

River Watch 2008



Hennepin County Environmental Services



Elm Creek Watershed Management Commission

River Watch 2008: Year in Review

Elm Creek Watershed



For more information about the Hennepin County River Watch program, please contact:

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River Watch is a program of Hennepin County Environmental Services sponsored by:





Elm Creek Watershed Management Commission

Every spring and fall students and their teachers go out into a Hennepin County stream to monitor for bugs. It's an eye-opening experience for everyone. The resulting data helps us to understand the health of the stream but doesn't always tell of the fun. From riding a bike (or trying to) found in the stream, to making the local paper, River Watch provides a whole lot more than data. Thanks to everyone who participated this year!



MONITORING GROUPS

School	Site	Teacher	Since
Benilde St. Margaret St. Louis Park	Minnehaha Creek #11	John Porisch	1998
Blake School Minneapolis	Bassett Creek BC#1	Dan Trockman	2007
Carondelet Minneapolis	Minnehaha Creek #25	Cece Cope	2004
Champlin High School Brooklyn Park	Elm Creek #26 Rush Creek #6	Pete Ockuly Jackie Paul	2004 2007
Cooper High School Robbinsdale	Bassett Creek #13	Jon Ong	1999
Highview Alternative School Crystal	Shingle Creek #27	Dustin Dobitz	2007
Hopkins High School Hopkins	Minnehaha Creek #9, #19 Bremer Bank site	Tom Nelson John Sammler	2007 New 2008
Kaleidoscope Charter School Rogers	Rush Creek #4	Paula Higgins	2005
Maple Grove High School Maple Grove	Elm Creek #5	Todd Martin	New 2008
Minnesota Transition Charter School Minneapolis	Minnehaha Creek #32	Wendy Anderson	2005
Newayee Center School Minneapolis	Minnehaha Creek	Cindy Ward Jim Lorenz	2007
Park Center High School Brooklyn Park	Shingle Creek #10	Cindy Jahnke	1996
Patrick Henry High School Minneapolis	Shingle Creek #28	Charlene Ellingson	New 2008
Rockford High School Rockford	Pioneer Creek #24 Crow River #12	Jason Hester	2001
Saint Louis Park High School	Minnehaha at Izaak Walton Park, St. Louis Park	Al Wachutka	New 2008
South High School Minneapolis	Mattson Brook #20	Cindy Ward Staci Marshall	2007
St. Michael – Albertville High School	Crow River #23	Kay Nowell	2004
Wayzata High School Wayzata	Elm Creek #17	Susie Newman	2006
West Lutheran High School Plymouth	Crow River #12	Steve Merten	1999



Hennepin County Stream Evaluations

Stream Grading Scale					
Family Biotic Index	Grade	EPT	Grade	Number of Families	Grade
0.00 – 4.00	A	9-12	A	12 - 15	A
4.01 – 5.75	B	6.0 - 8.9	B	9.1 - 11.9	B
5.76 – 6.50	C	3 - 5.9	C	6 - 9	C
> 6.50	D	< 3	D	< 6	D

Letter Grading Scale	
3.83 - 4.00	A
3.50 - 3.82	A-
3.17 - 3.49	B+
2.83 - 3.16	B
2.50 - 2.82	B-
2.17 - 2.49	C+
1.83 - 2.16	C
1.50 - 1.82	C-
1.17 - 1.49	D+
0.83 - 1.16	D
0.50 - 0.82	D-
0.00 - 0.49	F

The grading scale used in River Watch takes into account three major biotic indices used routinely in biological monitoring programs. The first component is the Family Biotic Index which measures the overall community of invertebrates and their tolerance to pollution levels. The scale ranges from 0 to 10 with the lower values indicating high sensitivity and good water quality if present.

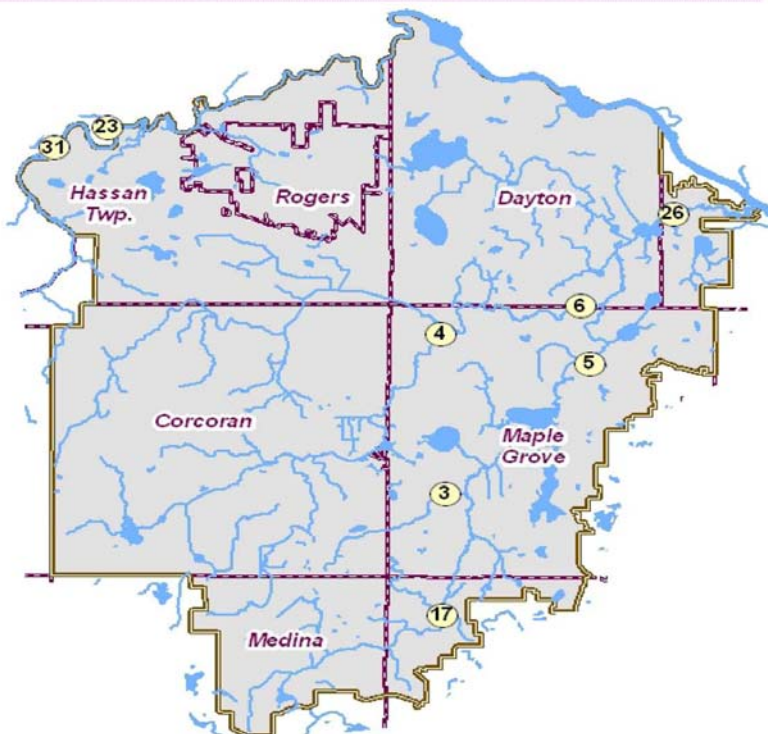
EPT stands for Ephemeroptera, Plecoptera, and Trichoptera or mayflies, stoneflies, and caddisflies. These three families include the most sensitive individuals and is looked at for indications of presence or absence. Higher scores indicate better water quality.

Finally, number of families measures the overall abundance of families or total diversity of family units. Again, with this index, the higher the number the better.



2008 Sites

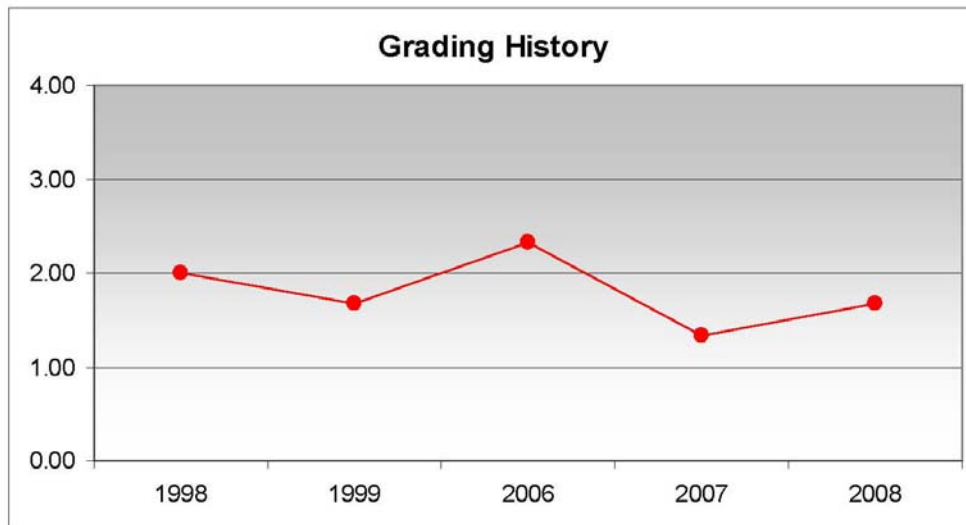
1. Elm Creek #17 - upstream of Peony Lane. Monitored by Susie Newman and Wayzata High School
2. Elm Creek #26 - Josephine Nunn Park. Monitored in the spring and fall by Champlin Park High School.
3. Rush Creek #4 - at 101st Avenue. Monitored by Kaleidoscope Charter School and Paula Higgins.
4. Rush Creek #6 - Downstream of Fernbrook Lane. Monitored by Jackie Paul and Champlin Park High School.
5. Elm Creek #5 - This site is near the Maple Grove High School and is monitored by a new teacher in 2008, Todd Martin. The class went through training and monitoring and plan on submitting data in 2009



Current and historic sites on Elm Creek monitored as part of River Watch.



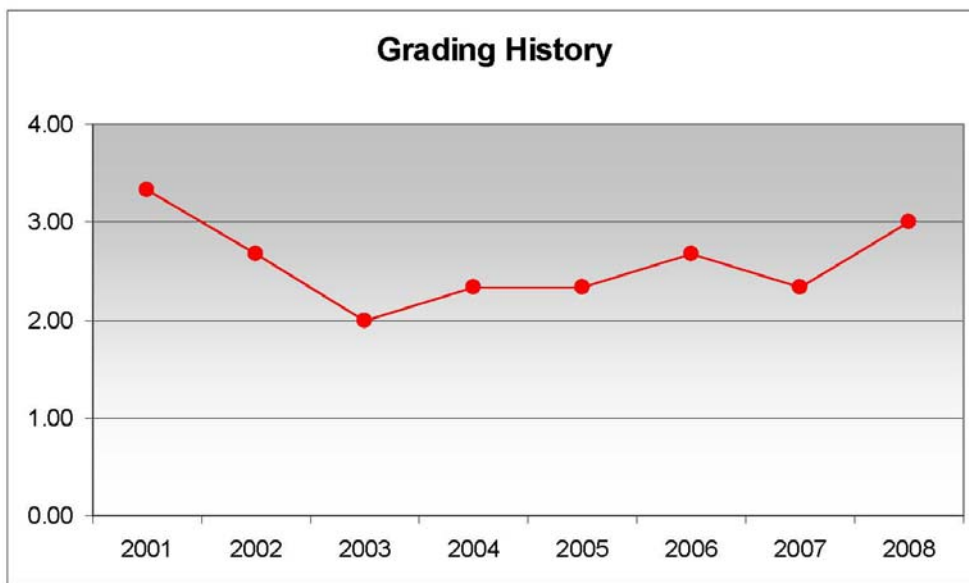
Elm Creek Site #17
Peony Lane



Elm Creek Site #17 Grading History	
Year	Grade
2008	C-
2007	D+
2006	C+
1999	C-
1998	C



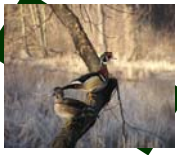
Elm Creek Site #26
Hayden Lake



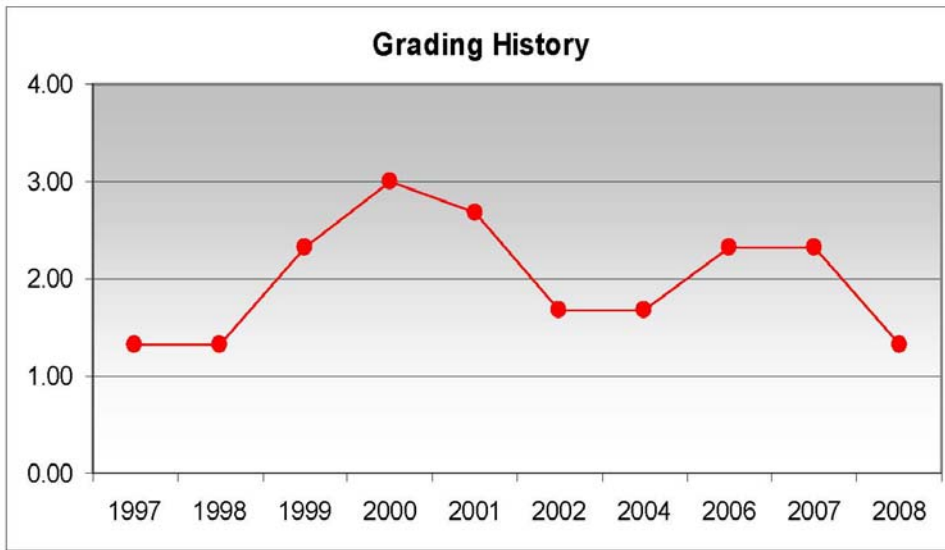
Minnehaha Creek Site #19 Grading History	
Year	Grade
2008	B
2007	C+
2006	B-
2005	C+
2004	C+
2003	C
2002	B-
2001	B+

Average grade over 8 years = 2.6

B-



Rush Creek Site #4
101st Ave

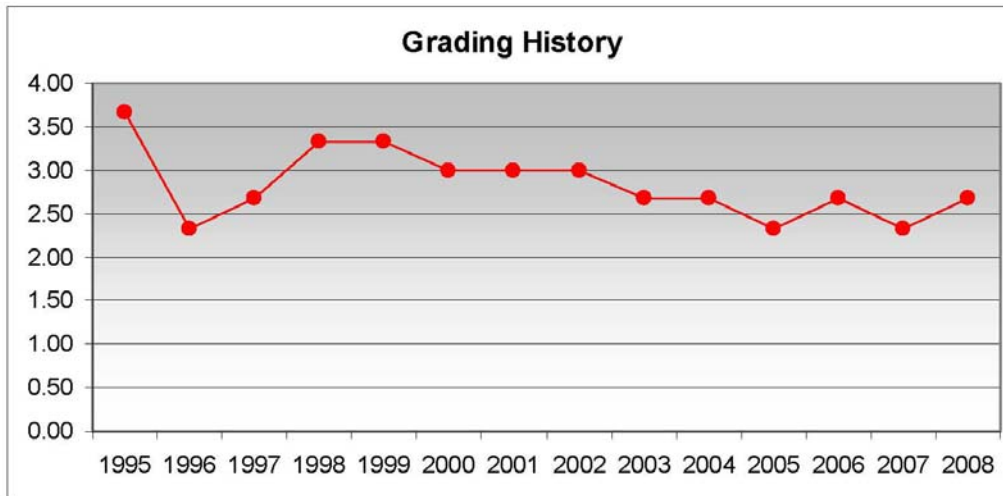


Elm Creek Site #4 Grading History	
Year	Grade
2008	D+
2007	C+
2006	C+
2004	C-
2002	C-
2001	B-
2000	B
1999	C+
1998	D+
1997	D+

Average grade over 10 years = 1.9

C

Rush Creek Site #6
Fernbrook Lane



Elm Creek Site #6 Grading History	
Year	Grade
2008	B-
2007	C+
2006	B-
2005	C+
2004	B-
2003	B-
2002	B
2001	B
2000	B
1999	B+
1998	B+
1997	B-
1996	C+
1995	A-

Average grade over 12 years = 2.83

B



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Photographs of participants were supplied by the school groups and Fortin Consulting.

For additional copies of this report contact Hennepin County Environmental Services at: 612-596-9129

