

# How to do a Rapid Trash Assessment

## Lay out the Transect (Rope):

- Choose your landmarks, and note them so that you can repeat the survey at a later date.
- The length measured should be 30.5 meters, or 100-feet long.
- Layout the transect (rope) along the curve of the water line.

*Note: if you are not monitoring a water area, pick a location such as the school yard. If you are comparing one site to another, make sure the size of the area being surveyed is consistent. For example each comparison is a 30m x 30m area.*

## Assign Group Member Roles:

- High Water Line Person (this person searches for trash, and picks it up)
- Low Water Line/ Stream Bed Person (this person searches for trash, and picks it up)
- Recorder (this person will hold the surveys, and document trash the others find it)

## Do the Assessments:

- Do the "Rapid Trash Assessment" and document your results, Circle the rating 1-4.
- Do the "Trash Tally" and document your results. Make sure to look under plants and rocks.
- Analyze & Interpret Your Data with your group.
- Compare Results with other sites, or compare to see if there is change over time.

## Pick up the trash:

- Avoid: hazardous waste, or unidentifiable waste.
- If there are strong currents or waves, do your assessment from a safe distance

# Rapid Trash Assessment Scoring

Rating System:	Optimal (score: 3)	Sub-optimal (score: 2)	Marginal (score: 1)	Poor (score: 0)
<b>Level of Trash</b> <i>On first glance of the area I see...</i>	no visible trash	little trash visible	Trash is evident at first glance.	Trash distracts the eye.
<b>Trash that is a threat to Aquatic Life</b> <i>(things that are toxic, items can float long distances and be mistaken for food)</i>	If any trash, is mostly paper or wood products or other biodegradable materials	Little or no persistent buoyant, and small litter or debris.	Medium prevalence of litter that is plastic	Large amount of persistent litter, including toxic materials: <ul style="list-style-type: none"> <li>• Batteries</li> <li>• Pesticides</li> <li>• Medical waste</li> <li>• Cigarette butts</li> </ul>
<b>Trash that is a threat to Humans</b> <i>(toxic chemicals, things with bacteria, viruses, sharp edges, long-standing water)</i>	Observable trash contains no evidence of direct threats to humans	Trash contains something that might puncture someone: <ul style="list-style-type: none"> <li>• broken glass</li> <li>• metal debris</li> </ul> Trash contains standing water where mosquitos can reproduce (i.e. inside a tire, or bucket).	Presence of standing water and/or <u>one</u> of the following hazards: <ul style="list-style-type: none"> <li>• hypodermic needles</li> <li>• medical waste</li> <li>• diaper</li> <li>• pet / human feces</li> <li>• Pesticides</li> <li>• Batteries</li> <li>• Light bulbs</li> </ul>	Presence of <u>more than</u> one the hazards: <ul style="list-style-type: none"> <li>• hypodermic needles</li> <li>• medical waste</li> <li>• diaper</li> <li>• pet / human feces</li> <li>• Pesticides</li> <li>• Batteries</li> <li>• Light bulbs</li> </ul>
<b>Trash was Dumped</b> <i>(these items were brought and left behind)</i>	5 items or less of litter that was carried downstream from another location	Some evidence of littering on site	Litter is in the water and along the shore, and one large item that would have had to have been driven into the area.	Significant litter on shore or in the water. Evidence of chronic dumping, and more than one large item.
<b>Trash has Accumulated</b> <i>(has been brought from elsewhere by water or wind- silt marks, faded, or decomposing)</i>	No trash has been transported by water. If there is trash it appears to be directly deposited.	Less than 5 pieces of trash have evidence that they have been transported there by water.	5 to 20 items of trash are carried to the location by water. Often these are found at high water mark.	More than 20 items have been carried to the area by water.

# Trash Tally – Data Collection

Name: \_\_\_\_\_ Location: \_\_\_\_\_ Date: \_\_\_\_\_

Survey Landmarks: \_\_\_\_\_ (check box)  High Water Line  Low Water line (in walkable water)  Not a Water Area

*As you go along, tally up the number of items that you find in each category. Collect any trash that does not pose a risk to you.*

<p><b>Plastic</b></p> <ul style="list-style-type: none"> <li>• Bags</li> <li>• Bottles</li> <li>• Bottle Caps</li> <li>• Cigarette Filters</li> <li>• Cup Lid/ straw</li> <li>• Six pack rings</li> <li>• Thin Wrappers</li> <li>• Hard Plastic Packaging</li> <li>• Foam (Polystyrene)</li> <li>• Fishing Lines</li> <li>• Tarps</li> <li>• Other (write-in) _____</li> </ul>	<p><b>Biodegradable</b></p> <ul style="list-style-type: none"> <li>• Paper</li> <li>• Cardboard</li> <li>• Food waste</li> <li>• Yard waste</li> <li>• Leaf litter piles</li> <li>• Other (write-in) _____</li> </ul>	<p><b>Biohazard</b></p> <ul style="list-style-type: none"> <li>• Human Waste/ Diapers</li> <li>• Pet Waste</li> <li>• Syringes or Pipettes</li> <li>• Dead Animals</li> <li>• Other (write-in) _____</li> </ul>
<p><b>Metal</b></p> <ul style="list-style-type: none"> <li>• Aluminum Foil</li> <li>• Aluminum or Steel Cans</li> <li>• Bottle Caps</li> <li>• Metal Pipe Segments</li> <li>• Auto Parts</li> <li>• Wire</li> <li>• Other (write-in) _____</li> </ul>	<p><b>Large Items</b></p> <ul style="list-style-type: none"> <li>• Appliances</li> <li>• Furniture</li> <li>• Garbage Bags of Trash</li> <li>• Tires</li> <li>• Shopping Carts</li> <li>• Other (write-in) _____</li> </ul>	<p><b>Construction Debris</b></p> <ul style="list-style-type: none"> <li>• Concrete (not placed for erosion)</li> <li>• Rebar</li> <li>• Bricks</li> <li>• Wood Debris</li> <li>• Other (write-in) _____</li> </ul>
<p><b>Glass</b></p> <ul style="list-style-type: none"> <li>• Bottles</li> <li>• Pieces</li> <li>• Other (write-in) _____</li> </ul>	<p><b>Fabric and Cloth</b></p> <ul style="list-style-type: none"> <li>• Synthetic Fabric</li> <li>• Natural Fabric</li> <li>• Other (write-in) _____</li> </ul>	

# Analyze & Interpret Your Data

Rapid Trash Assessment	Score (1-4)
Level of Trash	
Threat to Aquatic Life	
Threat to Human Life	
Illegal Dumping	
Accumulation of Trash	
<b>Total:</b>	

Trash Tally	# of items found*
Plastic	
Metal	
Glass	
Biodegradable	
Large Items	
Fabric and Cloth	
Biohazards	
Construction Debris	
<b>Total:</b>	

\*You could also compare weight or volume of the items for comparison.

## Discuss with your group

- a.) Based on the data, what do you think is the biggest direct threat to human life? What about the biggest threat aquatic life?
  
- b.) Based on your evidence, where do you think that threat comes from?
  
- c.) Is there other data, measurements or information that would be helpful in assessing the threats to humans and wildlife?
  
- d.) Thinking about the biggest threat and its sources, brainstorm some solutions to the issue specific to your location.
  
- e.) What solution could you do to make a difference in this problem?