1. Location details		1. Location details				
1. Name		1. Name				
Date	WATER RANGERS	Date	WATER RANGERS			
Time		Time				
2. Body of water		2. Body of water				
3. Location name		3. Location name				
4. Weather yesterday	5. Weather now	4. Weather yesterday	5. Weather now			
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Notes

What do you see? What do you hear? What do you smell?

Notes

What do you see? What do you hear? What do you smell?

2. Qualitative observations



Check all boxes that apply

Check all boxes that apply	Check all boxes that apply				
1. Is there any of the following on the water surface? □ None □ Foam □ Scum □ Algae □ Litter □ Oily sheen □ Natural debris □ Other	1. Is there any of the following on the water surface? None Foam Scum Algae Litter Oily sheen Natural debris Other				
 2. Are there any pollution sources in the immediate surroundings? Industrial discharge Urban/road discharge Other: 	 2. Are there any pollution sources in the immediate surroundings? Industrial discharge Urban/road discharge Other: 				
 3. Algae? □ Yes □ No <i>If yes, try to identify what type!</i> □ Cladaphora □ Cyanobacteria □ Evenly dispersed □ Not sure □ Floating mats □ Attached □ Blue-green scum 	3. Algae? □ Yes □ No <i>If yes, try to identify what type!</i> □ Cladaphora □ Cyanobacteria □ Evenly dispersed □ Not sure □ Floating mats □ Attached □ Blue-green scum				
 4. Can you see evidence of water uses? □ Fishing □ Swimming □ Boating □ Other □ Irrigation □ Ceremonial □ Public water supply 	4. Can you see evidence of water uses? □ Fishing □ Swimming □ Boating □ Other □ Irrigation □ Ceremonial □ Public water supply				
5. Estimate the water flow 6. Estimate the water level □ Surging □ Steady □ Slow □ Still □ Low Tip: look for a visual point and find the water line!	5. Estimate the water flow 6. Estimate the water level □ Surging □ Steady □ Slow □ Still □ Slow □ Still				
7. Water colour Clear Pellow Brown Other Green Blue Grey	7. Water colour Clear I Yellow I Brown I Other Green I Blue I Grey				
8. Odour □ None □ Sewage □ Algae □ Petroleum □ Other	8. Odour □ None □ Sewage □ Algae □ Petroleum □ Other				

2. Qualitative observations

WATER RANGER

3. Quantitative observations



Use your tools to measure each parameter

3. Quantitative observations

Use your tools to measure each parameter

1. Air temperature	°C	8. Dissolved oxygen	mg/L	1. Air temperature	°C	8. Dissolved oxygen	mg/L
2. Water temperature	°C	Saltwater parameters 9. Salinity	ppt	2. Water temperature	°C	Saltwater parameters 9. Salinity	ppt
3. Conductivity	μS	10. Nitrates	ppm	3. Conductivity	μS	10. Nitrates	ppm
4. Chlorine	ppm	11. Nitrites	ppm	4. Chlorine	ppm	11. Nitrites	ppm
5. pH		Optional parameters 12. Clarity/depth		5. pH		Optional parameters 12. Clarity/depth	
6. Alkalinity	ppm		m	6. Alkalinity	ppm		m
7. Hardness	ppm	13. Flow rate	m/s	7. Hardness	ppm	13. Flow rate	m/s

Notes

Anything unexpected?

Notes

Anything unexpected?



4. Data validation



Compare your data with other groups and upload the average!

4. Data validation

Compare your data with other groups and upload the average!



Parameter	Group 1	Group 2	Group 3	Average	Parameter	Group 1	Group 2	Group 3	Average
Air temperature					Air temperature				
Water temperature					Water temperature				
Conductivity					Conductivity				
Chlorine					Chlorine				
рН					рН				
Alkalinity					Alkalinity				
Hardness					Hardness				
Dissolved oxygen					Dissolved oxygen				
Salinity					Salinity				
Nitrates					Nitrates				
Nitrites					Nitrites				
Flow					Flow				
Water clarity					Water clarity				