Land and Water Resource Surveys

Natural Resource Maps user guide

nrmaps.nt.gov.au

To seek assistance using NR Maps, please contact the department's Geospatial Services Unit.

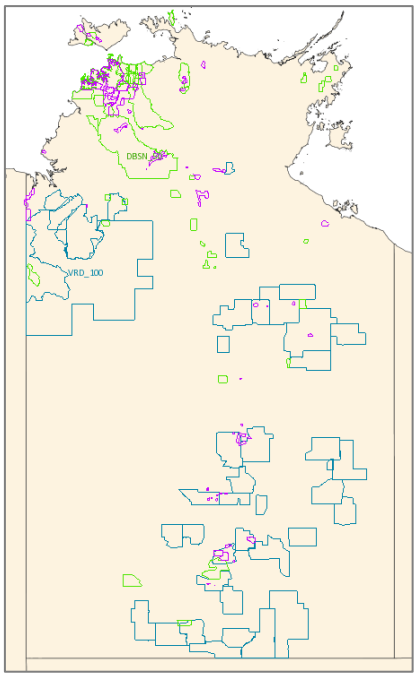
Email datarequests.DLPE@nt.gov.au
Phone (08) 8999 4579

We recommend reading the NR Maps user guide *How to use NR Maps tools.* To view user guides, please click on the User Guide tab above the map screen in NR Maps or click the Help link on the top right of the NR Maps screen.

This guide describes how to find more information about natural resource surveys conducted by the Land Assessment Branch and Water Assessment Branch. The surveys provide knowledge and understanding of soil, land and vegetation resources and groundwater systems.

Information compiled for land and water resource surveys by this department may include;

Spatial data	• Survey polygons • Survey boundary extent • Soil and Land Information database (SALI) soil profile descriptions • Flora Atlas is compiled of site data from Vegetation Site Database (VSD) and NT Herbarium specimen database (HOLTZE).
Metadata	A brief summary record about the survey and how the data was compiled
Map products	Download (PDF) via NR Maps
Technical reports	Download (PDF) via the Northern Territory Library
Spatial data package	Geospatial Resources web page Spatial data for Land and Water Resource surveys is available for download as a zipped package and contains spatial data in an ESRI format, reports and maps.The spatial data is stored using the department survey code.



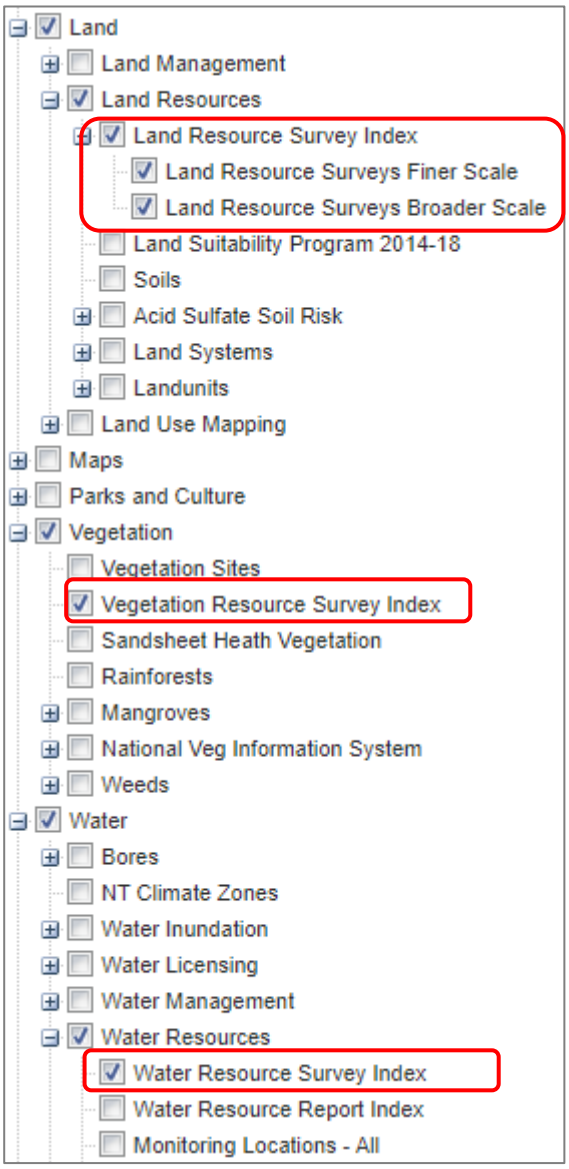
1. NT Survey Index datasets

The polygon boundary extent of each survey is grouped into a single dataset that covers the Northern Territory.

The merged polygons may overlap and may also include a polygon that covers the entire Northern Territory.

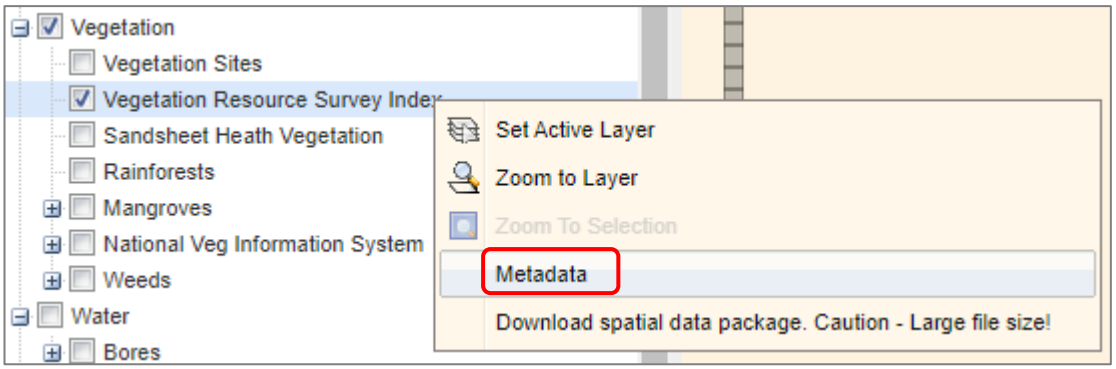
See layer files in NR Maps:

- **Vegetation Resource Survey Index**
- **Land Resource Surveys Finer Scale** (scale ≤100k)
- **Land Resource Surveys Broader Scale** (scale > 100k)
- **Water Resource Survey Index**

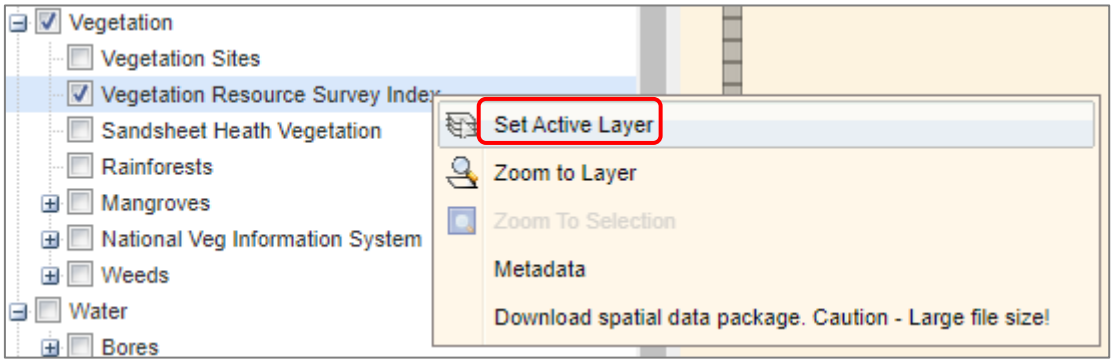


Each polygon in the NT Index represents the footprint of the survey extent and contains descriptive attributes about the survey, including;

- Survey type
- Survey code (used by this department)
- Survey name
- Survey scale
- Published date
- Link to the Technical Report (if available)
- Link to download a map (if available)
- Link to the metadata record
- Link to download the spatial data package (zip file includes, data, report, maps etc)

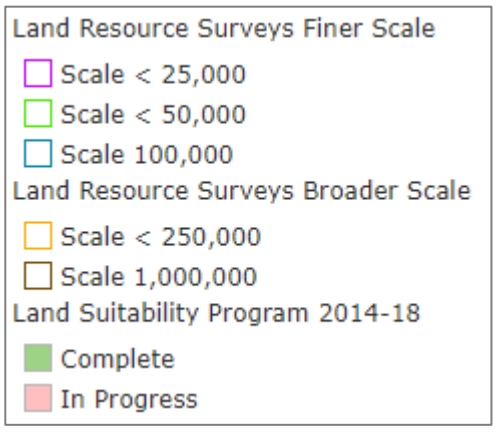


To find out more about these NT survey index compilation datasets, **review the Metadata**.
Right mouse click on a data layer and select **Metadata**.



To use query tools or select features on the map screen, **change the Active Layer.**
Right mouse click on a data layer and select **Set Active**
The layer name text will change to bold-italics

2. Land Resource Surveys



More than 200 Land Resource surveys are archived in the department's spatial library.

The boundary extent of each survey is displayed in the survey index layer.

Tick the layer to display on the map screen.

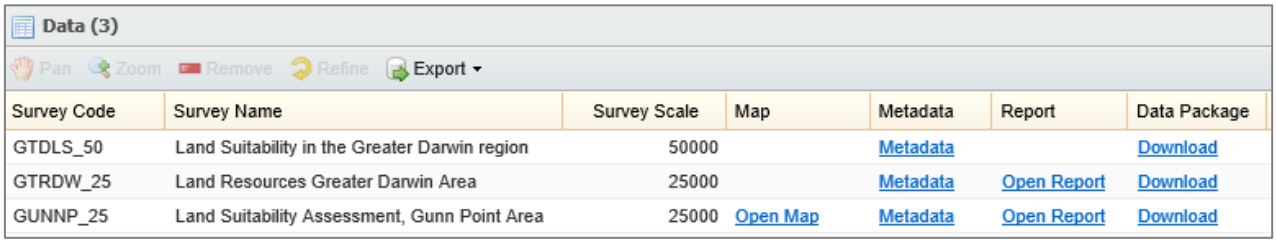
View the Legend panel to see how the land resource survey index is displayed on the map screen.

Zoom to your area of interest and review the surveys available over this location.

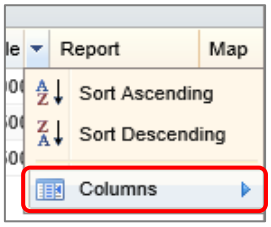
- Draw a small rectangle on the screen to select features from this layer
- This will change Land Resource Surveys Finer Scale as an active layer

All surveys that cover the rectangle are described in the data panel at the bottom of the screen.

- Attribute description include survey name and scale and web links to reports (pdf), maps (pdf), metadata and spatial data packages (large zip files)
- Each survey has an individual metadata record
- Users may drag columns of data across to a new position on the table



Survey Code	Survey Name	Survey Scale	Map	Metadata	Report	Data Package
GTDLS_50	Land Suitability in the Greater Darwin region	50000		Metadata		Download
GTRDW_25	Land Resources Greater Darwin Area	25000		Metadata	Open Report	Download
GUNNP_25	Land Suitability Assessment, Gunn Point Area	25000	Open Map	Metadata	Open Report	Download



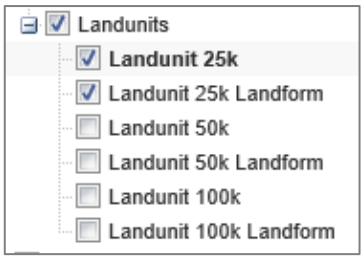
Sort query results by Survey Scale – e.g. sort ascending.

Turn off columns if the descriptive attribute is not needed.

If the department has defined Core Attributes for the survey, polygons are displayed in scale groups.

Status Project	Status GIS
Complete (Spatial)	Spatial (Label)
Complete (Spatial)	Spatial (Core Attributes)
Complete (Spatial)	Spatial (Core Attributes)

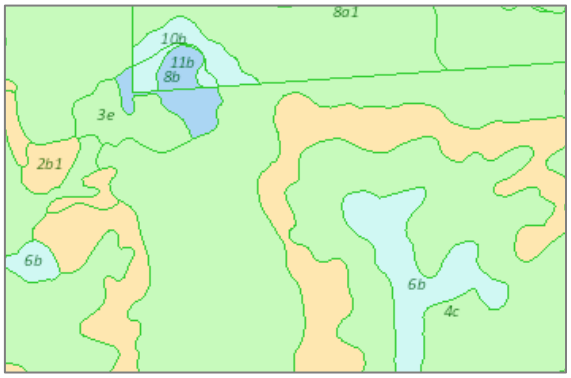
- Finer scale surveys have Land Unit polygons.
- Broader scale surveys have Land System polygons.



Landunits display a green outline for each polygon.

Landform display polygons grouped by the dominant Landform Class.

Land unit surveys also include dominant vegetation descriptions.

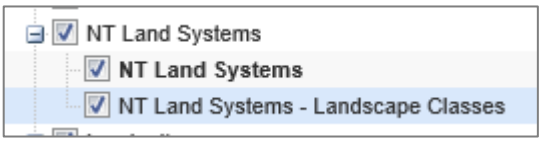


Zoom in to view data.

Review the legend to see the display description.

Change the active layer to Landunit 25k.

Select polygons on the map screen to review attributes in the data panel (bottom of screen).



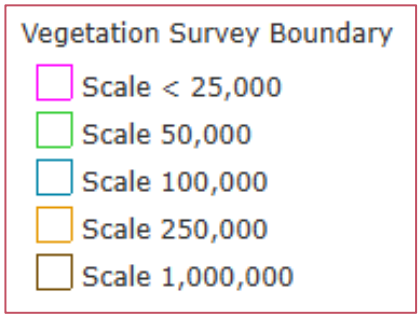
Land Systems are a compilation dataset ranging in scales from 1:250k in the north to 1:1 million in the south of the NT.

The land systems are grouped for display using the Landscape Class.

Review the display in the legend.

The original survey is noted in the data panel. Further descriptions and links to reports are noted in the metadata.

3. Vegetation Survey Resources

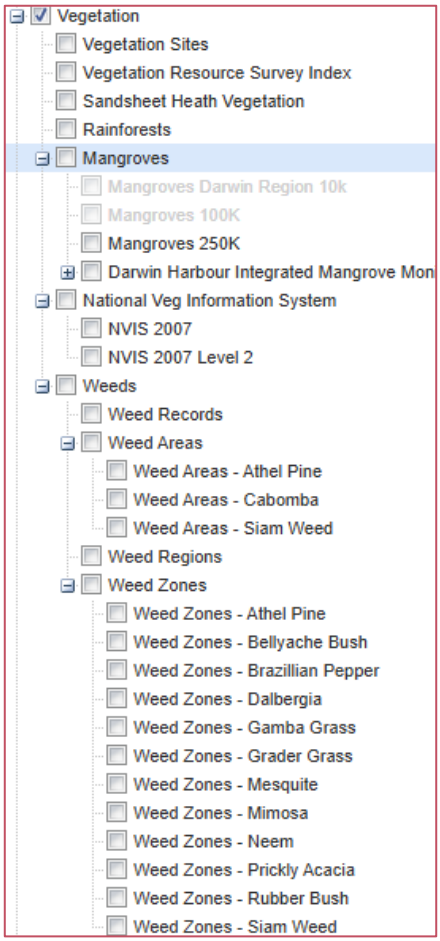


A large number of individual Vegetation Resource surveys are archived in the department's spatial library.

The boundaries of each survey are displayed in the survey index layer.

Tick the layer to display on the map screen.

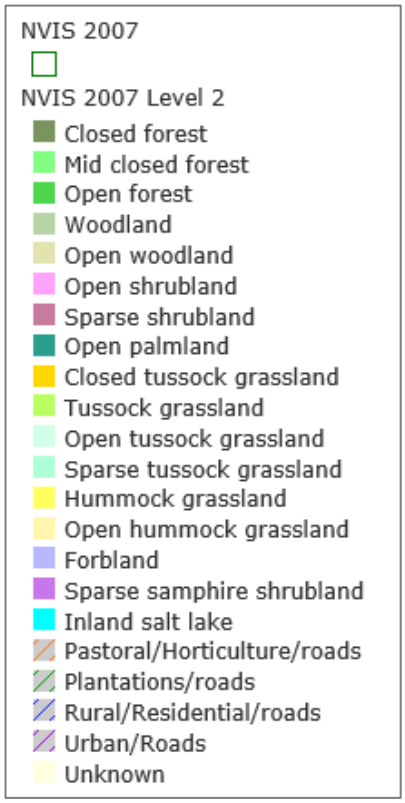
View the Legend panel to see how the spatial data is displayed on the map screen.



Use the same method described for land resources to review the vegetation resource surveys.

Only the individual surveys displayed in the graphic on the left are available for review in NR Maps. (as of December 2025)

As the NR Maps system develops, the spatial data display will increase.



The National Vegetation Information System (NVIS) is displayed across the entire NT. This is a compilation of several surveys.

Please read the metadata record for this complex survey.

The metadata also describes each of the attributes described in the data panel.

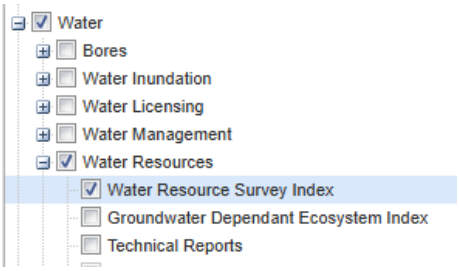
NVIS 2007 displays polygons with a green outline.

NVIS 2007 Level 2 displays polygons grouped by the structural formation.

Change the active layer to NVIS 2007 and select some polygons on the map screen.

Each map unit contains links to a database describing the vegetation characteristics.

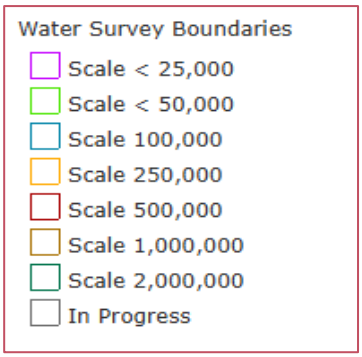
4. Water Resource Surveys



More than 80 Water Resource surveys are archived in the department's spatial library.

The boundaries of each survey are displayed in the Water Resources Survey Index layer on NR Maps.

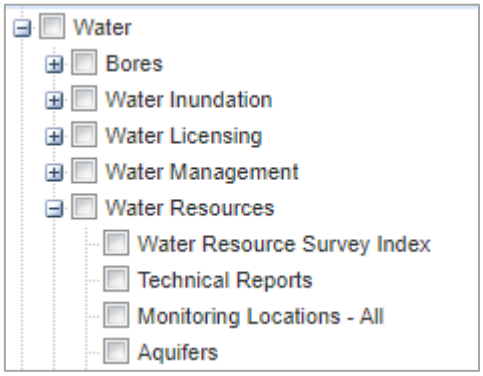
Tick the layer to display on the map screen.



View the Legend panel to see how the spatial data is displayed on the map screen.

Change the active layer to use search and query tools.

Use the method described for land resources to review the water resource surveys.

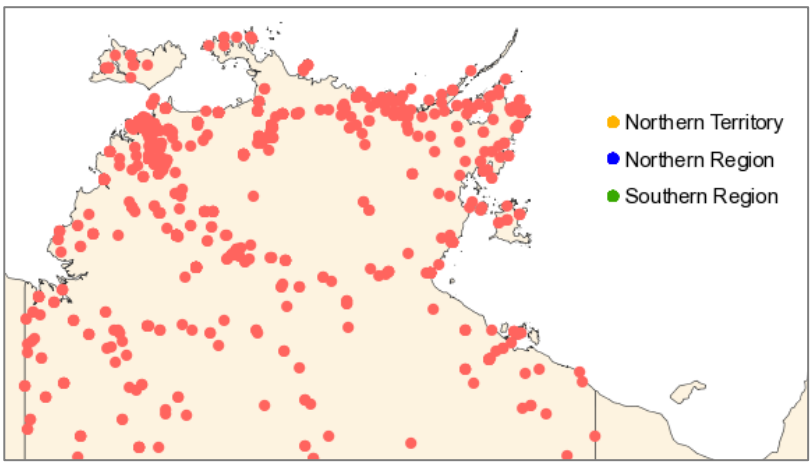


A compilation dataset has been created to display aquifers across the Northern Territory. The source includes data scales from 1:250,000 to 1:2,000,000.

View the Legend to see how this compilation dataset is displayed on the map screen.

5. Water Resource Report Index (*Technical Reports*)

- Reports with a specific location are displayed as a red dot.
- Reports that cover a larger region are located on the NE of the Northern Territory (in the Gulf of Carpentaria).

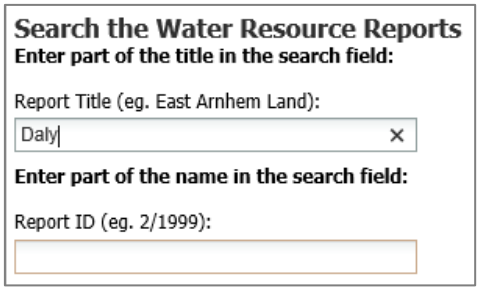


Make this the active layer.

Zoom to an area of interest and select a point on the map screen.

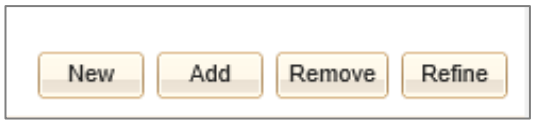
The reports in this general location are described and a web link to the Report is provided.

This layer is also searchable. Click on the Search panel in the table of contents.



Find titles that contain the text Daly

Enter: Daly

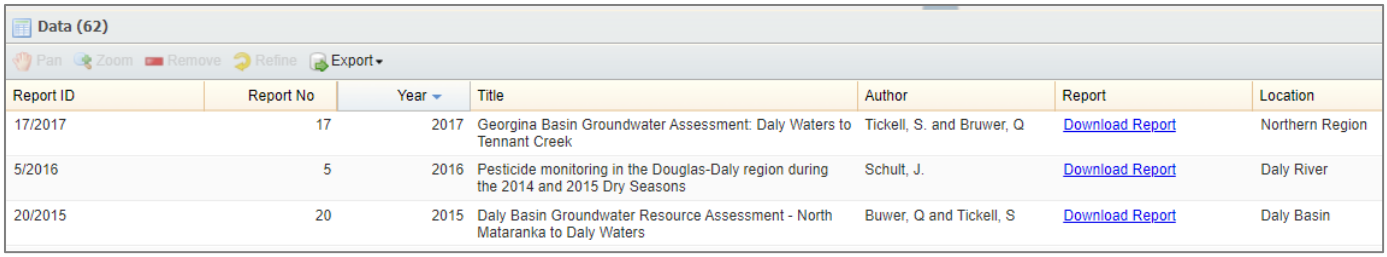


Filter the results: Click on **New** (at bottom of search panel)

62 results (as of December 2025)

Review data results in the Data Panel (located below the map screen).

Click on the report to download from the Northern Territory Library



Report ID	Report No	Year	Title	Author	Report	Location
17/2017	17	2017	Georgina Basin Groundwater Assessment: Daly Waters to Tennant Creek	Tickell, S. and Bruwer, Q	Download Report	Northern Region
5/2016	5	2016	Pesticide monitoring in the Douglas-Daly region during the 2014 and 2015 Dry Seasons	Schult, J.	Download Report	Daly River
20/2015	20	2015	Daly Basin Groundwater Resource Assessment - North Mataranka to Daly Waters	Buwer, Q and Tickell, S	Download Report	Daly Basin