

# Water & a Healthy Environment

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How intact is the habitat?



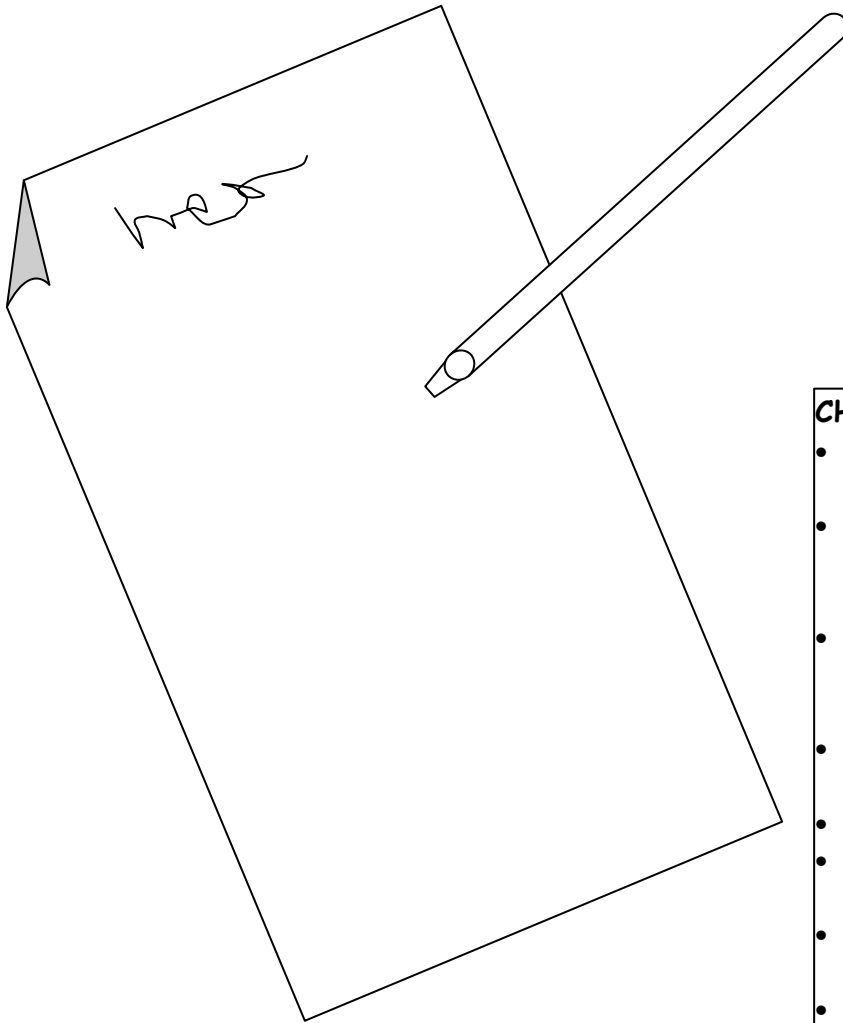
## 5. HABITAT INTEGRITY TEST



STORY:  
Sweet Water

### What do we need?

- Pen / pencil
- Clip board
- Habitat integrity checklist



### CHECKLIST: impacts on 'instream' habitat integrity

- Evidence of water removal - influences habitat type and flow of water.
- Modification of water flow. Influenced by addition or removal of water. Affects habitat.
- Modification of the stream bed - caused by increased input of sediment.
- Modification of the shape of the channel. Can influence the rate of flow and alter the habitat.
- Modification of the water quality (pollution) - is it 'diffuse' (everywhere) or 'point' (one place) pollution?
- Inundation (evidence of flooding). Influences the movement of sediment and aquatic fauna.

### Secondary impacts

- Invasive alien macrophytes/trees - in or over the water. Can obstruct flow, alter the habitat and water quality.
- Invasive alien aquatic fauna (fish). Disturb the bed and increase turbidity. Also upset the ecosystem.
- Solid waste disposal (rubbish dumping) - indication of misuse and mismanagement of the stream.

### CHECKLIST: impacts on the 'riparian zone' integrity

- Vegetation removal - physical removal by farming, firewood or over-grazing. Causes increased run-off and erosion.
- Invasive alien vegetation. Encroachment leads to unstable banks and decreases the buffering of the riparian zone. Diversity is decreased.
- Bank erosion. Decreases bank stability, increases sedimentation and causes modification. Caused by over-grazing, vegetation removal or alien encroachment.
- Modification of the channel. Influences the rate of flow and the habitat.
- Water Removal. Influences water level and riparian habitat.
- Inundation/flooding. Obstructs movement of sediment and aquatic fauna.
- Modification of water flow. Rate of flow can influence riparian habitats and species which live or breed in this area.
- Modification of Water Quality. Diffuse or point pollution.