

**Bassett Creek Water Management Commission**  
**Water Quality Activities**  
**Proposed 5-Year (2003- 2007) Plan**  
**June 2003**

Due to budget issues during 2001, the Commission temporarily delayed its water quality monitoring activities mid-year during 2001 and during 2002. The Commission discussed its water quality activities plan during several of its 2001 meetings. Much of these discussions centered around the frequency of monitoring and ways to supplement the Commission's efforts. During the 2003 budgeting process, it was recommended to continue the Bassett Creek biotic index monitoring on a 3-year cycle. Other lakes were to be monitored on a 4-year cycle by working with the Three Rivers Park District. It was also recommended to eliminate Sunset Hill Pond and Lost Lake from the Commission's lake monitoring program. The following was the recommended water quality activities 5-year plan developed by the Commission in 2001.

**1. 2003 Water Quality Budget Recommendations**

- ***General Water Quality Activities***

This task includes review of water quality information and previous studies as requested by Commission, watershed cities, or other regulatory agencies.

Estimated Cost: \$5,000

- ***Bassett Creek Biotic Index Monitoring***

An assessment of the benthic invertebrates found in a stream provides a long-term assessment of its water quality. During 1980, 1983, 1991, 1995 and 2000, benthic invertebrates were collected from Plymouth Creek, the Sweeney Lake Branch, the North Branch and the Main Stem of Bassett Creek to evaluate its water quality and to detect changes in water quality over time. The same six stations in previous surveys will be monitored. Hilsenhoff's Biotic Index will be used to evaluate existing water quality and to assess changes.

Estimated Cost: \$15,000

**2003 TOTAL: \$20,000**

**2. 2004 Water Quality Budget Recommendations**

- ***General Water Quality Activities***

This task includes review of water quality information and previous studies as requested by Commission, watershed cities, or other regulatory agencies.

Estimated Cost: \$5,000

- ***Detailed Lake Monitoring of Northwood, Sweeney and Twin Lakes***

Monitoring will be performed at each lake on six to twelve occasions for selected parameters by Three Rivers Park District (Hennepin Parks). Selected parameters include total phosphorus, soluble reactive phosphorus, total nitrogen, pH and chlorophyll *a*. Phytoplankton, and zooplankton will be analyzed by Barr. An aquatic survey will be performed on two occasions.

Estimated Cost: \$27,000

- ***Detailed Lake Monitoring of Medicine Lake***

Medicine Lake monitoring is currently performed annually at one site by Three Rivers Park District and Plymouth. The detailed monitoring program includes monitoring two locations at Medicine Lake on six to twelve occasions for selected parameters by Three Rivers Park District (Hennepin Parks). Selected parameters include total phosphorus, soluble reactive phosphorus, total nitrogen, pH and chlorophyll *a*. Phytoplankton, and zooplankton will be analyzed by Barr. An aquatic survey will be performed on two occasions.

Estimated Cost: \$18,000

**2004 TOTAL: \$50,000**

### **3. 2005 Water Quality Budget Recommendations**

- ***General Water Quality Activities***

This task includes review of water quality information and previous studies as requested by Commission, watershed cities, or other regulatory agencies.

Estimated Cost: \$5,000

- ***Detailed Lake Monitoring of North and South Rice***

Monitoring will be performed at each lake on six to twelve occasions for selected parameters by Three Rivers Park District (Hennepin Parks). Selected parameters include total phosphorus, soluble reactive phosphorus, total nitrogen, pH and chlorophyll *a*. Phytoplankton, and zooplankton will be analyzed by Barr. An aquatic survey will be performed on two occasions.

Estimated Cost: \$23,000

**2005 TOTAL: \$28,000**

#### 4. 2006 Water Quality Budget Recommendations

- *General Water Quality Activities*

This task includes review of water quality information and previous studies as requested by Commission, watershed cities, or other regulatory agencies.

Estimated Cost: \$5,000

- *Detailed Lake Monitoring of Crane and Westwood Lakes*

Monitoring will be performed at each lake on six to twelve occasions for selected parameters by Three Rivers Park District (Hennepin Parks). Selected parameters include total phosphorus, soluble reactive phosphorus, total nitrogen, pH and chlorophyll *a*. Phytoplankton, and zooplankton will be analyzed by Barr. An aquatic survey will be performed on two occasions.

Estimated Cost: \$24,000

- *Bassett Creek Biotic Index Monitoring*

An assessment of the benthic invertebrates found in a stream provides a long-term assessment of its water quality. During 1980, 1983, 1991, 1995 and 2000, benthic invertebrates were collected from Plymouth Creek, the Sweeney Lake Branch, the North Branch and the Main Stem of Bassett Creek to evaluate its water quality and to detect changes in water quality over time. The same six stations in previous surveys will be monitored. Hilsenhoff's Biotic Index will be used to evaluate existing water quality and to assess changes.

Estimated Cost: \$18,000

**2006 TOTAL: \$47,000**

#### 5. 2007 Water Quality Budget Recommendations

- *General Water Quality Activities*

This task includes review of water quality information and previous studies as requested by Commission, watershed cities, or other regulatory agencies.

Estimated Cost: \$10,000

**2007 TOTAL: \$10,000**

**Summary of Water Quality Activities  
Recommended 5-Year ( 2003 –2007) Plan  
Bassett Creek Water Management Commission  
June 2003**

Year	Water Quality Activity	Estimated Cost
2003	General Water Quality Activities	\$5,000
	Bassett Creek Biotic Index Evaluation	\$15,000
	<b>Total 2003</b>	<b>\$20,000</b>
2004	General Water Quality Activities	\$5,000
	Monitoring of Northwood, Sweeney and Twin Lakes	\$27,000
	Detailed Monitoring of Medicine Lake	\$18,000
	<b>Total 2004</b>	<b>\$50,000</b>
2005	General Water Quality Activities	\$5,000
	Monitoring of North and South Rice Lake	\$23,000
	<b>Total 2005</b>	<b>\$28,000</b>
2006	General Water Quality Activities	\$5,000
	Monitoring of Crane and Westwood Lakes	\$24,000
	Bassett Creek Biotic Index Evaluation	\$18,000
	<b>Total 2006</b>	<b>\$47,000</b>
2007	General Water Quality Activities	\$10,000
	<b>Total 2007</b>	<b>\$10,000</b>

- (1) Medicine Lake and Parkers Lake monitoring is currently performed annually by Three Rivers Park District and Plymouth.
- (2) Wirth Lake monitoring is currently performed by Minneapolis Park and Recreation Board.
- (3) Monitoring program assumes that sampling will be performed for the Commission by Three Rivers Park District; phytoplankton, and zooplankton parameters and the final report will be prepared by Barr Engineering.
- (4) North and South Rice Pond monitored on 4-year cycle.
- (5) Northwood, Parkers, Sweeney and Twin lakes, monitored on 4-year cycle.
- (6) Crane and Westwood lakes monitored on 4-year cycle.
- (7) The following lakes are participating in the 2002 CAMP program:
  - Northwood Lake
  - Parkers Lake
  - South Rice Lake
  - Sweeney Lake
  - Westwood Lake
- (8) Biotic Index monitoring will be performed on a 3-year cycle.
- (9) Water quality reports will include lake and stream monitoring performed by the Commission and data from other programs including CAMP, WOMP and River Watch
- (10) Sunset Hill Pond (Cavanaugh Lake) and Lost Lake were eliminated from the Commission's lake monitoring program.