## Water Modelling-Modelled Data-Annual Permitted Take (APT)-Title Castlereagh Alternative title(s) APT **Abstract** 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 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. 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). 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: • irrigated crop area and planting decisions • water entitlement holders' distribution and use patterns • how storages are operated to supply water for consumption and the environment. Resource locator Name: Data Quality Statement **Data Quality Statement** Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Water Modelling-Modelled Data-Annual Permitted Take (APT)-Belubula Function: download 420001\_Castlereagh@Gilgandra Name: 420001 Castlereagh@Gilgandra Protocol: WWW:DOWNLOAD-1.0-http--download Description: 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. Function: download Name: 420005 Castlereagh@Coonamble 420005\_Castlereagh@Coonamble Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

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	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-httpdownload
	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	

Keyword set		
keyword value	WATER	
	WATER-Surface	
Originating controlled vocabulary		
Title	ANZLIC Search Words	
Reference date	2008-05-16	
Geographic location		
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	
Vertical extent information		
Minimum value	-100	
Maximum value	2228	
Coordinate reference system		
Authority code	urn:ogc:def:cs:EPSG::	
Code identifying the coordinate reference system	5711	
Temporal extent		
Begin position	1895-01-01	
End position	N/A	
Dataset reference date		
Resource maintenance		
Maintenance and update frequency	Annually	
Contact info		
Contact position	Data Broker	
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water	
Telephone number	131555	
Email address	data.broker@environment.nsw.gov.au	
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew	
Responsible party role	pointOfContact	
Limitations on public access		

Responsible party

Contact position Data Broker

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

Metadata language