# Metadata Standard for the Moreton Bay Knowledge Hub

This document outlines the procedures and categories used for the creation of the Moreton Bay Knowledge Hub metadata library. This metadata uses an adapted version of the framework outlined in ASTM E2468 - Standard Practice for Metadata to Support Archived Data Management Systems.

## Changes to the Metadata Framework

1. Identification Information

This section has been modified slightly from the outline in ASTM E2468, the changes are as follows:

* Section 1.4 Status was not included. Status is a measure of the completeness of the data, i.e. “Complete”, “In work”, “planned”.
* Section 1.12 Security Information was not included, this would detail and restrictions imposed on the data based on national security or privacy concerns.
* Section 1.13 Native Data Set Environment was replaced with section 1.13 Data set Size at Reception. Native data set environment would detail the environment that the data producers used, details such as name of the software and it’s version, operating system etc.
* Section 1.14 Cross Reference was superseded with section 1.14 Data Category. Cross Reference would include links to other relevant data sets.

1. Data Quality Information

This section has been completely removed from the metadata framework used in this metadata library. This section of the framework outlined in ASTM E2468 focused on providing qualities such as the attribute and positional accuracy of the data, as well as aspects of the data such as the consistency and verification methods.

#TODO: WHY REMOVED

1. Spatial Data Organisation Information

This section remains in full as outlined in ASTM E2468 and that in this metadata library section 3.3.1 Point and Vector Object Information is used instead of 3.3.2 Raster Object Information. This substitution is acceptable as outlined in ASTM E2468.

1. Spatial Reference Information

This section remains in full as outlined in ASTM E2468. For section 4.1 Horizontal Coordinate System Definition, this metadata library utilises section 4.1.1 Geographic.

1. Entity and Attribute Information

This section remains in full as outlined in ASTM E2468.

1. Distribution Information

This section has been modified slightly from the outline in ASTM E2468, the changes are as follows:

* Section 6.3 Distribution Liability is not included in this metadata library.
* Section 6.5 Custom Order Process is not included in this metadata library. For custom data orders the data custodian should be contacted directly.
* Section 6.7 Available Time Period is replaced with Section 6.7 Data Accessed

1. Metadata Reference Information

This section has been modified slightly from the outline in ASTM E2468, the changes are as follows:

* Sections 7.2 and 7.3 are not included in this metadata library because this metadata library is not an ongoing resource.
* Section 7.8, 7.9, and 7.10 are not included in this metadata library.
* Section 7.11 has an appended entry – 7.11.1 Available in Platform. This metadata indicates if the data is included on the Moreton Bay Knowledge Hub.

## Metadata Framework Implementation

The full metadata framework used in this metadata library (with modifications included) is outlined as follows. Many of the descriptions for the individual subsections are adapted excerpts directly from ASTM E2468.

1. Identification Information

This section of the metadata composes a set of basic information about the data set.

* 1. Citation

Information used to be to reference the data set.

* 1. Description

A characterisation of the data set including its intended use.

* 1. Time Period of Content

Time period for the given data set.

* 1. Spatial Domain

The geographic domain of the data set – elucidated latitude and longitude coordinates.

* 1. Keywords

Words or phrases pertaining to the data set.

* 1. Access Constrains

Any restrictions or legal prerequisites for accessing the data set.

* 1. Use Constraints

Any restrictions of legal prerequisites for using the data set.

* 1. Point of Contact

Contact information for a person or organisation that is knowledgeable about the data set.

* 1. Browse Graphic

A link to a piece of visual media the provides a visual overview of the data set.

* 1. Data Set Credit

Recognition of those who contributed to the data set.

* 1. Data set Size at Reception

Download size of the data set.

* 1. Data Category

Custom category to assign the metadata to a specific category (i.e. “flora”, “fauna”, “anthropogenic”).

1. Spatial Data Organisation Information

This section features metadata about how spatial data is represented in the data set.

* 1. Indirect Spatial Reference

General term which describes the data location (i.e. “Moreton Bay”, “Peel Island”).

* 1. Direct Spatial Reference

The type of object used to represent the spaces in the data set (i.e. (“point”, “vector”, “shapefile”).

* 1. Point and Vector Object Information

The types and numbers of spatial objects in the data set.

1. Spatial Reference Information

This section contains information about how geographic and altitudinal measurements are recorded.

* 1. Horizontal Coordinate System Definition – Geographic

Units of measure used for latitude and longitude values.

* 1. Vertical Coordinate System Definition

Units of measure and frame of reference (i.e. metres from sea level).

1. Entity and Attribute Information

This section contains information about the individual attributes (columns) within the data set, and their domain and datatype (i.e. “BOOLEAN”, “BIT”, “STRING”, “NUMERICAL”).

* 1. Detailed Description

A description of the domain and datatype of each attribute in the data set.

* 1. Overview Description

A description that is a subset of the attributes within the data set, one that is sufficient enough to provide the elements required for a user to understand the information content.

1. Distribution Information

This section contains information about the distributor of the data and methods by which the data set can be accessed.

* 1. Distributor

The organisation or individual from whom the data set can be obtained.

* 1. Resource Description

An identifier by which the distributor knows the data set.

* 1. Standard Order Process

The common way in which the data set is obtained from the distributor – including and fee information.

* 1. Technical Prerequisites

A description of the technical specifications required to open/use the data once obtained.

1. Metadata Reference Information
   1. Metadata Date

The date at which the metadata for the data set was created.

* 1. Metadata Standard Name

The metadata standard name for the metadata for this data set.

* 1. Metadata Standard Version

The version of the metadata standard that was used for the metadata for this data set.

* 1. Metadata Time Conversion

Method used to convey time conversion in the metadata entry. Used if time of day information is included in the metadata for a data set.

* 1. Metadata Extensions
     1. Available in Platform

Is the given data set available on the Moreton Bay Knowledge Hub platform.

* + 1. External Metadata Reference

A link to metadata that already exists for this data set.