



Hennepin County River Watch 2014 Report

Item 8D.
BCWMC 2-19-15



Hopkins High School



Park Center High School



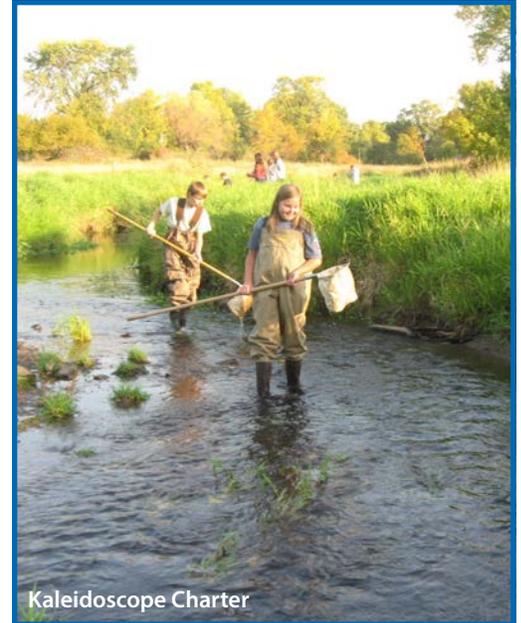
West Lutheran High School



Hennepin County River Watch 2014 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 these organisms helps assess water quality. River Watch is an eye-opening experience for all participants, and the resulting data helps us to understand the health of our streams.

In 2014, 20 stream stretches were monitored in the spring and/or fall. Data was gathered by more than 700 students from 35 classes and 16 schools, and volunteers 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.

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	Total range
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



2014 monitoring groups and results

Bassett Creek Watershed					
Site	School	Teacher	2014 grade	Cumulative average grade	Years monitoring
Bassett Creek at General Mills Park	Blake School High School, Minneapolis	Dan Trockman	C	C	7
Bassett Creek Nature Area	School of Engineering & Arts, Golden Valley	Cara Rieckenberg	C+	B-	2
Bassett Creek at Noble Ave	Cooper High School, New Hope	Jon Ong	C	C	15
Crow Wing					
Crow River at Lake Rebecca Park	West Lutheran High School, Plymouth	Steve Merten	C+	B-	15
Crow River at St. Michael Water Treatment Plant	St. Michael-Albertville High School, St. Michael	Kay Nowell	B+	B+	10
Elm Creek Watershed					
Rush Creek, Elm Creek Tributary at 101st Lane, Maple Grove	Kaleidoscope Charter School, Otsego	Carrie Lynch	B-	B-	8
Elm Creek at Elm Creek Golf Club	Wayzata High School, Plymouth	Susie Newman	C+	C	16
Elm Creek downstream from Rice Lake	West Lutheran High School, Plymouth	Steve Merten	D+	N/A	1
Elm Creek at Peony Lane at Wayzata High School	Wayzata High School, Plymouth	Susie Newman	C-	C	16
Minnehaha Creek Watershed					
Minnetonka Civic Center, Minnetonka	Minnetonka High School Minneapolis	Allison Crowell	C-	N/A	1
Burwell House, Minnetonka	Hopkins High School, Hopkins	John Sammler	B	C+	15
Bremer Bank, Knollwood canoe launch, St Louis Park	Hopkins High School, Hopkins	John Sammler	C	C	16
Minnehaha Creek at Utley Park, Edina	Benilde St. Margaret, St. Louis Park	John Porisch	B	C	18
54th St & Washburn Ave, Minneapolis	Carondelet Catholic School, Minneapolis	Holly Stene	C+	C	12
Below the falls, Minneapolis	NeWayee Center School, Minneapolis	Cindy Ward	B	C+	5
Pioneer-Sarah Watershed					
Dance Hall Creek	Rockford High School, Rockford	Jason Hester	C	N/A	1
Shingle Creek Watershed					
Lion's Park	Calvin Christian High School, Fridley	James Van de Glind	D+	C	5
Park Center High School	Park Center High School, Brooklyn Park	Cindy Jahnke	D+	C-	18
West Mississippi Watershed					
Mattson Brook, West River Road, Brooklyn Park	South High School, Minneapolis	Cindy Ward	C	C	7



Blake High School



Kaleidoscope Charter School



West Lutheran High School



Hopkins High School



St. Michael-Albertville



Park Center High School



Hennepin County
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www.hennepin.us/environmentaleducation