



*We acknowledge the First Nations peoples as the Traditional Owners and Custodians of the lands, waterways and skies of the Murray-Darling Basin. We respect their continuing connection to culture and Country, and we thank them for their knowledge and science and the values reflected in these data.*

## Flow-MER Lower Murray River salt and nutrient export – LOADS

<b>Dataset name</b>	Flow-MER Lower-Murray River salt and nutrient export (loads)		
<b>Dataset citation</b>	CEWH Flow-MER (2023) Flow-MER Lower Murray River salt and nutrient export (loads), Flow-MER Program. Commonwealth Environmental Water Holder, Australian Government Department of Climate Change, Energy, the Environment and Water. Sourced from <a href="https://data.gov.au/data/dataset/flow-mer-lower-murray-salt-and-nutrient-export">https://data.gov.au/data/dataset/flow-mer-lower-murray-salt-and-nutrient-export</a> on [date-sourced].		
<b>Description</b>	<p>Water quality parameters expressed as daily loads as the total export from the Murray-Darling Basin contained within all water sources (total combined natural flows plus managed environmental water). Data are collected to calibrate transport models by the Lower-Murray Selected Area for as part of the Commonwealth Environmental Water Holder's (CEWH) Flow-MER program.</p> <p>Total daily loads expressed in tonnes:</p> <ul style="list-style-type: none"> <li>• Salinity (tonnes of salt)</li> <li>• Phosphate (kilograms of phosphorus)</li> <li>• Particulate Organic Phosphorus (kilograms of phosphorus)</li> <li>• Ammonium (kilograms of nitrogen)</li> <li>• Particulate Organic Nitrogen (kilograms of nitrogen)</li> <li>• Dissolved Silica (kilograms of silicon)</li> <li>• Chlorophyll a (kilograms)</li> </ul> <p>The CEWH's Flow-MER program examines the contribution of Commonwealth environmental water to the environmental objectives of the Basin Plan 2012 (Basin Plan) and is assisting the CEWH to demonstrate environmental outcomes and adaptively manage the water holdings. Monitoring and evaluation is focused in seven Selected Areas: the Junction of the Warrego and Darling rivers, Gwydir river system, Lachlan river system, Murrumbidgee river system, Edward/Kolety-Wakool river system, Goulburn River and Lower Murray River.</p> <p>This Flow-MER data set includes and extends the long-term data collected at the same sites during the Long Term Intervention Monitoring (LTIM) project (2014-2019).</p>		
<b>Currency</b>	<b>Date from:</b> 1/7/2014 <b>Date to:</b> 30/6/2022		
<b>Spatial domain</b>	<b>Jurisdiction/Location:</b> Murray-Darling Basin <b>Geographic extent:</b> <div style="text-align: center;"> </div> <b>Coordinate system:</b> GDA1994, EPSG 4283		
<b>Dataset status</b>	<b>Progress:</b> Ongoing <b>Maintenance and update frequency:</b> Annually within the life of the Flow-MER project		
<b>Attributes</b>	<b>Attribute Name</b>	<b>Description</b>	<b>Data Type</b>
	samplePoint	The name of the location at which the measures were taken	text
	Description	Optional description of the SamplePoint	text
	Latitude	Decimal degrees	number
	Longitude	Decimal degrees	number
	sampleDate	Unique date-time stamp that is used to identify each data record	dateTime
	Salinity	tonnes/day	number

	Phosphate	kg P/day	number
	Particulate Organic Phosphorus	kg P/day	number
	Ammonium	kg N/day	number
	Particulate Organic Nitrogen	kg N/day	number
	Dissolved Silica	kg Si/day	number
	Chlorophyll a	kg/day	number
	comment	Optional comment to aid interpretation of each data record for the sampleDate time stamp.	text
Data quality	<p><b>Lineage:</b> Exported from the MDMS 22/08/2023</p> <p><b>Positional accuracy:</b> Locations accurate to 4 decimals but actual monitoring data collected at these locations can be up to 1km from the nominated point</p> <p><b>Attribute accuracy:</b> Direct export from the MDMS without further processing</p> <p><b>Logical consistency:</b> Sample point names are unique within the program as defined by the Lower-Murray Selected Area team</p> <p><b>Completeness:</b> Complete export from the MDMS</p>		
Access and License	<p><b>Published Data Landing Page:</b> <a href="https://data.gov.au/data/dataset/89f2c03e-d814-4b6a-9fa7-4e4ae09b7bf2">https://data.gov.au/data/dataset/89f2c03e-d814-4b6a-9fa7-4e4ae09b7bf2</a></p> <p><b>Distribution format:</b> CSV tabular data</p> <p><b>Access constraints:</b> Creative Commons license CC BY-SA 4.0 Attribution-ShareAlike 4.0 International). <a href="https://creativecommons.org/licenses/by-sa/4.0/">https://creativecommons.org/licenses/by-sa/4.0/</a> Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. redistribute the material in any medium or format must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.</p> <p><b>Copyright:</b> ©2023 Commonwealth of Australia, Flow-MER program</p>		
Contributors	<p>Flow-MER project Lower Murray River.</p> <p>Flow-MER acknowledges the First Nations peoples as the Traditional Owners and Custodians of the lands, waterways and skies of the Murray-Darling Basin. We thank them for their knowledge and science and respect their continuing connection to culture and Country and the values reflected in these data.</p>		
Custodian	Commonwealth Environmental Water Holder (CEWH), Department of Climate Change, Energy, the Environment and Water		
Contact	Commonwealth Environmental Water Holder (CEWH) cewomonitoring@dceew.gov.au		
Maintainer	Flow-MER Basin scale project Shane Brooks (Flow-MER data manager) <a href="https://brooks.eco/contact">https://brooks.eco/contact</a>		
Metadata information	<b>Metadata date:</b> 8/11/2023		