



Natural
Heritage
Trust

*Helping Communities
Helping Australia*

A Commonwealth Government Initiative



**USER GUIDE ~
AUSTRALIAN NATURAL RESOURCES
ATLAS AND DATA LIBRARY**

www.environment.gov.au/atlas

National Land & Water Resources Audit
A program of the Natural Heritage Trust

ACCESSIBLE AUSTRALIA-WIDE NATURAL RESOURCES INFORMATION

The Australian Natural Resources Atlas and Data Library

The Australian Natural Resources Atlas and Data Library combine to form one of the most comprehensive natural resource information systems available to the community anywhere in the world.

Developed by the Natural Heritage Trust through the National Land and Water Resources Audit (the Audit), the Atlas and Data Library cut through the red-tape to provide free access over the Internet to comprehensive, Australia-wide information about natural resources, the environment and primary industries.

The Atlas and Data Library are part of a seamless and accessible network of information services that allow users to discover, view and obtain natural resource information products from across Australia.

The Atlas home page

The home page of the Australian Natural Resources Atlas <www.environment.gov.au/atlas> provides several facilities for obtaining information.

You can view information on a particular topic or for a particular location or region

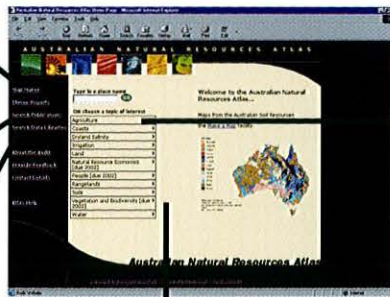
Information is presented as:

- Regional profiles with text, tables, graphs and basic maps for a region
- Written reports, including assessment reports, project summaries and technical reports from Audit projects
- Maps with the facility to choose both the scale and amount of information presented

Map Maker: construct a map for any region of interest. The user selects which natural resource, environmental, social & economic information is displayed (see page 6).

Publications: searches and links to technical reports & Audit assessments (page 9).

Data Library: download data free of all costs except for Internet charges incurred by users downloading the data (page 10)



Regional profiles: Choose a topic and view national, state or regional profiles integrating statistics, maps, text, tables and graphics, and explanations from the Audit assessments (pages 4&5)

Atlas navigator: Type in a place name to generate a list of information products available for a region of interest (page 4)

EXPLORING THE ATLAS

Information in the Atlas is organised by topics including:

- Agriculture** - agricultural statistics, industries, agricultural change and practice
- Coasts** - coastal environments and estuaries
- Land** - land resources including soils, dryland salinity, landscape nutrients and land use
- People** - Australians and the management of natural resources; productivity and profitability
- Rangelands** - biophysical resources, economic inputs and institutional activities
- Vegetation and biodiversity** - native vegetation extent and type, landscape health, and species
- Water** - use, availability, quality and management of Australia's water resources

Each topic is further divided into a range of sub-topics.

Selecting topics & sub-topics

On the home page, place the mouse over the topic and a list of sub-topics will appear.

Click the mouse over the sub-topic and go to a national report about that topic.

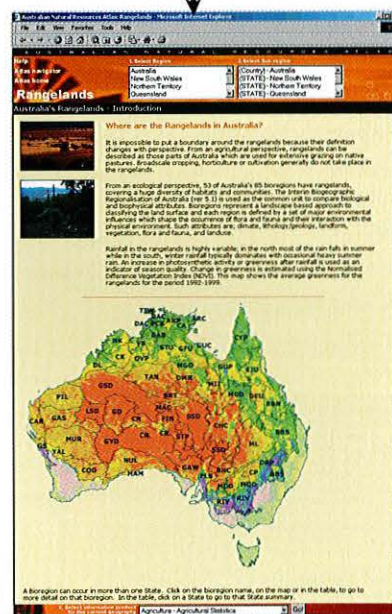
For example, the Rangelands topic has sub-topics about:

- **Rangelands** - introduction
- **Monitoring** - State and Territory monitoring programs and photosequences
- **Biophysical resources** - changes in soil, nutrients, water, plants and wildlife
- **Impacts on biophysical resources** - information on climate, land use intensity, clearing and exotic species
- **People in the rangelands** - socioeconomic information for individual, business and community attributes
- **Institutional response** - government support and conservation incentives
- **Project documentation** - project reports

Sub-topics are continually being added to the Atlas.



selecting sub-topics



Atlas tip: topics are presented by region. Page 5 provides information on moving from one region to the next

EXPLORING THE ATLAS FURTHER

Getting started with the Navigator

The quickest way to get to the natural resources regional profiles for a particular location is by using the Atlas Navigator.

From the home page, type a place name into the text box and click on **GO**. A list of available regional profiles arranged by the Atlas topics, sub-topics and regions appears. Click on any of the items in the list to view that regional profile.

For example: for information about water near Condamine, Queensland.

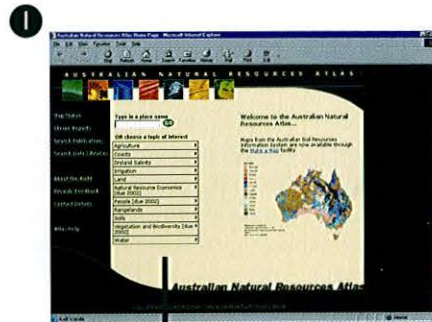
① From the home page, type in "Condamine" and click **GO**

② A list of regional profiles appears. Scroll down the page to the Water Resources section. There are many profiles available - from national scale to groundwater management unit.

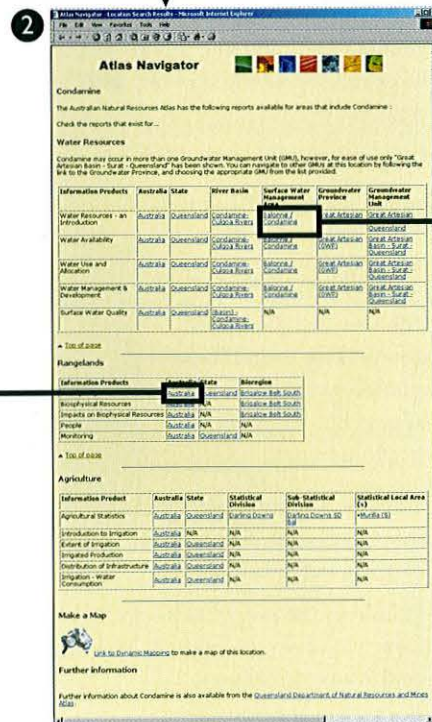
For example click on "Balonne/Condamine", in the surface water management column (the row labelled "water resources: an introduction")

A page of information, a map and statistics for that area appears. ③

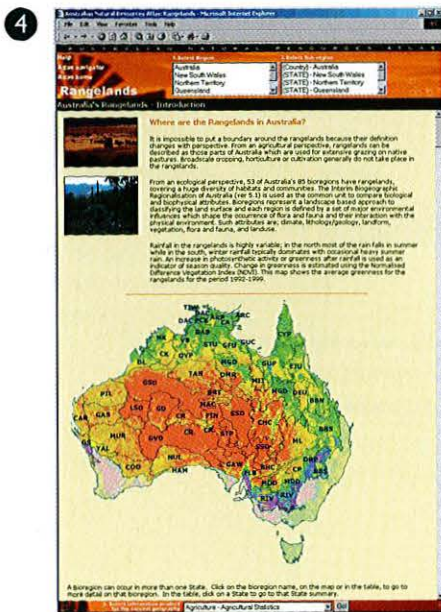
Or scroll to the rangelands heading and click on "Australia" under the column headed Australia and row labelled description/ introduction ④



Atlas front page



List of regional profiles for Condamine



Rangelands description/ introduction Australia

EXPLORING THE ATLAS FURTHER

Moving around a regional profile

Move to a new region (same topic).

From ③ At the top of the page: click on the text in the centre of the banner:

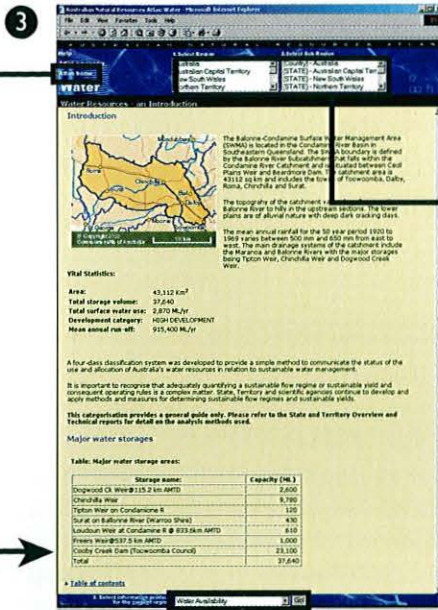
- Select region and
- Select sub-region ⑤

Move to new topic (same region).

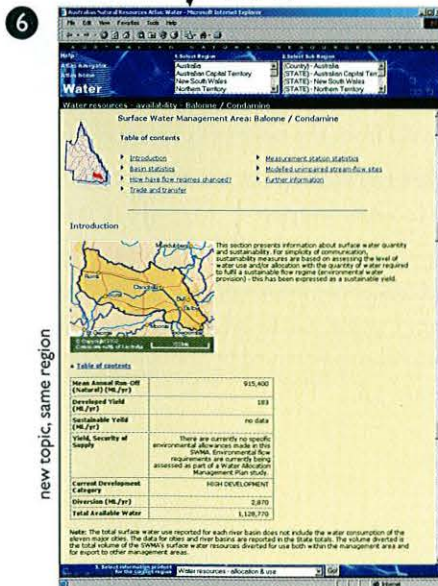
From ③ or ⑤ At the bottom of the page:

- Click on the pull-up menu in the centre of the banner
- Select an information product for the current region
- Click **Go!** ⑥

Water resources- an introduction

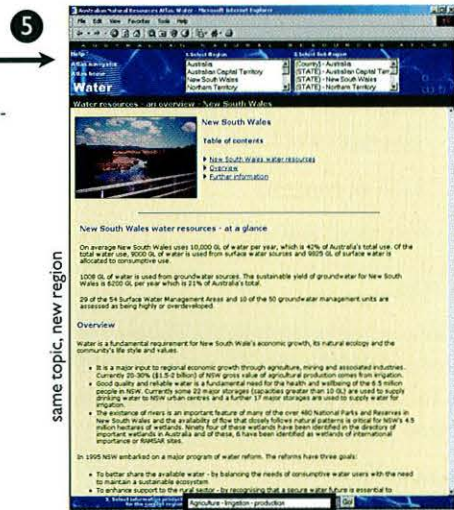


Select water resources-availability



Water resources- availability, Balonne/ Condamine

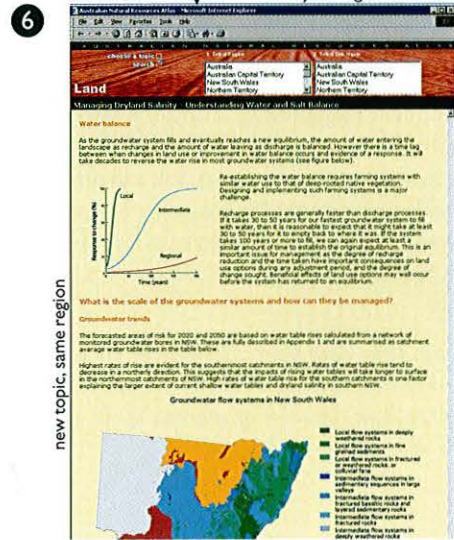
Water resources- an overview- New South Wales



select region "Australia", sub-region New South Wales

same topic, new region

Select Land- dryland salinity management



new topic, same region

Land- dryland salinity management- New South Wales

THE MAP MAKER

The Map Maker is one of the most exciting Atlas facilities. It brings together many sets of data at almost any scale, into a single map of natural resources.

Using the Map Maker tools, users can:

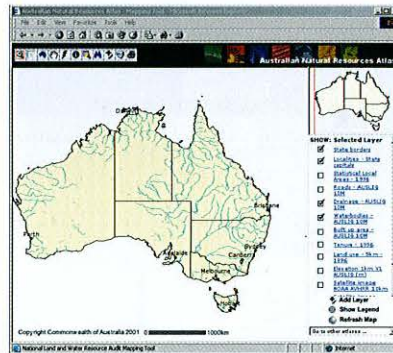
- Choose the information and data to display (experiment and view a variety of combinations)
- Select which area of Australia, and at what scale to view the map
- Find out about the data behind this information (for example, who collected it, how and why)
- Print a map or save it to a file

An example of the Map Maker at work is on page 8

Getting started with the Map Maker

From the home page, select “Map Maker” this takes you to a page comprising four main sections:

- Main map
- Tool bar
- Table of contents
- Overview map



Main map

The main map displays data (or “layers”) selected by the user at scales also chosen by the user. When new layers are added, the map needs to be redrawn or “refreshed” (bottom right hand corner).

The mouse cursor changes to a crosshair (*) when in the main map. The coordinates (in latitude and longitude) of cursor location are shown in the status bar below the main map.

Overview map

The overview map presents a simple map of Australia with a red box indicating the area currently being shown on the main map. You can move to another location on the main map by mouse clicking on the overview map; the main map is re-drawn at the current scale, centred on the location where you clicked.

Atlas tip: some data layers can only be viewed at set scales. For this reason, selected data layers will disappear from the table of contents if the map is drawn at an inappropriate scale.

Table of contents – viewing new layers

Data can be mapped by clicking on the check-boxes next to the name of the data layers. Once you have identified the new data to combine and view, press the **Refresh Map** to generate a new map. The **Refresh Map** button is also highlighted in red if the size of the browser window has been changed.

To find out more about the data, click on the [data layer name](#) in the table of contents.

The **Add layer** button is used to add or remove data layers from the table of contents.













The **Show Legend** button displays the map legend in a new window.

The Australian Natural Resources Atlas is a gateway to many information resources available over the Internet. Use the “Go to other Atlases...” menu to select an Atlas maintained by another agency.

THE MAP MAKER

Tool bar

The tool bar contains functions to manipulate the main map – specifically the scale, location and features. These functions are:

-  Zoom-in - select an area of the map for closer inspection by dragging the mouse over the area of interest and drawing a box.
-  Zoom-out - reverse of zoom-in, and redraws the map at a smaller scale.
-  Draws the map for the whole of Australia.
-  Pan - redraws the map at the current scale, but centred on the location of the mouse click.
-  Hot-link - opens Internet pages for map features at the location of the mouse click. Not all features have further information available through the hot-link tool.
-  Information about the features on the main map at the location of the mouse click.
-  Search - lists data layers and their attributes. A text entry box allows the user to search for a particular attribute. You can type information in UPPERCASE or lowercase. A list of features that match the expression is returned. Select a feature in the list and the main map will display that feature.
-  Location search - searches for a town and zooms in to that area.
-  Add layers –adds information layers to the table of contents. There is a default set of layers on the main map when the Map Maker starts. More layers can be added from the table of contents to the main map. Click on **Add Layer**. A list of topics will appear. Under each heading there is a list of layers to choose from. Click on a layer to select it, then click on “**Update list of data**” at the bottom of the box (which should now be highlighted). To display this layer on the main map, select this new layer in the table of contents, then  **Refresh Map** .
-  Help.
-  Print – create a customised map using the information on the main map. Users can add their own map title, extra text, overview map and/or legend.

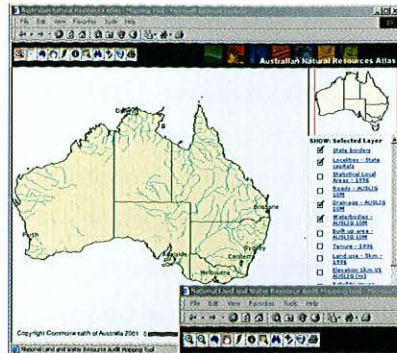
Atlas Tip

- *Make sure you set your browser to check for new versions of a page on every visit, or automatically.*
- *The Map Maker is compatible with most HTML3.2 or above compliant browsers*
- *If your Map Maker session has been inactive for some time, then the system will reload itself at the default page for all of Australia.*
- *Clicking on the data layer name takes users to the “metadata” or background information for a particular layer.*

THE MAP MAKER – AN EXAMPLE


"Show me information about native vegetation and potential hill slope erosion in the region around Condamine in Queensland."

Begin at the map of Australia




Click on  to search for the town of Condamine

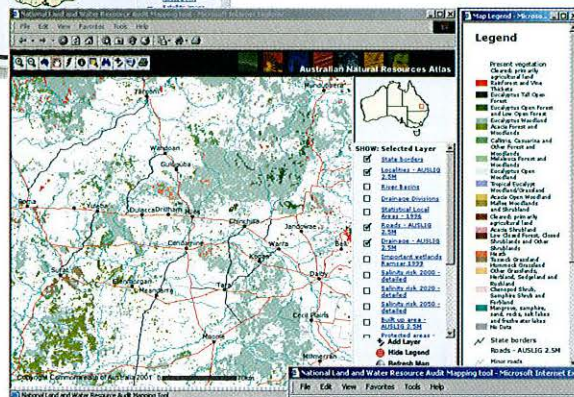


Zoom into the region around the town of Condamine and click on  to add a map of native vegetation.

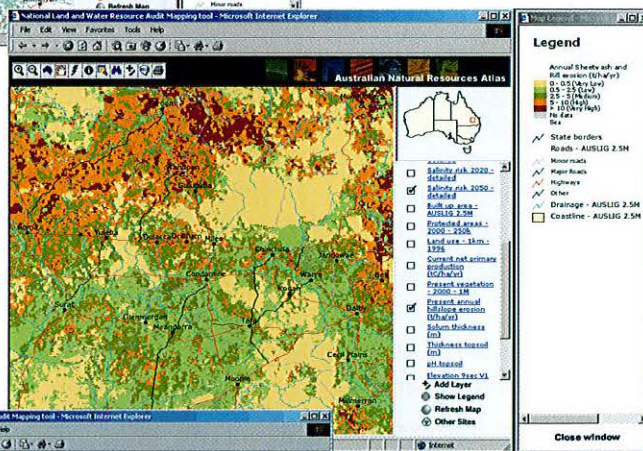
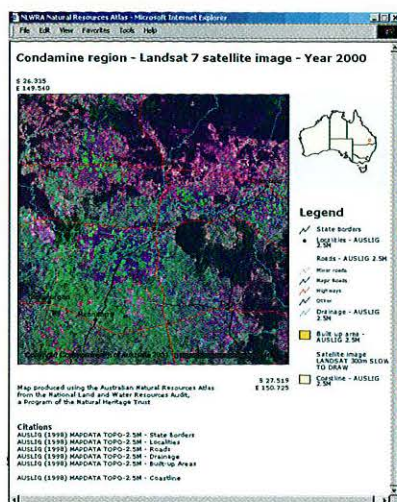
Check the box next to the native vegetation in the table of contents.

Select  Refresh Map to redraw the map.

Then zoom out  for a regional view of vegetation



Format a map and print it out



Change the data on the map by unchecking those information layers you do not want and adding those that you want to explore.

View maps of potential hill slope erosion and satellite imagery from the year 2000

You can do similar maps for anywhere else in Australia

SEARCH PUBLICATIONS

The Search Publications tool allows users to search through the assessment reports, project summaries and technical reports from Audit projects. Reports can then be viewed or down loaded.

How to use the Search Publications tool

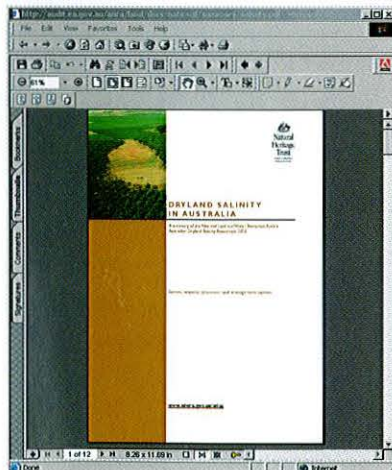
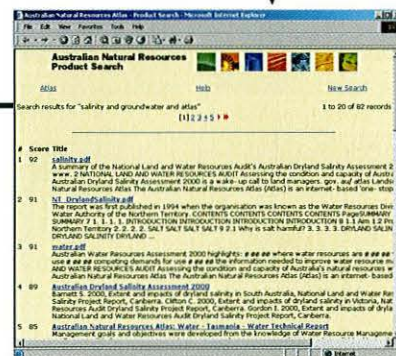
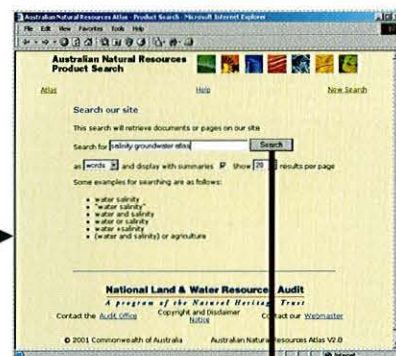
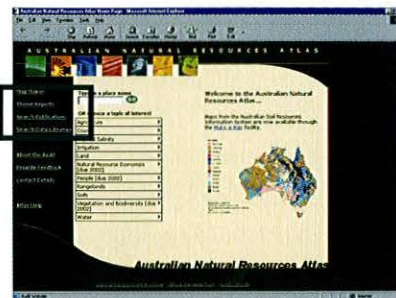
The Search Publications tool is available from the Australian Natural Resources Atlas home page.

Examples of search options:

- water - find documents with the word "water"
- "water salinity" - find documents with the phrase "water salinity"
- water and salinity - find documents with the words "water" and "salinity"
- water or salinity - find documents with the words "water" or "salinity"
- (water and salinity) or agriculture - find documents with the words ("water" and "salinity") or with the word "agriculture"

Once a user has typed in a query and pressed the search button, a results page appears listing all of the documents found that meet the search criteria.

From the results page, click on a document title to view that document.



THE AUSTRALIAN NATURAL RESOURCES DATA LIBRARY

What is the Data Library?

The Australian Natural Resources Data Library provides free and direct access to a large collection of natural resources data and information. The data in the Library are an extension of the data that can be viewed in the Atlas, often providing additional detailed technical information.

The Data Library allows users to:

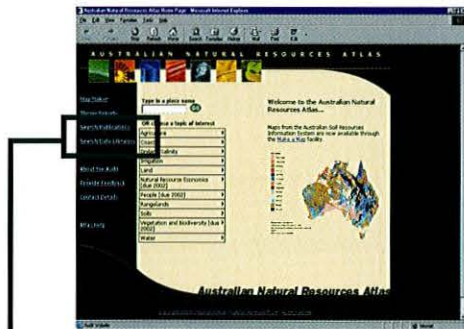
- Find the data and information about the data (metadata).
- Where allowed by owners / custodians of the data, download the data.

The data in the Data Library can be used in geographic information systems and spatial modelling tools.

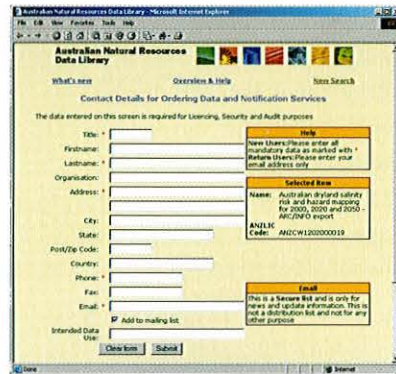
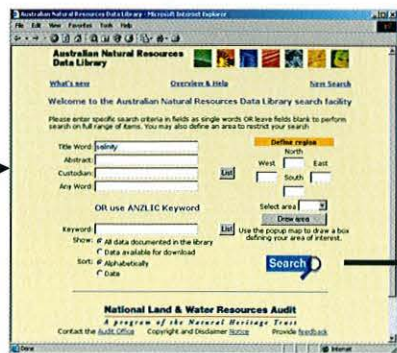
How to use the Data Library

The Data Library can be accessed from the Australian Natural Resources Atlas home page or directly from adl.brs.gov.au.

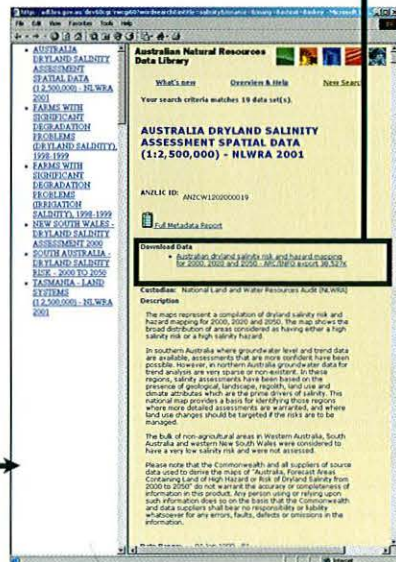
Once a user has filled out their contact details, a data licence is generated. A security code is e-mailed to the user which is used to download the data.



You can search by title, abstract, keyword, custodian or location.



View the detailed documentation about the data (metadata) or choose to download the data



DATA AVAILABLE FROM THE DATA LIBRARY

Data suitable for use in geographic information systems are available for download from the Australian Natural Resources Data Library or directly from data custodians. Data already available include:

Agriculture

- Agricultural industries – regional boundaries
- Spatially consistent sub-sets of agricultural statistics from 1982/83 to 1996/97

Biodiversity and Vegetation

- Pre-European major vegetation groups and sub-groups
- Major native vegetation groups and sub-groups
- Cleared major native vegetation groups
- Landscape health in Australia 2001

Coasts

- Estuary condition assessment 2000

Land

- Australian Dryland Salinity Assessment 2000
- Australian groundwater flow systems
- Australia-wide land use (1:1 000 000)
- Soil erosion and sediment transport
- Landscape carbon balance
- Landscape nitrogen and phosphorus balances
- Fertiliser use
- Soil properties – the Australian Soil Resources Information System:
 - Organic carbon in the soil
 - Total phosphorus or nitrogen
 - Soil texture, depth and density
 - % of clay, silt or sand
 - pH and ability to resist pH change
 - Water storage capacity
 - Permeability of the soil

Rangelands

- Land tenure in the rangelands from 1957
- Season quality in the rangelands
- Total grazing pressure from 1957 in the rangelands

Social and economic dimensions of natural resources

- Age and experience
- Education and training
- Farm financial characteristics
- Farm family characteristics
- Farm structure
- Sustainable practice
- Social and institutional contact as sources of change
- Remoteness and other community indicators
- Indicators of rural adjustment
- Agricultural profit at full equity
- Costs to agriculture
- Input costs to non-agricultural infrastructure

Water resources

- Australian Water Resource Assessment 2000
- Surface Water Management Area boundaries
- Groundwater Management Unit boundaries
- A nested set of catchments and sub-catchments for Australia
- Estimated daily and monthly streamflow data from 1901 to 1998 for 286 catchments
- 1985 review of Australia's water resources and water use
- River nutrients, loads & transport
- Assessment of river condition

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If you cannot fully access the information on a particular page, please contact the Audit or e-mail the contact person identified on the information product and they will help you. This may include providing the information to you in an alternate format.



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