# Accessible, multi-discipline field excursions

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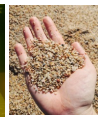
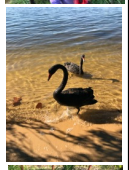
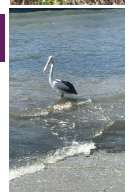




## Conclusions

- Planning accessible excursions requires a combination of local knowledge, Google Earth, and perhaps some specialist transport.
- An amazing array of science discovery can occur on an average city centre street or suburb.
- Walking/wheeled tours of historical districts can combine various aspects of history and society, for example urban settlement, migration patterns, planning and infrastructure, public health, social issues (the list goes on), as well as a broad array of sciences and engineering.
- Most large buildings in a city centre will showcase a global array of geology in their building and facing stones.
- Hidden parks, gardens and public spaces provide ample opportunities to look at ecology, zoology, botany, city ecosystems and adaptations.
- Access to rivers, lakes or wetlands expands these horizons. Bridges or construction sites allows engineering insights.
- Accessibility should not be a barrier to learning outdoors.
- This poster will showcase how to select accessible locations, tips and tricks for finding suitable content across a range of science and related disciplines, and present ideas for locations and follow-up work.



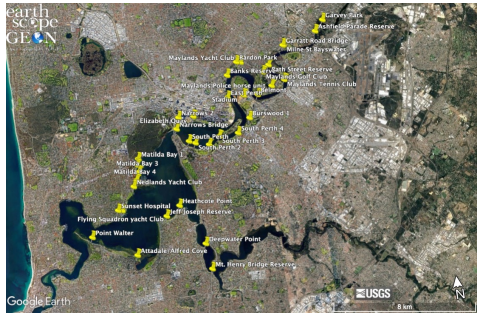
**Modern Swan River, looking westward**
http://www.birdseyeviewphotography.com.au/blog/?p=1945

## 1. Plan

- Choose your purpose. **What is the objective of the field learning?**
- Use **Google Earth** for preliminary planning. Use **street view** to get a better view.
- Find suitable locations to achieve the learning objectives. For example, areas that can be accessed or sampled, wetlands, habitats, quarries, dams, parks…
- Use the **photos tab** in Google Earth to view images that have already been posted by other users – you can gain a lot of insight from seeing what's there, before you head out.

### *Is it accessible? Investigate access*

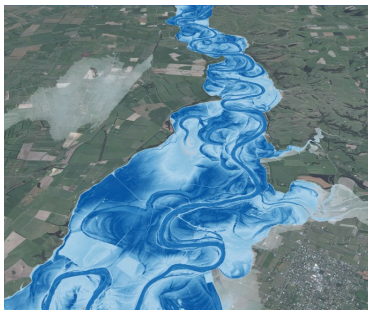
- Where are the toilet blocks and water fountains?
- Are there boat ramps or wheelchair accessible sites?
- Boardwalks and footpaths?




Location of all toilet blocks along the Swan River identified in Google Earth and saved as bookmarks.


Accessible tracks at Heathcote Reserve (left) and the Ashfield Parade Reserve (right).

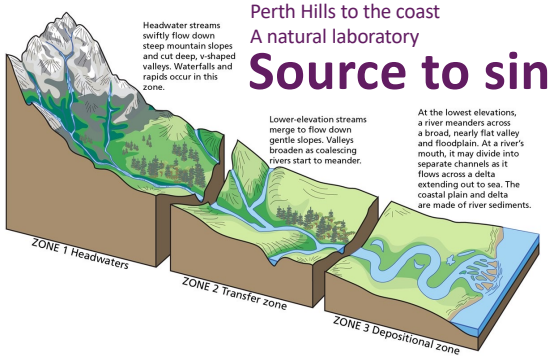



If it's accessible for bikes, and kids, and kids' bikes, it's accessible for wheels in general.

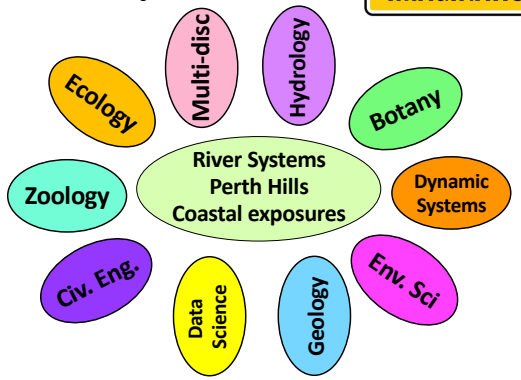
Perth Hills to the coast
A natural laboratory

## Source to sink




## 2. Create!

What elements do you require for your learning outcomes?
How many can you find at a single location?
What technologies can you incorporate?
Landsat? LiDAR? GIS? 3D modelling?


## 3. Test run

- Do a dry run to check out the area.
- Bring all the equipment you might be asking the students to use – see if you can use it effectively yourself.
- Maybe include a test group of students, or bring young kids!
- You may think of other things that you can do when you are there and can it all.
- Check out a back-up option in case of bad weather, road closures etc.
- Take photos!

## 4. Lab/workshop follow-up activities

- Physical data examination and analysis
- Experiments
- Statistics and programming
- Archiving collections
- Image analysis
- Physical models, numerical models
- Documentation

### *What is the end product?*

A presentation showcase, posters, design an app, 3D printing, design an activity…


## 5. Life skills

It's not all about the trip itself – involve students in:

- Risk and hazard assessments
- First aid training
- Reptile handling and safety