

Lesson 7 Fieldwork Preparation

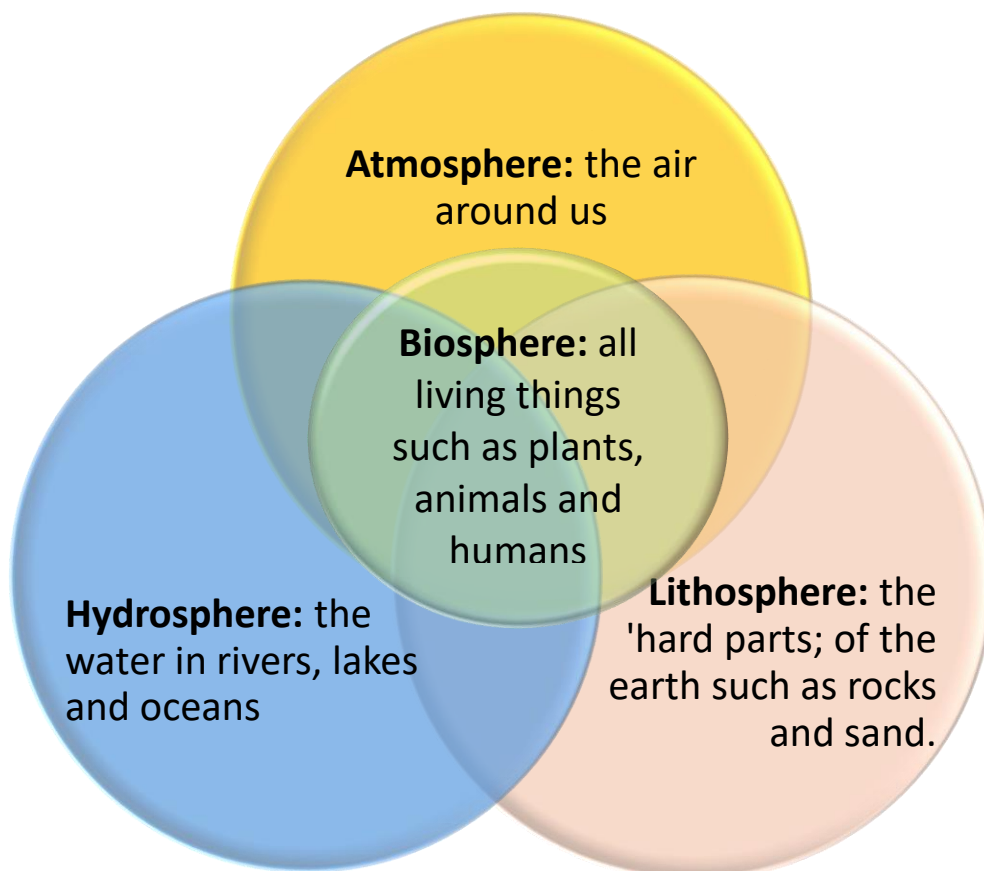
Fieldwork is one of a geographer's most useful tools. During your time on a field trip, you will apply the skills and knowledge you have learnt in class to a particular place. In this fieldwork activity, you will visit three sites beside the Wimmera River in Horsham. At each site, you will explore the ways in which local authorities such as the Wimmera Catchment Management Authority (CMA) and Horsham Rural City Council (HRCC) have improved the natural and social environments of the river and its surrounding areas.

Fieldwork usually begins with a big question, known as the research question. A suitable research question would be 'how have local authorities improved the river environment in Horsham?' Your teacher may decide on another research question, depending on the studies you have done in class.

Background

Local authorities such as the CMA and HRCC seek to find a balance between protecting the natural environment and providing access to the river for residents and visitors. In some places, this balance can be difficult to achieve as river users and other people in the region deliberately or accidentally impact on the river and its banks.

When considering the natural environment, it can be useful to use the following model, to show the interconnections of its many parts and to avoid thinking about just one small part of the environment. The diagram below demonstrates how the impacts of humans can be annotated on to an image based on the model below.



The surrounding air is part of the **atmosphere**. Human activities such as burning fossil fuels are changing the atmosphere resulting in warmer temperatures and changing rainfall patterns.

The Wimmera River is part of the **hydrosphere**. An important habitat for fish and frogs, it is also used by people in many ways. At times, these human activities can have a negative impact on the river if too much water is taken or pollutants such as fertilisers and other chemicals wash into the

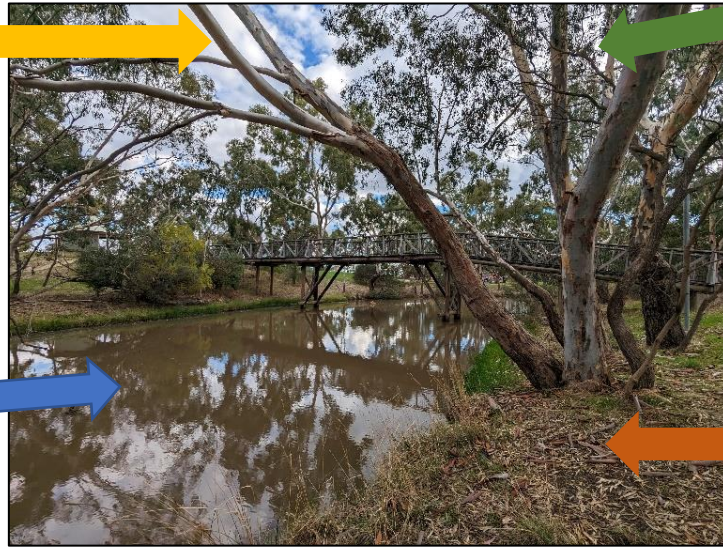


Figure 1: The Wimmera River near Adventure Island, Horsham

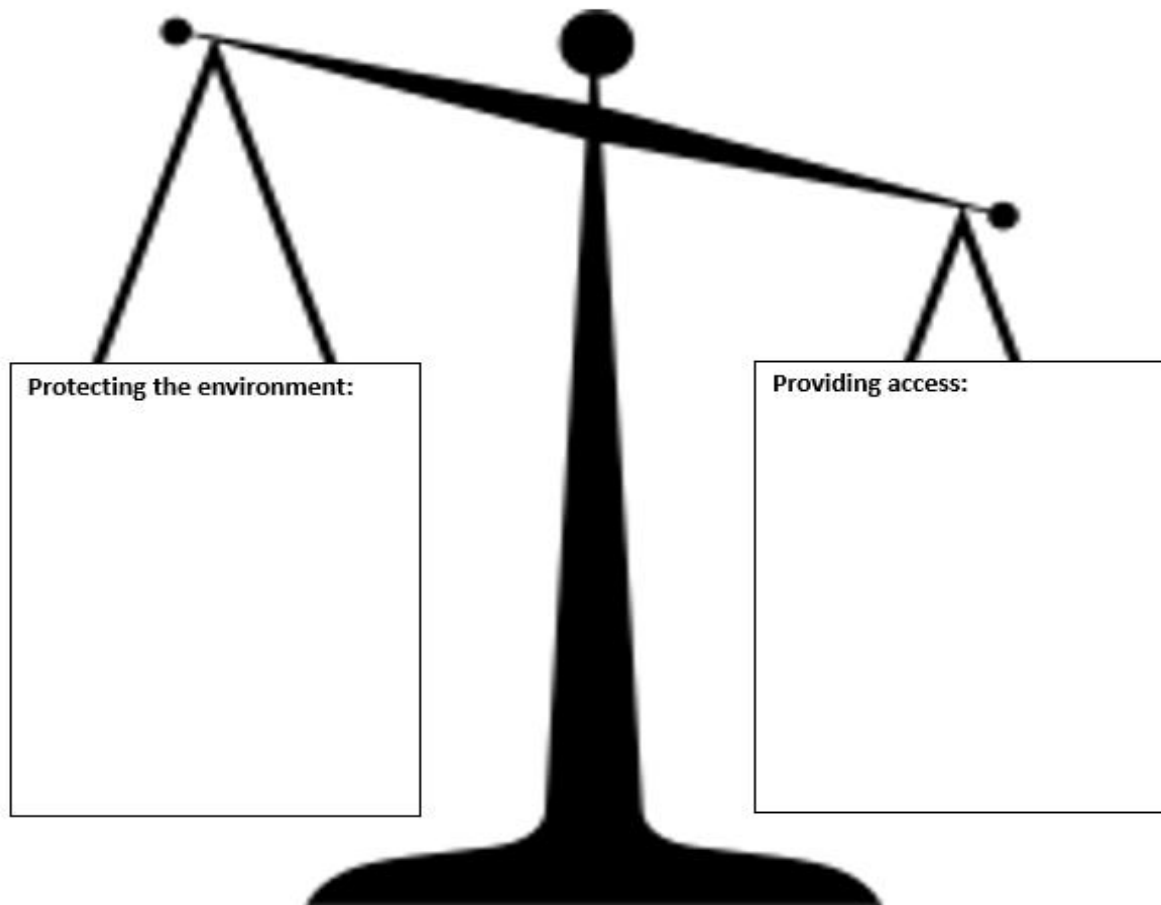
The trees near the water's edge are part of the **biosphere**. They are important habitats for birds and native animals such as bats, possums and gliders. They help to hold the banks in place and are impacted by human activities such as clearing land for farming or new housing areas.

The soil and rocks in the banks of the river are considered as part of the **lithosphere**. They are often impacted by human activities such as driving vehicles to the edge of the river and people walking or cycling.

People access the river and its banks for many reasons. It provides many recreation activities such as fishing, walking, cycling, picnicking and sight-seeing. A study in 2017 estimated that the Wimmera River provided visitors with the equivalent of \$8.5 million in health benefits. This was largely due to the reduction in diseases and the mental health benefits of exercise beside and on the river.

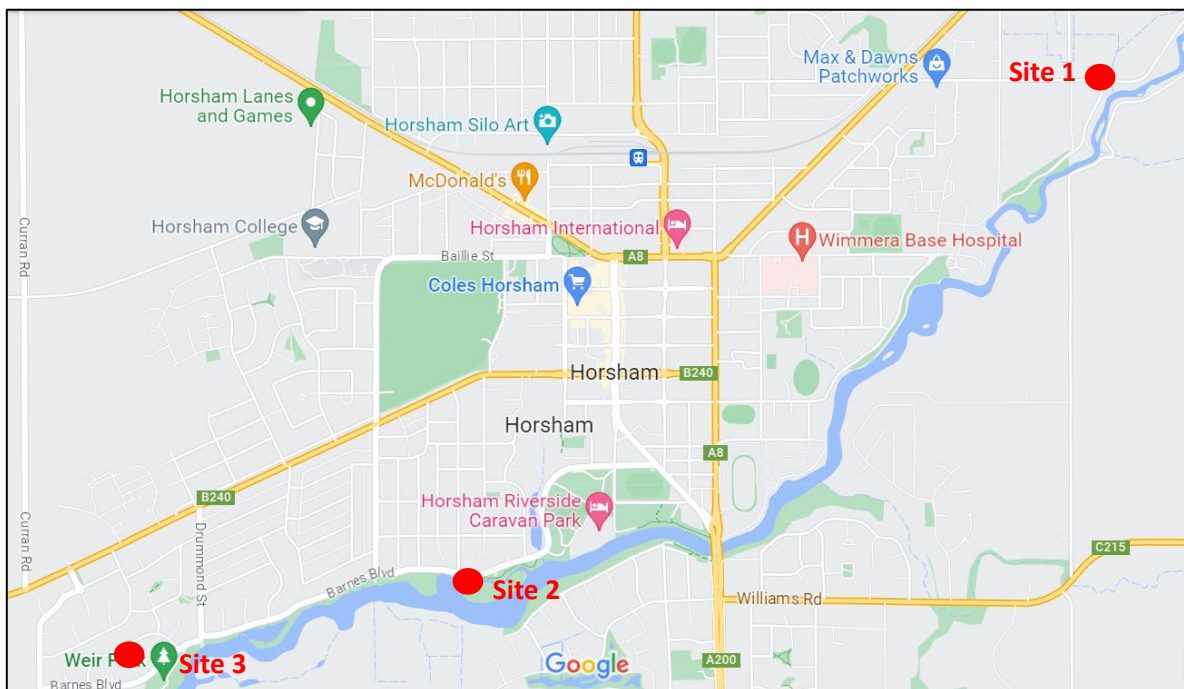
Task 1

In small groups complete the following diagram to illustrate the 'balancing act' between protecting the natural environment of the Wimmera River and its banks and providing access to it. Use some of the ideas described above to get you started and then add some more of your own.



Preparing for your field trip

It is a good idea to be familiar with the places you will visit on your field trip. The three sites are shown in the map below:



Step 1

Use Google Earth to explore these three sites. What are the main features of the natural and human environments at each place?

Step 2

In order to be ready for your fieldtrip there are some things that you will need. Here is a list of this field equipment. You will each need to have some of these items, while others can be shared in a small group. Organise yourselves into small groups and decide who will be responsible for each item.

Individual items

- A copy of the fieldwork activities
- A clipboard
- Pens and pencils
- A camera/smart phone
- On your phone, download the Oxford University app 'Epicollect 5'
- On your phone, download the Museums Victoria app 'Field Guide to Victorian Fauna'

Group or class Items

- Water quality test kit (if available)

Fieldwork practice

Some of the activities you will undertake on your fieldtrip will be new to you so it's a good idea to become familiar with them before the day. This will give you a chance to sort out any problems you may be having. One of these is collecting and recording data using the Epicollect App. This is an example of a geospatial technology which allows you to collect, record and map data in a digital format. Your teacher may have created a Fieldwork Practice project that you will find on the app which you have downloaded and installed on your phone.