

Hennepin County
River Watch
2015 Report

Item 8G.
BCWMC 2-18-16



Blake High School



Wayzata High School



Minneapolis College Prep

Hennepin County River Watch 2015 Report

The River Watch Program has provided hands-on environmental education opportunities for students throughout Hennepin County since 1995. Every spring and fall, students and teachers venture into Hennepin County streams with waders securely fastened and dip nets in hand to collect aquatic macroinvertebrates, or bottom-dwelling, spineless organisms including mayflies, stoneflies, snails and beetles. Macroinvertebrates are influenced by physical and chemical properties of streams, so monitoring those organisms helps assess water quality. River Watch is an eye-opening experience for all participants, and the resulting data helps us understand the health of our streams.

In 2015, 17 stream stretches were monitored in the spring and/or fall. Data was gathered by more than 600 students from 23 classes and 16 schools, and students, teacher and chaperones donated more than 2,300 hours. Thank you to all of you who participated this year!



Grading scale

The grading scales used in River Watch takes into account three major biotic indices used routinely in biological monitoring programs.

- The Family Biotic Index 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 (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). These three families include organisms that are the most sensitive to pollution. Higher scores indicate better water quality.
- The number of families measures the overall abundance of families or total diversity of family units. The higher the number indicates better ecosystem quality.

To develop a letter grade for a stream site, grades are assigned a letter grade for the data collected for each biotic index. The corresponding grade point value for each letter grade is averaged to calculate the letter grade for the site.

Stream grading scale

Grade	Family Biotic Index	EPT	Number of families
A	0.00 – 4.00	9.0 – 12.0	12.0 – 15.0
B	4.01 – 5.75	6.0 – 8.9	9.1 – 11.9
C	5.76 – 6.50	3.0 – 5.9	6.0 – 9.0
D	> 6.50	< 3.0	< 6.0

Letter grading scale

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



Kaleidoscope



Wayzata High School



Calvin Christian High School



West Lutheran High School



Washburn High School

2015 monitoring groups and results

Bassett Creek Watershed					
Site	School	Teacher	2015 grade	2014 grade	Years monitoring
Bassett Creek at General Mills Park	Blake School High School, Minneapolis	Dan Trockman	C	C	8
Bassett Creek Nature Area	School of Engineering & Arts, Golden Valley	Cara Rieckenberg	C	B-	3
Bassett Creek at Wirth Chalet	Minneapolis College Prep	Holly Lammert	C+/C	N/A	1
Crow Wing					
Crow River at Lake Rebecca Park	West Lutheran High School, Plymouth	Steve Merten	A-	B-	16
Crow River at St. Michael Water Treatment Plant	St. Michael-Albertville High School, St. Michael	Kay Nowell	A-	B+	11
Elm Creek Watershed					
Rush Creek, Elm Creek tributary at 101st Lane, Maple Grove	Kaleidoscope Charter School, Otsego	Carrie Lynch	B	B-	9
Elm Creek at Elm Creek Golf Club	Wayzata High School, Plymouth	Susie Newman	C	C+	17
Elm Creek at Peony Lane at Wayzata High School	Wayzata High School, Plymouth	Susie Newman	C	C	17
Minnehaha Creek Watershed					
Painter Creek	Minnetonka High School, Minnetonka	Allison Crowell	C-	N/A	2
Minnehaha Creek at Burwell House, Minnetonka	Hopkins High School, Hopkins	John Sammler	C+	C+	16
Minnehaha Creek at Bremer Bank, Knollwood canoe launch, St Louis Park	Hopkins High School, Hopkins	John Sammler	C	C	8
Minnehaha Creek at Utley Park, Edina	Benilde St. Margaret, St. Louis Park	John Porisch	B-	C	19
Minnehaha Creek at 54th St & Washburn Ave, Minneapolis	Carondelet Catholic School, Minneapolis	Holly Stene	No data	C	12
Minnehaha Creek at Nicollet Ave.	Washburn High School, Minneapolis	Raewyn Kelley	B	N/A	1
Minnehaha Creek, below the falls, Minneapolis	NeWayee Center School, Minneapolis	Cindy Ward	C+	C+	6
Shingle Creek Watershed					
Shingle Creek at Lion's Park in Brooklyn Center	Calvin Christian High School, Fridley	James Van de Glind	C-	C	6
Shingle Creek at Park Center High School in Brooklyn Park	Park Center High School, Brooklyn Park	Cindy Jahnke	D+	C-	19



Washburn High School



School of Engineering and Arts



Kaleidoscope



Minneapolis College Prep



Hopkins High School



Hopkins High School



Minnetonka High School

Hennepin County
Public Works
Environment & Energy Department
612-348-3777
www.hennepin.us/riverwatch

