

Section 10

Plan Implementation

This Storm Water Management Plan prepared for the City of New Berlin is designed to practically achieve the objectives and criteria presented in Section 2.

Implementation of the plan will require a long term commitment by the City of New Berlin, matched with a high level of cooperation with the WDNR, developers, businesses, industries, schools, and private property owners. Implementation of this plan should be coordinated with the WDNR's Non-point Source Control Plan for the Menomonee River Priority Watershed Project, the Non-point Source Control Plan for the Upper Fox River Watershed Project, the Non-point Source Control Plan for the Root River, the Non-point Source Control Plan for the Muskego - Wind Lakes Watershed Project.

10.1 Prioritization and Implementation of Plan Components

The plan consists of three major elements: storm water drainage and flood control, storm water quality improvement, and urban land development guidelines. The elements include non-structural, structural, and annual maintenance components. In general the greatest cost of the recommended plan is associated with the structural components. Although all of the structural components are considered necessary in development of an effective storm water management plan, it is not practical to expect implementation of all of the structural components at once. In order to assist in effective implementation of the plan, the structural plan components have been prioritized in the implementation schedule and are dependent on future approvals and funding. Federal, State, and local regulatory approvals are required on most projects, in general.

The streambank stabilization program is essential to reduce sediment loading directly into the streams due to erosion. This project should be annually funded.

The culvert replacement program is considered an annual maintenance program which should be included in the annual schedules and budgets.

The recommended implementation schedule for the storm water management plan is based on water quality improvement, drainage /flooding improvement, and cost effectiveness. The recommended general implementation schedule is presented in Table 10-1.

Table 10-1: Implementation Schedule

Plan Component	Short Range	Medium Range	Long Range
Water Quality Improvement Plan			
Implement Zoning Plan as shown	T		
Industrial Best Management Practices	T		
Roadway Pavement Sweeping	T		
Ice Management Practices	T		
Catch Basin Cleaning	T		
Landscape Practices	T		
Snow Storage Practices	T		
Erosion Control Ordinance Enforcement	T		
Extractive Land Use Areas	T		
Agricultural Practices	T		
Adopt Shoreland Management Ordinance	T		
Public Education and Information Program	T	T	T
Wet Detention Pond: Upper Kelly Lake		T	
Constructed Prior Converted Wetlands		T	
Streambank Stabilization	T	T	T
Regulatory/Ordinance Program			
Adoption and Compliance with the Storm Water Ordinance	T		
Drainage/Flood Control Plan			
Underwood 1	T		
Underwood 2	T		

Plan Component	Short Range	Medium Range	Long Range
Root 1		T	
Root 2			T
Root 3		T	
Root 4	T		
Deer 1 - Buena Park	T		
Regional Detention		T	T
Culvert Replacement Program (no water quality benefits)			
Replace/repair culverts	T	T	T
Ditch Improvement Program (no water quality benefits)			
Repair ditch segments	T	T	T

Short Range is based on obtaining policy by the city council as soon as possible and including required financial and staff resources in the next city budget.

Medium Range - financial and staff resources should be included in the annual city budget in the next 3 to 5 years.

Long Range - financial and staff resources should be included in the annual city budget in the next 5 to 10 years or at the direction of the elected officials/

10.2 Authorities and Partnerships for Plan Implementation

10.2.1 City of New Berlin

The City of New Berlin is ultimately responsible for the implementation of this storm water management plan within the City. New Berlin has the authority needed to implement plan components as outlined in Section 9. Support from all levels of the City's administration is necessary for the success of this plan. New Berlin implementation responsibilities include administration of the plan as well as operation and maintenance of the plan components. New Berlin is also responsible for several of the plan components such as pavement sweeping, catch basin cleaning,

adoption of a storm water ordinance and enforcement of the Erosion Control Ordinance.

Currently New Berlin has not been notified by the WDNR to obtain a storm water discharge permit. However, it is likely that the City will be required to obtain a Municipal Storm Water Discharge Permit sometime in the future. Information presented in this storm water management plan will provide information for completion of the application. Implementation of this plan will assist New Berlin in compliance with the conditions of the storm water permit.

10.2.2 Wisconsin Department of Natural Resources

The WDNR has broad authority for water quality control, natural resource protection, and water and wetlands regulation. WDNR's authority includes the establishment of water quality criteria and effluent limits, the administration of the Wisconsin Pollutant Discharge Elimination System (WPDES) permitting program, and the conduct of water quality research studies. Natural resource protection responsibilities include the management of fish, wildlife, and habitat resources. The Department also prepared the Root River, Upper Fox River, and Menomonee River Priority Watershed Projects reports and administers the non-point source priority watershed planning program, which assisted in funding of this study. WDNR can also provide technical assistance on the design and application of best management practices. They also have the authority to authorize regulatory approvals on plan components requiring permits. Responsibilities of the WDNR in implementation of this plan are summarized in Table 10-2.

10.2.3 Developers

Developers are responsible for compliance with the City ordinances as well as planning development in accordance with the urban land development guidelines. Compliance with the ordinance will require use of appropriate erosion control techniques for sites greater than 1 acre and storm water detention to maintain runoff flows at the pre-settlement condition and improve runoff water quality. Responsibilities of developers in implementation of this plan are summarized in Table 10-3.

10.2.4 Wisconsin Department of Transportation

The Wisconsin Department of Transportation (WDOT) is responsible for addressing water quantity and quality issues whenever they maintain or upgrade a roadway within their jurisdiction. By working with New Berlin in this storm water management effort, opportunities have been identified for WDOT and New Berlin to partner in implementation of selected plan elements, including the storm water facilities located at Interstate Highway 43 in Calhoun Creek subwatershed. Open communication of future WDOT projects will facilitate the identification of additional joint projects which will be mutually beneficial. Partnership opportunities for WDOT to assist in implementation of this plan are summarized in Table 10-3.

10.2.5 University of Wisconsin - Extension

The University of Wisconsin - Extension can assist New Berlin in providing information and education programs, and by providing technical advice and guidance on storm water related issues. The Extension also may assist New Berlin facilitate public meetings, and develop newsletters, bulletins, and research information. Responsibilities of the University of Wisconsin Extension in implementation of this Plan are summarized in Table 10-3.

10.2.6 Private Property Owners

Industrial, commercial, and residential landowners are responsible for management activities within their boundaries. Private property owners can assist in implementation of this plan by utilizing best management practices and implementing appropriate components of this plan. Responsibilities of private property owners in implementation of this plan are summarized in Table 10-3.

10.2.7 Waukesha County Technical College

The Waukesha County Technical College (WCTC) should partner with the communities in their storm water management efforts. Opportunities for the WCTC to provide education regarding storm water management programs should be explored.

Table 10-2: Storm Water Management Plan Implementation Responsibilities

Component	City of New Berlin	WDNR	Developers	WDOT	Private Property Owners	Others
Water Quality Improvement Plan						
Implement Zoning Plan	T		[
Industrial Best Management Practices	[[T(1)
Roadway Pavement Sweeping	T					
Ice Management Practices	T					
Catch Basin Cleaning	T					
Landscape Practices	T		T	[T	[(2)
Snow Storage Practices	T			[[(2)
Erosion Control Ordinance Enforcement	T					[(2)
Extractive Land Use Areas					T	
Agricultural Practices		T			T	[(2)(3)
Adopt Shoreland Management Ordinance	T				T	
Public Education and Information Program	T					[(3)(4)
Wet Detention Pond: Upper Kelly Lake	T	[T	

Component	City of New Berlin	WDNR	Developers	WDOT	Private Property Owners	Others
Constructed wetland	T	[[T		
Streambank Stabilization	[[[[(3)
Regulatory/Ordinance Program						
Adoption and Compliance with Storm Water Ordinance	T		T			
Drainage/Flood Control Plan						
Underwood 1	T	[
Underwood 2a & b	T	[
Root 1	T					
Root 2	T					
Root 3	T					
Root 4	T					
Deer 1 - Buena Park	T				T	
Minor System Flooding Problem Repairs	T				[
Culvert Replacement Program (no water quality benefits)						
Replace/repair culverts	T					
Ditch Improvement Program (no water quality benefits)						

Component	City of New Berlin	WDNR	Developers	WDOT	Private Property Owners	Others
Repair ditch segments	T					

T indicates primary responsibility; [indicates secondary responsibility.

(1) indicates industrial property operators; (2) UW - Extension; (3) Waukesha County Land Conservation Department

(4) New Berlin School District

10.3 Funding the Recommended Plan

Funding sources for the implementation of the Storm Water Management Plan can come from a combination of sources. Potential funding options may include:

- *Property Taxes -City:* funds are accumulated through property taxes and are used for a variety of services throughout the City and are used to pay debt service on financial instruments, such as bonds to pay for larger structural components. Competition for funding of other municipal services may cause significant variation in the amount of funds available for implementation of the Plan.
- *Cost-Share Grants - WDNR:* available to help offset the local cost of implementing the recommended plan under the Wisconsin Nonpoint Source Priority Watershed Program. Not all components of the storm water management plan are eligible for the grant funds. The state may fund through a direct grant up to 100 percent of the design for water quality elements and up to 70 percent of the installation of urban controls such as wet detention ponds. WDNR typically funds up to 70 percent of the design cost and 50 percent of the construction costs for wet detention ponds. Accelerated street sweeping programs may also be eligible for cost sharing. Grant funds are made available through the bi-annual State of Wisconsin budget process and therefore are impacted by state priorities.
- Under the State Non-point Source Priority Watershed Program, cost-share grants for eligible controls must be entered into and implemented within eight years after formal approval of the Priority Watershed Plan. The Root River Watershed Plan was approved by the Wisconsin Natural Resources Board in 1980. The Menomonee River Priority Watershed Plan was approved by the Wisconsin Natural Resources Board on April 23, 1991. The Upper Fox River Watershed and Muskego - Wind Lakes Watershed Plans approved by WDNR in 1994. Therefore, to qualify for cost sharing, eligible practices must be implemented by 2002 within the Upper Fox watershed and the Muskego - Wind Lakes watershed.
- *Sales Tax - Special Tax District:* development of a local sales tax, if authorized by the voting public. The revenue generated is used for improvements within the taxed district. The revenue generated can be used for capital improvements and/or operation and maintenance.
- *Bonds:* general obligation, revenue, or special assessment bonds are normally used by municipalities to fund large capital improvement programs. Repayment of the bond is typically through the general municipality fund. Bonds allow large-scale capital improvement programs to be initiated when the facilities are needed rather than delaying the program until funding is available. These funds cannot be used for operations and maintenance costs.
- *Storm Water Utility:* accumulated by a user charge system. The utility charge system is based on the premise that property owners are responsible for their storm

water runoff. Fees are assessed to property owners based on the estimated amount of storm water discharged from the facility.

- *Pay-As-You Go Sinking Fund*: adjunct to the revenue bond financing. The fund accumulates revenues until sufficient funding is available for a selected project. The project funds are then removed from the fund and the fund restarts accumulation for the next selected project. This method is generally associated with capital improvements where it is not advantageous to incur long-term debt.
- *Fees/Licenses/Permits*: generally the revenue generated is used to cover the costs of permit review or inspections required. These funds are used for administrative and staff cost.
- *Penalties/Fines*: limited funds. The best use of the funding generated by penalties and fees may be utilization in correction of the violation.

Sources of funding considered feasible for the implementation of this plan are summarized in Table 10-3.

Table 10-3: Funding Options for Implementation of the Storm Water Management Plan

Funding Option	Administration of Plan	Design of Components	Construction of Components	Operation & Maintenance
Property Tax - City Funds	T	T	T	T
Cost-Share Grants - WDNR		T	T	
Sales Tax - Special Tax District		T	T	T
Bonds	T	T	T	
Storm water Utility	T	T	T	T
Pay-as-you-go Sinking Fund		T	T	
Fees/ Licenses/Permits	T			
Penalties/Fines	T			

Only three of the funding methods have the ability to fund implementation of all components of the recommended plan; property tax, sales tax, and storm water utility. Numerous combinations of funding sources can be used to fund plan

implementation. However, successful plan implementation requires an equitable, long term funding method.

10.4 Plan Re-Evaluation and Updating

The storm water management plan should be periodically re-evaluated based on changes within the watersheds or within the New Berlin . Plan components should be revised as necessary to reflect development or redevelopment changes and storm water management requirements.