

Statewide wetland geospatial inventory update

Factsheet 2: Method to classify wetland system

Purpose

This Factsheet describes the method used to classify wetland system.

Intent of the classification

The new Victorian Wetland Classification Framework adopts four categories of wetland system:

Lacustrine	Non-tidal wetland with less than 30% cover of emergent aquatic vegetation
Palustrine	Non-tidal wetland with greater than 30% cover of emergent aquatic vegetation
Estuarine	Semi-enclosed tidal wetlands
Marine	Tidal wetlands in bays

Method to distinguish between tidal and non-tidal wetlands

The first step in the classification of wetland system involved classifying each wetland as either tidal or non-tidal. The method to determine if a wetland had a tidal water regime involved spatial overlay analysis of Wetland 2013 and the three datasets:

Dataset name	Dataset description / link
Victorian Saltmarsh EVC	Mapping of saltmarsh vegetation communities across Victoria, completed in March 2010 (unpublished)
Estuaries	Mapping of Victoria's estuaries by Deakin University for DSE (unpublished)
Outline of Victoria	Polygon version of outline of Victoria's landmass at 1:25:000 scale http://www.giconnections.vic.gov.au/content/vicgdd/record/ANZVI0803002865.htm

The following process was developed to identify tidal wetlands:

1. Assign wetlands that have more than 70% of their area outside the Victorian landmass as tidal
2. Assign wetlands that have less than 70% of their area outside the Victorian landmass, but more than 70% of their area intersecting Victorian Saltmarsh EVC mapping as tidal
3. Assign wetlands that have less than 70% of their area outside the Victorian landmass, but more than 70% of their area intersecting estuaries as tidal

All other wetlands that did not meet these criteria were classified as non-tidal.

Method to distinguish between palustrine and lacustrine wetlands

Having classified wetlands as either tidal or non-tidal, the non-tidal wetlands were classified into one of three possible classes, based upon the dominant vegetation classification (refer Factsheet 6) and/or the Corrick class assigned in Wetland 1994 and any subsequent refinement. The rules below were used for this classification:

Wetland system classification	Confidence of classification	Basis for classification
Lacustrine	High	<ul style="list-style-type: none"> Corrick class is either 'open permanent freshwater' or 'permanent saline', and dominant vegetation type is 'no emergent vegetation'
	Moderate	<ul style="list-style-type: none"> Corrick class is either 'open permanent freshwater' or 'permanent saline', but dominant vegetation type is either 'no dominant class' or 'unknown'
	Low	<ul style="list-style-type: none"> Dominant vegetation type is 'no emergent vegetation', but Corrick class is not 'open permanent freshwater' or 'permanent saline', OR Corrick class is either 'open permanent freshwater' or 'permanent saline', but dominant vegetation type has emergent vegetation (i.e. 'Forest/Woodland', 'Shrub', 'Sedge/grass/forb', 'Moss/heath', 'Mangrove', 'Sea grass' or 'Coastal saltmarsh')
Palustrine	High	<ul style="list-style-type: none"> Corrick class is not 'open permanent freshwater' or 'permanent saline', and dominant vegetation type has emergent vegetation (i.e. 'Forest/Woodland', 'Shrub', 'Sedge/grass/forb', 'Moss/heath', 'Mangrove', 'Sea grass' or 'Coastal saltmarsh'), OR Wetland sourced from 'ALPS' dataset
	Moderate	<ul style="list-style-type: none"> Wetland sourced from 'GB_SPR' dataset
	Low	<ul style="list-style-type: none"> No low confidence palustrine wetlands
Palustrine or Lacustrine (unknown specifics)	Low	<ul style="list-style-type: none"> Dominant vegetation type is either 'no dominant class' or 'unknown', and no Corrick class is assigned Dominant vegetation type is either 'no dominant class' or 'unknown', and no Corrick class is not 'open permanent freshwater' or 'permanent saline'

Method to distinguish between estuarine and marine wetlands

Having classified wetlands as either tidal or non-tidal, the tidal wetlands were classified into one of two possible classes, marine or estuarine. Based on our understanding of the relative proportion of freshwater inflows to each tidal wetland, the following tidal wetlands were classified as being 'marine' as freshwater inflows are expected to play a minor part in their ecology:

- Corner Inlet
- Shallow Inlet
- Anderson Inlet
- Western Port Bay, including Quail Island, Rhyll Inlet, The Duck Splash
- wetlands within Port Phillip Bay, including Mud Islands.

All other tidal wetlands were classified as estuarine.

All tidal wetlands (i.e. marine and estuarine) were described as having a high level of confidence in their wetland system classification.

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