

Ithaca Creek Habitat Monitoring

My name is: _____ Class: _____ Date: _____

Ithaca Creek is part of the _____ Catchment. Today when I was walking at the creek I decided that I wanted to investigate how healthy my waterway was. In ensuring a healthy waterway, it is important to understand the roles of different habitats and how to test the health of these.

Why is it important to know what habitats exist on Ithaca Creek?

If you were designing a scientific study for the habitat on Ithaca Creek, what might you need to consider?

Time of day: _____	Weather conditions: _____
Location: _____	Length of Site: _____
Water Level: _____	Air Temp: _____ Water Temp: _____

Do you see any disturbed areas or signs of pollution at the creek?

Define the riparian zone?

Why is riparian vegetation important?

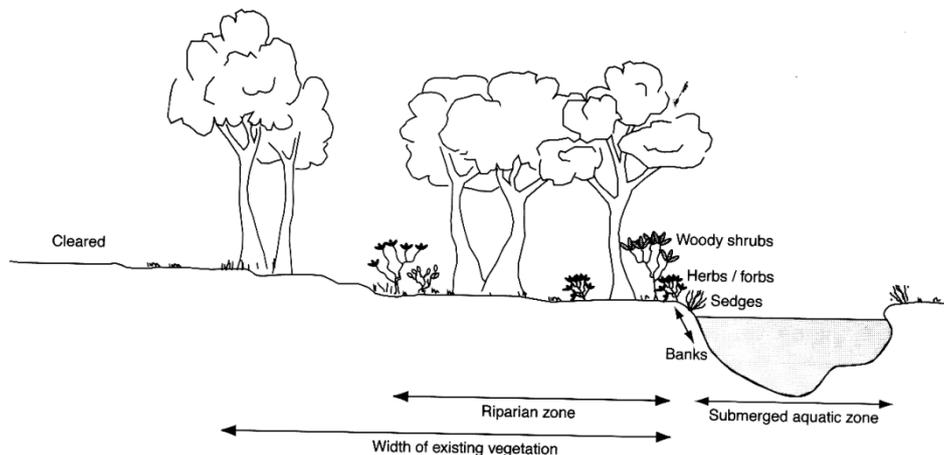


Image taken from the Community Water Monitoring Manual.

What is the width of the riparian vegetation on the left bank at Ithaca Ck? _____

What is the width of the riparian vegetation on the right bank at Ithaca Ck? _____

Tally the number of gaps in the canopy along the transect lines that are over 5m

Left Bank		Right Bank	
T1	T2	T1	T2
TOTAL	TOTAL	TOTAL	TOTAL

Weed Species	Native Species

Are there more weeds or native species along the transect lines? _____

How many different types of trees are there along the transect lines? _____

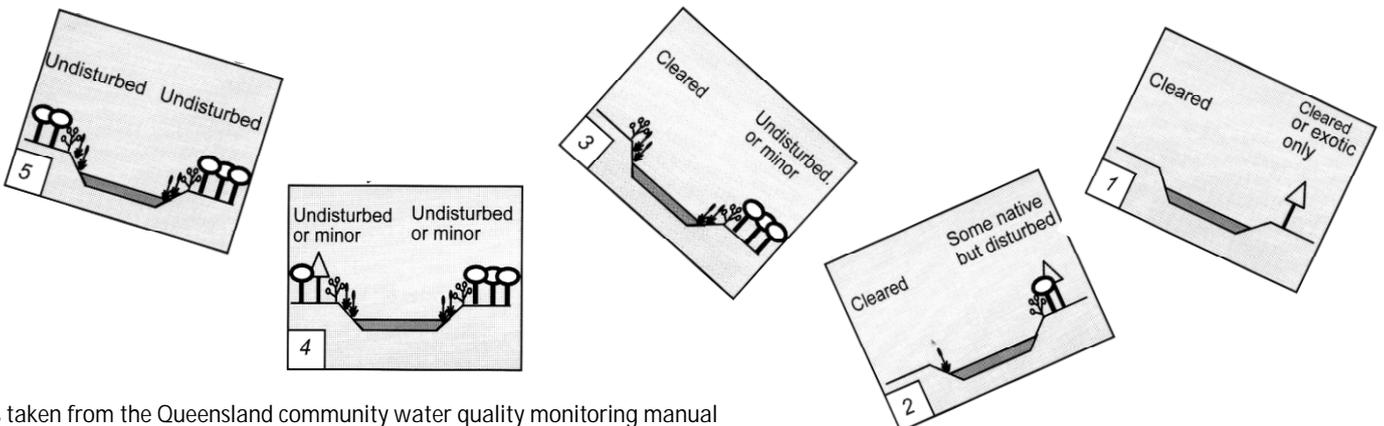
Habitat Structure _____

Are you using a continuous or interrupted method of sampling? _____

If interrupted, what is the interval? _____ m

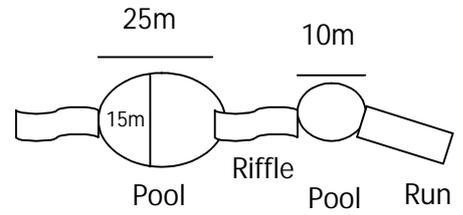
Cover Type	Definition	Tally
Large Trees		
Medium Trees		
Small Trees		
Shrubs		
Vines		
Ferns		
Long Grasses		
Short Grasses & herbs		
Rushes and sedges		

Rate the habitat disturbance 1 _____ 3 _____ 5

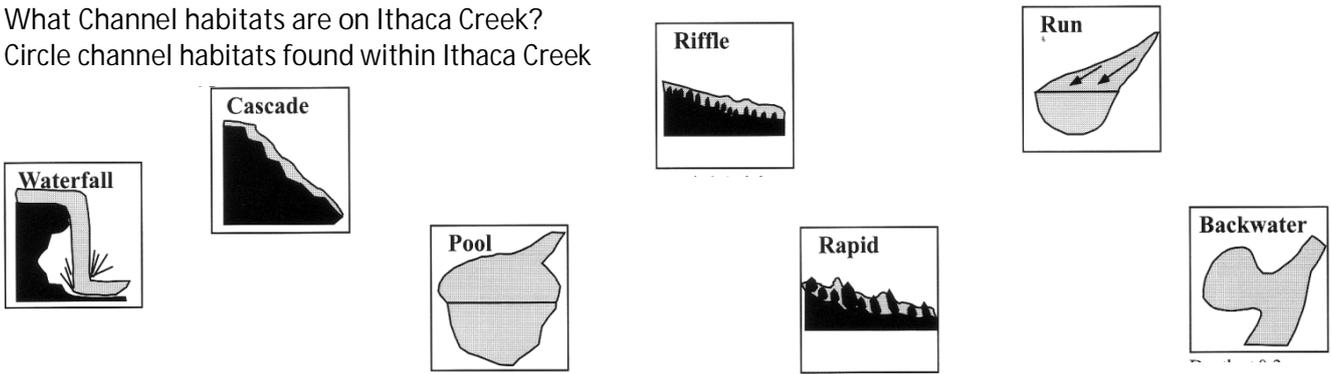


What stream habitats are in Ithaca Creek?

Draw an aerial view of the stretch of Ithaca Creek.
 Indicate any pools, waterfalls, riffles, runs and backwaters.
 Also include measurements of widths, lengths and the direction of flow.



What Channel habitats are on Ithaca Creek?
 Circle channel habitats found within Ithaca Creek



Images taken from the Queensland community water quality monitoring manual

Rate the channel habitats 1 ————— 3 ————— 5

- 1 = only one type of channel habitat
- 3 = three or more channel habitats
- 5 = five or more habitats

Why is important to have a variety of channel types?

Additional comments

Circle the in-stream habitats present in Ithaca Creek?

Logs

Roots

Branches & sticks

Water plants

Rocks

Leaves

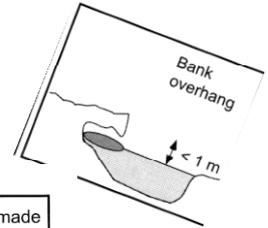
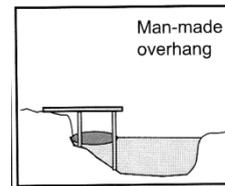
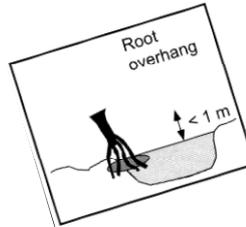
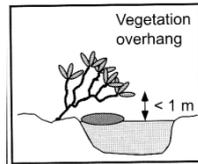
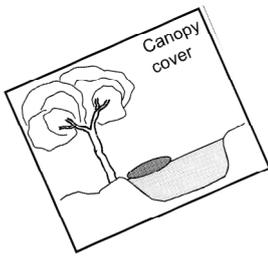
Human structures

Were there any other in-stream habitats? List them

*Add these features in the correct locations to your diagram above.

What stream cover is over Ithaca Creek?

Circle the pictures



Rate the in-stream habitats

1 _____ 3 _____ 5

1 = only one type of in-stream habitat

3 = three or more in-stream habitats

5 = five or more in-stream habitats

Overall Rating for Ithaca Creek Stream Habitat Diversity

Add the rating you gave the channel habitat to the rating you gave the in-stream habitat.

Habitat Diversity = _____ + _____ = $\frac{\quad}{10}$

Additional comments

Note: Adapted from the Queensland Community Water Quality Monitoring Manual

How stable is the creek bank at Ithaca Creek?

Draw and label the length of the sample site.

(Indicate any erosion, slumping or aggradation (depositing of sediment) occurring on each bank)

Left Bank	Right Bank
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Rate the bank erosion 1 _____ 3 _____ 5

1 = bank is very stable

5 = bank is very unstable

List some of the causes of erosion? Are they natural or unnatural?

How stable is the creek bed at Ithaca Creek?

Is the stream bed...

EROSION

steep and narrow

STABLE

width and depth varies

AGGRADATION

flat and shallow

Rate the bed erosion 1 _____ 3 _____ 5

1 = bed is very stable

5 = bed is very unstable

Overall Rating for Ithaca Creek bank and creek bed stability

Add the rating you gave the bank stability to the rating you gave the bed stability.

Stability = _____ + _____ = 10

Note: Adapted from the Queensland Community Water Quality Monitoring Manual