

OVERALL RATING

What do you think of this site?

(Draw a mouth for the face according to the average score)

$$\text{Average score} = \frac{\text{Total rating points}}{\text{Total categories}}$$



Mouth guide

Average scores



excellent
81-100



good
61-80



average
41-60



poor
21-40



very poor
0-20

lake report card

Our streams, rivers, lakes and wetlands are far more than just a part of the scenery - they are the lifeblood of the environment. They provide homes for wildlife and plants, water supplies for homes and industries, and places of recreation and enjoyment for all of us.

But how can you tell if a lake is healthy? It is actually quite simple to estimate the overall condition of the lake. You do not need high-tech equipment or chemicals, but you will need your senses, your common sense and a genuine concern for the lake.

In the next page, we have proposed categories in which you can make judgments on your local lake. In each category, you can rate your lake and then combine your scores to come up with an overall rating for the area. You can then compare different lakes or different sites along the same lake. Keep good notes on each site, recording the location, date and details on anything special that might vary from visit to visit. This is important so you can compare your scores if you visit the site over time.

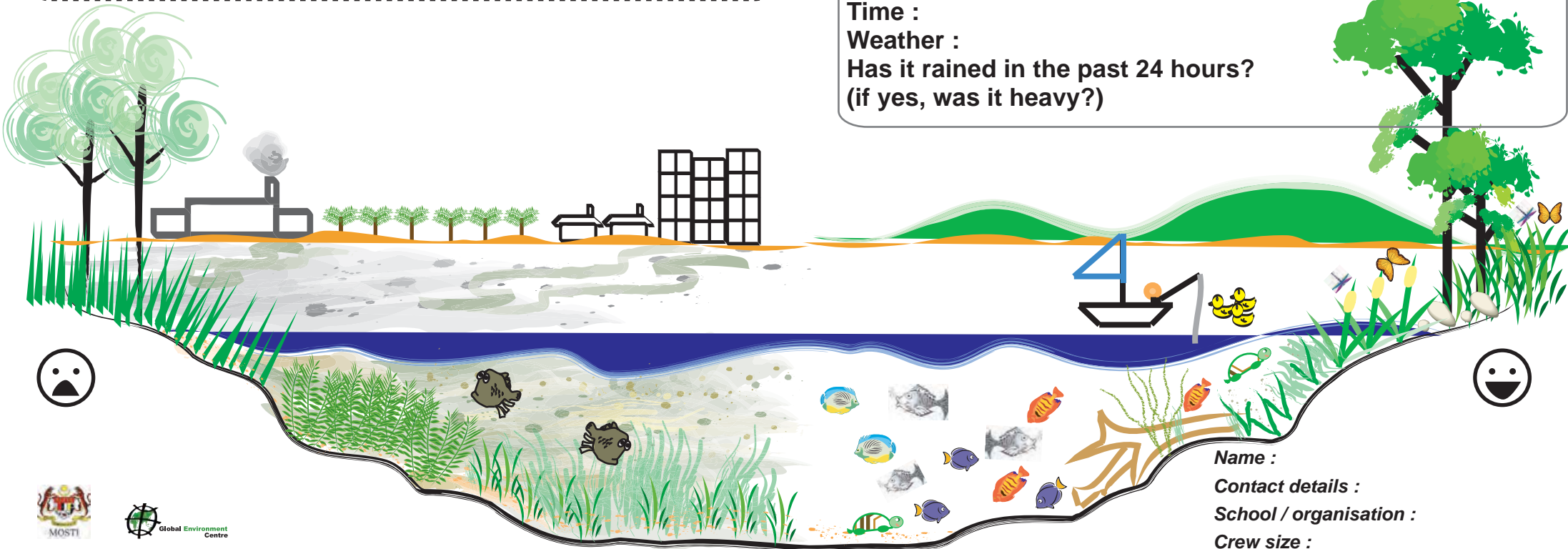
Name of waterway / site :

Date :

Time :

Weather :

**Has it rained in the past 24 hours?
(if yes, was it heavy?)**



Name :

Contact details :

School / organisation :

Crew size :

category 1

public perception

Is the lake water suitable for water activities/aesthetic enjoyment to lake users?

rating	characteristics
0-1	Impossible
2-4	Very minor aesthetic enjoyment, but, excellent for water activities
5-9	Slightly impaired
10	Beautiful

Your Rating

category 2

rubbish

Make note of the type of rubbish that can be found in the water or surrounding area (this include human made waste and natural litter such as leaves and animal faeces) and how much is there.

★ If rubbish seems to collect in one area, take photo of the area each time you monitor your site so you can compare rubbish build up.

rating	characteristics
0-1	Lots of human made rubbish such as tyres, plastics, cans and oily films
2-4	A lot of human made waste such as cans and plastic, or algae
5-7	Some human made waste such as garden waste and plastics
8-9	One or two pieces of human made waste and local vegetation such as leaves floating in the water
10	No human use at all, preserved in its natural state

Your Rating

category 3

inlet

Look for pipes, drains or trenches leading into your waterway. Record what's coming out of the pipes, drains or trenches.

rating	characteristics
0-1	A number of pipes from industry and/or sewage treatment and/or urban storm water
2-4	Some pipes or trenches
5-7	No pipes from industry, but some urban storm water drainage
8-10	No pipes or drains

Your Rating

category 4

smell

Take a water sample and record the smell.

rating	characteristics
0-1	Very strong pungent, unnatural chemical smell
2-4	Strong unnatural smell
5-7	Slight unnatural smell
8-9	Very slight smell, perhaps natural decay
10	No smell/ natural smell

Your Rating

category 5

water conditions

What is the colour of the lake water? Is there any plant growing/ covering the water surface. If yes, please indicate % of plant covering the lake water surface.

rating	characteristics
0-1	Severely high algae level or / with foam on the surface & water surface covered by plants(100%)
2-4	Noticeable green/yellow/brown (algae)colour & large patches of plants on water surface (75%)
5-9	Slightly clear with noticeable light green colour & small patches of plants on water surface (25%)
10	Crystal clear water & no plant on the water surface (0%)

Your Rating

category 7

vertebrate animal life

(birds, reptiles, fish, amphibians & mammals)

Sit by the lake and look for vertebrate animal activity. Record both the variety and number of animals

rating	characteristics
0	No animal life visible at all
1-2	One type of animal life
3-5	Two types of animals found
6-8	Three types of animal life found
9-10	More than three types of animal life found

Your Rating

category 8

Human Activity

Is there any human activities (construction, agricultural, ect.) contributing to the lake pollution.

rating	characteristics
0-1	Very high human activities with major impact to the lake condition
2-4	High human activities but with average impact to the lake condition
5-9	Low human activities with minor impact to the lake condition
10	No human activities

Your Rating

category 9

Sedimentation

Is there any sediment that flows into the lake. If yes, take a long stick & measure & record the depth of water from the surface to the top of the sediment. Then push the stick into the sediment until it becomes hard to push. Measure & record the depth. The difference between the two readings is the thickness of sediments.

rating	characteristics
0-1	Very thick sediments which creates mud along lake's shoreline
2-4	Noticeable sediments with low water clarity
5-9	Noticeable sediments but does not effect the water clarity
10	No sedimentation

Your Rating

category 10

invertebrate animal life

(insects, crustaceans, ect.)

Sit by the lake and look for invertebrate animal activity. Then use a net to sample the invertebrates. Observe & record both the variety and number of invertebrate.

rating	characteristics
0	No invertebrate life visible at all
1-3	Only 1 or 2 types of invertebrate life
4-6	3 to 6 types of invertebrates found
7-8	At least 7 types of animal life found
9-10	More than 10 types of invertebrates life found

Your Rating

category 6

vegetation

Is there any vegetation along the shoreline/banks

rating	characteristics
0-1	no vegetation, bare ground, concrete
2-4	slightly vegetation
5-8	patches of vegetation
9-10	minimal disturbed vegetation mainly natural vegetation

Your Rating

Water Quality

Using the water testing kit, write down the result of each test.

pH _____
 DO _____ ppm
 Phosphorus _____ ppm
 Nitrate _____ ppm
 Temperature _____ °C
 Turbidity _____ JTU
 E - Coli Yes / No
 Chlorophyll a ★ Lab analysis

Test Factor	Poor	Fair	Good	Excellent
DO	<50%	51 - 70%	71 - 90%	91 - 110%
pH	4, 5, 9, 10	6, 8		7
Temperature	>10 °C	6 - 10 °C	3 - 5 °C	0 - 2 °C
Nitrate	20 - 40 ppm	5 ppm		
Phosphorus		4 ppm	2 ppm	1 ppm
Turbidity	>100 JTU	40 - 100 JTU	>0 - 40 JTU	0 JTU
E - Coli	positive		negative	