

**Note H(vii): Catchment Assessment Checklist for freshwater recreational areas**

**The purpose of the checklist is to identify potential catchment risk factors of faecal contamination for freshwater recreational water quality.**

Site/area name: \_\_\_\_\_

Type of site: *Lake* \_\_\_\_\_ *River/Stream* \_\_\_\_\_

Location: \_\_\_\_\_

Map references: *Latitude* \_\_\_\_\_ *Longitude* \_\_\_\_\_

Name of local authority (specify authority responsible) \_\_\_\_\_

**Name of person completing checklist (for compiling report):** \_\_\_\_\_

*Check and tick all that apply and note findings for subsequent report.*

**Part A: Land use**

Type of land or human activity affecting the recreational site.

**Land cover/geography**

Forest/bush	<input type="checkbox"/>	Pasture	<input type="checkbox"/>	Urban	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	River/stream/irrigation	<input type="checkbox"/>		
Hilly	<input type="checkbox"/>	Flat	<input type="checkbox"/>		

**Urban**

Residential (population density)	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Military/prison (restricted areas)	<input type="checkbox"/>	Industry (please specify) _____	<input type="checkbox"/>
Sanitary landfills/old dumps	<input type="checkbox"/>	Other potentially polluting activity (please specify) _____	<input type="checkbox"/>

Disposal of human or animal wastes  
(degree and type of treatment applied –  
please specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Part B: Rural land use**

Indicate the presence of the following for agricultural land use.

Sheep	<input type="checkbox"/>	Dairy	<input type="checkbox"/>	Beef	<input type="checkbox"/>
Pigs	<input type="checkbox"/>	Deer	<input type="checkbox"/>	Horses	<input type="checkbox"/>
Poultry	<input type="checkbox"/>	Feral	<input type="checkbox"/>		

Is there disposal of animal wastes? (Please specify)

---

---

---

**Part C: Water uses**

Indicate the presence of the following for the recreational site.

Marina	<input type="checkbox"/>	Boat ramp	<input type="checkbox"/>
Permanent boat moorings	<input type="checkbox"/>	Jetty/wharf	<input type="checkbox"/>

***Additional influencing factors***

*Size of bathing /recreational area:*

Area \_\_\_\_\_ m<sup>2</sup>

Length \_\_\_\_\_ m

Mean width \_\_\_\_\_ m

Is the site subject to seasonal/holiday loading? Yes / No

Direction of prevailing winds \_\_\_\_\_

Shoreline configuration/geomorphology/erosion gullies: \_\_\_\_\_

*Total rainfall:*

Total annual: \_\_\_\_\_ mm

Location of rainfall monitoring station: \_\_\_\_\_

Shoreline configuration/geomorphology/erosion gullies: \_\_\_\_\_

---

**Part D: Microbiological hazards**

***Sewage and animal wastes***

Is the water quality in the recreational area <u>affected</u> , or <u>likely to be affected</u> by:	Is it present?	Is it likely to cause an effect?
1 discharge of untreated human effluent onto or upstream to a recreational area	<input type="checkbox"/>	<input type="checkbox"/>
2 stormwater outlets with potential sewage contamination / combined stormwater outlet onto or upstream to a recreational area	<input type="checkbox"/>	<input type="checkbox"/>
3 urban stormwater that is protected from sewage ingress	<input type="checkbox"/>	<input type="checkbox"/>
4 on-site or other private sewage disposal systems (e.g. septic tank or package plant)	<input type="checkbox"/>	<input type="checkbox"/>
5 communal sewage disposal or primary or secondary treatment facilities	<input type="checkbox"/>	<input type="checkbox"/>
6 communal sewage disposal with tertiary treatment facilities	<input type="checkbox"/>	<input type="checkbox"/>
7 intensive agricultural use in immediate catchment and potential for run-off from untreated animal effluent (e.g. dairying, piggeries, milking sheds etc.)	<input type="checkbox"/>	<input type="checkbox"/>
8 focal points of drainage, as run-off from low-intensity agriculture/urban/rural catchment	<input type="checkbox"/>	<input type="checkbox"/>
9 unrestricted stock access to waterways	<input type="checkbox"/>	<input type="checkbox"/>
10 the incidence and density of birdlife	<input type="checkbox"/>	<input type="checkbox"/>
11 water craft mooring or use	<input type="checkbox"/>	<input type="checkbox"/>
12 potential for run-off from feral animals (e.g. forest or bush).	<input type="checkbox"/>	<input type="checkbox"/>

***Indirect influences***

	Yes	No
Is there a stream (including a piped stream or tributary) or drain or wetland discharging into or upstream to the recreational area?	<input type="checkbox"/>	<input type="checkbox"/>

If 'Yes' please answer Questions 13–18.

Is the water quality of that stream, drain or wetland <u>affected</u> or <u>likely to be affected</u> by:	Is it present?	Is it likely to cause an effect?
13 discharge of untreated human effluent, primary or secondary wastewater treatment plant discharge, on-site or other private sewage disposal systems (e.g. septic tank)	<input type="checkbox"/>	<input type="checkbox"/>
14 stormwater outlets with potential sewage contamination / combined stormwater outlet	<input type="checkbox"/>	<input type="checkbox"/>
15 communal sewage disposal with tertiary treatment facilities	<input type="checkbox"/>	<input type="checkbox"/>
16 high-intensity agricultural/rural activities, incidence and density of feral animal/bird population	<input type="checkbox"/>	<input type="checkbox"/>
17 focal points of drainage, as run-off from low-intensity agriculture/urban/rural catchment	<input type="checkbox"/>	<input type="checkbox"/>
18 potential for run-off from feral animals (e.g. forest or bush).	<input type="checkbox"/>	<input type="checkbox"/>
<b><i>Further considerations</i></b>	Yes	No
Does rainfall trigger contamination events?	<input type="checkbox"/>	<input type="checkbox"/>
Does microbiological water-quality data exceed the national guidelines (550 <i>E. coli</i> per 100 mL single sample exceedance) on any occasion?	<input type="checkbox"/>	<input type="checkbox"/>
Is there additional information implying risk (such as notified illness related to recreational water activities)?	<input type="checkbox"/>	<input type="checkbox"/>

**Note:** *If the answer to any of the above microbiological hazard questions is ticked as present, the answer as to whether or not it is causing an effect may be obvious (i.e. discharge of untreated human effluent into or upstream to a recreational area). If, however, it is unclear that it is causing an effect, a more detailed investigation may be required to establish the relative importance of the effect.*