

Chapter 4 – Watershed Goals and Objectives

Eight (8) long-term watershed goals have been developed by the NEW Watershed Advisory Group (WAG) after consideration of discussions held during monthly watershed group meetings and input from several public participation meetings (refer to Chapter 8 for a synopsis of the Public Participation Process). Each of the long-term goals is summarized in Table 4.1 below with Goals 1-5 as the priority goals in the watershed.

Table 4.1 Long-Term Goals for St. Clair County’s Northeastern Watersheds

1. Identify and protect high-quality natural features including forested areas, floodplains, riparian buffers, wetlands, and contiguous greenways.
2. Ensure sustainable growth and development.
3. Protect and improve water related recreation.
4. Protect and improve the warmwater and coolwater fishery and conditions for other indigenous aquatic life and wildlife.
5. Protect public health and the drinking water supply (public and private).
6. Preserve the rural character (farmland and open space) of the area.
7. Increase recreational opportunities (parks and other facilities), including public access to Lake Huron, the Black River, and the St. Clair River.
8. Maintain and/or increase the aesthetics of the water resources.

Each long-term goal will be met by a series of short-term measurable objectives. The short-term designation in this case means that each objective will begin to be achieved through actions implemented within the first five (5) years of watershed plan implementation, with many actions on-going into subsequent permit cycles. Each Phase II permittee in the NEW will implement a series of vegetative, structural and non-structural (managerial) BMPs which are all designed to treat, prevent, or reduce water pollution. The actions that each Phase II permittee is already implementing, along with the short- and long-term commitments to implementing new actions that will achieve the watershed goals and objectives, are described in detail in Chapter 7 and outlined in a comprehensive action plan matrix in the Chapter. Table 4.2 below summarizes the watershed goals and associated objectives that have been formulated by the NEW WAG and input from the public. The host of BMPs that may be implemented by a permittee to achieve each objective is outlined in Table 9.5 of Chapter 9 (the Evaluation Process Chapter).

Ultimately, the attainment of the goals and objectives of this WMP will be accomplished through the process of adaptive management. In other words, as changes in the watershed occur and programs and BMPs are assessed as to their effectiveness, strategies to attain the watershed goals and objectives are likely to change over time. Changes to the watershed goals and objectives themselves are likely to occur over the lifetime of plan implementation, as well. These changes will be reflected in periodic updates to this WMP. The overall goal is that the watershed planning process becomes a self-sustaining process with increased participation and drive from stakeholders over time.

Table 4.2 Long-Term Goals and Measurable Objectives for St. Clair County’s Northeastern Watersheds Watershed Management Plan

Long-Term Goal	Short-Term Measurable Objective	Applicable Designated/Desired Uses Addressed*
1. Identify and protect high-quality natural features including forested areas, floodplains, riparian buffers, wetlands, and contiguous greenways.	1.1 Identify high-quality natural features, map them, and include them in planning documents.	1 – 6, 8-10
	1.2 Protect high-quality natural features (high-quality woodlands, wetlands, floodplains, riparian corridors, areas with endangered/threatened species, etc.).	
	1.3 Identify and protect greenway corridors.	
2. Ensure sustainable growth and development.	2.1 Implement coordinated and uniform land use planning codes, ordinances, and design standards throughout the watershed.	1 – 6, 8, 10, 11
	2.2 Implement coordinated enforcement of land use planning codes, ordinances, and design standards throughout the watershed.	
	2.3 Educate land use managers and developers on sustainable growth and development practices.	
3. Protect and improve water related recreation.	3.1 Reduce sediment loading and associated turbidity.	1 – 5, 7, 9, 11
	3.2 Reduce nutrient loading.	
	3.3 Identify and eliminate sources of pathogens (bacteria).	
	3.4 Ensure attainment of TMDLs to be developed for pathogens.	
	3.5 Increase public awareness of pollution issues that impact partial and total body contact recreation.	
	3.6 Increase knowledge of existing physical and chemical conditions in the watershed through monitoring strategies.	
	3.7 Minimize chemical spills and ensure proper notification of spills.	

***Key:**

Designated Uses Addressed:

- 1 – Public Water Supply
- 2 – Warmwater Fishery
- 3 – Other Indigenous Aquatic Life and Wildlife
- 4 – Partial Body Contact Recreation
- 5 – Total Body Contact Recreation

Desired Uses Addressed:

- 6 – Rural Character
- 7 – Recreation/Public Access
- 8 – Protection of Natural Features (woodland, wetlands, floodplains, greenway corridors, etc.)
- 9 – Aesthetics of Water Resources
- 10 – Recreational Fishery
- 11 – Protection of Public Health

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4. Protect and improve the warmwater and coolwater fishery and conditions for other indigenous aquatic life and wildlife.	4.1 Reduce sediment loading and associated turbidity.	1 – 5, 8 – 11
	4.2 Reduce nutrient loading.	
	4.3 Stabilize hydrologic flows.	
	4.4 Enhance and protect riparian areas and in-stream habitat.	
	4.5 Increase public awareness of pollution issues that impact the fishery and other indigenous aquatic life and wildlife.	
	4.6 Ensure attainment of TMDLs to be developed for pathogens.	
	4.7 Increase knowledge of existing aquatic populations and physical and chemical conditions in the watershed through monitoring strategies.	
	4.8 Minimize chemical spills and ensure proper notification of spills.	
5. Protect public health and the drinking water supply (public and private).	5.1 Increase public awareness of pollution issues that impact public health and drinking water supplies (public and private).	1 – 5, 11
	5.2 Identify and eliminate sources of pathogens (bacteria).	
	5.3 Identify and eliminate sources of nutrients.	
	5.4 Ensure attainment of TMDLs to be developed for pathogens.	
	5.5 Minimize chemical spills and ensure proper notification of spills.	
	5.6 Protect groundwater supplies from over-withdrawal.	
6. Preserve the rural character (farmland and open space) of the area.	6.1 Preserve prime agricultural land.	3, 6
	6.2 Preserve open space.	

***Key:**

Designated Uses Addressed:

- 1 – Public Water Supply
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- 5 – Total Body Contact Recreation

Desired Uses Addressed:

- 6 – Rural Character
- 7 – Recreation/Public Access
- 8 – Protection of Natural Features (woodland, wetlands, floodplains, greenway corridors, etc.)
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7. Increase recreational opportunities (parks and other facilities), including public access to Lake Huron, the Black River, and the St. Clair River.	7.1 Work with regional, county, and local governments, and other agencies and organizations to increase water-related recreational opportunities throughout the watershed while protecting water resources from degradation.	7, 9, 10
	7.2 Seek out and act on opportunities for additional parks and recreational spaces, with priority along stream and riparian corridors, and greenway corridors.	
	7.3 Provide additional public access to water resources.	
	7.4 Stabilize waterway shorelines in a manner that increases public access to area waterways.	
8. Maintain and/or increase the aesthetics of the water resources.	8.1 Reduce sediment loading and associated turbidity.	1 – 3, 7, 9 – 11
	8.2 Reduce nutrient loading.	
	8.3 Stabilize hydrologic flows.	
	8.4 Enhance and protect riparian areas and in-stream habitat.	
	8.5 Minimize chemical spills and ensure proper notification of spills.	

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4.1 Relationship to the St. Clair River RAP Goals

As outlined in the St. Clair River Remedial Action Plan (RAP), the St. Clair River has been identified as an international Area of Concern (AOC) and has several “beneficial uses” for water that are impaired (those that were impaired as of the 2005 RAP update are highlighted in bold below). An impaired beneficial use means a change in the chemical, physical or biological integrity of the Great Lakes system sufficient to cause any of the following:

- **Restrictions on fish and wildlife consumption**
- Tainting of fish and wildlife flavor
- Degradation of fish and wildlife populations
- Fish tumors and other deformities
- Bird or animal deformities or reproduction problems
- **Degradation of benthos**
- **Restrictions on dredging activities**
- Eutrophication or undesirable algae
- Restrictions on drinking water consumption, or taste and odor problems
- **Beach closings**
- **Degradation of aesthetics**
- Added costs to agriculture and or industry
- Degradation of phytoplankton and zooplankton populations
- **Loss of fish and wildlife habitat**

In recognition of the fact that all tributaries in the NEW ultimately discharge to the St. Clair River, reduction of both point and nonpoint sources of pollution from these tributary areas, as well as the protection of natural features (woodlands, wetlands, floodplains, etc.) throughout the watershed, will all provide a reduction in the amount of pollutants that may be contributing to the impaired beneficial uses of the St. Clair River. Ultimately, all of the goals developed for the NEW will concurrently work towards the achievement of the goals outlined in the St. Clair River RAP pertaining to aesthetics, consumption of fish and wildlife, ecosystem health, recreation, and sources of contaminants (both point and nonpoint).

Additional details on the St. Clair River RAP can be found at the following websites:

- <http://www.epa.gov/glnpo/aoc/st-clair.html>, and
- <http://friendsofstclair.ca/rap/reports.asp>.