

Goals, Objectives, and Strategies for the Huron River Articulated in Existing City Plans

Ann Arbor Stormwater Management Plan (2002)

The City's stormwater system is regulated by a National Pollutant Discharge Elimination System (NPDES) permit, issued by the Michigan Department of Environmental Quality. The permit contains six Minimum Measures for which the city's stormwater system must comply: Public Education, Public Involvement and Participation, Illicit Discharge Elimination Program, Post Construction Stormwater Management (for new development and redevelopment), Construction Stormwater Runoff Control, and Stormwater Pollution Prevention/Good Housekeeping. Each year, the City must submit an annual progress report which details activities completed for each minimum measure.

The permit also required development of a Stormwater Management Plan. The plan identified the following goals, objectives, and best management practices that would fulfill the permit requirements:

Desired Goals and Objectives (pg. 2)

Objectives

1. Develop, enhance and coordinate stormwater management activities.
2. Prevent or reduce the introduction of pollutants and sediment into the Stormwater Drainage System.
3. Mitigate the impacts of flooding within the System service area through proper planning and management of stormwater and land use within the City.

Goals

1. Protect human life and health.
2. Reduce the level of pollutants and sediments discharged from Ann Arbor into waters of the State.
3. Comply with the federal and state laws regarding stormwater discharges and floodplain management.

Best Management Practices and Measurable Goals for the Six Minimum Measures (pp. 23-24)

Public Education

Provide direct mailing to the residents of Ann Arbor, covering at least four topics per year. Examples of topics: lawn care, household hazardous waste, auto maintenance, riparian lands.

Public Involvement & Participation

Establish a stormwater committee to involve citizens in the planning of stormwater activities.

Illicit Discharge Elimination Program

Inspect 35,000 linear feet of the stormwater system per year using closed circuit TV.

Post Construction Stormwater Management

Continue the review of development/redevelopment site plans for compliance with Chapter 63 of the City Code as it relates to stormwater management.

Construction Stormwater Runoff Control

Require all construction sites that need a soil erosion permit to comply with Chapter 63 of the City Code. Require post construction controls to be in place and stabilized before soil disturbance commences. Complete monthly inspection of the sites.

Stormwater Pollution Prevention/Good Housekeeping

On an annual basis, clean 125,000 linear feet of the enclosed stormwater system. Label 500 stormwater inlets per year until all inlets are labeled. Install inlet filters at the Water Utilities yard; clean and inspect the filters once a month. Have a weekly waste/compost curbside pickup program from April 1 – October 31 of each year.

Ann Arbor Natural Features Master Plan (2004)

III. Executive Summary (p.4)

Natural Features and Protection Goal Summaries	Methods for Implementation
<p>1. The Watershed of the Huron River and Its Tributaries in Ann Arbor: The Huron River is the central natural feature of the City and its major source of water. Goal Summary: Update watershed plans; ensure that the City's Capital Improvements Plan is consistent with Natural Features Master Plan; add greenways along the Huron River; add flood storage capacity and reduce adverse impacts of heavy rain events, including flooding.</p>	<p>Implementation Summary: Implement watershed plans, the City Master Plan and the Capital Improvements Plan; work with various partners to implements watershed planning; encourage native plantings and acquisition of lands along the river; improve education outreach techniques; improve city services; and improve GIS capabilities relating to data management.</p>

IV. Purpose (p.7)

“The City of Ann Arbor is committed to securing a high quality of life for its current and future residents. It is City policy to promote sound stewardship of the City’s natural features. A healthy natural environment is necessary to sustain a high quality of life....”

“...Standards for protection are based upon the sensitivity of each natural feature and its importance and uniqueness as part of a local ecosystem. The principles of this document should be incorporated into all elements of the City Master Plan and in the day-to-day decision-making processes of City departments.

V. General Description and Protection Measures (p. 10)

C. Natural Features Plan Over-Arching Goals

1. Improve water quality
2. Inventory natural features
3. Foster stewardship through education and outreach

4. Minimize invasive organisms
5. Update local ordinances
6. Anticipate climate change

VI-1. Natural Features: The Huron River and Its Tributaries (p.12)

“The long-term vision for the river is to continue to restore the water quality of the River and its tributaries, making them once again rich in wildlife, and appealing for swimming, water sports, fishing, and for more pleasant recreation of all sorts.”

Huron River’s tributaries are “key components of scenic beauty and of outdoor attraction.” ...

“It is possible to restore portions of tributary waterways to their natural function, and doing so can greatly improve water quality.”

Implementation Strategies (p.13)

1. Work with local and regional partners to implement watershed-based planning, environmental analysis and coordinated programs to protect and sustain the flow and the water quality of the Huron River. Include best management practices for the surface waters of Barton, Argo, Gallup and South Ponds to reduce concentrations of excess nutrients that cause algae blooms and eutrophication.
2. Implement the recommendations of the City’s Capital Improvements Plan relating to improving water quality.
3. Review and modify current plans, codes and policies to ensure that best management practices, including new and innovative designs, are being applied to maintain or enhance flood storage capacity when land is developed or disturbed.
4. Continue to foster the work of watershed groups by assisting in the development and implementation of watershed plans. Participate in the development of watershed groups that currently do not exist (i.e., Fleming and Honey Creeks).
8. Modify Chapter 57 regarding steep slope regulation provisions for developments either facing or adjacent to the river, both to guard against erosion and to protect scenic views.
9. Acquire lands along the Huron River Valley, focusing on natural areas that complete linkages or have significant natural features, and otherwise meet criteria consistent with the PROS (Parks, Recreation and Open Space) plan.
11. Increase public education on the ways citizens can improve water quality by retaining storm water on their property, using native plants, avoiding use of polluting chemicals, conserving water, and properly disposing of wastes.
18. Continue to foster and support stewardship activities and organizations, such as the Stewardship Network of the Huron River Watershed Council, to protect and restore the Huron River and other natural features.

Ann Arbor Parks, Recreation and Open Space Plan (2006-2011)

SECTION D. PARK AND RECREATION SYSTEM-WIDE GOALS

Goal 8. Appropriately utilize (while preserving and restoring) the Huron River and areas of natural, historical or architectural significance. (P.D9)

Rationale

The natural, historic and cultural resources in Ann Arbor are highly valued by the community. The park, recreation and open space system must be a responsible steward of the resources under its care and work with other agencies and the community to balance the use of these resources with their long term preservation.

Objectives

- c. Insure that efforts continue to clean up the Huron River and its tributaries and to address the non-point source pollution issues.
- d. Plan and provide for greater access to the Huron River by developing appropriately existing lands along the river to relieve crowding of areas such as Gallup Park.
- e. Enhance the fishery in the river to improve sport fishing.
- f. Improve water quality overall so the river could be declared swimmable.
- g. Enhance and protect scenic shorelines. Provide more native plant landscapes in parks to reduce maintenance, reestablish wildlife habitat areas and increase diversity of species.
- h. Provide appropriate access to these areas (transportation, necessary parking and pathways) and interpretive information to give the interested public opportunity for enjoyment with the least disturbance to the area.
- i. Establish interpretive programs that relate to our cultural, natural and historical resources.
- i. Continue a policy of acquisition and land control along the Huron River valley and other unique natural resource areas.
- l. Develop, manage and maintain natural areas and features within the park system in order to preserve, protect and enhance the value, quality and features of the resources available.
- m. Carefully consider the characteristics and limitations of the site when developing or improving parkland. Such on-site or off-site (adjacent) limiting factors include topography, wildlife, existing vegetation, soils, drainage and access.
- p. Insure/maximize multiple-use activities/programs/facilities at riverfront parks (i.e., canoeing, rowing, fishing, etc.) that provide balanced opportunities.
- q. Develop a surface water management plan for the Huron River, Argo and Barton ponds.

Goal 9. Enhance the Huron River and its tributaries as Ann Arbor's most significant natural resource and a source of its domestic water supply. Park development land acquisition affecting the Huron River watershed should restore and preserve the Huron River and its tributaries, improve water quality, preserve wildlife habitat, manage storm water and enhance recreation opportunities. (P. D10)

Rationale

The Huron River's watershed, its streams, creeks, wetlands and floodplains, should be viewed as an entire natural system. The Huron River can only be preserved and restored by taking care of the land and water system that is connected to the river.

Objectives

- b. Work to restore eroded stream banks through revegetation and erosion control to enhance water quality.
- c. Incorporate features designed to improve water quality in City parks, where feasible.
- d. Enforce buffer zones of no mowing adjacent to streams and the river.
- e. Coordinate water quality monitoring activities with other organizations such as the Huron River Watershed Council and the Washtenaw County Drain Commissioner's Office.
- f. Work to restore natural drainage to wetlands and streams when possible.
- g. Develop greenways along the tributaries of the Huron River where feasible to improve water quality and reduce flooding.

SECTION F. LAND USE PLANNING AND ACQUISITION PRINCIPLES

Huron River Frontage

Acquisitions along the river and its tributaries that protect or enable better public use of this asset should be highly rated in any evaluation. (P. F7)

SECTION G. PLANNING AREA

Central Area Park Issues (P. G11)

- The open space along the Huron River, although close by, is physically isolated from the residents of the Central Area by railroad tracks and private development. Better linkages to the river would enhance this connection. ...
- A connection from Riverside Park to Broadway Park as well as a linkage from Riverside Park through the DTE property to the Argo Dam are highly desired to help complete the Huron River Trail.

Northeast Area Park Issues (P. G17)

- The wetland and hillside along Huron River Drive, across from South Pond of the Huron River, has been identified as an important natural area related to the Huron River and needs protection.
- A study of the impacts of the potential removal of the Argo Dam should be done, both for the environmental and recreational impacts.

The Huron River (P. G28)

The river within the Ann Arbor area has been impounded by construction of four dams: Barton, Argo, Geddes and Superior. There has been ongoing discussion of removing the dam at Argo to address safety and maintenance concerns, improve water quality and wildlife habitat. Further study is needed. ...

The City park system currently encompasses much of the Huron River and portions of Malletts Creek, Traver Creek, Swift Run and Allen Creek. Park maintenance, development and acquisition should address the Huron River watershed as a whole natural system rather than piecemeal. ...

Water Quality (P. G28)

Studies of Huron River water quality in the vicinity of Gallup Park and Barton Pond resulted in some changes in the body contact use policy of the Huron River:

1. Restrict use of Gallup Park for all water body contact activities, including windsurfing, for a two-day period following a daily precipitation in the range of 0.1 - 0.49 inches, for a four-day period following a daily precipitation in the range of 0.5 - 0.99 inches, and for a five-day period following a daily precipitation greater than 1.0 inch.
2. Establish an official rain gauge to be operated by the City of Ann Arbor, which would be the main data source for restrictive use decision at Gallup Park.
3. Continue the routine water quality monitoring program in the Barton and Geddes Pond (Gallup Park) areas, especially for indicator bacteria. This would be used in refining the prediction of future periods of restrictive use.
4. Develop a plan for long-term solutions to minimize the impact of urban storm water discharge on the water quality of the Huron River in the vicinity of Ann Arbor. Swimming was once common in the river and this plan recommends that a study be done to determine the feasibility of recreating a swimming beach like one that once existed in Argo Pond.

Fisheries and Wildlife (P. G29)

In 1985, a state-level Fisheries and Wildlife Task Force completed a report with recommendations for expanding the fisheries and wildlife opportunities in southern Michigan. As part of that study, it recommended various improvements be made to these recreational resources. The report concluded that Southern Michigan, aside from its proximity to population centers, is also an area in which resource-based recreational opportunities could be made much more available. The region lacks needed public access; specifically, the region is deficient in fishing access, boat launching facilities, campgrounds, cross country ski trails, fishing piers, hiking trails, nature trails, nature areas and hunting access.

The demand for fishing exceeds the supply of available opportunities in Southern Michigan. For lack of these opportunities, fishing efforts in Southern Michigan have remained relatively constant over the past ten years, while they have risen in Northern Michigan. To look at this situation from another perspective, Southern Michigan has fewer resident anglers than other parts of the state. In part, this is due to the region's shortage of fishing opportunities, which likely accounts for some of the reasons more anglers from Southern Michigan travel outside of their area to fish than is the case for resident fishermen in Northern Michigan.

Recommendations from these studies, which should be implemented in the Ann Arbor area, include the following:

1. Restore a fish community native to the Huron River with a focus on predator species such as small-mouth and large-mouth bass.
2. Better "on-site" promotional literature to help anglers use these improved fishing opportunities.
3. Improvement of water quality through better erosion control and removal of toxic sediments, where possible.

4. Improved access to promote both bank and float fishing, which could include acquisition of easements as an alternative to outright ownership.

Within the City park system, Bandemer Park, Argo Park, and Olson Park fishing facilities have been targeted for improvement.

Creekshed Organizations (P. G30)

Four creekshed groups, the Malletts Creek Association, the Allen Creek Group, the Friends of Traver Creek, and the Millers Creek Action Team, participate in the Huron River Watershed Council's stewardship activities. They are governed by three main goals:

1. Water quality and flow improvement
2. Wildlife habitat improvement
3. Increasing citizen awareness of, connection with and stewardship of local creeks and watersheds

The creekshed groups propose the following recommendations for park design considerations to address improvement of water quality and wildlife habitat in the Huron River and its tributaries.

- Improve and retain natural areas along creek banks within parks.
- Remove invasive plant species. Expand native plantings, including native wildflower displays, and use native species for tree and shrub replacements.
- Add constructed or reconstructed riparian and wetland habitat, as well as prairie and woodland plantings as part of park development where possible.
- Restore natural ravine systems where possible.
- Improve runoff protection by creating unmown or infrequently mown native vegetative buffers along creeks and the river of at least 75 to 150 feet, where feasible...

The North Main Street and Argo Pond Area (P. G33)

The North Main Street/Huron River corridor has been examined for its redevelopment and land use potential. Ongoing planning efforts have included significant citizen involvement. The purchase of a southern addition to Bandemer Park was a first step in that direction. A proposed master plan for Bandemer Park is being revisited to respond to activities and trends. Planning issues include incorporating the needs of rowers into the master plan, removing existing infrastructure, providing more park amenities, restoring the shoreline and creating more efficient parking.

The redevelopment potential of this area may tend to favor more commercially-oriented development such as housing, shopping or office space. Some proposals could strain the natural value of the area; careful controls should be established to encourage developments that would complement, rather than compromise, the scenic and natural qualities of the Huron River Valley and ensure public access to the River.

Goals (P. G33)

The Huron River and the adjacent land have been of interest to planners for a long time. A prime goal of all park plans since the 1960s has been reservation of as much of the riverfront land as possible for public use. The objective of reserving the riverfront for

public use remains a high priority in the 2006-2011 Plan. Linkages between parks and improved access to the river are also a high priority.

Ann Arbor Water Treatment Facilities and Water Resources Master Plan (2006)

How can Ann Arbor improve the quality of its drinking water sources? (p. VI)

To improve water quality in Barton Pond, it is recommended that Ann Arbor:

- Participate in watershed protection activities.
- Conduct additional monitoring and data analysis for phosphorus, hydrocarbons, and other parameters.
- Control Eurasian milfoil with weevils or by reservoir management.

6.2 Barton Pond Water Quality (p. 14)

Ann Arbor obtains up to 90 percent of its water supply from the Huron River at Barton Pond. The following recommendations are made to protect water quality in Barton Pond:

- The City of Ann Arbor should take an active role in watershed management through the Huron River Watershed Council and be an advocate for stormwater inspection and maintenance enforcement throughout the watershed, particularly within Washtenaw County.
- The City of Ann Arbor should advocate phosphorus management practices to protect Barton Pond from developing nuisance algal conditions. Methods of control may include a stormwater ordinance that limits the amount of phosphorus discharged from new development, redevelopment, and agricultural land.
- The City of Ann Arbor should investigate techniques to control invasive species in order to manage the Eurasian water milfoil. The two most practical applications in Barton Pond are reservoir management alternatives to kill Eurasian milfoil and biological control with milfoil weevils that eat the plant. The City should continue to track invasive species sampling and reporting programs conducted by MDNR, and reevaluate monitoring efforts for Barton Pond if the invasive species distribution changes from the current zebra mussel and Eurasian milfoil populations.
- The City of Ann Arbor should continue zebra mussel control. Zebra mussels are present in Barton Pond. The mussels filter out small particles in the water column, making the pond clearer and enabling growth of aquatic plants in deeper water, including the Eurasian water milfoil. The City controls zebra mussels at the intake pipeline through polymer addition.
- The City of Ann Arbor should continue monitoring water quality in both Barton Pond and upstream. An emergency response plan should be developed to address specific water quality issues. Strengthening a spill response notification program to protect the Barton Pond intake should be a proactive measure to provide timely information from first responders and upstream wastewater treatment plants on source water quality.