Title Water Modelling-Modelled Data-Long-term average annual extraction limit (LTAAEL)-Paterson

Alternative title(s)

LTAAEL

Abstract

Long-term average annual extraction limit (LTAAEL) is a regulatory limit set on annual water extractions from a river system. It ensures that average extractions over the long term are sustainable, and thus help prevent environmental degradation.

In NSW these limits are defined by water sharing plans (WSPs). Every WSP outlines how the water in a river system will be shared over a 10-year period. They also define:

- how LTAAEL compliance is to be assessed for each river system
- what conditions will trigger noncompliance action
- what compliance action can be taken.

The Natural Resources Commission regularly reviews all WSPs to ensure extractions from each river system are within the limits set, and the Murray-Darling Basin Authority reviews sustainable diversion limit (SDL) compliance each year.

To assess compliance, we model LTAAEL using a model that has been configured to represent the development and management rules defined by a system WSP (this refers to as LTAAEL model). We then compare this modelled LTAAEL with the modelled under current conditions long-term average annual extractions (LTAAEs) (which are usually those modelled by the annual permitted take, or APT, model). Although, the LTAAEL includes multiple types of water use, the compliance assessment is based on the total. We do this annually using the best available models, and the outcomes are published on the DPE website.

Where river system's LTAAE exceed LTAAEL, the system is considered noncompliant. If the noncompliance trigger conditions in the WSP are met, noncompliance action is taken.

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

Resource locator

<u>Data Quality Statement</u> Name: Data Quality Statement

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

Description:

Data quality statement for Water Modelling-Modelled Data-Long-term average annual extraction limit (LTAAEL)

Function: download

210021_Paterson@DS Lostock Dam Name: 210021 Paterson@DS Lostock Dam

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

Description:

The version of WSP scenario model at 27/02/2023 (combined Hunter/Paterson/Williams model) run on software (IQQMv7.91.6). Data set

covers period from 01/07/1895 to 30/06/2022.

Function: download

210022_Allyn@Halton Name: 210022_Allyn@Halton

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

	Description:
	The version of WSP scenario model at 27/02/2023 (combined Hunter/Paterson/Williams model) run on software (IQQMv7.91.6). Data set covers period from 01/07/1895 to 30/06/2022.
	Function: download
210079_Paterson@Gostwyck	Name: 210079_Paterson@Gostwyck
	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	The version of WSP scenario model at 27/02/2023 (combined Hunter/Paterson/Williams model) run on software (IQQMv7.91.6). Data set covers period from 01/07/1895 to 30/06/2022.
	Function: download
210143_Allyn@Flying Fox Lane	Name: 210143_Allyn@Flying Fox Lane
	Protocol: WWW:DOWNLOAD-1.0-httpdownload
	Description:
	The version of WSP scenario model at 27/02/2023 (combined Hunter/Paterson/Williams model) run on software (IQQMv7.91.6). Data set covers period from 01/07/1895 to 30/06/2022.
	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
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Code	af0e6cb6-8507-4b97-8f34-2517bb82809c
Code Presentation form	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital
Code Presentation form Edition	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0
Code Presentation form Edition Dataset language	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0
Code Presentation form Edition Dataset language Metadata standard	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0 English
Code Presentation form Edition Dataset language Metadata standard Name	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0 English ISO 19115
Code Presentation form Edition Dataset language Metadata standard Name Edition	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0 English ISO 19115 2016 https://datasets.seed.nsw.gov.au/dataset/af0e6cb6-8507-4b97-8f34-
Code Presentation form Edition Dataset language Metadata standard Name Edition Dataset URI	af0e6cb6-8507-4b97-8f34-2517bb82809c Document digital 1.0 English ISO 19115 2016 https://datasets.seed.nsw.gov.au/dataset/af0e6cb6-8507-4b97-8f34-2517bb82809c The data set provided contains flows at several gauges in each river system, as simulated by the annually extended LTAAEL model. Notwithstanding the model's inherent limitations, these are a fair representation of those we would expect under WSP operation and development conditions. They can be compared with flows simulated by other key scenario models, such as annual permitted take (APT) model or

Spatial reference system

Code identifying the spatial reference system

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	150.22
East bounding longitude	151.73
North bounding latitude	-32.73
South bounding latitude	-31.48
NSW Place Name	Paterson
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 date 2024-08-20T22:20:12.721725

Metadata language