

# Citizen's Qualitative Habitat Evaluation Index

**CQHEI  
Score**

Date:

Length of Reach Evaluated:  150 m  200 m  500 m  Other: \_\_\_\_\_

River Code:

River Mile:

River/Site:

## I. Substrate (Bottom Type)

**Score:**

**a.) Size**

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> Mostly Large (Fist Size or Bigger)<br>14 pts | <input type="checkbox"/> Mostly Medium (Smaller Than Fist Bigger Than Fingernail)<br>10 pts | <input type="checkbox"/> Mostly Small (Smaller Than Fingernail, But Still Coarse)<br>6 pts | <input type="checkbox"/> Mostly Very Fine (Not Coarse, Sometimes Greasy or Mucky)<br>0 pts |
|---|---|--|--|

**b.) "Smothering"**

- Yes 0 pts     No 5 pts
- Are Fist Size and Larger Pieces Smothered By Sands/Silts?

Symptoms:  
Hard to Move Large Pieces, Often Black on Bottom w/Few Insects

**c.) "Siltling"**

- Yes 0 pts     No 5 pts
- Are Silts and Clays Distributed Throughout Stream?

Symptoms:  
Light Kicking of Bottom Results in Substantial Clouding of Stream for More than a Minute or Two

## II. Fish Cover (Hiding Places) - 2 Points For Each One Present

**Score:**

- |   |   |  |   |   |  |
|---|---|--|---|---|--|
| <input type="checkbox"/> Underwater Tree Roots (Large)<br>2 pts   | <input type="checkbox"/> Boulders<br>2 pts                            | <input type="checkbox"/> Downed Trees, Logs, Branches<br>2 pts       | <input type="checkbox"/> Water Plants<br>2 pts                                      | <input type="checkbox"/> Deep Areas (Chest Deep)<br>2 pts | <input type="checkbox"/> Undercut Banks<br>2 pts |
| <input type="checkbox"/> Underwater Tree Rootlets (Fine)<br>2 pts | <input type="checkbox"/> Backwaters, Oxbows or Side Channels<br>2 pts | <input type="checkbox"/> Shallow, Slow Areas for Small Fish<br>2 pts | <input type="checkbox"/> Shrubs, Small Trees That Hang Close Over the Bank<br>2 pts |   |  |

## III. Stream Shape and Human Alterations

**Score:**

**a.) "Curviness" or "Sinuosity" of Channel**

<input type="checkbox"/> Very Straight 0 pts 	<input type="checkbox"/> Mostly Straight Some "Wiggle" 3 pts 
<input type="checkbox"/> 1 or 2 Good Bends 6 pts 	<input type="checkbox"/> 2 or More Good Bends 8 pts 

**a.) How Natural Is The Site?**

- |  |   |
|--|---|
| <input type="checkbox"/> Mostly Natural<br>12 pts  | <input type="checkbox"/> Many Man-made Changes, but still some natural conditions left (e.g., trees, meanders)<br>6 pts |
| <input type="checkbox"/> A Few Minor Man-made Changes (e.g., bridge, some streambank changes)<br>9 pts | <input type="checkbox"/> Heavy, Man-made Changes (e.g., channelized, leveed,)<br>0 pts                                  |

## IV. Stream Forests & Wetlands ("Riparian Area") & Erosion

**Score:**

**a.) Width - Mostly:**

- Wide (Can't Throw A Rock Through It)  
8 pts
- Narrow (Can Throw A Rock Through It)  
5 pts
- None  
0 pts

**b.) Land Use - Mostly:**

- |  |  |
|--|--|
| <input type="checkbox"/> Forest/Wetland<br>5 pts   | <input type="checkbox"/> Fenced Pasture<br>2 pts       |
| <input type="checkbox"/> Shrubs<br>4 pts           | <input type="checkbox"/> Park (Grass)<br>2 pts         |
| <input type="checkbox"/> Overgrown Fields<br>3 pts | <input type="checkbox"/> Conservation Tillage<br>2 pts |

**c.) Bank Erosion - Typically:**

- Suburban  
1 pts
- Rowcrop  
1 pts
- Open Pasture  
0 pts
- Urban/Industrial  
0 pts
- Raw, Collapsing Banks  
0 pts
- Combination of Stable and Eroding Banks  
2 pts
- Stable Hard or Well Vegetated Banks  
4 pts

**d.) How Much of Stream is Shaded?**     3 pts - Mostly     2 pts - Partly     0 pts - None

## V. Depth & Current Velocity:

**Score:**

**a.) Deepest Pool Is At Least:**

- |   |   |
|---|---|
| <input type="checkbox"/> 8 pts - Chest Deep | <input type="checkbox"/> 4 pts - Knee Deep  |
| <input type="checkbox"/> 6 pts - Waist Deep | <input type="checkbox"/> 0 pts - Ankle Deep |

**b.) Check ALL The Flow Types That You See:**

- |  |  |
|--|--|
| <input type="checkbox"/> 2 pts - <u>Very Fast</u> : Hard to Stand in the Current | <input type="checkbox"/> 1 pts - <u>Moderate</u> : Slowly Takes Objects Downstream |
| <input type="checkbox"/> 3 pts - <u>Fast</u> : Quickly Takes Objects Downstream  | <input type="checkbox"/> 1 pt - <u>Slow</u> : Flow Nearly Absent                   |
- 0 pts - No Flow

## VI. Riffles/Runs (Areas Where Current is Fast/Turbulent, Surface May Be Broken)

**Score:**

**a.) Riffles/Runs Are:**

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> 8 pts - Knee Deep or Deeper & Fast | <input type="checkbox"/> 6 pts - Ankle/Calf Deep & Fast | <input type="checkbox"/> 4 pts - Ankle Deep or Less & Slow | <input type="checkbox"/> 0 pts - Do Not Exist |
|---|---|--|---|

**b.) Riffle/Run Substrates Are:**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> 7 pts - Fist Size or Larger | <input type="checkbox"/> 4 pts - Smaller Than Fist Size, but Larger Than Fingernail | <input type="checkbox"/> 0 pts - Smaller Than Your Fingernails |
|--|---|--|

For Most Metrics Intermediate Conditions Can Be Denoted By Checking Two Boxes and Averaging The Scores