

Hello Adopt-A-Stream Volunteers!

Here is a summary of our Fall of 2014 monitoring results. It was a tough monitoring season for many of us due to the weather and high water levels. Overall, our stream quality scores this season were lower than average. Don't worry, it's probably not because our streams are getting worse, but is most likely due to the inclement weather we experienced making it difficult to collect macroinvertebrates throughout the entire stream section.

To refresh your memories, after we collect the macroinvertebrates from the stream and identify them, we can then calculate a "Stream Quality Score" and rank the stream section (see Appendix A). The scores you see on the following graph (Figure 1.) are the scores for this season. For site locations and ID, please refer to Table 1. For site specific long-term scores and averages, contact CRWC staff or look at the score graphs for the previous years on our website:

<http://www.crowc.org/programs/adoptastream/results/>

Here are a few fun facts from the Fall monitoring:

- Three most abundant invertebrates collected:
 1. Net-spinning caddisfly (Hydropsychidae)
 2. Sowbug (Isopoda)
 3. Damselfly (Odonata)
- Most abundant river-bed substrate types:
 1. Silt
 2. Sand
 3. Gravel
- Average stream temperature/subwatershed (to view the subwatershed your stream is in click here: <http://www.crowc.org/watershed/subwatersheds/>)
 - Clinton River East: 56.8°F
 - North Branch Clinton River: 56.7°F
 - Stony Creek: 53°F
 - Paint Creek: 52.1°F
 - Clinton River Main: 57.7°F
 - Red Run: 54°F
 - Upper Clinton: 52.9°F



Table 1. Site locations and ID

Site ID	Stream Name	Location/Site Description
CM3	Clinton River	Riverside Park, Auburn Hills
CM4	Clinton River	NW corner of Perry and Giddings in Pontiac
CM5	Clinton River	Corner of Avon and Livernois
CM6	Clinton River	Yates Park
CM9	Avon Creek	CRWC office
CREW2	Gloede Drain	M-59 & Garfield
CREW4	Utica Drain	MCCC Campus (Hall Rd. and Garfield)
CREW6	Clinton River	Dodge Park, Sterling Heights
CREW7	Utica Drain	MCCC Campus (Hall Rd. and Garfield)
CREW8	Middle Branch Clinton River	Hayes Rd, Shelby Twp
LSC4	Cottrell Drain	Jefferson Ave. @ Donaldson St.
NB1	Clinton River North Branch	Wolcott Mill
NB2	Clinton River North Branch	MCPWO office
NB13	Clinton River North Branch	Cascade Dam
NB14	East Pond Creek	33 Mile Rd & McVicar Rd
RR3	Nelson Drain	Hill @ Dequindre, West side of Dequindre
RR4	Beaver Creek	James Nelson Park, 15mi E. of Dequindre
RR6	Plumbrook Drain	Mound & 18 1/2 mi.
RR9	Beaver Creek	Beaver Creek Park Bieber Dr off Ryan Rd 1/2 mile North of E14 mile
SP1	Paint Creek	Indianwood/Newman Rd.
SP2	Paint Creek	Children's Park, 160 Anderson St.
SP5	Stony Creek, West Branch	West Branch Picnic Area, S.C. Park
SP6	Stony Creek	Lake George Rd. S. of Predmore, N. of Stony Creek
SP8	Paint Creek	Kings Cove Subdivision/Tienken Rd.
SP9	Paint Creek	Rochester Hills Public Library
SP15	Stony Creek	Van Hoosen Museum
SP18	Stony Creek	Rochester Rd & Milmine Rd
SP25	Gallagher Creek	Gallagher Rd.
UC1	Clinton River	Between Green's Lake and Dollar Lake
UC2	Clinton River	Kimball Preserve
UC3	Sashabaw Creek	Pine Knob Rd west of Clintonville Rd
UC4	Clinton River	Clarkston United Methodist Church

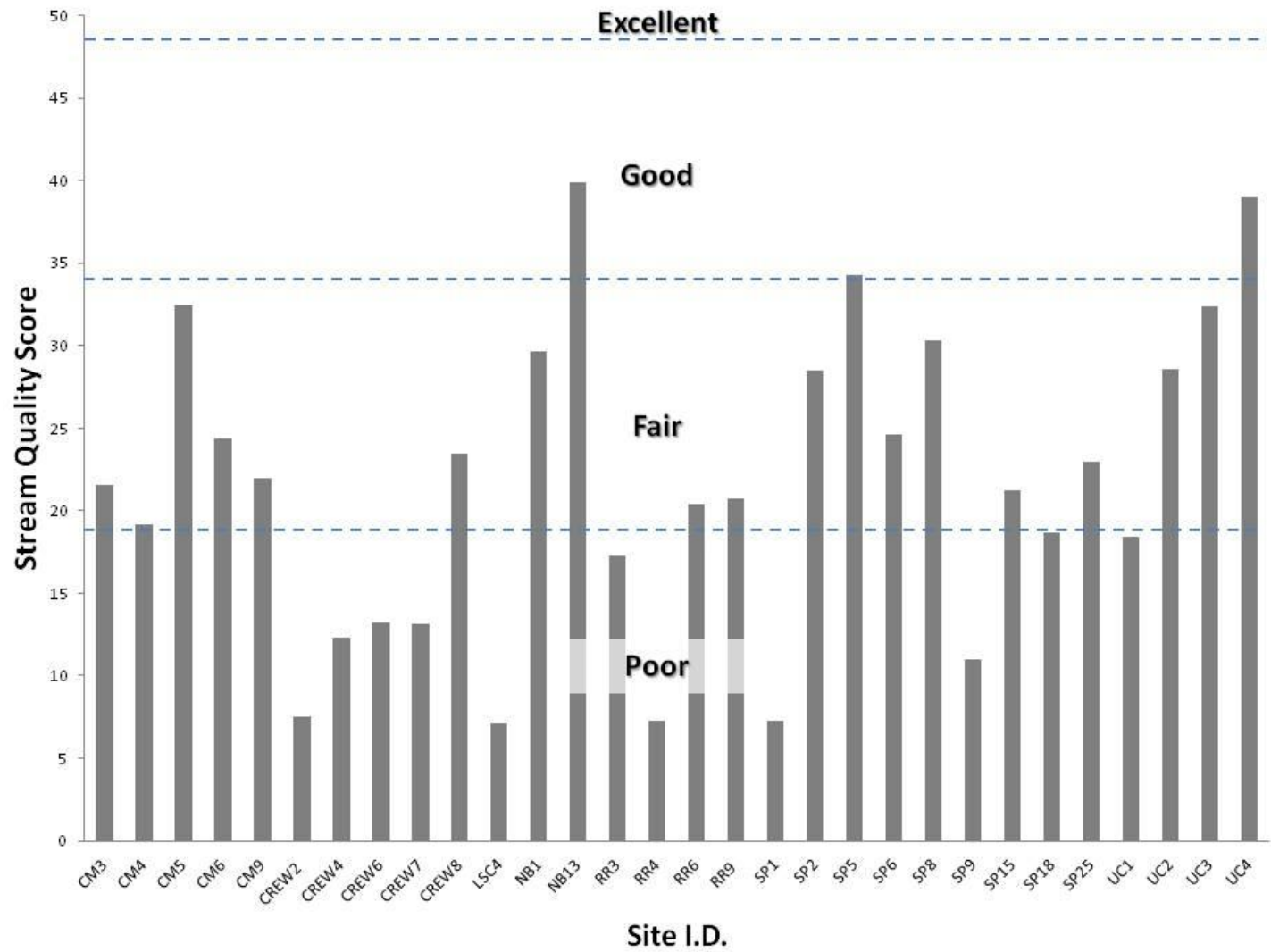


Figure 1. Bar graph of Stream Quality scores (based on Adopt-A-Stream volunteer macroinvertebrate samples) for Fall 2014.

APPENDIX A: Macroinvertebrate Data Form

Site ID or Location: _____

Date: _____

Identification and Enumeration

Use the codes "R" (rare) = 1-10, or "C" (common) = 11 or more when recording the number of individuals in each taxonomic group.

Group 1: Sensitive

- ___ Caddisfly larvae (Trichoptera) *EXCEPT Net-spinning caddisflies
- ___ Hellgrammites (Megaloptera)
- ___ Mayfly nymphs (Ephemeroptera)
- ___ Gilled (right-handed) snails (Gastropoda)
- ___ Stonefly nymphs (Plecoptera)
- ___ Water penny's (Coleoptera)
- ___ Water snipe fly (Diptera)

Group 2: Somewhat-Sensitive

- ___ Alderfly larvae (Megaloptera)
- ___ Beetle adults (Coleoptera)
- ___ Beetle larvae (Coleoptera)
- ___ Black fly larvae (Diptera)
- ___ Clams (Pelecypoda)
- ___ Crane fly larvae (Diptera)
- ___ Crayfish
- ___ Damselfly nymphs (Odonata)
- ___ Dragonfly nymphs (Odonata)
- ___ Net-spinning caddisfly larvae (Trichoptera)
- ___ Scuds (Amphipoda)
- ___ Sowbugs (Isopoda)

Group 3: Tolerant

- ___ Aquatic Worms (Oligochaeta)
- ___ Leeches (Hirudinea)
- ___ Midge larvae (Chironomidae)
- ___ Pouch snails (Gastropoda)
- ___ True bugs (Hemiptera)
- ___ Other true flies (Diptera)

STREAM QUALITY SCORE
(metric created by MiCorps, www.micorps.net)

Group 1
 ___ # of R's * 5.0 = ___
 ___ # of C's * 5.3 = ___
 Group 1 Total = ___

Group 2
 ___ # of R's * 3.0 = ___
 ___ # of C's * 3.2 = ___
 Group 2 Total = ___

Group 3
 ___ # of R's * 1.1 = ___
 ___ # of C's * 1.0 = ___
 Group 3 Total = ___

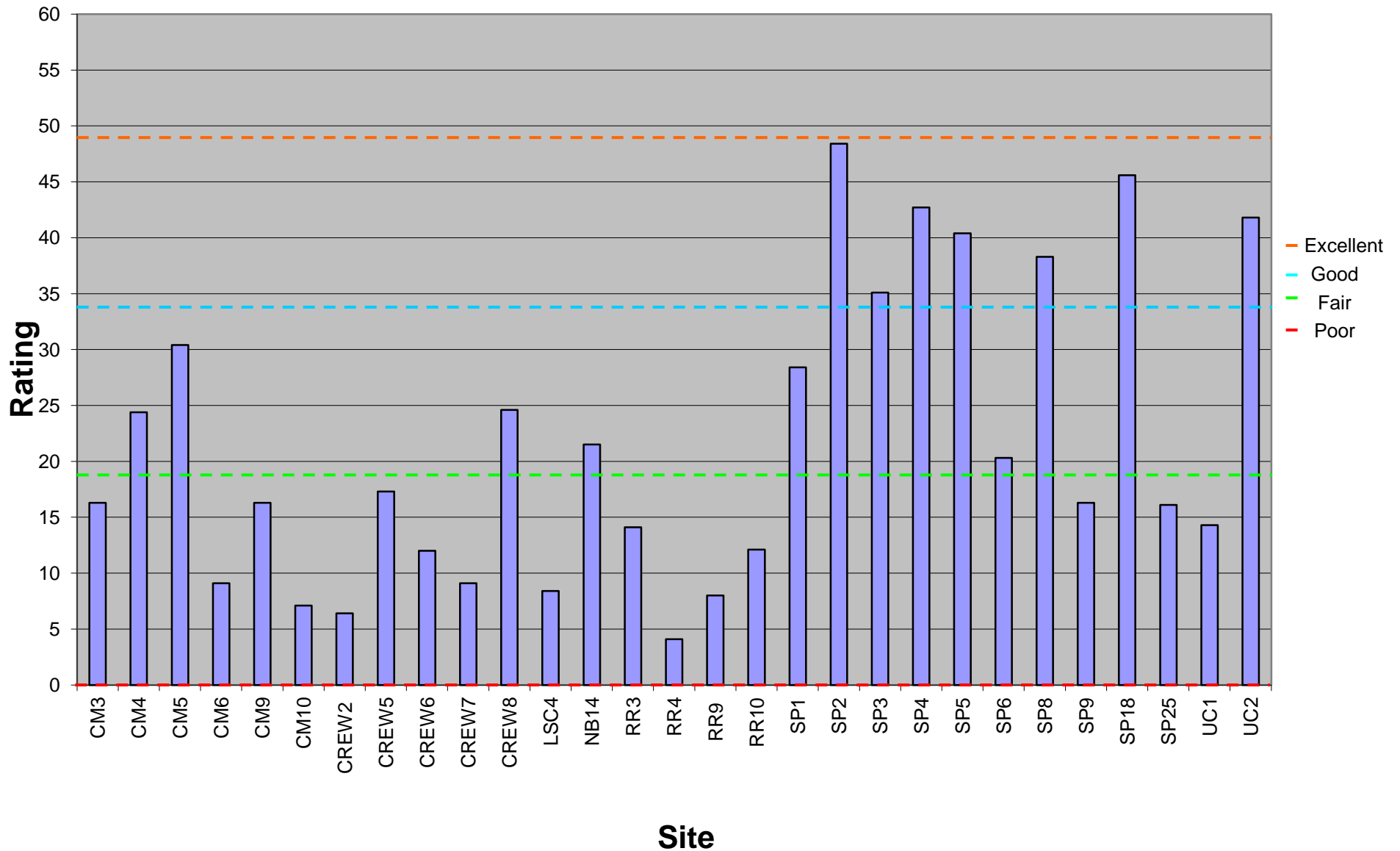
Total Stream Quality Score = _____
(Sum of totals for groups 1-3; round to nearest whole number)

Excellent (>48)
 Good (34-48)
 Fair (19-33)
 Poor (<19)

Identifications made by: _____

Identifications verified by: _____

Sampling Results: Spring 2014



Stream quality scores for Adopt-A-Stream sites for the Spring of 2014. Scores based on volunteers samples of the macroinvertebrate community within a 300ft section of the river. Site locations can be found here: <http://www.cwcc.org/programs/adoptastream/monitoring/>