

## **CHAPTER 3 - WATERSHED GOALS AND OBJECTIVES**

## 3.0 LONG-TERM GOALS AND SHORT-TERM OBJECTIVES

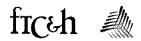
The 2003 Watershed Management Plan (WMP) identified the long-term goals and short-term objectives designed to address concerns raised by the public as well as to restore and protect the beneficial uses established under the Great Lakes Water Quality Agreement and the designated uses set by the State of Michigan. These goals and objectives are retained in the 2005 WMP to ensure the decisions and wishes of the community remain.

The goals and objectives are intended to reduce and/or eliminate the impacts of the pollutants within the Anchor Bay Watershed (Watershed). They will not only lead to a reduction and/or elimination of the current impairments, but will also protect water quality and natural habitat in threatened areas. The goals have been developed on a watershed-wide basis. Therefore, no single community is responsible for achieving all of the goals on their own. Rather, communities and counties must work together to implement individual Best Management Practices (BMPs) and collectively achieve objectives that will accomplish these long-term goals.

Implementing and maintaining the listed objectives designed to reach the Watershed goals is a four-step process.

- 1. Implementing and maintaining BMPs designed to accomplish the objectives and goals.
- 2. Reviewing and modifying existing projects, programs, and ordinances as necessary.
- Designing and implementing education and information activities designed to inform the public about the purpose of the BMPs, objectives, and goals, and the role of the public in accomplishing those measures.
- 4. Evaluating the effectiveness of planned activities associated with implementation of BMPs within the Watershed.

The objectives associated with each of the goals are also developed on a watershed-wide basis and no single community or county is expected to accomplish all the listed objectives. It is anticipated that the participating communities and counties within the Watershed will continuously strive to meet the objectives for each goal through implementation of various BMPs within their jurisdiction and by working collectively with the other Watershed entities. While many of the objectives are already being implemented, additional objectives will be implemented under this WMP and in conjunction with the National Pollutant Discharge Elimination System (NPDES) Phase II storm water permits.



For example, the Macomb County Public Works Office administers the Illicit Discharge Elimination Program (IDEP) as an intensive effort to locate and eliminate illegal connections to the county's storm drain system that could be contributing pollutants to Anchor Bay. The St. Clair County Health Department's Storm Water Program initiated the IDEP to identify and eliminate sources of bacteria contamination in the waterways by tracking down the sources of *E. coli* through systematic sampling and testing of the natural waterways, road ditches, and drains. The first step to eliminating these sources is to find the sources of bacteria, which can be agricultural runoff, illegal sanitary sewer connections, malfunctioning septic systems, and animal waste.

Progress toward meeting the goals will be submitted as part of each community's or county's annual report to the Michigan Department of Environmental Quality (MDEQ) under the NPDES Phase II storm water permits. Progress will be measured against milestones and criteria that have been established as part of the development of this revised WMP. The measurable milestones, criteria, and monitoring plans are detailed in Chapter 6.

Listed below are the long-term goals and short-term objectives, listed in no specific order of priority.

Long-term Goal 1: Restore and enhance recreational uses

Objectives: 1a. Reduce bacterial loading
1b. Reduce putrient loading

1b. Reduce nutrient loading

1c. Provide additional public access to water resources

Long-term Goal 2: Restore and protect aquatic life, wildlife, and habitat

Objectives: 2a. Protect and re-establish riparian and instream habitat

2b. Reduce soil erosion and sedimentation

Reduce excess runoff

2d. Protect open space and natural areas within the Watershed

Long-term Goal 3: Protect public health

Objectives: 3a. Protect drinking water supply

3b. Reduce bacterial loading

3c. Reduce pollutants resulting in fish advisories

Long-term Goal 4: Reduce impacts from peak flows

Objectives: 4a. Establish target peak flows for the tributaries

4b. Develop water resource protection and management ordinances to reduce runoff

4c. Reduce storm water runoff quantity

Minimize post-storm instream flow velocities



Goals were developed based on:

- 1. The designated and beneficial uses identified as impaired by the MDEQ and the Technical and Steering Committees.
- 2. The desired uses and concerns identified by the participating public officials and stakeholder groups.

Table 3-1 summarizes the impairment status of the beneficial and designated uses in the Watershed and shows the relationships among the desired uses and concerns of the public in the Watershed and how those uses and concerns relate to the designated and beneficial use determinations. Those uses that are not listed are considered to be unimpaired. The table lists the long-term goals, which are designed to upgrade the impaired designated/beneficial use to an unimpaired status when fully achieved.

TABLE 3-1: GOALS TO MEET DESIGNATED AND BENEFICIAL USES

Designated (D) and Beneficial (B) Use Determinations	Desired Uses and Concerns of the Public	Impairment Status		Long-term Goals
		Anchor Bay	Watershed Area	
	C = Conce	n, I = Impaire	d, T = Threater	ned
Partial body contact (D), (B)	Swimming, recreation, beach closings, sewage	l	I	Restore and enhance recreational uses Protect public health
Total body contact (D), (B)	Swimming, recreation, beach closings, sewage	l	ŀ	Restore and enhance recreational uses Protect public health
Degradation of aesthetics (B)	Flooding, erosion	1	1	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Reduce impacts from peak flows
Indigenous aquatic life and wildlife (D), (B)	Waterfowl and wildlife habitat, flooding	_		Restore and protect aquatic life, wildlife, and habitat Reduce impacts from peak flows
Eutrophication or undesirable algae (B)	Swimming, recreation, fishing, waterfowl and wildlife habitat, aquatic weeds, trash removal, control fertilizer runoff	I	l	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Protect public health
Warmwater/coldwater fisheries (B), (D)	Fishing, erosion, flooding	I	I	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Protect public health Reduce impacts from peak flows

TABLE 3-1: GOALS TO MEET DESIGNATED AND BENEFICIAL USES.

ABLE 3-1: GOALS TO M Designated (D) and Beneficial (B) Use Determinations	Desired Uses and Concerns of the Public	Impairment Status		Long-term Goals
		Anchor Bay	Area	Compared   Compared
	C = Concer	n, I = Impa	ired, T = Threate	ned
Degradation of benthos (B)	Fishing, erosion, flooding		l	Restore and protect aquatic life, wildlife, and habitat Reduce impacts from peak flows
Drinking water (D), (B)	Drinking water	Т	No drinking water intake in Watershed	Protect public health
Financial concerns		С	С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Protect public health Reduce impacts from peak flows
Educating the public		С	С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Protect public health Reduce impacts from peak flows
Lack of open space, boating, biking, and walking trails, fishing access, manage riparian land			С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat
Unmanaged development		С	С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat Reduce impacts from peak flows
Lack of governmental support for agricultural buffer strips			С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat
Lack of consistent application of agricultural BMPs			С	Restore and enhance recreational uses Restore and protect aquatic life, wildlife, and habitat
Lack of recreational access		С	С	Restore and enhance recreational uses