



DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

BioNet NSW Landscapes Web Service data standard

BioNet Web Services Version 1.1



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1. Introduction

The BioNet NSW Landscapes Web Service provides an open application programming interface (API) to enable IT application developers to integrate Mitchell Landscapes data held in the BioNet data repository with software applications. The scope of applications for this open data initiative spans the full breadth of potential uses, from mobile apps to organisational decision-management business systems.

The web service does not replace the existing Vegetation Classification User Interface, as it is intended for use by software applications, not as a user interface. To this end, not all data held in the Vegetation Classification database are made available via the web service. Legacy data will not be carried via the web service, but will remain available via the existing web-based Vegetation Classification user interface.

This document provides detailed information on the Mitchell Landscapes data available via the BioNet NSW Landscapes Web Service. It will enable potential users of the web service to evaluate whether the service will meet their data needs.

To ensure that this version of the data standard applies to the web service, please check [the data online](#) and confirm that the version of this document aligns with the value in *'bioNet:dataStandardVersion'* for *'EntitySet Name=NSWLandscapes_MitchellLandscapes'* (see Figure 1).

```
<EntitySet Name="NSWLandscapes_MitchellLandscapes"  
EntityType="BioSvcApp.Models.vwCUBE_VegClassificationMitchellLandscapes"  
bioNet:bioNetOpenAPIVersion="3.1.0.0" bioNet:dataStandardVersion="1.1"  
bioNet:dateLastBulkUpdate="12/12/2017"/>
```

Figure 1 Metadata output

2. Overview of the web service and standard

The BioNet NSW Landscapes Web Service is based on OASIS Open Data (OData) v4.0. OData provides a standardised RESTful (REpresentational State Transfer) protocol for querying and retrieving data and is already in use for the BioNet Species Sightings Web Service. The following links will give you more background about the OData protocol:

- [Unlock your data with OData](#) – a short high-level explanatory video.
- [What is the OData protocol?](#) – a short, more technical explanation of the protocol.
- [OASIS Open Data Protocol \(OData\) TC](#) – the OASIS standard specification details.
- [OData – the best way to REST](#) – the OData community website.

OData makes data available via entity sets. These can be thought of as tables of data – like a sheet within a spreadsheet. One entity set is available for the NSW Landscapes Web Service (see Figure 2).

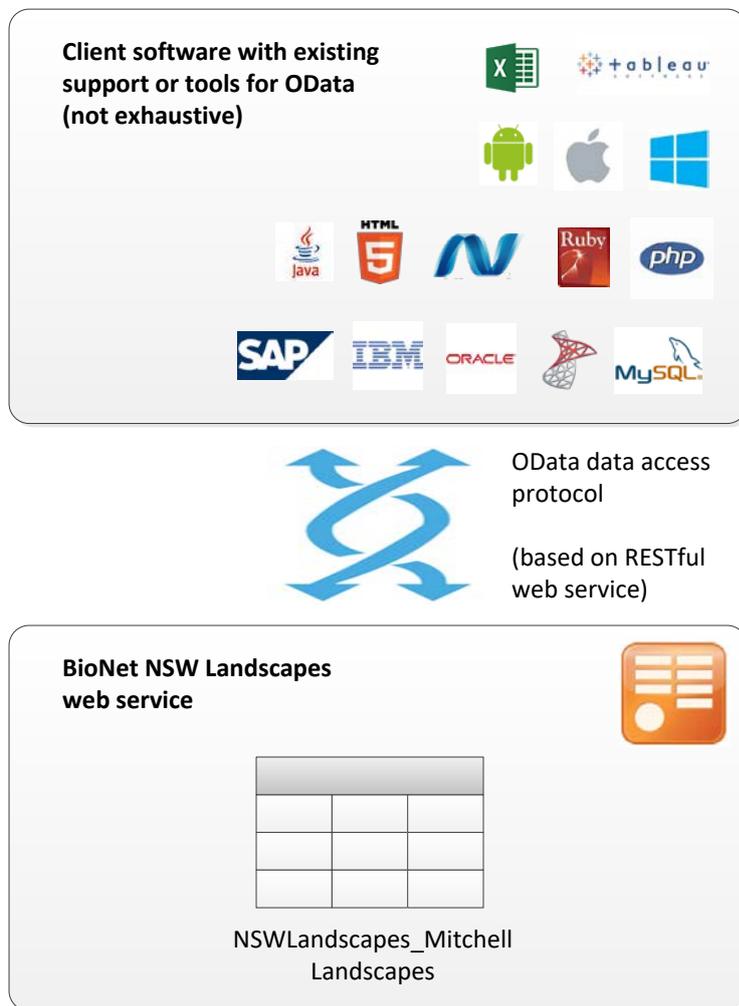


Figure 2 Conceptual overview of data exposure via the OData-based BioNet NSW Landscapes Web Service

Within the NSWLandscapes_MitchellLandscapes dataset, two data categories are shared (Figure 3). Full details of all data fields within the categories are given in the next section.

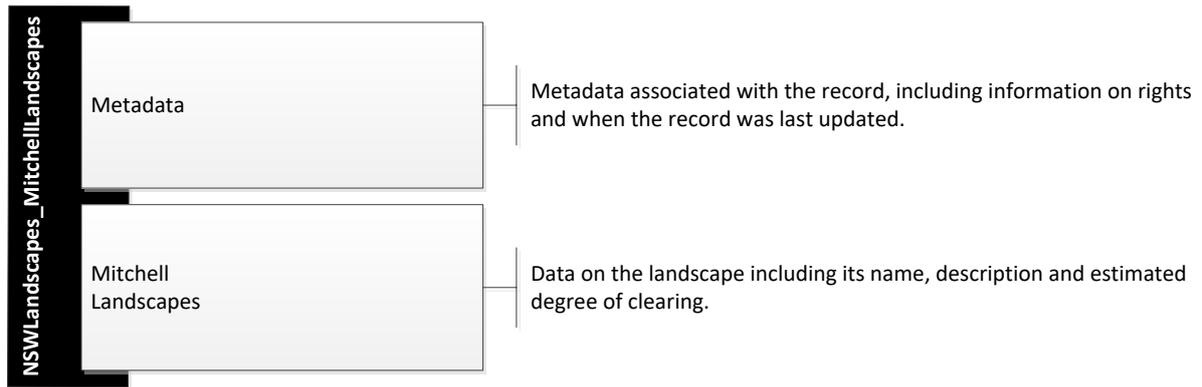


Figure 3 Overview of the categories of data shared via the `NSWLandscapes_MitchellLandscapes` entity set

3. Specifications for the NSWLandscapes_MitchellLandscapes dataset

Tables 1 and 2 list the exact specifications of the data fields available within the Record-level Terms category and the Mitchell Landscapes category.

Table 1 Metadata data fields

Field name	Occurrence	Definition	Format	Example	Data type
collectionCode	1	The name, acronym, coden, or initialism identifying the collection or dataset from which the record was derived.	Always 'BioNet NSW Landscapes'	'BioNet NSW Landscapes'	VARCHAR (50)
datasetName	1	The name identifying the dataset from which the record was derived.	Always 'Mitchell Landscapes'	'Mitchell landscapes'	VARCHAR (100)
dcterms_bibliographicCitation	1	A bibliographic reference for the resource, as a statement indicating how this record should be cited (attributed) when used.	'BioNet NSW Landscapes <current date> <HH:MM> <AM/PM> + <HH:MM offset from UTC>'. Note: the date and time are Australian Eastern Standard Time adjusted for daylight saving. They reflect the date and time when the web service data were last refreshed from the source data (BioNet Vegetation Classification).	'BioNet NSW Landscapes 22/08/2014 12:47 AM + 10:00'	VARCHAR (50)
dcterms_language	1	The language of the resource.	RFC 4646 [RFC4646]	'en'	VARCHAR (3)
dcterms_modified	1	The most recent date and time when the resource was changed.	ISO 8601:2004(E). Note: The date modified relates to any change made	'15/03/2011 4:42:29 PM +11:00'	VARCHAR (50)

Field name	Occurrence	Definition	Format	Example	Data type
			in the source system (BioNet Vegetation Classification). It is thus possible that the date modified is updated but no actual changes are carried through into the data fields presented via the web service.		
dcterms_available	1	Date that the resource became or will become available.	DD/MM/YYYY HH:MM:SS AM/PM +HH:MM offset from UTC	'16/04/2010 4:02:29 PM +11:00'	DATETIME
dcterms_rights	1	Information about rights held in and over the resource. Typically, rights information includes a statement about various property rights associated with the resource, including intellectual property rights.	Text	'CC-BY 4.0'	VARCHAR (300)
dcterms_rightsHolder	1	The person or organisation owning or managing the rights over the resource.	Text	'NSW Dept of Planning, Industry and Environment'	VARCHAR (150)
dcterms_type	1	The nature or genre of the resource.	Always 'dataset'	'dataset'	VARCHAR (20)
institutionCode	1	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.	Text	'NSW Dept of Planning, Industry and Environment'	VARCHAR (200)

VARCHAR, variable character field.

Table 2 Mitchell landscapes data fields

Field name	Occurrence	Definition	Format	Example	Data type
landscapeID	1	The unique identifier within the source BioNet Vegetation Classification database for the Mitchell landscape.	Numeric code	'1101'	INT
landscapeName	1	The name of the Mitchell landscape. ¹	Text	'Adelong Granite Ranges'	VARCHAR (200)
landscapeDescription	0–1	A free text description of the geology, geography and broad vegetation associated with the landscape.	Text	'Steep hills and peaks on and Silurian gneissic granite and Devonian massive granite, general elevation 500 m to 760 m, local relief 200 m. Coarse loamy sand between rock outcrops and in crevices, then gritty gradational profiles developing to yellow harsh texture-contrast soils on lower slopes. Forests of yellow box (<i>Eucalyptus melliodora</i>), red stringybark	VARCHAR (MAX)

¹ NSW Department of Environment and Conservation (ed.) 2006, Atlas of NSW Landscapes: the Mitchell Landscapes. Department of Environment and Conservation, Sydney South.

Field name	Occurence	Definition	Format	Example	Data type
				(<i>Eucalyptus macrorhyncha</i>), brittle gum (<i>Eucalyptus mannifera</i>), black cypress pine (<i>Callitris endlicheri</i>) and white gum (<i>Eucalyptus rossii</i>).	
totalAreaOfNSW Landscape	1	The total area of land occupied by the landscape, based on version 2 of the line work.	Hectares (ha)	'33694.38'	DECIMAL (10,2)
percentClearedEstimateOfLandscape	1	An estimate of the cover of native vegetation within the landscape, expressed as a percentage of the total area of the landscape and based on the best available information, including mapping, modelling and/or expert advice.	Percentage expressed as a decimal, i.e. 0.82 = 82%. Note: Where no information is available, 'null' is given.	'0.82'	DECIMAL (10,2)
statusOfLandscape ClearingEstimate	0–1	The approval status of the percentage cleared estimate, as determined by the Plant Community Type Change Control Panel approval process.	One item from the following controlled vocabulary: <ul style="list-style-type: none"> • approved • pending • draft. 	'Draft'	VARCHAR (50)

INT, integer.