Title	Water Modelling-Modelled Data-Annual Permitted Take (APT)-Murrumbidgee
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

Data Quality Statement	Name: 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
410001 Murrumbidgee@Wagga	Name: 410001 Murrumbidgee@Wagga
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
410004 Murrumbidgee@Gundagai	Name: 410004 Murrumbidgee@Gundagai
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
410005 Murrumbidgee@Narranderra	Name: 410005 Murrumbidgee@Narranderra

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410006 Tumut@Tumut

Name: 410006 Tumut@Tumut

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410007 Yanco@Offtake

Name: 410007 Yanco@Offtake

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410008 Murrumbidgee@Burrinjuck

Name: 410008 Murrumbidgee@Burrinjuck

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410015 Yanco@Morundah

Name: 410015 Yanco@Morundah

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410016 Billabong@Jerilderie

Name: 410016 Billabong@Jerilderie

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

410017 Billabong@Puckawidgee

Name: 410017 Billabong@Puckawidgee

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

Description:

Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).

Function: download

[410018 Colombo@Morundah](#)	Name: 410018 Colombo@Morundah
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
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	Function: download
[410021 Murrumbidgee@Darlington Point](#)	Name: 410021 Murrumbidgee@Darlington Point
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
[410039 Tumut@Brungle](#)	Name: 410039 Tumut@Brungle
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
[410073 Tumut@Oddys Bridge](#)	Name: 410073 Tumut@Oddys Bridge
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
[410078 Murrumbidgee@Carrathool](#)	Name: 410078 Murrumbidgee@Carrathool
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
[410130 Murrumbidgee@Balranald Weir](#)	Name: 410130 Murrumbidgee@Balranald Weir
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
[410134 Billabong@Darlot](#)	Name: 410134 Billabong@Darlot
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual

	Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
410136 Murrumbidgee@Hay Weir	Name: 410136 Murrumbidgee@Hay Weir
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
410148 Forest Creek@Warriston Weir	Name: 410148 Forest Creek@Warriston Weir
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download
410169 Yanco@Yanco Bridge	Name: 410169 Yanco@Yanco Bridge
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Simulated streamflow from the 2021/22 run of the Murrumbidgee Annual Permitted Take model. Model system file BIDGP103.iqq revsion 326 (run 15 June 2023).
	Function: download

Unique resource identifier	
Code	bc667271-f206-4130-85d8-5a4da0a01f15

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/bc667271-f206-4130-85d8-5a4da0a01f15

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	143.2
East bounding longitude	149.58
North bounding latitude	-36.55
South bounding latitude	-33.61
NSW Place Name	Murrumbidgee 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

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Metadata point of contact

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Responsible party role	pointOfContact

Metadata date	2024-06-19T05:37:05.939014

Metadata language