

*Water Quality.* The standards adopted in the Second Generation Plan required no net increase in pollutant loading from pre-development to post-development. As adopted in the revised standards, that requirement is now “the load reduction achieved by abstracting 1.1 inch from net new impervious or no net increase in TP or TSS, whichever is lower.” From a practical standpoint, developers will need to calculate first, the loading from the pre-development condition, and second, the loading assuming the abstraction of 1.1 inch of impervious runoff from the post-development condition. The development must incorporate water quality BMPs to limit post-construction loading to the lesser of those two figures. Load reduction achieved by meeting the infiltration requirement can be applied toward meeting the water quality requirement.

*Buffers.* The Second Generation Plan required developers to provide a 50 foot buffer adjacent to Elm, Rush, North Fork Rush, and Diamond Creeks for any new or redevelopment, and encouraged property owners to provide a 20 foot buffer adjacent to wetlands, lakes, and streams. That requirement is revised in the new standards to require an average 50 foot, minimum 25 foot wide buffer adjacent to the aforementioned streams, and to require an average 25 foot, minimum 10 foot wide buffer adjacent to lakes, wetlands, PWI streams, and county ditches for any new development or redevelopment. This revised buffer requirement provides more flexibility in establishing the buffer while retaining the basic buffer functions.

#### **4.4.2 2015-2024 Monitoring Program**

The Third Generation Monitoring Program, which is set forth in more detail in Appendix D, has two organizing principles: continuation of routine flow and water quality monitoring Elm Creek and Sentinel Lakes, and rotating monitoring of other streams and lakes by the Commission and by volunteers.

The Third Generation Plan outlines a monitoring program for the next ten years. Each year the Commission will evaluate the proposed program and make modifications as necessary based on the most current data needs. The monitoring objectives guiding the Elm Creek monitoring program and the assessment of data are shown below.

<b>MONITORING PROGRAM GOALS</b>	
1.	To quantify the current status of streams and lakes throughout the watershed in comparison to state water quality standards.
2.	To quantify changes over time, or trends, in stream and lake water quality in the watersheds.
3.	To enhance the value of previous monitoring data by extending the period of record.
4.	To track and quantify the effectiveness of implemented BMPs throughout the watersheds for the protection of water quality.
5.	To evaluate progress toward meeting TMDL load reduction and other goals.

In general the components of the monitoring program include the following:

- Continuing routine flow and water quality monitoring on Elm Creek in partnership with the USGS.
- Periodic flow and water quality monitoring at additional upstream sites on Elm Creek (ECW and EC77); Rush Creek (RCSL); North Fork Rush Creek (RC116); and Diamond Creek (DCZ) on a rotating basis.
- Continuing the partnership with Hennepin County Environmental Services to obtain macroinvertebrate collections by volunteers each year through RiverWatch and the Stream Health Evaluation Program.
- Periodic macroinvertebrate collections on biotically-impaired streams to assess progress toward meeting those TMDLs, and periodic longitudinal dissolved oxygen surveys on those streams with a dissolved oxygen impairment. Annual monitoring of four “Sentinel Lakes:” Fish Lake, Rice Lake, Diamond Lake, and Weaver Lake. In the past this monitoring has been completed by the Three Rivers Park District under contract to the Commission.
- Continuation of the partnership with the Metropolitan Council to conduct lake surface water quality monitoring of other lakes by volunteers every two to three years through the Citizen Assisted Monitoring Program (CAMP).
- Each year Three Rivers Park District prepares a report on current water quality and trends, and reports water quality monitoring data to the state’s EQuIS database.

The schedule and monitoring program set forth in Appendix D is intended to collect data sufficient to evaluate progress toward meeting TMDL goals, and is consistent with the recommendations in the draft Elm Creek Watershed TMDL.

#### **4.4.3 2015-2024 Education and Outreach Program**

Education and Public Outreach is a core function of the Elm Creek Watershed Management Organization. The Commission has conducted some education and outreach activities and has also collaborated with other organizations in Hennepin County as part of the West Metro Water Alliance (WMWA) and participated in Metro-wide education and outreach initiatives such as Blue Thumb, Watershed Partners and Northland NEMO.

This Third Generation Education and Public Outreach Program expands the Commission’s education and outreach activities. The program is set forth in more detail in Appendix E. The following sections set forth the program goals and strategies.

#### **WATERSHED EDUCATION AND PUBLIC OUTREACH PROGRAM GOALS**

The goal of the Elm Creek Watershed Management Commission’s Education and Outreach Program is to educate and engage everyone in the watershed by increasing awareness of water resources, and creating and supporting advocates willing to protect and preserve the resources in the watershed.

*Implementation Strategies.* Each year the Commission will evaluate the proposed Education and Outreach program and establish education and outreach activities for the coming year. The WRAPS study may identify additional goals and strategies to be pursued in the coming years. The