



Wetland Mapping and Classification Methodology

Overall Framework

A Method to Provide Baseline Mapping and Classification for Wetlands in Queensland

VERSION 1.2

Attachment 7g

Channel Identification

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1. The Purpose

In many cases satellite imagery may pick up part of a river but not the whole length (due to tree cover etc.). To ensure that these water body polygons are not falsely attributed as palustrine or lacustrine, the following process is undertaken.

2. The Process

The Geodata drainage layer is used to determine whether the satellite imagery derived water bodies are riverine. In most areas (except for wide rivers and near river mouths) Geodata represents rivers, creeks and streams with a single line rather than showing both banks. Due to scale differences etc., the satellite imagery derived water bodies that represent riverine systems may not line up exactly with the Geodata drainage layer.

To overcome this difficulty and to provide an initial identification of the location of Riverine wetlands through the automated classification algorithms, the river or creek channel from the Geodata drainage map is buffered. The default buffering is carried out using 1:100,000 drainage data (where available) with a 50m buffer. However, when using 1:100,000 drainage data, with 1:50,000 (or more difficult 1:25,000) Geodata, in many cases the water bodies will not be aligned with the drainage. Consequently if 1:25,000 Geodata are used for water body mapping then the 1:25,000 drainage data should be used and buffered by 25m. When using 1:50,000 Geodata for water body mapping use 1:100,000 drainage data if available and buffer by 50m, but if there is no 1:100,000 drainage data available then use 1:50,000 drainage data with a 25m buffer if a double lined stream represents the river then both lines are buffered.

The standardised buffering procedure will inevitably lead to the misclassification of non-riverine features as riverine and vice versa. Care should be taken during all manual evaluation stages of the data development to ensure the rigorous application of the riverine definition across a study area regardless of the outcome of the automated classification procedure.

Due to the issue of mapping scale (where the minimum width of mapped regional ecosystem features is 35m), the mapping process incorporates fringing palustrine vegetation into the riverine system where the riverine system is dominant.

For further technical information please refer to the Technical Specifications and Data Recording Standards (Decision Rule 11 in the main text of the Method).