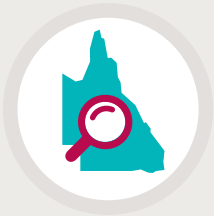# GovHack

How might we make discovering and understanding scientific data for a location possible?

A **tourist** searches **'grocery store Longreach'** and they will see *a* list of *stores, opening hours, address and contact details, ratings, photos, interactive maps, directions.* Off they go to get their supplies.

An **agricultural science student** searches **'environmental and natural resource data Longreach'** or **'environmental and natural resource data Condamine'.** *What can they find?*

What is your solution?

Your solution to this challenge should use at least one science dataset from the Department of Environment and Science **and we suggest you use one or more of the following science APIs:** Science APIs

A list of other useful open datasets and resources is on the following page.

Guidance to help you prepare your GovHack project video to pitch your solution (3 minutes):

1 **Introduction:** state the project title, team name and members.

2 **Problem:** what is the challenge your hack addressed? Why does it matter to find a solution?

3 **Vision:** in one sentence, describe the ideal end state / long-term goal you are trying to achieve through your solution.

4 **Data/resources:** what was your approach to solve the problem? How did you investigate the problem? Provide an overview of the open data and information used and how it helped you to develop your solution.

5 **Minimum viable product:** describe your solution (proof of concept). What makes the solution unique? What would be the impact of the solution?

6 **Next steps:** outline a road map on how the solution could be developed and implemented to achieve your vision.

For more tips see the GovHack handbook

data.qld.gov.au

Queensland Government

Locating open data

Queensland Government open data is accessible at data.qld.gov.au. Search for other government open data at data.gov.au and local government websites.

Below is a list of other open datasets and resources you might like to use for this challenge.

Open datasets

1 Climate
- SILO scientific information for land owners
- Climate
- TERN
- Bureau of Meteorology – climate
- Southern Oscillation Index

2 Water
- Water quality monitoring
- Water monitoring information portal
- Science in the Queensland Government
- WaTERS – water tracking and electronic reporting system
- Bureau of Meteorology – water

3 Coastal
- NDRP storm tide hazard interpolation series
- Wave monitoring
- Assessing water quality
- Bureau of Meteorology – environment

4 Air
- Air quality
- Air quality monitoring

5 Soils
- Soils
- Land suitability
- Soil chemistry
- Acid sulfate soils series
- Environmental characteristics series
- Land resource areas series
- Land systems series
- Mapping erodible soils
- Queensland soil survey sites
- Soil and Landscape Grid of Australia

6 Agriculture
- Online Farm Trials data / Online Farm Trials portal
- Climate Kelpie
- Agricultural Production Systems simulator (APSIM)
- Queensland Agricultural Land Audit
- Queensland Agricultural Training Colleges Sites
- Rabbit barrier fence
- Cattle tick clearing facilities – Locations
- Agricultural Chemicals Distribution Control (ACDC) Atlas
- Australian Bureau of Statistics – Agricultural Commodities
- Department of Agriculture and Water Resources

– ABARES
- Queensland Alliance for Agriculture and Food Innovation crop outlook
- The Long Paddock – SOI and AussieGRASS
- The Long Paddock – FORAGE Property Reports

7 Biodiversity
- Wildlife
- Qld wildlife data API
- Vegetation
- Broad vegetation groups – pre-clearing and 2015 remnant – Queensland series
- Plants/animals – species list – useful links
- Queensland wetland data version 4 series
- The vegetation of the Australian tropical savannas
- Biodiversity and Climate Change Virtual Laboratory (BCCVL)
- Regional ecosystem

8 Remote sensing
- Landcover mosaic series
- Landsat fire scars Queensland series
- State-wide Landcover and Trees Study Queensland series
- Queensland spatial catalogue – QSpatial

Other resources

1. Department of Environment and Science
2. Department of Agriculture and Fisheries
3. Department of Natural Resources, Mines and Energy
4. Gazetteer of Australian Place Name Search
5. Queensland Globe
6. TERN AusCover
7. Australian Research Data Commons
8. Geoscience Australia
9. Atlas of Living Australia
10. National Environmental Information Infrastructure
11. NationalMap