

# Watershed Watch Habitat Assessment Form

Sampler Name(s)		Participants
		# Adults _____ # Youth _____
Site ID	Stream Name (If new site, also provide location description)	If New Site, Lat /Long:
		3 ____ . _____ ° N -8 ____ . _____ ° W
Volunteer Minutes		Miles Driven
<b>Instructions:</b> Record information on this sheet as you conduct assessments to determine the overall physical health of your stream. Fill out the sheet based on observed conditions at your monitoring site.		
Land Use in Drainage Area (Check all that apply)		
NOTE: For this section, you can use visual indications of land use, as well as your general familiarity with the area.		
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Industrial  <input type="checkbox"/> Downtown Residential  <input type="checkbox"/> Suburban Residential  <input type="checkbox"/> Commercial         </div> <div> <input type="checkbox"/> Open Space  <input type="checkbox"/> Agricultural  <input type="checkbox"/> Other _____         </div> </div>		
Pollutant Indicators (Check all that apply)		
Check all potential pollutant indicators you notice. These indicators may range from strange odors, unusual colors, or floatables (suds, sewage, or petroleum). Refer to guidance, if needed.		
Color	Odor	Floatables on water surface
<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Green <input type="checkbox"/> White <input type="checkbox"/> Grey <input type="checkbox"/> Orange <input type="checkbox"/> Other: _____	<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> None  <input type="checkbox"/> Rotten eggs  <input type="checkbox"/> Chlorine  <input type="checkbox"/> Rancid, sour  <input type="checkbox"/> Gas, petroleum         </div> <div> <input type="checkbox"/> Musty  <input type="checkbox"/> Sweet, fruity  <input type="checkbox"/> Sharp, pungent  <input type="checkbox"/> Other: _____         </div> </div>	<input type="checkbox"/> None <input type="checkbox"/> Oil sheen <input type="checkbox"/> Algae <input type="checkbox"/> Suds/foam <input type="checkbox"/> Sewage indicators <input type="checkbox"/> Other: _____

**After totaling scores on page 2, use the following scale to rate your stream's habitat.**

**Habitat Rating:** GOOD = 30 - 36; FAIR = 23 - 29; MARGINAL = 16 - 22; POOR = 9 - 15

## Physical Assessment: Stream Corridor Assessment

Based on Stream Corridor Assessment protocol from Maryland Department of Natural Resources.

**Instructions:** Select a stream segment of 100+ feet and observe the stream habitat in and on both sides of the water. Based on the descriptions for each habitat characteristic, rate your stream habitat from good (4 pts) to poor (1 pt).

Characteristic	Good (4)	Fair (3)	Marginal (2)	Poor (1)	Score
<b>Streambank Vegetation</b> – Look above water level and on land next to stream. Mowing/grazing impacts?	Lots of plants, shrubs and trees (not lawn or crops) covering banks and floodplain.	Some plants, shrubs and trees along banks.	Most <u>trees and shrubs</u> are gone.	Very little plant life at all along banks or in floodplain.	
<b>Stream Channel Alteration</b> – Is the stream curving or straight? Have humans changed the stream channel?	Channel allowed to naturally bend and curve around landscape. Flow not impacted by manmade features, such as rock baskets or concrete.	Channel straightened in some places, but some natural bends still present. No bank hardening with concrete or rocks.	Channel mostly straightened, but vegetation still present and no rock or cement hardening of banks.	Channel straightened and flowing along a rocky or paved channel.	
<b>Embeddedness</b> - Are there rocks on the bottom and are they covered by silt? Is there a variety of rock sizes?	Exposed rocks cover almost all of the stream bed with very little sand or silt between them.	Exposed rocks cover most of stream bed, with some sand/silt between & on rocks.	Rocks more than halfway buried (embedded) into sand/silt.	Rocks entirely buried by sand and silt.	
<b>Erosion</b> – What length of banks is bare of vegetation?	Most of streambanks are covered with large rocks and vegetation with very little exposed soil.	Approx. 2/3 of bank area covered with large rocks and vegetation, <u>1/3 exposed soil</u> .	Approx. 1/3 of bank area covered with large rocks and vegetation, <u>2/3 exposed soil</u> .	Steep banks of bare, exposed soil with very little covered by large rocks and vegetation.	
<b>Shelter for Macroinvertebrates</b> – Look for rocks, limbs and leaves on the stream bottom.	Lots of different sized rocks, submerged wood, and plenty of leaf packs.	Only small gravel- sized rocks, some wood and leaf packs.	No rocks or wood, but some leaf packs.	No rocks, wood, or leaf packs. Stream bottom mainly mud or bedrock.	
<b>Shelter for Fish</b> – Good shelter includes deep pools, submerged wood and undercut banks.	Multiple pools, some submerged wood, and undercut banks in the water.	Some pools, wood, and undercut banks in the water.	Very few pools, wood, and undercut banks in the water.	No pools, wood, and undercut banks in the water.	
<b>Riparian Vegetated Buffer Width</b> – How wide is the band of trees and shrubs on each side of the stream?	More than 50 feet of trees and shrubs extending out from <u>EACH bank</u> of the stream.	EACH bank has at least 20-50 feet of trees and shrubs	EACH bank has at least 5-20 feet of trees and shrubs	EACH bank has 0-5 feet of trees and shrubs	
<b>Bank Stability</b> - Are the banks of the stream steep or more gradually sloped? More vertical = more unstable.	Top of bank only slightly higher than water surface, bank gradually sloped (less than 20-degree incline). Minimal evidence of erosion.	Bank slope steeper (20 to 45-degree slope) and higher than water surface, less than half of bank surface showing erosion.	Banks steep (45 to 70-degree slope) with approximately half of bank surface showing erosion.	Banks extremely high compared to water surface (70 to 90-degree slope). More than half of bank surface area eroded.	
<b>Velocity &amp; Depth Combinations</b> – A variety of combinations provides a range of habitat conditions that support aquatic life.	Stream has areas of (a) fast/deep water, (b) fast/shallow water, (c) slow/shallow areas, and (d) slow/deep areas.	Stream has 3 of the velocity and depth combinations.	Stream 2 of the velocity and depth combinations.	Stream has only 1 type of velocity and depth combination.	

Add all scores to get a total.

**Total Score for Stream**

See bottom of page 1 for Habitat Rating.