



LOCAL TAB: National Level

Building capacity to implement natural resources information management systems.

www.nlwra.gov.au

NATIONAL LEVEL

Table of Contents

| | |
|---|----------|
| Guide to symbols | ii |
| Local tab: National Level | 3 |
| 1 Material on national NRM programs | 3 |
| 2 Spatial data infrastructures and policies..... | 3 |
| 3 Copyright and intellectual property | 3 |
| 4 Data access and licensing policies..... | 3 |
| 5 Data discovery, visualisation and reporting | 4 |
| 6 NRM monitoring and evaluation | 6 |

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Guide to symbols

The following symbols are used throughout the Toolkit as a guide to users, and draw attention to important issues and information.



Information which readers should take particular note of



Best practice information



Tips for readers—based on experience and aimed at saving time and resources



Caution—readers are advised that particular care should be taken or that the subject issue may be complex



Additional information



Capability raising—used to show a signpost to a higher capability level

**Bold
Text**

Used to highlight a particular issue

**Boxed
Text**

Highlighting of issues specifically related to ANZLIC or the Audit

Local tab: National Level

Considerable resource material related to natural resources management (NRM) programs (including the development of spatial data infrastructures, data discovery and visualisation services, monitoring and evaluation and, information management policies) is available on the web. The following are selected examples relevant to the national level.

1 Material on national NRM programs

Caring for Our Country: <http://www.nrm.gov.au/>

National Action Plan for Salinity and Water Quality: <http://www.napswq.gov.au/napswq/index.html>

Natural Heritage Trust: <http://www.nht.gov.au/>

National Land & Water Resource Audit: <http://www.nlwra.gov.au/>

2 Spatial data infrastructures and policies

General resource material

Australian Spatial Data Infrastructure (ASDI): http://www.anzlic.org.au/infrastructure_ASDI.html

ANZLIC policies: <http://www.anzlic.org.au/policies.html>

Australian Spatial Data Infrastructure (ASDI): <http://www.ga.gov.au/nmd/asdi>

Office of Spatial Data Management (OSDM): <http://www.osdm.gov.au/>

'Snapshot of SDI Development in Australia':

http://www.geom.unimelb.edu.au/research/publications/IPW/024_Warner%20REF.pdf

3 Copyright and Intellectual property

Copyright: The Australian Copyright Council produces a number of information sheets and a range of detailed practical guides that provide additional information about copyright law and how it applies in practice.

The information sheets and additional resource material are available at

<http://www.copyright.org.au/information/introductory.htm>.

Intellectual Property or IP: IP represents the property of the mind or intellect. In business terms this also means proprietary knowledge. Types of IP include patents, trade marks, designs, copyright, circuit layout rights, plant breeder's rights, and confidentiality/trade secrets. IP Australia maintains a website providing background information on IP in Australia and guidelines on how to develop a strategy to protect IP rights. See: <http://www.ipaustralia.gov.au/ip/introduction.shtml>

4 Data access and licensing policies

The National Land & Water Resources Audit (the Audit) and ANZLIC – the Spatial Information Council (ANZLIC)

The Audit and ANZLIC have collectively developed a Data Access and Management Agreement signed by all jurisdictions in September 2001. The agreement provides for consistent access

arrangements to the datasets held by the Audit and its jurisdictional partners. See

<http://www.anzlic.org.au/get/2375374673>

In addition, ANZLIC and the Audit have collaborated in developing a model agreement for use in any NRM program. The *Model Data Access and Management Agreement*

(<http://www.anzlic.org.au/get/2375374755>) incorporates guidelines for custodianship, metadata, archiving, accessing, data licensing and pricing and puts them into an operational context.

Other policies and guidelines include:

- [Guidelines for Custodianship](#) of spatial data
- [Policy Statement on Spatial Data Management](#)
- [Metadata protocol and standard metadata profile](#)
- [Guiding Principles for Spatial Data Access and Pricing Policy](#)
- [Privacy guidelines for spatial information](#)
- [Access to Sensitive Spatial Data.](#)

The Audit and ANZLIC have also recently developed an *Information for Sustainability: Statement of Intent*

(http://www.nlwra.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/96/89.pdf&siteID=9&str_title=ANRII%20Vision.pdf) which outlines a vision for an improved Australian natural resource information infrastructure and provides a set of guiding principles and steps for moving forward.

The Office of Spatial Data Management (OSDM)

The Australian Government Office of Spatial Data Management (OSDM) is charged with implementing the Australian Government Policy on Spatial Data Access and Pricing. See <http://www.osdm.gov.au/policy/accessPricing.html>.

In addition, the OSDM provides a licence for Australian Government spatial data provided online.

The licence is designed for transfers of Australian Government spatial datasets listed on the schedule. It designates OSDM as the party contracting on behalf of the Commonwealth. The OSDM licence is designed for use with the OSDM Licence Registrations Service (OLRS)—a licence authentication service for schedule datasets. It allows registered users to access multiple datasets from all participating Australian Government agencies after a single registration process. As such, users who have previously agreed to the OSDM licence conditions can access a range of spatial datasets without having to agree to new licences each time.

5 Data discovery, visualisation and reporting

Australian Natural Resources Atlas (ANRA)

http://audit.ea.gov.au/ANRA/atlas_home.cfm

ANRA holds theme assessments undertaken by the Audit.

The Atlas is housed within the Department of the Environment, Water, Heritage and the Arts and contains:

- Natural Resource Topics—online versions of the Audit's theme assessments (including the Audit's 1997–2002 'Black Books')
- Map Maker—a dynamic online mapping tool for viewing Audit theme data and contextual information and producing customised maps.

The Audit is developing a new module within the Atlas called *Australia's Resources Online* (<http://www.anra.gov.au/aro/>) for reporting on the National Monitoring and Evaluation Framework indicators. Australia's Resources Online (ARO) will progressively report against the indicators, directly from state/territory-provided information sources.

Australian Natural Resources Data Library (ANRDL)

http://adl.brs.gov.au/anrdl/php/basic_search.php

ANRDL provides a number of different tools for the discovery and access to data and information online, viz reports, posters and GIS ready spatial datasets. It is designed to distribute data provided by the Audit in a timely and reliable fashion to approved participants in Audit projects and other users.

Environmental Reporting Tool

<http://www.environment.gov.au/erin/ert/index.html>

This reporting tool allows the user to find information on nationally listed species and ecological communities, wetlands and protected areas, and heritage sites recorded in national databases. The tool searches the environmental databases of the Department of the Environment and Water Resources, and can produce summary reports by region, local government area, postcode or self-defined search areas.

Other sources of spatial data

Some datasets from these websites are available for download:

- [Australian Agriculture and Natural Resources Online database](#)
- [Australian Bureau of Agricultural and Resource Economics Data](#)
- [Australian Bureau of Statistics](#)
- [Australian Soil Resource Information System](#)
- [Australian Spatial Data Infrastructure](#)
- [Australian Spatial Data Directory](#)—online searches of all connected nodes for Australian spatial data maintained by GeoScience Australia
- [Bureau of Meteorology](#)

- [Discover Information Geographically](#)
- [Geoscience Australia](#)
- [Murray Darling Basin Commission](#)
- [Office of Spatial Data Management](#)

6 NRM monitoring and evaluation

The Natural Resource Management Ministerial Council, which includes representatives of the Australian Government and all states and territory governments, was established to develop a coordinated approach to issues affecting NRM in Australia. The council endorsed two national level documents to help set targets, monitor, evaluate and report on natural resource management:

[National Framework for Natural Resource Management Standards and Targets](#)

[National Natural Resource Management Monitoring and Evaluation Framework](#)

A [users' guide](#) to these documents provides background information and helps interpret the national framework.

These documents are currently being reviewed in preparation for implementation of future NRM programs.

A set of [Resource Condition Indicators](#) are being refined to provide more detail on how to monitor each 'matter for target' set out in the National Framework for Natural Resource Management Standards and Targets. The Audit is responsible for coordinating the collation of data and information against the national matters for targets and the relevant resource indicators. It uses national coordination committees or technical advisory groups to test and refine these indicators and to provide guidance on the most practical and effective set of measures to be used. More details of progress, with further development of the resource condition indicators, can be found on the Audit's website:

http://www.nlwra.gov.au/About_Us/Monitoring_and_Evaluation/index.aspx.

The initial set of indicators developed by the Australian Government Monitoring and Evaluation Working Group has been used as the starting point for further development by the Audit.

Information on the initial indicator set can be found at

<http://www.nrm.gov.au/me/index.html>

Note: This site may not have the most up-to-date information on indicators.

Australian Government contacts for further information relating to the matters for target and associated issues

| Theme | Custodian Agency/s | Contact | Website |
|--------------|--------------------|---|---|
| Soils | CSIRO DAFF | CSIRO Land and Water GPO Box 1666 Canberra ACT 2601 Tel: 02 6246 5916 Department of Agriculture, Fisheries and Forestry GPO Box 858 Canberra ACT 2601 Tel: 02 6272 3933 | ASRIS http://www.asris.csiro.au/index_ie.html Digital Atlas of Australian Soils http://www.daffa.gov.au/brs/data-tools/daas-lut-metadata Healthy Soils for Australian Farms http://www.daff.gov.au/natural-resources/land-salinity/soils |
| Water | BoM NWC | Bureau of Meteorology GPO Box 1289 Melbourne VIC 3001 Tel: 03 9669 4000 National Water Commission 95 Northbourne Ave, Canberra ACT 2600 Tel: 02 6102 6000 Email: enquiries@nwc.gov.au | http://www.bom.gov.au/hydro/wr/index.shtml http://www.water.gov.au |
| Vegetation | DEWHA DAFF | Department of the Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2601 Tel:02 6274 1111 Department of Agriculture, Fisheries and Forestry GPO Box 858 Canberra ACT 2601 Tel: 02 6272 3933 | National Vegetation Information System http://www.environment.gov.au/erin/nvis Vegetation Mapping and Monitoring Links http://www.environment.gov.au/erin/nvis/links.html Integrated Vegetation Information for NAP and NRM regions http://data.brs.gov.au/mapserv/intveg/index.html DAFF Vegetation http://www.daff.gov.au/naturalresources/vegetation |
| Biodiversity | DEWHA | Department of the Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2601 Tel:02 6274 1111 | Biodiversity Home Page http://www.environment.gov.au/biodiversity Species Profile and Threats Database http://www.environment.gov.au/cgi- |

| Theme | Custodian Agency/s | Contact | Website |
|--------------------------------------|---|--|--|
| | | | bin/sprat/public/sprat.pl |
| Estuarine, Coastal and Marine | DEWHA GeoScience Australia | Department of the Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2601 Tel:02 6274 1111 GeoScience Australia GPO Box 378 Canberra ACT 2601 Tel: 02 6249 9111 | DEWHA Coasts and Oceans Home Page http://www.environment.gov.au/coasts/index.html OzCoasts and OzEstuaries Home Page http://www.ozcoasts.org.au/ NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Estuarine_Coastal_and_Marine |
| Invasive Species | DAFF DEWHA | Department of Agriculture, Fisheries and Forestry GPO Box 858 Canberra ACT 2601 Tel: 02 6272 3933 Department of the Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2601 Tel:02 6274 1111 | Australian Government Weeds http://www.weeds.gov.au/ Australian Weeds Committee – Weeds Australia Website http://www.weeds.org.au/ DAFF Weeds http://www.daff.gov.au/natural-resources/invasive/weeds CRC for Australian Weed Management http://www.weeds.crc.org.au/index_flash.html Invasive Animals CRC http://www.invasiveanimals.com/ Australian Government/BRS Feral Animals http://www.feral.org.au NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Invasive_Species |

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|----------------------------|--------------|---|--|
| Land Salinity | DAFF | <p>Department of Agriculture, Fisheries and Forestry</p> <p>GPO Box 858 Canberra ACT 2601</p> <p>Tel: 02 6272 3933</p> | <p>National Dryland Salinity Program http://www.ndsp.gov.au/</p> <p>CRC for Plant-based Management of Dryland Salinity http://www.crcsalinity.com/index.php</p> <p>DAFF Dryland Salinity http://www.daff.gov.au/natural-resources/land-salinity/salinity</p> <p>NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Land_Salinity/index.aspx</p> |
| Land Use | DAFF | <p>Department of Agriculture, Fisheries and Forestry</p> <p>GPO Box 858 Canberra ACT 2601</p> <p>Tel: 02 6272 3933</p> | <p>Land Use and Management http://www.daff.gov.au/brs/land/use-management</p> |
| Rangelands | DEWHA | <p>Department of the Environment, Water, Heritage and the Arts</p> <p>GPO Box 787 Canberra ACT 2601</p> <p>Tel:02 6274 1111</p> | <p>Managing Rangelands http://www.environment.gov.au/land/management/rangelands/index.html</p> <p>Desert Knowledge CRC http://www.desertknowledge.com.au/</p> <p>Rangelands http://www.daff.gov.au/brs/land/rangelands</p> <p>Sustainable Rangelands and Savannas http://www.csiro.au/science/RangelandsSavannas</p> |
| Rivers and Wetlands | DEWHA | <p>Department of the Environment, Water, Heritage and the Arts</p> <p>GPO Box 787 Canberra ACT 2601</p> <p>Tel:02 6274 1111</p> | <p>Aquatic Ecosystems http://www.environment.gov.au/water/environmental/ecosystems/index.html</p> <p>Wetlands http://www.environment.gov.au/water/environmental/wetlands/index.html</p> <p>NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Rivers_and_wetlands/index.aspx</p> |

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|---|--------------|---|--|
| Signposts for Australian Agriculture | DAFF | Department of Agriculture, Fisheries and Forestry GPO Box 858 Canberra ACT 2601 Tel: 02 6272 3933 | Signposts for Australian Agriculture http://signposts4ag.com/signposts-grains/about-signposts NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Signposts_for_Australian_Agriculture/index.aspx |
| Socio-economic | DAFF | Department of Agriculture, Fisheries and Forestry GPO Box 858 Canberra ACT 2601 Tel: 02 6272 3933 | NLWRA http://www.nlwra.gov.au/Natural_Resource_Topics/Socio-economic/index.aspx Australian Bureau of Agricultural Resource Economics http://www.abareconomics.com/ Australian Bureau of Statistics http://www.abs.gov.au/ |
| Species and Communities | DEWHA | Department of the Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2601 Tel:02 6274 1111 | Threatened species and ecological communities http://www.environment.gov.au/biodiversity/threatened/index.html |