Since 2012 the Benzie Conservation District has been working with caring volunteers to help assess the quality and health of Benzie County’s lotic (flowing) waters. As part of Michigan Clean Water Corps’ Volunteer Stream Monitoring Program (VSMP) our teams have been collecting aquatic macroinvertebrates (water bugs) at nine sites within the Platte, Betsie and Herring lakes watersheds. Based on the types (taxa: taxonomic orders and families) of macroinvertebrates collected, we can compute a Stream Quality Index (SQI) score for each site. This will be used to track changes in water quality over time.
After carefully sorting and identifying specimens from the nine sites across the county, we use the macroinvertebrate community to classify sites into one of four categories: excellent, good, fair or poor. The table below shows how each site scored.

*Stream Quality Index ratings from Spring and Fall 2017*

<table>
<thead>
<tr>
<th>River Name</th>
<th>Site Name</th>
<th>Spring 2017</th>
<th>Fall 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platte</td>
<td>P1 – Reynolds Rd</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>P2 – Veteran’s Park</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>P3 – Indian Hill Rd</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Betsie</td>
<td>B1 – Lewis Bridge</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>B2 – Wolf Rd</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>B3 – Bentley Rd</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Herring</td>
<td>H1 – Elberta Resort</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>H2 – Swamp Rd</td>
<td>Good</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>H3 – Raymond Rd</td>
<td>Good</td>
<td>Poor</td>
</tr>
</tbody>
</table>
Stream Quality Index values, number of taxa collected, and EPT (mayfly, stonefly and caddisfly) families collected from Spring and Fall 2017

**SPRING 2017**

- Reynolds Rd: 51.4, 26 taxa, 12 EPT
- Veterans Park: 51.5, 31 taxa, 15 EPT
- Indian Hill Rd: 44.4, 23 taxa, 11 EPT
- Lewis Bridge: 59.6, 36 taxa, 18 EPT
- Wolf Rd: 59.6, 28 taxa, 12 EPT
- Bentley Rd: 39.2, 16 taxa, 7 EPT
- Elberta Resort Rd: 56.8, 24 taxa, 10 EPT
- Swamp Rd: 39, 17 taxa, 7 EPT
- Raymond Rd: 40.2, 20 taxa, 8 EPT

**FALL 2017**

- Reynolds Rd: 51.7, 19 taxa, 7 EPT
- Veterans Park: 60.7, 35 taxa, 16 EPT
- Indian Hill Rd: 46.3, 26 taxa, 14 EPT
- Lewis Bridge: 54.1, 24 taxa, 10 EPT
- Wolf Rd: 67, 32 taxa, 10 EPT
- Bentley Rd: 40, 25 taxa, 6 EPT
- Elberta Resort Rd: 37.8, 14 taxa, 6 EPT
- Swamp Rd: 15.1, 6 taxa, 1 EPT
- Raymond Rd: 17.4, 17.4, 8 EPT

**PLATTE**

**BETSIE**

**HERRING**
WHAT DOES IT MEAN?

Overall Benzie’s rivers retained their high quality in 2017. Across all sites the average SQI score was 44.9, which ranks firmly in the “good” category. Our highest quality sites including: Veteran’s Park (Platte), Wolf Road (Betsie), and Elberta Resort Road (Herring) were again hotspots for macroinvertebrate diversity and high SQI scores.

Unfortunately, 2017 was also the first year where two sites scored “poor,” both being small tributaries to Herring Creek. The Raymond Road and Swamp Road sites are both very small streams (~3ft wide) and lack some of the instream habitat found at the larger sites. However, these sites have scored better in the past. We will be keeping our eye on future results to see if improvements/restoration are needed in these streams.

If you want to learn more about the Volunteer Stream Monitoring Program (VSMP) or to see past results from the program please visit Benzie Conservation District’s website and look for VSMP under the “Benzie Waters” tab or contact Conservation Specialist John Ransom at john@benziecd.org or 231.882.4391.
TO ALL THE VOLUNTEERS WHO MAKE THIS PROGRAM POSSIBLE,

THANK YOU!