

**Title**

NSW Combined Drought Indicator

**Abstract**

The NSW Combined Drought Indicator (CDI) is used by the Department of Primary Industries and Regional Development (DPIRD) to classify drought in New South Wales. It integrates weather, climate, soil, and land-use datasets into a single framework to help decision making. The CDI combines meteorological, hydrological and agronomic definitions of drought using indicators for rainfall (RI), soil water (SWI), and plant growth (PGI). From these, a fourth index, the Drought Direction Index (DDI), is developed. Used together, these indices classify the five categories of drought. By using multiple indicators, the CDI provides an overall indication of drought conditions in NSW. The CDI is a long-term drought indicator which tracks events that are at least 9-12 months in duration. It is not overly sensitive to short term climatic events and for this reason can lag field conditions. For more information on the CDI and its underlying indicators, see [https://www.dpi.nsw.gov.au/climate\\_applications/interactive-drought-map/Learn-more/understanding-the-cdi-phases](https://www.dpi.nsw.gov.au/climate_applications/interactive-drought-map/Learn-more/understanding-the-cdi-phases)

CDI online interactive map [https://www.dpi.nsw.gov.au/climate\\_applications/interactive-drought-map](https://www.dpi.nsw.gov.au/climate_applications/interactive-drought-map)

DPIRD's interactive CDI map provides free access to current and historical drought information at the NSW parish level (~10-20 farms), while the underlying monitoring occurs at 1 square kilometre resolution (data provided by ANUClimate). The interactive map is updated daily and displays the latest (4 days lag) CDI and drought indicator values for NSW. Time series CDI and indicator data for up to 5 years before present for a particular location can be obtained by using the location search bar or by clicking on the LLS, LGA, then Parish of interest. Time series can be downloaded as figure files (.jpg). CDI data cannot be downloaded directly from the interactive map. For access to the data that is displayed on the map, please visit the Seasonal Conditions Information Portal (SCIP) <https://edis.spaceport.intersect.org.au/>

The Seasonal Conditions Information Portal provides access to monthly snapshots of CDI data in several forms: Monthly CDI and indicator GIS .zips containing .shp, .shx, .dbf, and .prj (2020 January to present), Monthly CDI and indicator .csv files (2020 January to present), Monthly LGA percentages in drought .csv files (2016 January to present), Weekly updating high-quality parish-level time series figures (.jpg) (2 years before present to present), and Extended parish time series by decade (1970 - 2020).

The NSW State Seasonal Update [https://www.dpi.nsw.gov.au/climate\\_applications/state-seasonal-update](https://www.dpi.nsw.gov.au/climate_applications/state-seasonal-update) contains a verified version of CDI information released as monthly report and accompanying text. Includes: statewide overviews of monthly indicators, including the CDI, rainfall, temperature, remotely-sensed vegetation and water availability Regional (Local Land Service) breakdowns of seasonal conditions Climate driver updates Seasonal forecasts of rainfall, temperature, and drought.

NSW Drought in a Changing Climate Report: The NSW-CDI has also been utilised to assesses the longer term risk of future drought using CMIP6 climate projections to drive the EDIS system. A report summarising the project and its results are available here <https://www.dpi.nsw.gov.au/dpi/climate/seasonal-conditions-and-drought/key-research/drought-under-climate-change>.

Additional data available by request by contacting [seasonal.conditions@dpird.nsw.gov.au](mailto:seasonal.conditions@dpird.nsw.gov.au)

**Resource locator**[Interactive Drought Map](#)

Name: Interactive Drought Map

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Interactive Combined Drought Indicator map and timeseries

Function: download

[Seasonal Conditions Information Portal](#)

Name: Seasonal Conditions Information Portal

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Figures and information generated using the NSW DPI Enhanced Drought Information System II (EDIS II)

Function: download

Data Quality Statement

Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

CDI Data Quality Statement

Function: download

**Unique resource identifier**

Code a684f5a1-e073-4406-b7ba-466d31dce1f8

**Presentation form** Map digital

**Dataset language** English

**Metadata standard**

Name ISO 19115

Edition 2016

**Dataset URI** <https://datasets.seed.nsw.gov.au/dataset/a684f5a1-e073-4406-b7ba-466d31dce1f8>

**Purpose** The Enhanced Drought Information System (EDIS) and Combined Drought Indicator (CDI) were developed by the Department in 2016 to monitor drought to improve the awareness, monitoring and forecasting of seasonal conditions across NSW. Since 2018, EDIS has been used to monitor seasonal conditions, including the major drought event from 2017-2019, and supplying regional level information for many stakeholders.

**Status** On going

**Spatial representation**

Type vector

**Spatial reference system**

Code identifying the spatial reference system 4283

**Additional information source** The CDI is one source of information that informs policy and Government responses to changing seasonal conditions, including drought. EDIS is a trademark owned by the NSW Department of Primary Industries and Regional Development. Copyright in EDIS and CDI vests in the State of New South Wales through the Department of Industry, Skills and Regional Development, 2016. Any use of EDIS, CDI or any related material must be underwritten licence on terms approved by the NSW Department of Primary Industries and Regional Development. Administration and commercial fees may apply. For more information contact [seasonal.conditions@dpiird.nsw.gov.au](mailto:seasonal.conditions@dpiird.nsw.gov.au)

**Topic category**

<b>Keyword set</b>	
keyword value	AGRICULTURE CLIMATE-AND-WEATHER-Drought CLIMATE-AND-WEATHER-Rainfall HAZARDS-Drought
<b>Originating controlled vocabulary</b>	
Title	ANZLIC Search Words
Reference date	2008-05-16
<b>Geographic location</b>	
West bounding longitude	140.9
East bounding longitude	153.7
North bounding latitude	-37.6
South bounding latitude	-28.1
<b>Vertical extent information</b>	
Minimum value	-100
Maximum value	2228
<b>Coordinate reference system</b>	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
<b>Temporal extent</b>	
Begin position	1970-01-01
End position	N/A
<b>Dataset reference date</b>	
<b>Resource maintenance</b>	
Maintenance and update frequency	Daily
<b>Contact info</b>	
Contact position	Data Broker
Organisation name	Department of Primary Industries and Regional Development (DPIRD)
Responsible party role	pointOfContact
<b>Lineage</b>	<p>The Enhanced Drought Information System™ (EDIS) is an automated computing process that takes in climate observations and remote sensing data from a range of sources. The primary climate data source for EDIS is the Bureau's national climate station network which feeds the production of regular 1km<sup>2</sup> climate data across Australia. The 1km<sup>2</sup> data is ANUClimate, developed by the Australian National University. The climate data for NSW is processed through the DPI AgriMod crop-climate soil water balance model and used to calculate meteorologic, hydrologic, and agronomic drought indices for the state.</p>

Limitations on public access

## Responsible party

Contact position	Data Broker
Organisation name	Department of Primary Industries and Regional Development (DPIRD)
Responsible party role	pointOfContact

## Metadata point of contact

Contact position	Data Broker
Organisation name	Department of Primary Industries and Regional Development (DPIRD)
Responsible party role	pointOfContact

**Metadata date** 2025-03-18T03:14:28.897964

**Metadata language**