIS***	$500	$500	$500			$1,500	$3,000
Permit Reporting and Administration							
-WPDES Permit Fee	$100	$50	$100			$250	$500
-Admin/Reporting***	$400	$200	$400			$1,000	$2,000
TOTAL EXPENDITURES	$3,250	$2,600	$3,250	$900	$1,700	$16,900	$28,600

REVENUE							
Public Education and Outreach							
-Public Information/Outreach							
-Targeted Education***						$1,250	$1,250
-Chippewa Valley Stormwater Forum							
Public Participation							
-Public Meetings							
-Stormwater Coordinating Committee							
Illicit Discharge Detection and Elimination							
-Annual Training							
-Annual Ditchline Inspection							
-Annual Outfall Inspection***						$1,500	$1,500
-Regulatory Response/Enforcement							
Construction Site/Stormwater Ordinance							
-Permit Administration*					$500		$500
-Plan Review*						$5,000	$5,000
-Construction Inspection*						$3,000	$3,000
-Regulatory Response/Enforcement							
Pollution Prevention/Water Quality Model							
-Remodeling of Pollutant Loads							
Storm Sewer System Map							
-Annual BMP Inspection***						$1,500	$1,500
-Update/Maintain Drainage System Map/GIS***						$1,500	$1,500
Permit Reporting and Administration							
-WPDES Permit Fee						$250	$250
-Admin/Reporting***						$1,000	$1,000
TOTAL REVENUE	$0	$0	$0	$0	$500	$15,000	$15,500
Difference of Expenditures and Revenue	-$3,250	-$2,600	-$3,250	-$900	-$1,200	-$1,900	-$13,100

*Regulatory expense offset by permit fee revenue.

**Proportion of municipal costs distributed on a per capita basis.
- -Lake Hallie 40%
- -Lafayette 40%
- -Eagle Point 20%

***Service Fee Transfer Between Municipality and County

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Appendix 1 - Planning Services and Responsibilities

Figure 1 - Schedule of Project Activities and Responsibilities

Figure 2 - Outline of Technical Advisory Committee Charge

Figure 1

Schedule of Project Activities and Responsibilities

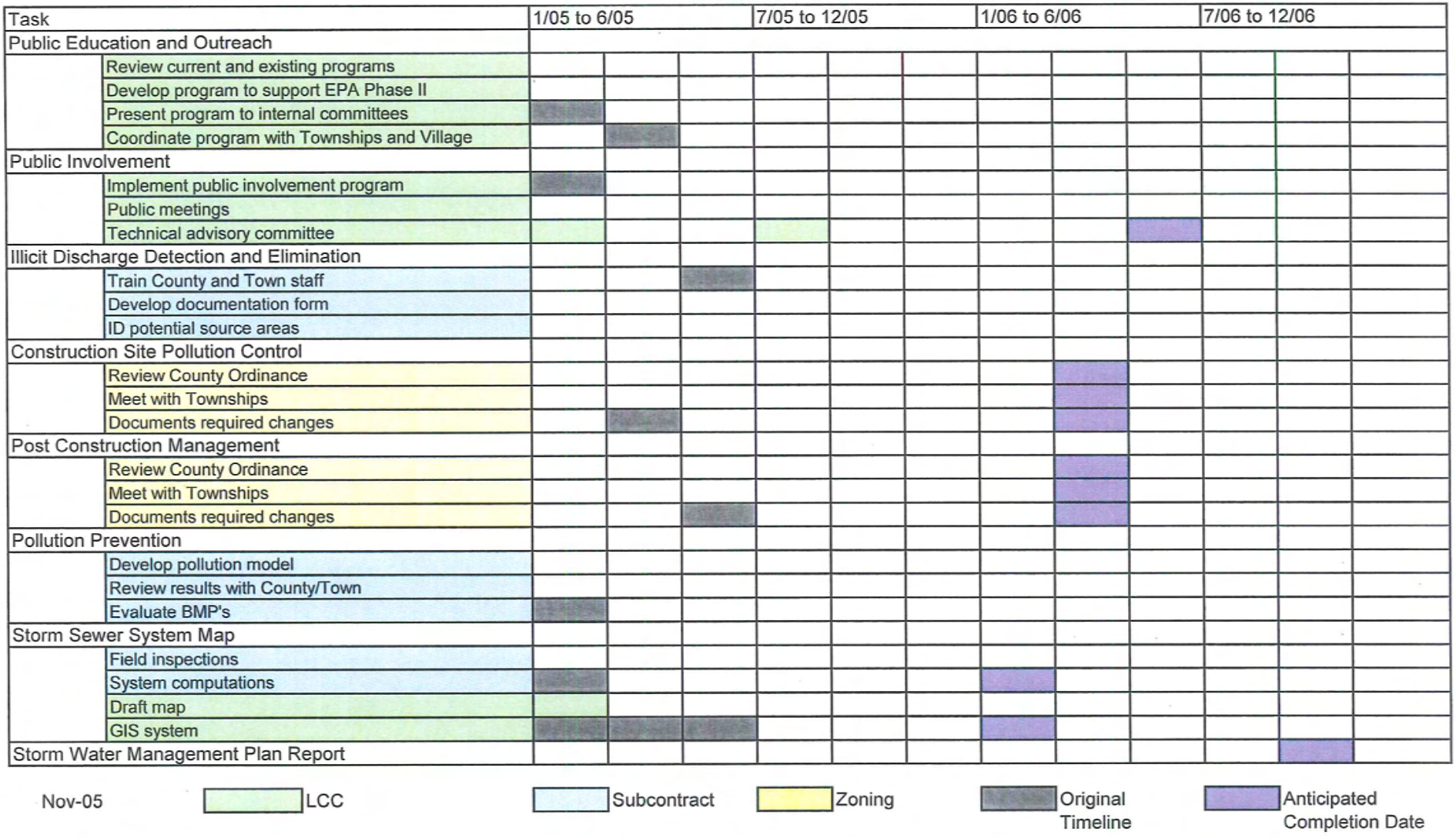

Figure 2 (LCD 8/24/04)

OUTLINE OF STORMWATER MANAGEMENT PLANNING COMMITTEE CHARGE CHIPPEWA FALLS URBAN AREA STORMWATER PLANNING PROJECT

This is a project-based ad hoc committee.

Duties and Responsibilities
This committee is established to:

1. Provide for structured communication between Chippewa County, the Village of Lake Hallie, the Town of Eagle Point, the Town of Lafayette, and the City of Chippewa Falls.

2. Provide policy input from municipalities toward the development of a joint stormwater management plan for the designated Chippewa Falls Urban Area.

3. Conduct a critical review of work products developed through the course of stormwater planning process.

4. Conduct a critical review of a draft stormwater plan prior to public hearings.

5. Upon completion of the public hearing process, assist in the presentation of the plan to the affected municipalities for their consideration and intended adoption.

6. Evaluate the value and the feasibility of developing a coordinated stormwater management program and single stormwater management permit application as necessary to meet EPA Phase II and Wisconsin NR216 stormwater planning and permit requirements.

7. Other.

The stated purpose of the urban stormwater plan is as follows:

1. Meet the minimum standards for plan content as necessary to meet NR216 stormwater permit requirements.

2. Allow the County and municipalities to explore stormwater management issues within the broader context of community land use and water resource management objectives.

Specific public policy and management issues that will be addressed are as follows:

A. What stormwater infrastructure will be used to manage stormwater from new construction and from existing land uses?

-What physical "Best Management Practices" are best suited to the area?
-To what extent will they be necessary under anticipated (built out) land use scenarios?
-Where will they be located?

B. How will urban stormwater be managed within the context of state and local water conservation management plans?

-Which surface water resources (if any) warrant a unique management approach?
-What consideration (if any) will be given to groundwater quality, groundwater quantity, and municipal wellhead protection as part of the stormwater management strategy?

C. How will the stormwater infrastructure be financed?

-What financing mechanisms are available (tax rule -vs- utility)?
-How are they being used in other places?
-What are the advantages and disadvantages of each?

D. How will the stormwater infrastructure be maintained?

-What maintenance mechanisms are available (tax rule -vs- utility)?
-How are they being used in other places?
-What are the advantages and disadvantages of each?

E. Which institutional mechanisms will be used to administer a coordinated stormwater management program?

-How will the I/E program be administered? -Other nonregulated components?

F. How will the regulatory components of a coordinated stormwater program be administered?

-What ordinances will be applied?
-Who will do what, when, how?

G. Other.

H. Other.

Representation

Agency Representatives	**Phone**	**Email**
DNR		
- S. Thon	715-839-3776	thons@dnr.state.wi.us
-D. Simonson	715-839-3725	simond@dnr.state.wi.us
Zoning Dept.		
-D. Clary	715-726-7940	dclary@co.chippewa.wi.us
Land Conservation Department		
-D. Masterpole	715-726-7920	dmasterpole@co.chippewa.wi.us
-D. Nashold	715-726-7923	dnashold@co.chippewa.wi.us
-M. Dahlby	715-726-7921	mdahlby@co.chippewa.wi.us
Town of Eagle Point		
-J. Bowe	715-288-6472	
Town of Lafayette		
-D. Staber	715-726-1144	
Village of Lake Hallie		
-P. Lehmann	715-720-8088	
City of Chippewa Falls		
-R. Rubenzer	715-726-2736	

H:\ADMIN\SEC\Stormwater\Stormwater Plan\TABLES\Figure 2 - TAC Charge.wpd

Appendix 2 - Public Education and Outreach

Table 1 - Stormwater Education Plan

Figure 1 - Storm Water Management Public Education and Outreach Cooperative Agreement

Table 1

Stormwater Education Plan

March 2004

Target Audience	Educational Message	Delivery Mechanism	Method for Evaluation
Consultants, Developers, Home Builders and Contractors* Purpose: To gain enough skill and knowledge to implement practices that reduce the quantity of storm water runoff and improve its quality Priority 1 – Those who must act (developers and others in the construction industry)	There are stormwater rules and there is a regulatory process. Explain what it is and who will do what. Information is available describing designs which meet or exceed performance standards Stormwater systems must be designed to control pollution , not just for drainage. There is economic benefit to complying with standards. Unpermitted wastewater discharge can be identified and should be reported for enforcement and remedy. Illicit discharge has environmental consequences. Some contractors meet or exceed performance standards including reducing imperviousness and increasing infiltration.	Demonstration sites of new and innovative practices that meet or exceed standards. (Design, construction and maintenance techniques that are evolving – share experiences, learn about latest developments in the field) Fact sheets explaining designs that minimize erosion from construction sites. Develop and promote BMP manual Develop, publicize and offer in-house training for building inspectors, contractors and staff Create and provide technical workshops Promote positive actions of developers and others in the construction industry Recruit developers to be advocates.	Assess current knowledge of best management practices and the frequency with which they are implemented. Compare with similar assessment at end of education program.
Municipalities and Municipal staff* (Staff employed by county, city, town and village governments.) Purpose: To provide staff with the necessary tools and information to effectively administer standards. Priority 1: Those who must act (government officials)	Information is available for evaluating BMPs for effectiveness. Engineering firms hired by municipalities should be evaluated for their understanding and proper use of stormwater retrofitting. It is the responsibility of the municipality to communicate standards to landowners, developers, contractors and consultants. It is the responsibility of municipalities to review plans and enforce standards and to provide adequate staffing for administration. Encouraging "green development" benefits the community economically and environmentally.	Evaluation tool for measuring BMP effectiveness Evaluation tool for rating engineering firms Information session regarding responsibilities of municipalities. Develop fact sheets, displays and PSAs which explain the economic and environmental benefits of storm water management	Assess current compliance with standards and compare to similar assessment at end of education program.
(Continued)			

Target Audience	Educational Message	Delivery Mechanism	Method for Evaluation
Government Officials* (Especially those on land use and zoning committees and town boards) Purpose: To develop support of storm water plan recommendations Priority 1: Those who must act (government officials, both elected and appointed)	Understand the intent and benefit of the stormwater management plan and how the recommendations were determined	Presentations to present information and answer questions Fact sheet of storm water impact, regulation, expectations Invite to tour of BMP demonstration sites Develop AV presentation and display to use at meetings Develop information on ordinances that allow conservation design practices and passive stormwater control	Extent to which officials provide human and financial resources to address storm water management
Managers of large facilities or businesses of particular concern such as strip malls, golf courses, gas stations, businesses with outdoor storage and lawn care companies.* Purpose: To reduce the impact from businesses of particular concern	Your business or facility has potential for significant impact to water quality. There are stormwater rules and regulations which you must address. Proper business and municipal stormwater practices are important. Information is available to explain appropriate BMPs for your facility or business.	Fact sheets Personal visits to explain problem and solutions.	Document the number of business who add BMPs. Monitor water quality.
Civic and service groups, conservation and environmental groups, water resource user groups (fishing and boating, etc)* Purpose: To engage citizens who are most likely to carry out solutions Priority 2: Those who can actively support change	(see general public)	Provide suggestions for behavior changes that individuals can make and remove barriers for implementing those changes. Publicize changes made. Offer opportunities for citizen water quality monitoring.	Document the number of people who implement a storm water management practice.
(Continue)			

Target Audience	Educational Message	Delivery Mechanism	Method for Evaluation
General Public* Purpose: To increase support for changes in stormwater management Priority 3: Future supporters	<u>1)Recognize problem exists and understand what causes that problem</u> Stormwater runoff has a significant impact on water quality. (Impacts of heat, quantity, pollutants, extreme variations of flow). Impervious surfaces affect runoff. There are techniques to reduce imperviousness and increase infiltration during redevelopment and in new developments. Runoff impacts habitat, groundwater and surface water. <u>2) Overcome resistance and accept solutions</u> There are local examples of those who have implemented effective stormwater management practices. <u>3) Learn how to carry out solutions</u> Information is available to explain management practices for homes and businesses to reduce runoff. Stormwater drains connect our streets to certain water bodies. Materials should not be dumped in them. There are runoff standards. Pollution prevention is the most effective control.	Insert in utility bills Newspaper articles Promote BMP demo sites Tours of stormwater treatment methods (detention, infiltration and biofiltration) Display at fairs Public service announcements (storm sewers, dog feces, leaves, etc) Promote storm drain stenciling	Quantify awareness of the problem and its causes and assess understanding of solutions and their value to water quality. (June 2004 and June 2007)
Youth, including teachers and youth group leaders* Purpose: To educate future decision makers so they will understand the need for stormwater management Priority 3: Future actors and supporters	(See messages for general public)	Lesson plans for all grade 5 students Drains to stream stenciling program	Evaluate understanding of curriculum lessons.

*All audiences: There is a cooperative stormwater program. Explain what it does, who does it, why we are doing it and what it means.

Best education activities that will most likely lead to a behavior change ask for a commitment, provide a prompt near the behavior, communicate a norm and remove a barrier.

Figure 1

STORM WATER MANAGEMENT PUBLIC EDUCATION AND OUTREACH COOPERATIVE AGREEMENT

This Agreement is entered into pursuant to Wis. Stat. § 66.0301 to specify those certain responsibilities of the parties hereto in the implementation of an intergovernmental storm water public education and outreach program during the term of this Agreement.

I. PARTIES

This Agreement is between Eau Claire County, Wisconsin, a quasi-municipal corporation, ("Eau Claire County") located at 721 Oxford Avenue, Eau Claire, Wisconsin 54703, and Chippewa County, Wisconsin, a quasi-municipal cooperation, ("Chippewa County") located at 711 N. Bridge Street, Chippewa Falls, WI 54729.

II. TERM OF AGREEMENT

This Agreement shall commence May 1, 2006, and continue through April 30, 2008. This Agreement may be terminated by either party on thirty (30) days written notice to the other, subject only to the payment of any obligations due to the other party under this Agreement up to the point of said termination.

III. PURPOSE OF AGREEMENT

The purpose of this Agreement is to develop and implement a single information and outreach program for both Counties meeting the requirements of Wis. Admin. Code Section § NR 216.07 to increase awareness of storm water impacts on waters of the state while avoiding duplication of efforts and saving costs.

The parties to this Agreement may seek to improve the quality of local storm water management programs by mutually agreeing to contract for services that would evaluate institutional arrangements for long-term program delivery and develop marketing and/or educational materials on storm water impacts on waters of the state to residents of Eau Claire County and Chippewa County. The agreement allows the parties to share resources and work together on a program that meets permit requirements of Wis. Admin. Code § NR 216.07.

IV. PROGRAM SUMMARY

The activities required to complete this project include, but are not limited to the following.

A. Review current research about storm water impacts on waters of the state.

B. Assess the public's current knowledge of the causes of storm water pollution.

C. Develop marketing/educational materials to encourage reduction of the causes of storm water pollution.

D. Provide information directly to Eau Claire County and Chippewa County residents to influence changes in the behavior and encourage best practices for storm water management.

E. Evaluate collaborative efforts and institutional arrangements which may be used to implement a long-term information and outreach program to meet the interests of Eau Claire County and Chippewa County, and the associated municipalities in the Chippewa Falls/Eau Claire urban area.

V. SCOPE OF SERVICES

A. Eau Claire County agrees to the following:

1. Apply jointly with Chippewa County for a Wisconsin Department of Natural Resources grant to develop a public education and outreach program for storm water management to comply with Wis. Admin. Code § NR 216.07.

2. If a grant is awarded, on behalf of Eau Claire County and Chippewa County, to manage the grant and the contract for services, to research, evaluate and develop a public education and outreach program, which will meet the requirements of Wis. Admin. Code § NR 216.07, for interested municipalities in the Chippewa Falls/Eau Claire urban area subject to WPDES storm water permit requirements.

3. If a grant is awarded, provide contract oversight and guidance to the individual or firm contracted to implement the project.

4. If a grant is awarded, maintain a record of all expenses incurred by Eau Claire County and Chippewa County, as necessary to administer the grant and provide documentation of the direct and matching grant contributions made by each County.

5. If a grant is awarded, pay for the total cost of contracted services on behalf of Eau Claire County and Chippewa County.

6. Irrespective of whether a grant is awarded, cooperate with Chippewa County to sponsor and conduct specific activities as contributing components of a storm water management public education and outreach program, to be implemented during the term of this Agreement.

Eau Claire County will be responsible for conducting the following activities:

a. Schedule and conduct a storm water BMP tour in the Chippewa Falls/Eau Claire urban area.

b. Prepare or arrange radio or TV announcements or broadcasts which focus on storm water education in the Chippewa Falls/Eau Claire urban area, and. which deliver public information messages

c. With Chippewa County, working through the Chippewa Valley "Storm Water Management Forum", evaluate collaborative efforts and institutional arrangements which may be used to implement a long-term information and outreach program to meet the interests of Eau Claire County and Chippewa County, and the associated municipalities in the Chippewa Falls/Eau Claire urban area.

B. Chippewa County agrees to the following:

1. Apply jointly with Eau Claire County for a Wisconsin Department of Natural Resources grant to develop a public education and outreach program for storm water management to comply with Wis. Admin. Code § NR 216.07.

2. If a grant is awarded, provide information and input, as requested to assist Eau Claire County to manage the grant and the contract for services to research, evaluate and develop a public education and outreach program which will the requirements of Wis. Admin. Code § NR 216.07, for interested municipalities in the Chippewa Falls/Eau Claire urban area subject to WPDES storm water permit requirements.

3. If a grant is awarded and if assistance is requested, provide contract oversight and guidance to the individual or firm contracted to implement

4. If a grant is awarded, maintain a record of expenses incurred and staff hours expended by Chippewa County under the project, and provide that record to Eau Claire County on a quarterly basis as documentation of the direct and matching grant contributions provided by Chippewa County.

5. Irrespective of whether a grant is awarded, cooperate with Eau Claire County to sponsor and conduct specific activities as contributing components of a storm water management public education and outreach program, to be implemented during the term of this Agreement.

Chippewa County will be responsible for conducting the following activities:

a. Schedule and conduct a technical workshop or training session for municipal officials, agency staff, and developers in the Chippewa Falls/Eau Claire urban area.

b. Prepare or arrange a series of newspaper articles or news releases which focus on delivering public information messages on preventing storm water pollution

c. With Eau Claire County, working through the Chippewa Valley "Storm Water Management Forum", evaluate collaborative efforts and institutional arrangements which may be used to implement a long-term information and outreach program to meet the interests of Eau Claire County and Chippewa County, and the associated municipalities in the Chippewa Falls/Eau Claire urban area.

VI. LIAISONS

For Eau Claire County: Jean Schomisch, Land Conservation Division Supervisor, Planning & Development Department, 227 First Street, West, Altoona, WI, 54720, (715) 839-4788; and

For Chippewa County: Dan Masterpole, County Conservationist, Chippewa County Land Conservation Department, 711 N. Bridge Street, Chippewa Falls, WI 54729, #715-726-7920.

VII. NOTICES

Notices required or deemed advisable under this Agreement shall be placed in writing and delivered personally or by registered or certified mail upon Eau Claire County to: Jean Schomisch, Land Conservation Division Supervisor, Planning & Development Department, 227 First Street, West, Altoona, WI, 54720, (715) 839-4788: and upon Chippewa County to Dan Masterpole, County Conservationist, Chippewa County Land Conservation Department, 711 N. Bridge Street, Chippewa Falls, WI 54729, #715-726-7920.

VIII. INSURANCE

Each party to this Agreement shall maintain its own liability insurance sufficient to insure against the risks arising from each party's responsibilities under this Agreement.

IX. MUTUAL INDEMNIFICATION.

The parties agree fully to indemnify and hold one another harmless from and against all claims, actions, judgments, costs, and expenses, arising out of damages or injuries to third persons or their property, caused by the fault or negligence of the said party, its agents, or employees, in the performance of this Agreement. The parties shall give to each other prompt and reasonable notice of any such claims or actions and the other party shall have the right to investigate, compromise, and defend the same.

X. WAIVER OF BREACHES

No waiver of any breaches of this Agreement shall be held to be a waiver of any other or any subsequent breaches. All remedies afforded in this Agreement shall be considered to be cumulative and in addition to any other remedies provided by law.

XI. APPLICABLE LAW

This contract shall be governed under the laws of the state of Wisconsin and is made at Eau Claire County, Wisconsin, and venue for any legal action to enforce the terms of this Agreement shall be in Eau Claire County Circuit Court.

XII. SECTION HEADINGS

The headings of the several sections, and any table of contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

XIII. NON-ASSIGNMENT OF AGREEMENT

The parties agree that there shall be no assignment of transfer of this Agreement, nor of any interests, rights or responsibilities herein contained, except as agreed to in writing.

XIV. MODIFICATIONS TO AGREEMENT

There shall be no modifications to this Agreement, except in writing, signed by both parties.

XV. INTEGRATION OF AGREEMENT

The entire agreement of the parties is contained herein, and this Agreement supersedes all previous agreements, whether written or oral and all negotiations as well as any previous agreements presently in effect between the Provider and the County relating to the subject matter.

Both parties hereto having read and understood the entirety of this Agreement consisting of four (4) typewritten pages hereby affix their duly authorized signatures.

EAU CLAIRE COUNTY BY:

J. Thomas McCarty — 4/25/06

J. Thomas McCarty
County Administrator

(Date)

CHIPPEWA COUNTY BY:

James Leschensky — 4/26/06

James Leschensky
County Board Chair

(Date)

CNTX-172

Appendix 3 - Storm water GIS and associated field data on illicit discharge and storm water modeling (CD)

Appendix 4 - Model Post-Construction Storm Water Management Zoning Ordinance

Chapter NR 152

Appendix B

MODEL POST–CONSTRUCTION STORM WATER MANAGEMENT ZONING ORDINANCE

TABLE OF CONTENTS

MODEL POST–CONSTRUCTION STORM WATER MANAGEMENT ZONING ORDINANCE

Note to Users: *This model ordinance includes the use of brackets [ ] around phrases that are to be filled in by the municipality. For example, the phrase [administering authority] is frequently used. Where the municipality chooses to have the ordinance administered by the City Engineer, the phrase [administering authority] should be replaced by "City Engineer". In a few places, the model ordinance includes phrases in brackets that are underlined [_____]. In these cases, one of the underlined phrases should be selected verbatim. For example, if the phrase includes statutory citations, several underlined choices may be given such as [59.693, 60.627, 61.354, or 62.234]. A county would replace the phrase in brackets with "59.693", since that is the appropriate citation for the county to use.*

AN ORDINANCE TO CREATE CHAPTER [NUMBER] OF THE [CODE OR ORDINANCE] OF THE [NAME OF MUNICIPALITY] RELATING TO THE CONTROL OF POST–CONSTRUCTION RUNOFF

FOREWORD.

The intent of this ordinance is to reduce the amount of post–construction storm water and associated pollutants reaching waters of the state. Use of this ordinance by municipalities will foster the consistent statewide application of post–construction performance standards for new development and redevelopment contained in subchapters III and IV of chapter NR 151, Wis. Adm. Code.

The [governing body] of the [name of municipality] does hereby ordain that Chapter [number] of the [code or ordinance] of the [name of municipality] is created to read as follows:

[CHAPTER]

POST–CONSTRUCTION STORM WATER MANAGEMENT

S.01 AUTHORITY.

(1) This ordinance is adopted by the [governing body] under the authority granted by s. [59.693, for counties; 60.627, for towns; 61.354, for villages; or 62.234, for cities], Wis. Stats. This ordinance supersedes all provisions of an ordinance previously enacted under s. [59.69, 60.62, 61.35, or 62.23], Wis. Stats., that relate to storm water management regulations. Except as otherwise specified in s. [59.693, 60.627, 61.354, or 62.234], Wis. Stats., s. [59.69, 60.62, 61.35, or 62.23], Wis. Stats., applies to this ordinance and to any amendments to this ordinance.

(2) The provisions of this ordinance are deemed not to limit any other lawful regulatory powers of the same governing body.

(3) The [governing body] hereby designates the [administering authority] to administer and enforce the provisions of this ordinance.

(4) The requirements of this ordinance do not pre–empt more stringent storm water management requirements that may be imposed by any of the following:

(a) Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under ss. 281.16 and 283.33, Wis. Stats.

(b) Targeted non–agricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under s. NR 151.004, Wis. Adm. Code.

S.02 FINDINGS OF FACT.

The [governing body] finds that uncontrolled, post–construction runoff has a significant impact upon water resources and the health, safety and general welfare of the community and diminishes the public enjoyment and use of natural resources. Specifically, uncontrolled post–construction runoff can:

(1) Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperature.

(2) Diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loading of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens and other urban pollutants.

(3) Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.

(4) Reduce the quality of groundwater by increasing pollutant loading.

(5) Threaten public health, safety, property and general welfare by overtaxing storm sewers, drainage ways, and other minor drainage facilities.

(6) Threaten public health, safety, property and general welfare by increasing major flood peaks and volumes.

(7) Undermine floodplain management efforts by increasing the incidence and levels of flooding.

S.03 PURPOSE AND INTENT.

(1) PURPOSE. The general purpose of this ordinance is to establish long–term, post– construction runoff management requirements that will diminish the threats to public health, safety, welfare and the aquatic environment. Specific purposes are to:

(a) Further the maintenance of safe and healthful conditions.

(b) Prevent and control the adverse effects of storm water; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; preserve ground cover and scenic beauty; and promote sound economic growth.

(c) Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; and prevent conditions that endanger downstream property.

(2) INTENT. It is the intent of the [governing body] that this ordinance regulates post–construction storm water discharges to waters of the state. This ordinance may be applied on a site–by–site basis. The [governing body] recognizes, however, that the preferred method of achieving the storm water performance standards set forth in this ordinance is through the preparation and implementation of comprehensive, systems–level storm water management plans that cover hydrologic units, such as watersheds, on a municipal and regional scale. Such plans may prescribe regional storm water devices, practices or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where

such plans are in conformance with the performance standards developed under s. 281.16, Wis. Stats., for regional storm water management measures and have been approved by the [governing body], it is the intent of this ordinance that the approved plan be used to identify post–construction management measures acceptable for the community.

S.04 APPLICABILITY AND JURISDICTION.

(1) APPLICABILITY.

(a)Where not otherwise limited by law, this ordinance applies after final stabilization to a site of land disturbing construction activity meeting any of the criteria in this paragraph, unless the site is otherwise exempt under paragraph (b).

1. A post construction site that had 5 or more acres of land disturbing construction activity.

2. A post–development construction site that had one or more acres of land disturbing construction activity after March 10, 2003.

Note to Users: The 5– and 1–acre land disturbance thresholds are consistent with state and federal laws regarding applicability of construction site erosion control permits.

(b) A site that meets any of the criteria in this paragraph is exempt from the requirements of this ordinance.

1. A redevelopment post–construction site with no increase in exposed parking lots or roads.

2. A post–construction site with less than 10% connected imperviousness based on complete development of the post–construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.

3. Nonpoint discharges from agricultural facilities and practices.

4. Nonpoint discharges from silviculture activities.

5. Routine maintenance for project sites under 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

6. Underground utility construction such as water, sewer and fiberoptic lines. This exemption does not apply to the construction of any above ground structures associated with utility construction.

(c) Notwithstanding the applicability requirements in paragraph (a), this ordinance applies to post–construction sites of any size that, in the opinion of the [administering authority], is likely to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety.

(2) JURISDICTION.

This ordinance applies to [post construction sites within the boundaries and jurisdiction of the [name of the municipality]].

or

[post construction sites within the boundaries and jurisdiction of the [name of municipality]], as well as the extraterritorial division of land subject to an ordinance enacted pursuant to s. 236.45(2) and (3) Wis. Stats.]

or

[post construction sites within the boundaries and jurisdiction of the [name of the municipality]], as well as all lands located within the extraterritorial plat approval jurisdiction of the [name of municipality], even if plat approval is not involved.]

Note to Users: *These options differ in the amount of land area covered by this ordinance and may have ramifications for enforcement authority. For counties, the first option will be the only option since counties do not have extraterritorial authority. Under s. 59.693(10), Wis. Stats., if a county storm water management ordinance exists at the time of annexation, then the municipal ordinance must be at least as restrictive as the county ordinance.*

(3) EXCLUSIONS.

This ordinance is not applicable to activities conducted by a state agency, as defined under s. 227.01 (1), Wis. Stats., but also including the office of district attorney, which is subject to the state plan promulgated or a memorandum of understanding entered into under s. 281.33 (2), Wis. Stats.

Note to Users: *The Wisconsin Department of Transportation (WisDOT) has entered into a memorandum of understanding with the Wisconsin Department of Natural Resources that satisfies s. 281.33 (2), Wis. Stats., such that activities directed and supervised by WisDOT are exempt from this model ordinance.*

S.05 DEFINITIONS.

(1) "Administering authority" means a governmental employee, or a regional planning commission empowered under s. [59.693; 60.627; 61.354;

62.234], Wis. Stats., that is designated by the [governing body] to administer this ordinance.

(2) "Agricultural facilities and practices" has the meaning given in s. 281.16, Wis. Stats.

(3) "Average annual rainfall" means a calendar year of precipitation, excluding snow, which is considered typical.

(4) "Best management practice" or "BMP" means structural or non–structural measures, practices, techniques or devices employed to avoid or minimize sediment or pollutants carried in runoff to waters of the state.

(5) "Business day" means a day the office of the [administering authority] is routinely and customarily open for business.

(6) "Cease and desist order" means a court–issued order to halt land disturbing construction activity that is being conducted without the required permit.

(7) "Combined sewer system" means a system for conveying both sanitary sewage and storm water runoff.

(8) "Connected imperviousness" means an impervious surface that is directly connected to a separate storm sewer or water of the state via an impervious flow path.

(9) "Design storm" means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total depth of rainfall.

(10) "Development" means residential, commercial, industrial or institutional land uses and associated roads.

(11) "Division of land" means the creation from one parcel of [number] or more parcels or building sites of [number] or fewer acres each in area where such creation occurs at one time or through the successive partition within a 5 year period.

(12) "Effective infiltration area" means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.

(13) "Erosion" means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

(14) "Exceptional resource waters" means waters listed in s. NR 102.11, Wis. Adm. Code.

(15) "Extraterritorial" means the unincorporated area within 3 miles of the corporate limits of a first, second, or third class city, or within 1.5 miles of a fourth class city or village.

(16) "Final stabilization" means that all land disturbing construction activities at the construction site have been completed and that a uniform, perennial, vegetative cover has been established, with a density of at least 70% of the cover, for the unpaved areas and areas not covered by permanent structures, or employment of equivalent permanent stabilization measures.

(17) "Financial guarantee" means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the [administering authority] by the responsible party to assure that requirements of the ordinance are carried out in compliance with the storm water management plan.

(18) "Governing body" means town board of supervisors, county board of supervisors, city council, village board of trustees or village council.

(19) "Impervious surface" means an area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, parking lots and streets are examples of areas that typically are impervious.

(20) "In–fill area" means an undeveloped area of land located within existing development.

(21) "Infiltration" means the entry of precipitation or runoff into or through the soil.

(22) "Infiltration system" means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or road side channels designed for conveyance and pollutant removal only.

(23) "Karst feature" means an area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.

(24) "Land disturbing construction activity" means any man–made alteration of the land surface resulting in a change in the topography or existing vegetative or non–vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and

movement of sediment into waters of the state. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.

(25) "Maintenance agreement" means a legal document that provides for long–term maintenance of storm water management practices.

(26) "MEP" or "maximum extent practicable" means a level of implementing best management practices in order to achieve a performance standard specified in this ordinance which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. MEP allows flexibility in the way to meet the performance standards and may vary based on the performance standard and site conditions.

(27) "New development" means development resulting from the conversion of previously undeveloped land or agricultural land uses.

(28) "Off–site" means located outside the property boundary described in the permit application.

(29) "On–site" means located within the property boundary described in the permit application.

(30) "Ordinary high–water mark" has the meaning given in s. NR 115.03(6), Wis. Adm. Code.

(31) "Outstanding resource waters" means waters listed in s. NR 102.10, Wis. Adm. Code.

(32) "Percent fines" means the percentage of a given sample of soil, which passes through a # 200 sieve.

Note to Users: *Percent fines can be determined using the "American Society for Testing and Materials", volume 04.02, "Test Method C117–95 Standard Test Method for Materials Finer than 75–μm (No. 200) Sieve in Material Aggregates by Washing". Copies can be obtained by contacting the American society for testing and materials, 100 Barr Harbor Drive, Conshohocken, PA 19428–2959, or phone 610–832–9585, or on line at: "http://www.astm.org/".*

(33) "Performance standard" means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

(34) "Permit" means a written authorization made by the [administering authority] to the applicant to conduct land disturbing construction activity or to discharge post–construction runoff to waters of the state.

(35) "Permit administration fee" means a sum of money paid to the [administering authority] by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the permit.

(36) "Pervious surface" means an area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests or other similar vegetated areas are examples of surfaces that typically are pervious.

(37) "Pollutant" has the meaning given in s. 283.01(13), Wis. Stats.

(38) "Pollution" has the meaning given in s. 281.01(10), Wis. Stats.

(39) "Post–construction site" means a construction site following the completion of land disturbing construction activity and final site stabilization.

(40) "Pre–development condition" means the extent and distribution of land cover types present before the initiation of land disturbing construction activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.

(41) "Preventive action limit" has the meaning given in s. NR 140.05(17), Wis. Adm. Code.

(42) "Redevelopment " means areas where development is replacing older development.

(43) "Responsible party" means any entity holding fee title to the property or other person contracted or obligated by other agreement to implement and maintain post–construction storm water BMPs.

(44) "Runoff" means storm water or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

(45) "Separate storm sewer" means a conveyance or system of conveyances including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

(a) Is designed or used for collecting water or conveying runoff.

(b) Is not part of a combined sewer system.

(c) Is not draining to a storm water treatment device or system.

(d) Discharges directly or indirectly to waters of the state.

(46) "Site" means the entire area included in the legal description of the land on which the land disturbing construction activity occurred.

(47) "Stop work order" means an order issued by the [administering authority] which requires that all construction activity on the site be stopped.

(48) "Storm water management plan" means a comprehensive plan designed to reduce the discharge of pollutants from storm water after the site has under gone final stabilization following completion of the construction activity.

(49) "Storm water management system plan" is a comprehensive plan designed to reduce the discharge of runoff and pollutants from hydrologic units on a regional or municipal scale.

(50) "Technical standard" means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.

(51) "Top of the channel" means an edge, or point on the landscape, landward from the ordinary high–water mark of a surface water of the state, where the slope of the land begins to be less than 12% continually for at least 50 feet. If the slope of the land is 12% or less continually for the initial 50 feet, landward from the ordinary high–water mark, the top of the channel is the ordinary high–water mark.

(52) "TR–55" means the United States Department of Agriculture, Natural Resources Conservation Service (previously Soil Conservation Service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986.

(53) "Type II distribution" means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973". The Type II curve is applicable to all of Wisconsin and represents the most intense storm pattern.

(54) "Waters of the state" has the meaning given in s. 281.01 (18), Wis. Stats.

S.06TECHNICAL STANDARDS.

The following methods shall be used in designing the water quality, peak flow shaving and infiltration components of storm water practices needed to meet the water quality standards of this ordinance:

(1) Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.

(2) Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the [administering authority].

(3) In this ordinance, the following year(s) and location(s) [has or have] been selected as average annual rainfall(s): [Madison, 1981 (Mar.12–Dec. 2); Green Bay, 1969 (Mar. 29–Nov. 25); Milwaukee, 1969 (Mar. 28–Dec. 6); Minneapolis, 1959 (Mar. 13–Nov. 4); Duluth, 1975 (Mar. 24 –Nov. 19)]

Note to Users: Of the five locations listed, the location closest to a project site best represents the average annual rainfall for that site.

S.07 PERFORMANCE STANDARDS.

(1) RESPONSIBLE PARTY. The responsible party shall implement a post–construction storm water management plan that incorporates the requirements of this section.

(2) PLAN. A written storm water management plan in accordance with S.09 shall be developed and implemented for each post–construction site.

(3) REQUIREMENTS. The plan required under sub. (2) shall include the following:

(a) TOTAL SUSPENDED SOLIDS. BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post–construction site as follows:

1. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.

2. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.

3. For in–fill development under 5 acres that occurs within 10 years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.

4. For in–fill development that occurs 10 or more years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.

5. Notwithstanding subds. 1. to 4., if the design cannot achieve the applicable total suspended solids reduction specified, the storm water management plan shall include a written and site–specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

Note to Users: *Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids.*

(b) PEAK DISCHARGE.

1. By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre–development conditionally the 2–year, 24–hour design storm applicable to the post–construction site. Pre–development conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR–55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR–55. However, when pre–development land cover is cropland, rather than using TR–55 values for cropland, the runoff curve numbers in Table 1 shall be used.

Table 1 – Maximum Pre–Development Runoff Curve Numbers for Cropland Areas

Hydrologic Soil Group	A	B	C	D
Runoff Curve Number	56	70	79	83

Note to Users: *The curve numbers in Table 1 represent mid–range values for soils under a good hydrologic condition where conservation practices are used and are selected to be protective of the resource waters.*

2. This subsection of the ordinance does not apply to any of the following:

a. A post–construction site where the change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving water by more than 0.01 of a foot for the 2–year, 24–hour storm event.

Note to Users: *Hydraulic models such as HEC–RAS or another methodology may be used to determine the change in surface water elevations.*

b. A redevelopment post–construction site.

c. An in–fill development area less than 5 acres.

Note to Users: *The intent of the peak discharge standard is to minimize streambank erosion, under bank–full conditions. For water quantity concerns, the post–development peak flow rate for the 10, 25, 50 and 100 year – 24 hour storm events should also be controlled either at or below pre–development discharge rates. This has not been addressed in this model ordinance but may need to be included in the local ordinance to address flood control issues.*

(c) INFILTRATION. BMPs shall be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in subds. 5. through 8.

1. For residential developments one of the following shall be met:

a. Infiltrate sufficient runoff volume so that the post–development infiltration volume shall be at least 90% of the pre–development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.

b. Infiltrate 25% of the post–development runoff from the 2 year –24 hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR–55. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.

2. For non–residential development, including commercial, industrial and institutional development, one of the following shall be met:

a. Infiltrate sufficient runoff volume so that the post–development infiltration volume shall be at least 60% of the pre–development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.

b. Infiltrate 10% of the runoff from the 2 year – 24 hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, and not composite curve numbers as defined in TR–55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.

3. Pre–development condition shall be the same as in par. (b).

Note to Users: *A model that calculates runoff volume, such as SLAMM, P8, or an equivalent methodology may be used.*

4. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with subd. 8. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

Note to Users: *To achieve the infiltration requirement for the parking lots or roads, maximum extent practicable should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts, it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.*

5. Exclusions. The runoff from the following areas are prohibited from meeting the requirements of this paragraph:

a. Areas associated with tier 1 industrial facilities identified in s. NR 216.21(2)(a), Wis. Adm. Code, including storage, loading, rooftop and parking.

b. Storage and loading areas of tier 2 industrial facilities identified in s. NR 216.21(2)(b), Wis. Adm. Code.

Note to Users: *Runoff from tier 2 parking and rooftop areas may be infiltrated but may require pretreatment.*

c. Fueling and vehicle maintenance areas.

d. Areas within 1000 feet upgradient or within 100 feet downgradient of karst features.

e. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except this subd. 5.e. does not prohibit infiltration of roof runoff.

f. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.

g. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4), Wis. Adm. Code, or within 100 feet of a private well as specified in s. NR 812.08(4), Wis. Adm. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.

h. Areas where contaminants of concern, as defined in s. NR 720.03(2), Wis. Adm. Code are present in the soil through which infiltration will occur.

i. Any area where the soil does not exhibit one of the following soil characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a 3–foot soil layer with 20% fines or greater; or at least a 5–foot soil layer with 10 percent fines or greater. This does not apply where the soil medium within the infiltration system provides an equivalent level of protection. This subd. 5.i. does not prohibit infiltration of roof runoff.

Note to Users: *The areas listed in subd. 5 are prohibited from infiltrating runoff due to the potential for groundwater contamination.*

6. Exemptions. The following are not required to meet the requirements of this paragraph:

a. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the site.

b. Parking areas and access roads less than 5,000 square feet for commercial and industrial development.

c. Redevelopment post–construction sites.

d. In–fill development areas less than 5 acres.

e. Infiltration areas during periods when the soil on the site is frozen.

f. Roads in commercial, industrial and institutional land uses, and arterial residential roads.

7. Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such

alternate use shall be given equal credit toward the infiltration volume required by this paragraph.

8. a. Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140, Wis. Adm. Code. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.

b. Notwithstanding subd. par. a., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

(d) PROTECTIVE AREAS.

1. "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. NR 103.04, 75 feet.

b. For perennial and intermittent streams identified on a United States geological survey 7.5–minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.

c. For lakes, 50 feet.

d. For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineations shall be made in accordance with s. NR 103.08(1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.

e. For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

f. In subd. 1.a., d. and e., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.

g. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.

2.This paragraph applies to post–construction sites located within a protective area, except those areas exempted pursuant to subd. 4.

3. The following requirements shall be met:

a. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The storm water management plan shall contain a written site–specific explanation for any parts of the protective area that are disturbed during construction.

b. Where land disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self–sustaining vegetative cover of 70% or greater shall be established and maintained. The adequate sod or self–sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non–vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high velocity flows occur.

Note to Users: *It is recommended that seeding of non–aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long–term bank stability because of an extensive root system is preferable. Vegetative cover can be measured using the line transect method described in the University of Wisconsin Extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".*

c. Best management practices such as filter strips, swales, or wet detention basins, that are designed to control pollutants from non–point sources may be located in the protective area.

Note to Users: *Other regulations, such as ch. 30, Wis. Stats., and chs. NR 103, 115, 116 and 117,*

Wis. Adm. Code, and their associated review and approval process may apply in the protective area.

4. This paragraph does not apply to:

a. Redevelopment post–construction sites.

b. In–fill development areas less than 5 acres.

c. Structures that cross or access surface waters such as boat landings, bridges and culverts.

d. Structures constructed in accordance with s. 59.692(1v), Wis. Stats.

e. Post–construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note to Users: *A vegetated protective area to filter runoff pollutants from post–construction sites described in subd. 4.e. is not necessary since runoff is not entering the surface water at that location. Other practices, necessary to meet the requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants before the runoff enters a surface water of the state.*

(e) FUELING AND VEHICLE MAINTENANCE AREAS. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note to Users: *A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non–structural method of preventing or treating petroleum in runoff.*

(f) SWALE TREATMENT FOR TRANSPORTATION FACILITIES. [OPTIONAL]

1. Applicability. Except as provided in subd. 2., transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the requirements of this section, if the swales are designed to the maximum extent practicable to do all of the following:

a. Be vegetated. However, where appropriate, non–vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.

Note to Users: *It is preferred that tall and dense vegetation be maintained within the swale due to its greater effectiveness at enhancing runoff pollutant removal.*

b. Carry runoff through a swale for 200 feet or more in length that is designed with a flow velocity no greater than 1.5 feet per second for the peak flow generated using either a 2–year, 24–hour design storm or a 2–year storm with a duration equal to the time of concentration as appropriate. If a swale of 200 feet in length cannot be designed with a flow velocity of 1.5 feet per second or less, then the flow velocity shall be reduced to the maximum extent practicable.

Note to Users: *Check dams may be included in the swale design to slow runoff flows and improve pollutant removal. Transportation facilities with continuous features such as curb and gutter, sidewalks or parking lanes do not comply with the design requirements of this paragraph. However, a limited amount of structural measures such as curb and gutter may be allowed as necessary to account for other concerns such as human safety or resource protection.*

2. Exemptions. The [administering authority] may, consistent with water quality standards, require other provisions of this section be met on a transportation facility with an average daily travel of vehicles greater than 2500 and where the initial surface water of the state that the runoff directly enters is any of the following:

a. An outstanding resource water.

b. An exceptional resource water.

c. Waters listed in s. 303(d) of the federal clean water act that are identified as impaired in whole or in part, due to nonpoint source impacts.

d. Waters where targeted performance standards are developed under s. NR 151.004, Wis. Adm. Code, to meet water quality standards.

Note to Users: *The Department of Natural Resource's regional storm water staff can determine if additional BMPs, beyond a water quality swale, are needed under this paragraph.*

(4) GENERAL CONSIDERATIONS FOR ON–SITE AND OFF–SITE STORM WATER MANAGEMENT MEASURES. The following considerations shall be observed in managing runoff:

(a) Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this section.

(b)Emergency overland flow for all storm water facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(5) LOCATION AND REGIONAL TREATMENT OPTION.

(a) The BMPs may be located on–site or off–site as part of a regional storm water device, practice or system.

(b) Post–construction runoff within a non–navigable surface water that flows into a BMP, such as a wet detention pond, is not required to meet the performance standards of this ordinance. Post–construction BMPs may be located in non–navigable surface waters.

(c) Except as allowed under par. (d), post–construction runoff from new development shall meet the post–construction performance standards prior to entering a navigable surface water.

(d) Post–construction runoff from any development within a navigable surface water that flows into a BMP is not required to meet the performance standards of this ordinance if:

1. The BMP was constructed prior to the effective date of this ordinance and the BMP either received a permit issued under ch. 30, Stats., or the BMP did not require a ch. 30, Wis. Stats., permit; and

2. The BMP is designed to provide runoff treatment from future upland development.

(e) Runoff from existing development, redevelopment and in–fill areas shall meet the post–construction performance standards in accordance with this paragraph.

1. To the maximum extent practicable, BMPs shall be located to treat runoff prior to discharge to navigable surface waters.

2. Post–construction BMPs for such runoff may be located in a navigable surface water if allowable under all other applicable federal, state and local regulations such as ch. NR 103, Wis. Adm. Code and ch. 30, Wis. Stats.

Note to Users: *This allows the location of BMPs in navigable surface waters where necessary to augment management practices upstream of the navigable surface water to meet the performance standards.*

(f) The discharge of runoff from a BMP, such as a wet detention pond, or after a series of such BMPs is subject to this chapter.

Note to Users: *This section does not supersede any other applicable federal, state or local regulation such as ch. NR 103, Wis. Adm. Code and ch. 30, Wis. Stats.*

(g) The [administering authority] may approve off–site management measures provided that all of the following conditions are met:

1. The [administrating authority] determines that the post–construction runoff is covered by a storm water management system plan that is approved by the [name of municipality] and that contains management requirements consistent with the purpose and intent of this ordinance.

2. The off–site facility meets all of the following conditions:

a. The facility is in place.

b. The facility is designed and adequately sized to provide a level of storm water control equal to or greater than that which would be afforded by on–site practices meeting the performance standards of this ordinance.

c. The facility has a legally obligated entity responsible for its long–term operation and maintenance.

(h) Where a regional treatment option exists such that the [administering authority] exempts the applicant from all or part of the minimum on–site storm water management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the [administering authority]. In determining the fee for post–construction runoff, the [administering authority] shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.

(6) ALTERNATE REQUIREMENTS. The [administering authority] may establish storm water management requirements more stringent than those set forth in this section if the [administering authority] determines that an added level of protection is needed to protect sensitive resources.

S.08 PERMITTING REQUIREMENTS, PROCEDURES AND FEES.

(1) PERMIT REQUIRED. No responsible party may undertake a land disturbing construction activity without receiving a post–construction runoff permit from the [administering authority] prior to commencing the proposed activity.

(2) PERMIT APPLICATION AND FEES. Unless specifically excluded by this ordinance, any responsible party desiring a permit shall submit to the [administering authority] a permit application made on a form provided by the [administering authority] for that purpose.

(a) Unless otherwise excepted by this ordinance, a permit application must be accompanied by a storm water management plan, a maintenance agreement and a non–refundable permit administration fee.

(b) The storm water management plan shall be prepared to meet the requirements of SS.07 and 09, the maintenance agreement shall be prepared to meet the requirements of S.10, the financial guarantee shall meet the requirements of S.11, and fees shall be those established by the [governing body] as set forth in S.12.

(3) REVIEW AND APPROVAL OF PERMIT APPLICATION. The [administering authority] shall review any permit application that is submitted with a storm water management plan, maintenance agreement, and the required fee. The following approval procedure shall be used:

(a) Within [number] business days of the receipt of a complete permit application, including all items as required by sub. (2), the [administering authority] shall inform the applicant whether the application, plan and maintenance agreement are approved or disapproved based on the requirements of this ordinance.

(b) If the storm water permit application, plan and maintenance agreement are approved, or if an agreed upon payment of fees in lieu of storm water management practices is made, the [administering authority] shall issue the permit.

(c) If the storm water permit application, plan or maintenance agreement is disapproved, the [administering authority] shall detail in writing the reasons for disapproval.

(d) The [administering authority] may request additional information from the applicant. If additional information is submitted, the [administering authority] shall have [number] business days from the date the additional information is received to inform the applicant that the plan and maintenance agreement are either approved or disapproved.

(e) Failure by the [administering authority] to inform the permit applicant of a decision within [number] business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.

(4) PERMIT REQUIREMENTS. All permits issued under this ordinance shall be subject to the following conditions, and holders of permits issued under this ordinance shall be deemed to have accepted these conditions. The [administering authority] may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the [administering authority] to suspend or revoke this permit may be appealed in accordance with S.14.

(a) Compliance with this permit does not relieve the responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations.

(b) The responsible party shall design and install all structural and non–structural storm water management measures in accordance with the approved storm water management plan and this permit.

(c) The responsible party shall notify the [administering authority] at least [number] business days before commencing any work in conjunction with the storm water management plan, and within [number] business days upon completion of the storm water management practices. If required as a special condition under sub. (5), the responsible party shall make additional notification according to a schedule set forth by the [administering authority] so that practice installations can be inspected during construction.

(d) Practice installations required as part of this ordinance shall be certified "as built" by a licensed professional engineer. Completed storm water management practices must pass a final inspection by the [administering authority] or its designee to determine if they are in accordance with the approved storm water management plan and ordinance. The [administering authority] or its designee shall notify the responsible party in writing of any changes required in such practices to bring them into compliance with the conditions of this permit.

(e) The responsible party shall notify the [administering authority] of any significant modifications it intends to make to an approved storm water management plan. The [administering authority] may require that the proposed modifications be submitted to it for approval prior to incorporation into the storm water management plan and execution by the responsible party.

(f) The responsible party shall maintain all storm water management practices in accordance with the storm water management plan until the practices either become the responsibility of the [governing body], or are transferred to subsequent private own-

ers as specified in the approved maintenance agreement.

(g) The responsible party authorizes the [administering authority] to perform any work or operations necessary to bring storm water management measures into conformance with the approved storm water management plan, and consents to a special assessment or charge against the property as authorized under subch. VII of ch. 66, Wis. Stats., or to charging such costs against the financial guarantee posted under S.11.

(h) If so directed by the [administering authority], the responsible party shall repair at the responsible party's own expense all damage to adjoining municipal facilities and drainage ways caused by runoff, where such damage is caused by activities that are not in compliance with the approved storm water management plan.

(i) The responsible party shall permit property access to the [administering authority] or its designee for the purpose of inspecting the property for compliance with the approved storm water management plan and this permit.

(j) Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the [administering authority] may require the responsible party to make appropriate legal arrangements with affected property owners concerning the prevention of endangerment to property or public safety.

(k) The responsible party is subject to the enforcement actions and penalties detailed in S.13, if the responsible party fails to comply with the terms of this permit.

(5) PERMIT CONDITIONS. Permits issued under this subsection may include conditions established by [administering authority] in addition to the requirements needed to meet the performance standards in S.07 or a financial guarantee as provided for in S.11.

(6) PERMIT DURATION. Permits issued under this section shall be valid from the date of issuance through the date the [administering authority] notifies the responsible party that all storm water management practices have passed the final inspection required under sub. (4)(d).

S.09 STORM WATER MANAGEMENT PLAN.

(1) PLAN REQUIREMENTS. The storm water management plan required under S.08 (2) shall contain at a minimum the following information:

(a) Name, address, and telephone number for the following or their designees: landowner; developer; project engineer for practice design and certification; person(s) responsible for installation of storm water management practices; and person(s) responsible for maintenance of storm water management practices prior to the transfer, if any, of maintenance responsibility to another party.

(b) A proper legal description of the property proposed to be developed, referenced to the U.S. Public Land Survey system or to block and lot numbers within a recorded land subdivision plat.

(c) Pre–development site conditions, including:

1. One or more site maps at a scale of not less than 1 inch equals [number] feet. The site maps shall show the following: site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site at a scale not to exceed [number] feet; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all storm water conveyance sections; watershed boundaries used in hydrology determinations to show compliance with performance standards; lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site; limits of the 100 year floodplain; location of wells and wellhead protection areas covering the project area and delineated pursuant to s. NR 811.16, Wis. Adm. Code.

2. Hydrology and pollutant loading computations as needed to show compliance with performance standards. All major assumptions used in developing input parameters shall be clearly stated. The geographic areas used in making the calculations shall be clearly cross–referenced to the required map(s).

(d) Post–development site conditions, including:

1. Explanation of the provisions to preserve and use natural topography and land cover features to minimize changes in peak flow runoff rates and volumes to surface waters and wetlands.

2. Explanation of any restrictions on storm water management measures in the development area imposed by wellhead protection plans and ordinances.

3. One or more site maps at a scale of not less than 1 inch equals [number] feet showing the following: post–construction pervious areas including vegetative cover type and condition; impervious surfaces

including all buildings, structures, and pavement; post–construction topographic contours of the site at a scale not to exceed [number] feet; post–construction drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; locations and dimensions of drainage easements; locations of maintenance easements specified in the maintenance agreement; flow path and direction for all storm water conveyance sections; location and type of all storm water management conveyance and treatment practices, including the on–site and off–site tributary drainage area; location and type of conveyance system that will carry runoff from the drainage and treatment practices to the nearest adequate outlet such as a curbed street, storm drain, or natural drainage way; watershed boundaries used in hydrology and pollutant loading calculations and any changes to lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site.

4. Hydrology and pollutant loading computations as needed to show compliance with performance standards. The computations shall be made for each discharge point in the development, and the geographic areas used in making the calculations shall be clearly cross–referenced to the required map(s).

5. Results of investigations of soils and groundwater required for the placement and design of storm water management measures. Detailed drawings including cross–sections and profiles of all permanent storm water conveyance and treatment practices.

(e) A description and installation schedule for the storm water management practices needed to meet the performance standards in S.07.

(f) A maintenance plan developed for the life of each storm water management practice including the required maintenance activities and maintenance activity schedule.

(g) Cost estimates for the construction, operation, and maintenance of each storm water management practice.

(h) Other information requested in writing by the [administering authority] to determine compliance of the proposed storm water management measures with the provisions of this ordinance.

(i) All site investigations, plans, designs, computations, and drawings shall be certified by a [licensed professional engineer] to be prepared in accordance with accepted engineering practice and requirements of this ordinance.

(2) ALTERNATE REQUIREMENTS. The [administering authority] may prescribe alternative submittal requirements for applicants seeking an exemption to on–site storm water management performance standards under S.07 (5).

S.10 MAINTENANCE AGREEMENT.

(1) MAINTENANCE AGREEMENT REQUIRED. The maintenance agreement required under S.08 (2) for storm water management practices shall be an agreement between the [administering authority] and the responsible party to provide for maintenance of storm water practices beyond the duration period of this permit. The maintenance agreement shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the storm water management practices.

(2) AGREEMENT PROVISIONS. The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required by S.09(1)(f):

(a) Identification of the storm water facilities and designation of the drainage area served by the facilities.

(b) A schedule for regular maintenance of each aspect of the storm water management system consistent with the storm water management plan required under S.08 (2).

(c) Identification of the responsible party(s), organization or city, county, town or village responsible for long term maintenance of the storm water management practices identified in the storm water management plan required under S.08 (2).

(d) Requirement that the responsible party(s), organization, or city, county, town or village shall maintain storm water management practices in accordance with the schedule included in par. (b).

(e) Authorization for the [administering authority] to access the property to conduct inspections of storm water management practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.

(f) A requirement on the [administering authority] to maintain public records of the results of the site inspections, to inform the responsible party responsible for maintenance of the inspection results, and to specifically indicate any corrective actions

required to bring the storm water management practice into proper working condition.

(g) Agreement that the party designated under par. (c), as responsible for long term maintenance of the storm water management practices, shall be notified by the [administering authority] of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the [administering authority].

(h) Authorization of the [administering authority] to perform the corrected actions identified in the inspection report if the responsible party designated under par. (c) does not make the required corrections in the specified time period. The [administering authority] shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to subch. VII of ch. 66, Wis. Stats.

S.11 FINANCIAL GUARANTEE.

(1) ESTABLISHMENT OF THE GUARANTEE. The [administering authority] may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the [administering authority]. The financial guarantee shall be in an amount determined by the [administering authority] to be the estimated cost of construction and the estimated cost of maintenance of the storm water management practices during the period which the designated party in the maintenance agreement has maintenance responsibility. The financial guarantee shall give the [administering authority] the authorization to use the funds to complete the storm water management practices if the responsible party defaults or does not properly implement the approved storm water management plan, upon written notice to the responsible party by the administering authority that the requirements of this ordinance have not been met.

(2) CONDITIONS FOR RELEASE. Conditions for the release of the financial guarantee are as follows:

(a) The [administering authority] shall release the portion of the financial guarantee established under this section, less any costs incurred by the [administering authority] to complete installation of practices, upon submission of "as built plans" by a licensed professional engineer. The [administering authority] may make provisions for a partial pro–rata release of the financial guarantee based on the completion of various development stages.

(b) The [administering authority] shall release the portion of the financial guarantee established under this section to assure maintenance of storm water practices, less any costs incurred by the [administering authority], at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

S.12 FEE SCHEDULE.

The fees referred to in other sections of this ordinance shall be established by the [administering authority] and may from time to time be modified by resolution. A schedule of the fees established by the [administering authority] shall be available for review in [location].

S.13 ENFORCEMENT.

(1) Any land disturbing construction activity or post–construction runoff initiated after the effective date of this ordinance by any person, firm, association, or corporation subject to the ordinance provisions shall be deemed a violation unless conducted in accordance with the requirements of this ordinance.

(2) The [administering authority] shall notify the responsible party by certified mail of any non–complying land disturbing construction activity or post–construction runoff. The notice shall describe the nature of the violation, remedial actions needed, a schedule for remedial action, and additional enforcement action which may be taken.

(3) Upon receipt of written notification from the [administering authority] under sub. (2), the responsible party shall correct work that does not comply with the storm water management plan or other provisions of this permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the [administering authority] in the notice.

(4) If the violations to a permit issued pursuant to this ordinance are likely to result in damage to properties, public facilities, or waters of the state, the [administering authority] may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the [administering authority] plus interest and legal costs shall be billed to the responsible party.

(5) The [administering authority] is authorized to post a stop work order on all land disturbing construction activity that is in violation of this ordinance, or to request the [municipal attorney, corporation counsel] to obtain a cease and desist order in any court with jurisdiction.

(6) The [administering authority] may revoke a permit issued under this ordinance for non–compliance with ordinance provisions.

(7) Any permit revocation, stop work order, or cease and desist order shall remain in effect unless retracted by the [administering authority] or by a court with jurisdiction.

(8) The [administering authority] is authorized to refer any violation of this ordinance, or of a stop work order or cease and desist order issued pursuant to this ordinance, to the [municipal attorney, corporation counsel] for the commencement of further legal proceedings in any court with jurisdiction.

(9) Any person, firm, association, or corporation who does not comply with the provisions of this ordinance shall be subject to a forfeiture of not less than [number] dollars or more than [number] dollars per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.

(10) Compliance with the provisions of this ordinance may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease and desist order before resorting to injunctional proceedings.

Note to Users: *Injunctional orders are authorized pursuant to s. 59.69(11), 61.35, or 62.23(8), Wis. Stats., for counties, villages and towns with village powers, and cities respectively.*

(11) When the [administering authority] determines that the holder of a permit issued pursuant to this ordinance has failed to follow practices set forth in the storm water management plan, or has failed to comply with schedules set forth in said storm water management plan, the [administering authority] or a party designated by the [administering authority] may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved plan. The [administering authority] shall keep a detailed accounting of the costs and expenses of performing this work. These costs and expenses shall be deducted from any financial security posted pursuant to S.11 of this ordinance. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.

S.14 APPEALS.

(1) BOARD OF [APPEALS or ADJUSTMENT]. The board of [appeals or adjustment], created pursuant to section [number] of the [name of municipality] ordinances pursuant to s. [59.694, or 60.65 or 61.354(4)(b) or 62.23(7)(e)], Wis. Stats, shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the [administering authority] in administering this ordinance. The board shall also use the rules, procedures, duties, and powers authorized by statute in hearing and deciding appeals. Upon appeal, the board may authorize variances from the provisions of this ordinance that are not contrary to the public interest, and where owing to special conditions a literal enforcement of the ordinance will result in unnecessary hardship.

(2) WHO MAY APPEAL. Appeals to the board of [appeals or adjustments] may be taken by any aggrieved person or by an officer, department, board, or bureau of the [name of municipality] affected by any decision of the [administering authority].

S.15 SEVERABILITY.

If any section, clause, provision or portion of this ordinance is judged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the ordinance shall remain in force and not be affected by such judgment.

S.16 EFFECTIVE DATE.

This ordinance shall be in force and effect from and after its adoption and publication. The above and foregoing ordinance was duly adopted by the [governing body] of the [name of municipality] on the [number] day of [month], [year].

Approved: _____

Attested _____

Published on [day, month, year].

For information about this document, contact:
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