

Section 2

Objectives and Criteria

Objectives and criteria guide the development of the Storm Water Management Master Plan. The project objectives are the goals that this plan is designed to achieve. Each objective is supported by several criteria. Criteria are used to evaluate the degree to which each objective is achieved, to design plan components, and to measure the effectiveness of the plan.

Objectives and criteria established for this plan, presented on Table 2-1, are compatible with the Priority Watershed Plans and address local issues and concerns. The objectives and criteria address surface water quality, storm water drainage and flood control, protection of wetlands and other environmentally sensitive areas, and cost effectiveness.

Table 2-1: Objectives and Criteria for the New Berlin Storm Water Management Master Plan

<p><i>Objective No. 1</i></p> <p>Provide water quality suitable to support the designated potential recreational and biological uses of the streams. The designated use classifications are:</p> <ul style="list-style-type: none"># Root River Watershed<ul style="list-style-type: none">< Upper Root River -- limited fish and aquatic life< Tess Corners Creek -- warm water fish and aquatic life# Upper Fox River Watershed<ul style="list-style-type: none">< Poplar Creek -- warm water sport fish< Tributaries to Poplar Creek -- warm water sport fish, warm water forage fish, or limited aquatic life# Muskego - Wind Lakes Watershed<ul style="list-style-type: none">< Calhoun Creek -- warm water sport fish, warm water forage fish, or limited forage fish# Menomonee River Watershed<ul style="list-style-type: none">< South Branch Underwood Creek -- limited aquatic life
<p><i>Criteria</i></p> <ul style="list-style-type: none">a. Achieve the water quality standard set forth in NR 102, 104, and 105 of the Wisconsin Administrative Code that support the designated use classifications.b. Achieve the pollutant reduction goals set forth in the non-point source control plans for the Root River watershed (1980), the Menomonee River watershed (1991), the Upper Fox River watershed (1994), and the Muskego - Wind Lakes watershed (1994). The pollutant reduction goals for sediment, phosphorous, and metals are:<ul style="list-style-type: none"># Sediment:<ul style="list-style-type: none">< Root River watershed -- 50% reduction in 1975 loadings< Menomonee River watershed -- 50% reduction in 1985 loadings< Upper Fox River watershed -- 60% reduction in 1985 loadings< Muskego -Wind Lakes watershed -- 50% to 75% reduction in 1985 loadings

Objective No. 1 Criteria continued

Phosphorous:

- < Root River watershed -- 50% reduction in 1975 loadings
- < Menomonee River watershed -- 50% to 70% reduction in 1985 loadings
- < Upper Fox River watershed -- 35% reduction in 1985 loadings
- < Muskego -Wind Lakes watershed -- 30% to 50% reduction in 1985 loadings

Metals:

- < Root=s River watershed -- 50% reduction in 1975 loadings
- < Menomonee River watershed -- 53% reduction in 1985 loadings
- < Upper Fox River watershed -- 40% to 53% reduction in 1985 loadings
- < Muskego -Wind Lakes watershed -- no reduction required

- b. Achieve a level of pollution control equivalent to providing wet detention for 100 percent of existing critical land uses for established urban areas, and for 100 percent of planned urban growth.

Objective No. 2

Provide storm water drainage and flood control facilities to prevent flood damages to property, prevent health and safety hazards, and prevent drainage-related nuisance and inconvenience.

Criteria

- a. Design the minor storm water drainage system (storm sewers, roadside ditches) to accommodate runoff from a 10-year recurrence interval storm event.
- b. Design the major storm water drainage system (channels, bridges and major culverts) to accommodate runoff from a 100-year recurrence interval storm event.
- c. Prevent flood damages to buildings and significant road overtopping during a 100-year recurrence interval storm event.
- d. Establish emergency spillways for detention basins that would safely convey flow during a 100-year recurrence interval storm event.

Objective No. 3

Develop a storm water management system that effectively serves both existing and anticipated future land uses at the lowest practicable cost.

Criteria

- a. Modify existing drainage facilities and structures where necessary to accommodate the estimated design storm flows under both existing and future land use conditions.

- b. Design new storm water drainage systems to utilize, where possible, the natural drainage and storage system, to complement the proposed street layout and topography, and to accommodate anticipated peak flows and volumes under future land use conditions.

Objective No. 4

Reduce erosion and sedimentation from construction of new development and agricultural activities.

Criteria

1. Achieve a 75 percent reduction in uncontrolled construction site loadings of sediment by properly installing construction site erosion controls in accordance with the Wisconsin Construction Site Handbook, and by adequately maintaining those erosion controls to retain their effectiveness throughout the construction activity.
2. Within environmentally sensitive areas, achieve at least a 90 percent reduction in construction site sediment loading by utilizing procedures such as those described in the Special Erosion and Sediment Control issue of Watershed Protection Techniques (Vol.2, No. 3, February 1997)
3. Achieve at least a 50 percent decrease in 1985 agricultural loadings of sediment, as set forth in the priority watershed plans.

Objective No. 5

Protect environmentally sensitive areas that provide significant surface water quantity or quality benefits.

Criteria

- a. Identify wetlands and woodlands that provide storm water detention and infiltration, sediment retention, or nutrient removal.
- b. Protect, enhance, and/or preserve high quality environmentally sensitive areas that provide storm water benefits.
- c. Integrate valuable environmentally sensitive areas into the storm water management plan and into zoning.
- d. Prevent the discharge of increased storm water flows and pollutant loadings that would damage environmentally sensitive areas.