

Title	Water Modelling-Modelled Data-Annual Permitted Take (APT)-Castlereagh
Alternative title(s)	APT
Abstract	<p>Annual permitted take (APT) is a critical component of sustainable resource management, balancing the need for water resource utilisation with the preservation of ecosystems. It is a crucial mechanism for ensuring the long-term annual sustainable diversion limits (SDLs) set under the Murray-Darling Basin Plan are not exceeded, and that enough water is available for the environment. APT is the maximum amount of water permitted to be taken for consumptive purposes each year, and has been enforced since July 2019</p> <p>A method for determining APT is part of each water resource plans (WRPs) developed by the Basin states under the Commonwealth Water Act 2007. When the method is applied over the Basin Plan reference period (1895–2009), the annual APT must be equal to or less than SDL.</p> <p>An APT model is a major component of the APT calculation method. It is used to calculate the APT that would be expected in a year, given that year’s water availability and climatic conditions. APT is calculated at the end of each year and compared to actual take in that year, with the difference added to a public register of take. SDL compliance is tracked using the cumulative difference (from water year 2019–20).</p> <p>APT models are configured using estimates of the river management and development (public and private infrastructure) conditions in a river system across the water resource plan period. These estimates include:</p> <ul style="list-style-type: none"> <li>• irrigated crop area and planting decisions</li> <li>• water entitlement holders’ distribution and use patterns</li> <li>• how storages are operated to supply water for consumption and the environment.</li> </ul>
Resource locator	
<a href="#">Data Quality Statement</a>	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for Water Modelling-Modelled Data-Annual Permitted Take (APT)-Belubula</p> <p>Function: download</p>
<a href="#">420001_Castlereagh@Gilgandra</a>	<p>Name: 420001_Castlereagh@Gilgandra</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>The version of the model used for the Current Conditions scenario as at 26/07/2023 and covers period from 01/07/1895 to 30/06/2021. From the latest Castlereagh Source model, using the Input.Instrumental.Historic data input set to run for the Current Conditions scenario. Model is run using Source software version 5.0.3.11176 from 01/01/1889. Model outputs are not comparable between different scenarios for different models.</p> <p>Function: download</p>
<a href="#">420005_Castlereagh@Coonamble</a>	<p>Name: 420005_Castlereagh@Coonamble</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>The version of the model used for the Current Conditions scenario as at 26/07/2023 and covers period from 01/07/1895 to 30/06/2021. From</p>

the latest Castlereagh Source model, using the Input.Instrumental.Historic data input set to run for the Current Conditions scenario. Model is run using Source software version 5.0.3.11176 from 01/01/1889. Model outputs are not comparable between different scenarios for different models.

Function: download

[Map View for data download](#)

Name: Map View for data download

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

Description:

All the gauges are shown in this map (ESRI Rest Map Service Format), and the data can be downloaded by clicking each gauge in the map.

Function: download

## Unique resource identifier

Code a9fbf575-eade-4273-81e2-b59b9c96f9a0

Presentation form Document digital

Edition 1.0

Dataset language English

## Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/a9fbf575-eade-4273-81e2-b59b9c96f9a0>

**Purpose**  
The data set provided contains flows at several gauges in each river system, as simulated by the annually extended APT model. Notwithstanding the model's inherent limitations, these are a fair representation of those we would expect under current conditions development and operation rules. They can be compared with flows simulated by other key scenario models, such as long-term average annual extraction limit (LTAAEL) model or without development (WOD) model.

Status Completed

Spatial representation type None

## Spatial reference system

Code identifying the spatial reference system 4283

## Topic category

<b>Keyword set</b>	
keyword value	WATER WATER-Surface
<b>Originating controlled vocabulary</b>	
Title	ANZLIC Search Words
Reference date	2008-05-16
<b>Geographic location</b>	
West bounding longitude	147.18
East bounding longitude	149.49
North bounding latitude	-31.4
South bounding latitude	-30.69
NSW Place Name	Castlereagh Valley
<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	1895-01-01
End position	N/A
<b>Dataset reference date</b>	
<b>Resource maintenance</b>	
Maintenance and update frequency	Annually
<b>Contact info</b>	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
Web address	<a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a>
Responsible party role	pointOfContact
<b>Limitations on public access</b>	

## Responsible party

Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
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Responsible party role	pointOfContact

## Metadata point of contact

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Responsible party role	pointOfContact

**Metadata date** 2024-08-20T22:22:16.490526

**Metadata language**