The pages in this document were taken from the "Millers Creek Watershed Improvement Plan" published in April 2004. The entire document can be found at <a href="http://www.aamillerscreek.org/Findings.htm">http://www.aamillerscreek.org/Findings.htm</a>.

# Millers Creek Watershed Improvement Plan

Excerpt Showing an Example of How to Document Existing Monitoring and Resource Data

**April 2004** 

## 3. METHODS

### 3.1 General Summary

The watershed plan was prepared by the Project Team, including Ayres, Lewis, Norris & May, Inc. (ALNM), Tilton and Associates, Inc. (TAI) and the Huron River Watershed Council (HRWC). Oversight for plan development was provided by the Millers Creek Action Team (MCAT). On a monthly basis the Project Team met with the MCAT and reviewed progress to date, projected future progress, resolved project issues and discussed plan development.

One unique aspect of this project was the highly detailed field work, including the efforts and involvement of volunteer groups to measure macroinvertebrate diversity, habitat conditions, temperature, conductivity, channel dimensions, flow and velocity. HRWC taught volunteers basic surveying and flow gaging techniques. In addition, as a class project for a University of Michigan undergraduate chemistry class, continuous recording temperature, conductivity and dissolved oxygen probes were installed at the Glazier site for Fall 2002.

The efforts of MCAT and the Project Team were communicated and discussed with public participants in three direct mailings, a meeting of watershed businesses, three public meetings, two stream tours and through a regularly updated web page (<u>http://www.aamillerscreek.org</u>).

### 3.2 Existing Data Sources

Existing sources of data compiled for this project include:

Planning Documents

- Complete City of Ann Arbor (AA) Storm Water Master Plan, including all associated NPDES storm water monitoring data
- University of Michigan NPDES monitoring data and facilities planning information
- Ordinances (AA, AAT) and regulations (WCDC)
- City of Ann Arbor Northeast Area Plan

Spatial Data

- Natural Features Information
- City of Ann Arbor Stormwater Management Model (XP-SWMM) input and output data in electronic format
- City of Ann Arbor storm sewer maps
- UM storm sewer maps
- Soils, topography, and land use from state, county, city and UM sources
- Historic and current aerials for review of watershed and stream changes to provide context for impacts of urbanization on the stream corridor
- Zoning/tax assessor maps
- Existing National Flood Insurance Program (NFIP) FEMA maps and studies for Ann Arbor City and Township, including Geddes Dam water surface elevations

Construction Drawings

- Pfizer site data, including topography, wetland delineation, natural features inventory and as-built drawings for storm water features
- As-built drawings for storm water features from all major developments in the watershed
- Geddes Lake Condominium lower lake outlet structure retrofit

Existing Gauges



#### Millers Creek Watershed Improvement Plan

- Pfizer rain gauge and mitigation wetland pressure transducer (water level)
- University of Michigan (UM) rain gauge

#### Water Quality Data

• Michigan Department of Environmental Quality E. coli sampling data to support the *E. coli* TMDL (summer of 2002 – See **Appendix A** of this report)