

# Hydrography

## Datasets

Including:  
*Hydrographic Lines*  
*Hydrographic Areas*  
*Hydrographic Points*



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# Hydrographic Model

The hydrographic model was designed to cater for users who need to display or map hydrographic elements, require a framework for recording detail information on the hydrography, or for incorporating in intelligent hydrographic systems. The model covers most natural and man-made features holding, allowing or restricting the flow of water for short or long periods. Some abstract information is included for analysis purposes.

## Hydrographic Model - Data Structure

### HYDROGRAPHIC AREA Dataset - Area Features

**Class: Hydarea** – Area features representing water storage or water flows more than 10m in one dimension. The area features in this dataset are:

- Sea
- Submerged Reef
- Tidal Zone
- Estuary
- Land
- Flat
- Floodplain
- Wetland
- Watercourse
- Rapid
- Artificial Watercourse
- Water Body
- Submerged Tree
- Dam

The bounding lines for these polygons with accuracy metadata are contained in the hydrographic line dataset. Lines bounding these polygons have limited classification into Tidal lines, Water lines or Hydro lines. Large area features ie land (the mainland) and sea are divided into smaller manageable areas. The table below indicates the attributes associated with the **Hydrographic Area** dataset.

<i>Field name</i>	<i>Field Type</i>	<i>Description</i>
HYDAREA_ID	INT32	Persistent ID
HYDARTY1	CHAR(60)	Hydro Area Type
HYDARTY2	CHAR(60)	Hydro Area Sub Type
HYD_CLASS	CHAR(60)	Hydrographic Watercourse Classification
PERENNIAL	CHAR(60)	Permanency of Water in an Area
EXISTING	CHAR(60)	Features state of Existence
WC_BED_TY	CHAR(60)	Type of Material in the bed of a Watercourse
RELGRND	CHAR(60)	Relation to Ground of an Artificial Watercourse
INUSE	CHAR(60)	Whether the instance is in use or not
ISLANDTYPE	CHAR(60)	Island Type
ELEVATION	DECIMAL(15,4)	Elevation above Mean Sea Level
COMP_AREA	DECIMAL(16,3)	Computed Area
PRI_NAME	CHAR(60)	Features Primary Name
SEC_NAME	CHAR(60)	Features Secondary Name
TER_NAME	CHAR(60)	Features Tertiary Name
UFI	CHAR(12)	Unique Feature Identifier
FMP	CHAR(12)	Feature Metadata Pointer
CREATED_ON	CHAR(19)	Created on Date

### **HYDROGRAPHIC LINES Dataset - Linear Features**

**Class: Hydline** – A line that represents a flow or restriction of water or a boundary of an area in hydarea. The line features in this dataset are:

- Tidal line
- Water Line
- Watercourse
- Artificial Watercourse
- Hydrographic Connector
- Hydrographic Closure
- Waterfall
- Dam
- Hydrographic Line

Tidal lines, water lines, hydrographic lines and hydrographic closures are features bounding area features. Some other features can form the boundary of polygons, such as single line watercourse bounding the edge of a floodplain or wetland.

The artificial features of hydrographic connectors and closures have been included for analysis purposes and to be able to complete some boundaries eg Mean High Water Mark. Some line types are combined where the features represented are coincident eg dam and closure. The table below indicates the attributes associated with the **Hydrographic Line** dataset.

<i>Field name</i>	<i>Field Type</i>	<i>Description</i>
HYDLINE_ID	INT32	Persistent ID
HYDLNTY1	CHAR(60)	Hydro Line Type
HYDLNTY2	CHAR(60)	Hydro Line Sub Type
NAME	CHAR(60)	Features Name
NOM_REG_NO	CHAR(7)	Nomenclature Register Number
MHWM_TYPE	CHAR(60)	Mean High Water Mark Type
HYD_CLASS	CHAR(60)	Hydrographic Watercourse Classification
EXISTING	CHAR(60)	Features state of Existence
RELGRND	CHAR(60)	Relation to Ground of an Artificial Watercourse
INUSE	CHAR(60)	Whether the instance is in use or not
HYDCNTR_TY	CHAR(60)	Hydrographic Connector Type
ADJ_FEAT_1	CHAR(60)	The area feature adjacent to this line
ADJ_FEAT_2	CHAR(60)	The area feature adjacent to this line
HEIGHT	DECIMAL(15,4)	Height
COMP_LEN	DECIMAL(8,1)	Computed Length
UFI	CHAR(12)	Unique Feature Identifier
FMP	CHAR(12)	Feature Metadata Pointer
CREATED_ON	CHAR(19)	Created on Date

A derived contiguous coastline layer can be obtained from the Hydrographic Line dataset by the following query. Note that the syntax may need to be modified to suit the specific application:

```
HYDLNTY1 = 'Tidal Line' AND HYDLNTY2 = 'MHWM' OR HYDLNTY1 = 'Tidal Line'  
AND HYDLNTY2 = 'MHWM & MLWM' OR HYDLNTY1 = 'Hydrographic Closure'  
AND ADJ_FEAT_1 = 'Estuary' OR HYDLNTY1 = 'Dam and closure' AND ADJ_FEAT_1  
= 'Estuary'
```

### **HYDROGRAPHIC POINT Dataset – Point Features**

**CLASS: Hydpntty** – Hydrographic features represented as a point. The point features in this dataset are:

- Rock
- Waterfall 0D
- Rapid 0D
- Spring
- Tank
- Junction
- Wreck
- Submerged Rock
- Surge Tank

The table below indicates the attributes associated with the **Hydrographic Point** dataset.

<i>Field name</i>	<i>Field Type</i>	<i>Description</i>
HYDPNT_ID	INT32	Persistent ID
HYDPNTTY	CHAR(60)	Hydro Point Type
DAM_TYPE	CHAR(60)	Dam Type
EXISTING	CHAR(60)	Features state of Existence
INUSE	CHAR(60)	Whether the instance is in use or not
HEIGHT	DECIMAL(15,4)	Height
ISLANDTYPE	CHAR(60)	Island Type
PRI_NAME	CHAR(60)	Features Primary Name
SEC_NAME	CHAR(60)	Features Secondary Name
TER_NAME	CHAR(60)	Features Tertiary Name
UFI	CHAR(12)	Unique Feature Identifier
FMP	CHAR(12)	Feature Metadata Pointer
CREATED_ON	CHAR(19)	Created on Date

For both Hydrographic Areas and Points primary, secondary and tertiary names have been added to accommodate the individual and group naming of islands and rocks.

## Metadata

### Hydrographic Area

<http://www.thelist.tas.gov.au/asdd/ANZTA0005000137.html>

### Hydrographic Line

<http://www.thelist.tas.gov.au/asdd/ANZTA0005000138.html>

### Hydrographic Point

<http://www.thelist.tas.gov.au/asdd/ANZTA0005000139.html>

## Links



<http://www.thelist.tas.gov.au>

## Data Pricing – Standard Commercial Rate

Base Data Fee (Standard State Supply)	\$ 750.00
Administration & Licensing	\$ 100.00
GST	\$ 85.00
<b>Total</b>	<b>\$ 965.00</b>

Additional fees may apply for supply of data in non supported formats

Extracts of portions of the Hydrographic data set can be supplied to client specifications and will be charged at \$0.02c per km<sup>2</sup> rate (POA) with a minimum charge of \$100.00 plus GST. Additional administration and licensing fees may not apply for partial extracts.

## Contact

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