



Department of Planning and Environment

How to access Vegetation Condition Benchmark Data from BioNet

Quick guide for BioNet Vegetation Classification
June 2022



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How to access benchmark data from BioNet

Vegetation Condition Benchmark information for a Plant Community Type (PCT) is maintained in the BioNet Vegetation Classification database. This document provides a quick guide on how to view the benchmark information and to export the benchmark data.

How to view benchmark data for individual PCTs

1. Login to the BioNet Vegetation Classification application

Register and access the application (use your email as your login ID) using this link:

www.environment.nsw.gov.au/NSWVCA20PRapp/LoginPR.aspx

2. Search for PCT/s

Step 1: Access this function by clicking on 'View a PCT' on the dropdown menu on the 'PCT DATA' tab on the top navigation bar.

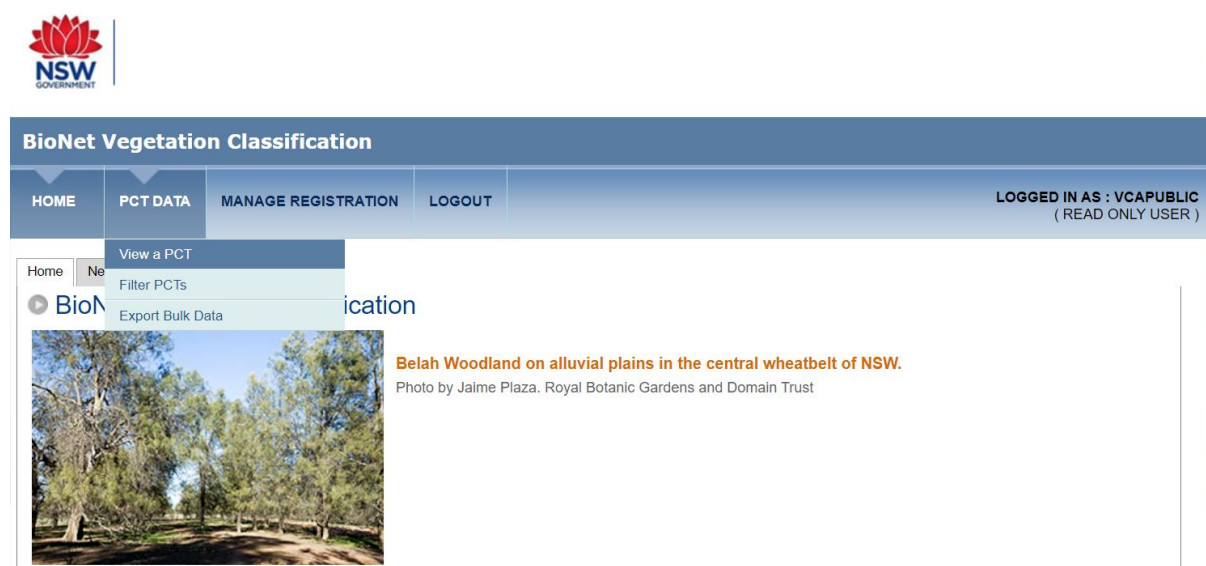


Figure 1 BioNet Vegetation Classification homepage

3. Search and view PCT data

Step 1: Specify the PCT ID or other parameters in the State-wide Search fields.

How to use the search fields

The fields for the 'State-wide Search' are either text fields (the first 4 fields) or dropdown menu fields (the bottom 6 fields).

The additional fields allow you to search Local Government Area (LGA), and/or by threatened ecological communities (TEC) (by TEC Act or TEC Name).

For the text fields, type in the terms or partial terms and hit 'Enter' on your keyboard, or the 'search' button at the bottom of the screen. For example, entering 'red gum' in the PCT Name field will retrieve all PCTs with 'red gum' in their name.

To use one of the dropdown fields, click the dropdown arrow next to the relevant field, then click to select the desired option.

Multiple search terms can be used and you can specify how you want the terms to interact to create a customised search. Options are to set a condition where ALL terms must be met, or where ANY of the terms are met. These 2 types of interactions are chosen via the and/or dropdown to the right of the relevant field.

As an example, for the 2 search terms Vegetation Class (Keith 2004) = Alpine Herbfields and IBRA Subregion = Snowy Mountains, the following results are obtained:

- A list of 50 PCTs is retrieved when the 2 interaction terms are left with the default option of 'or'. This is the list of all PCTs that are either in the Snowy Mountains IBRA Subregion or are attributed the Alpine Herbfields Vegetation Class.
- A list of 2 PCTs is retrieved when the 2 interaction terms are set to 'and'. This is the list of all PCTs that are both in the Snowy Mountains IBRA Subregion, and attributed to the Alpine Herbfields Vegetation Class.

The screenshot shows a search interface titled "State-wide Search Fields:" enclosed in a red border. It is divided into three main sections:

- Text fields:** Contains input boxes for "Plant Community Type ID", "VCA ID", "PCT Scientific Name", and "PCT Name". A "find species..." button is located next to the PCT Scientific Name field.
- Dropdown fields:** Contains dropdown menus for "Authority", "Vegetation Formation (Keith, 2004)", "Vegetation Class (Keith, 2004)", "PCT Definition Status", "IBRA Bioregion", and "IBRA Subregion".
- Additional Fields:** Contains dropdown menus for "Local Government Authority (LGA)" and "TEC Act", and a text field for "TEC Name" with a "find TEC Name..." button. "search" and "clear" buttons are at the bottom.

On the right side of the form, there is a vertical column of interaction options (dropdown menus) labeled "Interaction options". These options are: "or", "or", "or", "or", "or", "and", "or", "or", "or", "or", "or".

Figure 2 Use the text fields, dropdown menu items and interaction terms to customise your search for PCT/s

Step 2: Show results by selecting the 'search' button. The system will display the results in the area below the search fields at the bottom of the page. This will also display how many records match your search term(s).

State-wide Search Fields:

Plant Community Type ID :

VCA ID : or ▼

Type (part) scientific name or click button to search for name

PCT Scientific Name : OR or ▼

PCT Name : or ▼

Authority : --choose-- or ▼

Vegetation Formation (Keith, 2004) : --choose-- or ▼

Vegetation Class (Keith, 2004) : 114 Alpine Herbfields and ▼

PCT Definition Status : --choose-- or ▼

IBRA Bioregion : --choose-- or ▼

IBRA Subregion : AUA01 Snowy Mountains and ▼

Additional Fields : (NB: may retrieve only partial results if included)

Local Government Authority (LGA) : --choose-- or ▼

TEC Act : --choose-- or ▼

TEC Name : or ▼

Search results

PCT ID	PCT Name	PCT Scientific Name	
641	Alpine grassland/herbfield and open heathlands in Kosciuszko National Park, Australian Alps Bioregion	Alpine grassland/herbfield and open heathlands in Kosciuszko National Park, Australian Alps Bioregion	<input type="button" value="View"/>
642	Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion	Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion	<input type="button" value="View"/>

Your search returned **2** record(s).

Figure 3 Search for PCT data

4. Select PCT and view Vegetation Condition Benchmark information

Step 1: Choose the 'View' option in the search results to view the details of the selected PCT.

State-wide Search Fields:

Plant Community Type ID :

VCA ID : or

Type (part) scientific name or click button to search for name

PCT Scientific Name : OR or

PCT Name : or

Authority : --choose-- or

Vegetation Formation (Keith, 2004) : --choose-- or

Vegetation Class (Keith, 2004) : 114 Alpine Herbfields and

PCT Definition Status : --choose-- or

IBRA Bioregion : --choose-- or

IBRA Subregion : AUA01 Snowy Mountains and

Additional Fields : (NB: may retrieve only partial results if included)

Local Government Authority (LGA) : --choose-- or

TEC Act : --choose-- or

TEC Name : or

Search results

PCT ID	PCT Name	PCT Scientific Name	
641	Alpine grassland/herbfield and open heathlands in Kosciuszko National Park, Australian Alps Bioregion	Alpine grassland/herbfield and open heathlands in Kosciuszko National Park, Australian Alps Bioregion	<input type="button" value="View"/>
642	Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion	Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion	<input type="button" value="View"/>

Your search returned 2 record(s).

Figure 4 Select the PCT record to view its details

Step 2: Select the 'Threatened Biodiversity, TECs & Benchmarks' tab.

The screenshot displays the BioNet Vegetation Classification web application. At the top, a navigation bar includes 'HOME', 'PCT DATA', 'MANAGE REGISTRATION', and 'LOGOUT'. The user is logged in as 'VCAPUBLIC (READ ONLY USER)'. Below the navigation bar, the page title is 'Plant community'. A 'View plant community' link is present, along with a 'Print PCT' button. The main content area shows details for a specific plant community: PCTID: 642, VCAID: 0, and PCT Name: Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion. Below this, there are several status indicators: Classification Type: Qualitative; PCT Definition Status: Approved; PCT Benchmark Calculation level: Class/IBRA; Status: 2 out of 2 IBRA regions Approved; PCT % Cleared Status: Approved; PCT Threatened Ecological Communities Association Status: 27/06/2011; Tool Ready: Yes; Classification confidence level: 5 Very Low; Authority: PADACS - archive. A horizontal menu below these details contains several tabs: 'Vegetation community details', 'Scientific description', 'Distribution information', 'Extent', 'Threatened Biodiversity, TECs & Benchmarks' (which is circled in red), 'Spatial information', 'Image management', and 'Status, Lineage history'. The 'Threatened Biodiversity, TECs & Benchmarks' tab is active, showing a sub-header 'Community Name and Classification Level'. This sub-section contains fields for 'Plant community type ID: 642', 'VCA ID: 0', 'Authority: PADACS - archive', 'Status: Approved', and 'PCT Name: Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion'. There is also a 'PCT Scientific Name' field with the same text as the PCT Name, and a 'Classification confidence level' dropdown set to '5 Very Low' with a 'Further details' link next to it. A 'Classification source' field is also visible at the bottom of the sub-section.

Figure 5 Open the 'Threatened Biodiversity, TECs & Benchmarks' tab

Step 3: Choose the 'Community Condition Benchmarks' section to expand the list of benchmarks for the selected PCT.

BioNet Vegetation Classification

HOME | **PCT DATA** | MANAGE REGISTRATION | LOGOUT | LOGGED IN AS : VCAPUBLIC (READ ONLY USER)

Plant community Print PCT

View plant community
Use this page to view a vegetation community.

PCTID : 642 **VCAID** : 0 **PCT Name** : Alpine short snowpatch herbfield of the Kosciuszko Main Range, Australian Alps Bioregion

Classification Type : Qualitative

PCT Definition Status : Approved **PCT Benchmark Calculation level** : Class/IBRA **Status** : 2 out of 2 IBRA regions Approved

PCT % Cleared Status : Approved **PCT Threatened Ecological Communities Association Status** : 27/06/2011 **Tool Ready** : Yes

Classification confidence level : 5 Very Low **Authority** : PADACS - archive

Vegetation community details | Scientific description | Distribution information | Extent | **Threatened Biodiversity, TECs & Benchmarks** | Spatial information | Image management | Status, Lineage history

Threatened Biodiversity

Community Condition Benchmarks

PCTID	Vegetation Class	IBRA	Benchmark Calculation Level	Benchmark Variation	Rainfall Threshold	Defa
642	Alpine Herbfields	Australian Alps	Class/IBRA	monthly average, following AVERAGE RAINFALL year		Yes
642	Alpine Herbfields	South Eastern Highlands	Class/IBRA	monthly average, following AVERAGE RAINFALL year		Yes

Figure 6 View benchmark information for the selected PCT

How to export benchmark data

5. Select 'Export Bulk Data' from the 'PCT DATA' dropdown menu

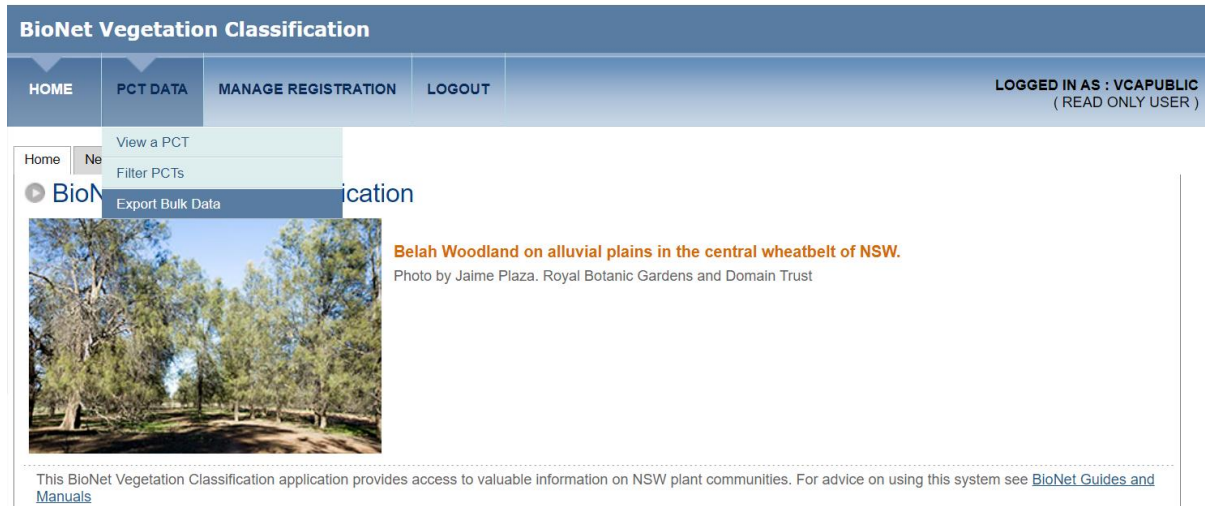


Figure 7 Export bulk data

6. Click on the 'PCT Vegetation Condition Benchmarks data' hyperlink

BioNet Vegetation Classification

HOME PCT DATA MANAGE REGISTRATION LOGOUT LOGGED IN AS : VCAPUBLIC (READ ONLY USER)

BioNet Vegetation Classification Reports/Exports feature is unavailable until further notice.

Plant Community Type (PCT) and NSW Landscapes data can be obtained using the following data file links:
Note: these reports may be more than 1000 pages long and take more than 10-15mins to generate. Please be patient

- [Export All PCTs - PCT Description data](#)
- [Community Profile exports \(Qualitative PCTs\) - CSV Format](#)
- [Community Profile reports \(Qualitative PCTs\) - PDF Format](#)
- [Community Profile exports \(Quantitative PCTs\) - CSV Format](#)
- [Community Profile reports \(Quantitative PCTs\) - PDF Format](#)
- [PCT Vegetation Condition Benchmarks data](#)
- [PCT-Threatened Ecological Communities \(TEC\) associations data](#)
- [NSW Landscapes data](#)
- [PCT Lineage History data](#)

Alternative download data option – Power queries (csv format)

Plant Community Type (PCT) and NSW Landscapes data can also be obtained using refreshable Excel spreadsheets under the Power Queries headings on the [BioNet quick guides, manuals, and datasheets web page](#). These Excel spreadsheets contain embedded Power Queries which extract data directly from the BioNet databases via BioNet Web Services. They refresh with the latest data at the click of a button (see the 'Read Me' tab when you open each power query file). For guidance on building Power Queries in Excel to extract BioNet data, please refer to the Power Query Quick Guide on the [BioNet Web Services web page](#).

For support please contact bionet@environment.nsw.gov.au.
We apologise for any inconvenience,
BioNet team

Figure 8 Click the hyperlink to produce a csv export of Vegetation Condition Benchmark data for all PCTs

How to access benchmark data using BioNet Web Services

The simplest way to access benchmark data directly from BioNet Web Services is to download a copy of the pre-prepared 'BioNet Plant Community Types Benchmarks data' Power Query. This can also be accessed by navigating to the BioNet resources webpage directly or via the link from the 'Export Bulk Data' menu item in the BioNet Vegetation Classification application.

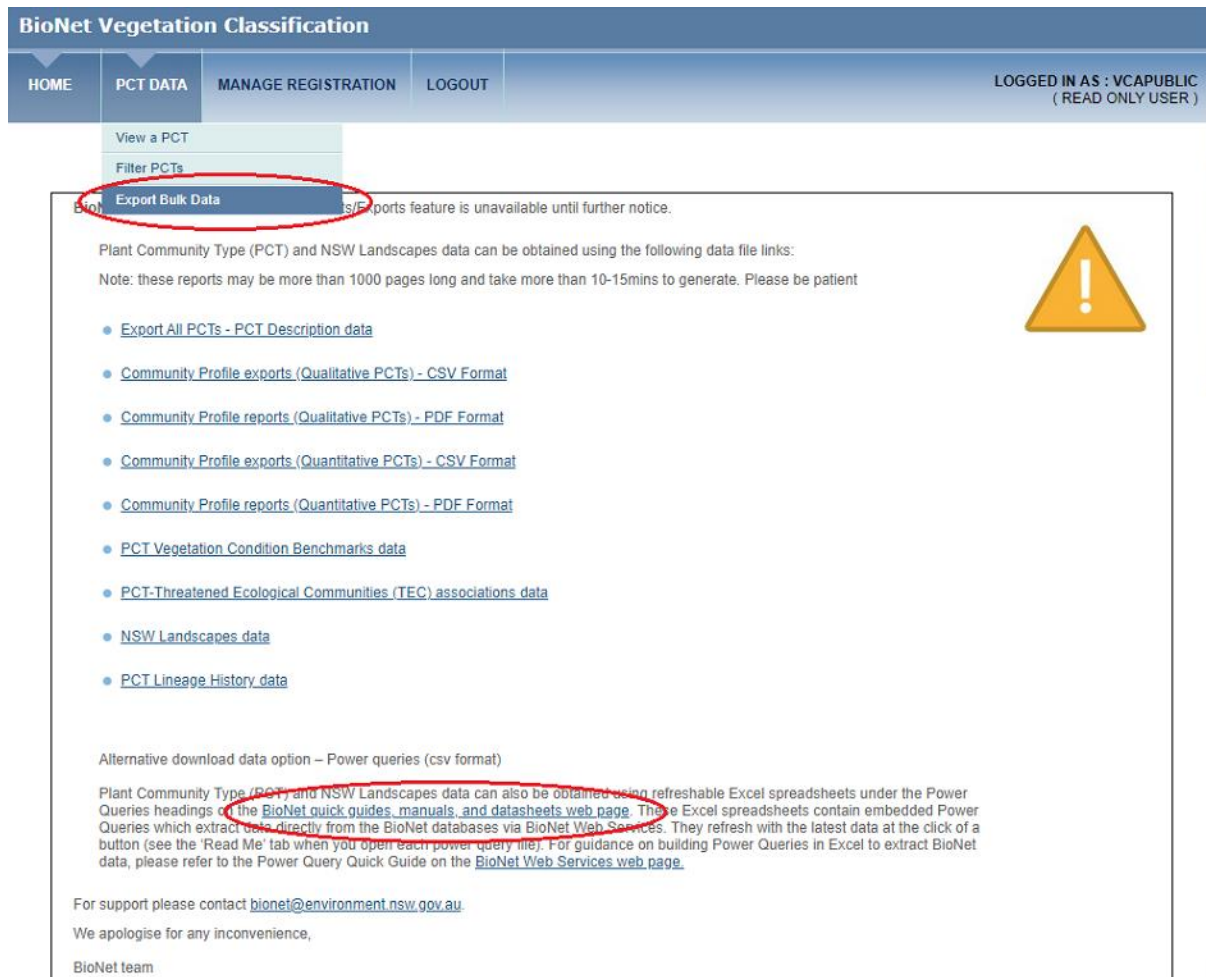


Figure 9 Navigate to the BioNet Power Queries from within the BioNet Vegetation Classification application

Alternatively, you can build your own Power Query to tap into the power of the BioNet Web Services.

This section provides instructions for producing a Power Query in Excel that can be saved and refreshed at any time to download up-to-date data from the BioNet Web Services.

Step 1: Open Microsoft Excel.

Step 2: Open the 'Data' menu

Step 3: Click on the 'Get Data' icon, then select 'From Other Sources' and click on 'From OData Feed'.

Note: For more information on how to access the BioNet Web Services using Excel and Power Query refer to *How to access the BioNet Web Service using Excel and Power Query: A BioNet Quick Guide*.

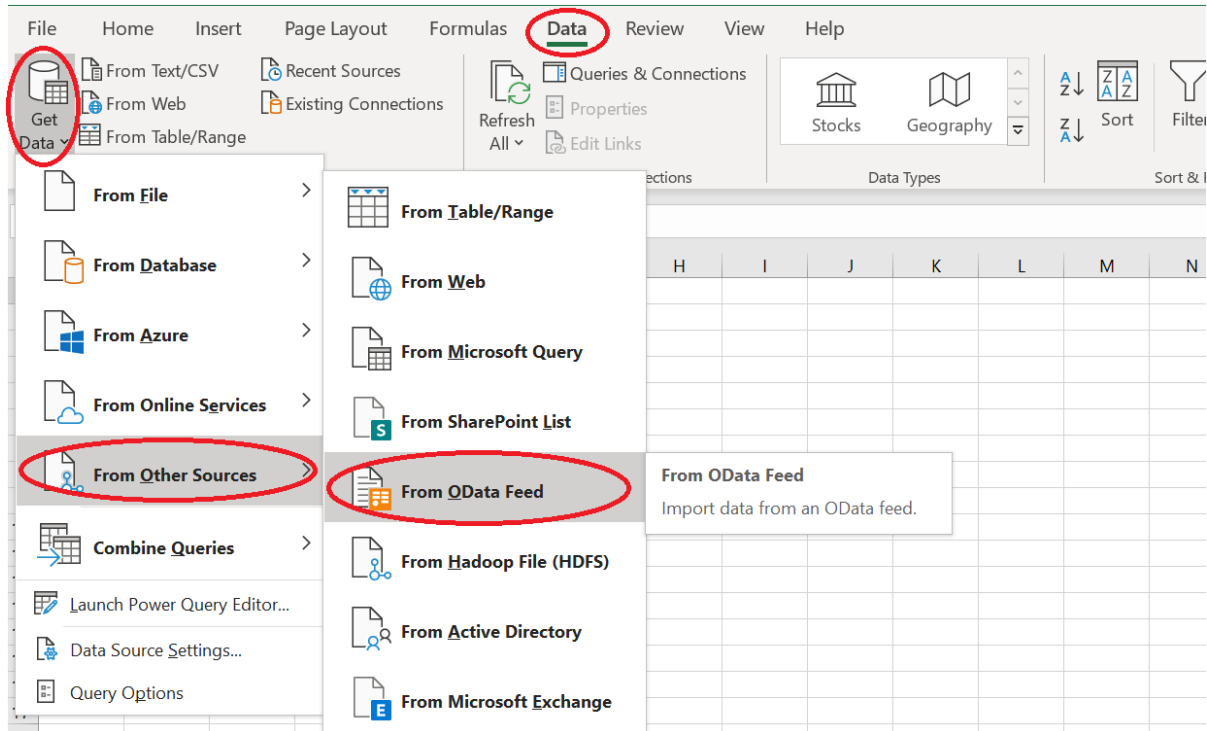


Figure 10 Steps to select 'OData Feed' in Excel

Step 4: In the OData feed URL dialogue box enter <https://data.bionet.nsw.gov.au/biosvcapp/odata> and click 'OK'.

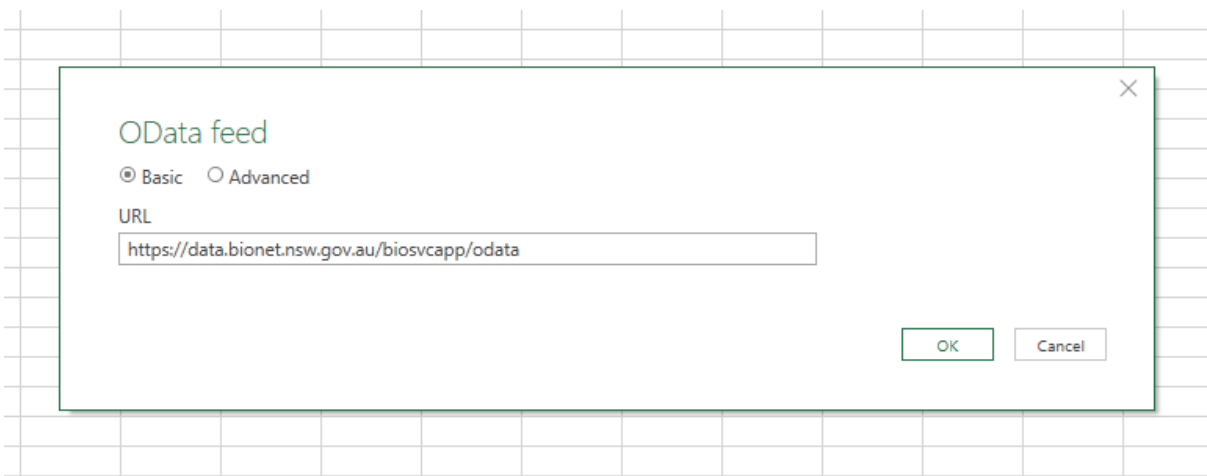


Figure 11 Specify the BioNet Web Services URL

7. Select the PCT benchmark entity set in BioNet Web Services

Step 1: Select the option 'VegetationClassification_PCTBenchmarks' in the 'Navigator' popup.

Step 2: Click on 'Transform Data' to preview full details for the first 1,000 data rows.

The screenshot displays the BioNet Web Services interface. On the left, the 'Navigator' panel shows a list of data services under the URL 'https://data.bionet.nsw.gov.au/biosvcapp/odata [18]'. The service 'VegetationClassification_PCTBenchmarks' is highlighted with a red circle. On the right, the 'VegetationClassification_PCTBenchmarks' preview is shown, displaying a table with two columns: 'institutionCode' and 'collectionCode'. The table contains 10 rows of data, all with 'NSW Dept of Planning, Industry and Environment' in the 'institutionCode' column and 'BioNet Vegetation Class' in the 'collectionCode' column. Below the table, a message states: 'The data in the preview has been truncated due to size limits.' At the bottom of the interface, the 'Transform Data' button is highlighted with a red circle.

institutionCode	collectionCode
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class
NSW Dept of Planning, Industry and Environment	BioNet Vegetation Class

Figure 12 Select PCT benchmarks web service

Step 3: Benchmarks by PCT will be displayed in the Power Query Editor.

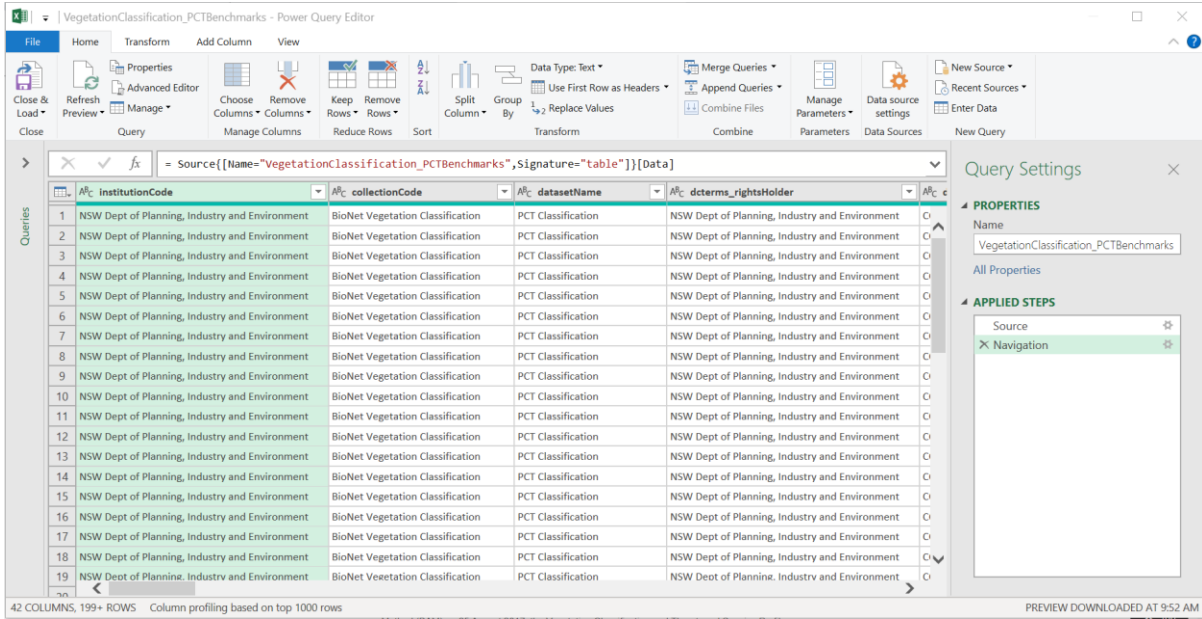


Figure 13 Benchmarks by PCT data displayed in Power Query Editor

Step 4: Selecting only the columns of data you are interested in makes the download quicker and more efficient. This is not a mandatory step.

Click on 'Choose Columns' on the Home tab. Now check the columns you need on the 'Choose Columns' popup, and click 'OK'. The chosen columns will be displayed (Figure 15).

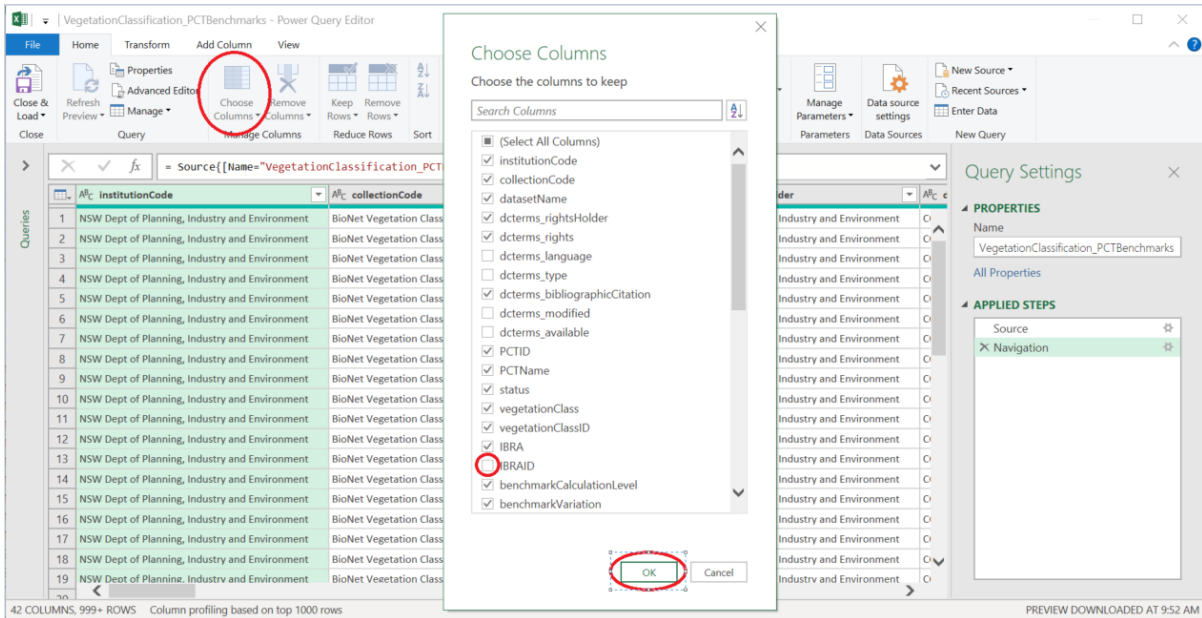


Figure 14 Choose only the desired columns for a smaller and quicker data download

Step 5: Click on the 'Close and Load' button to load your data into your spreadsheet.

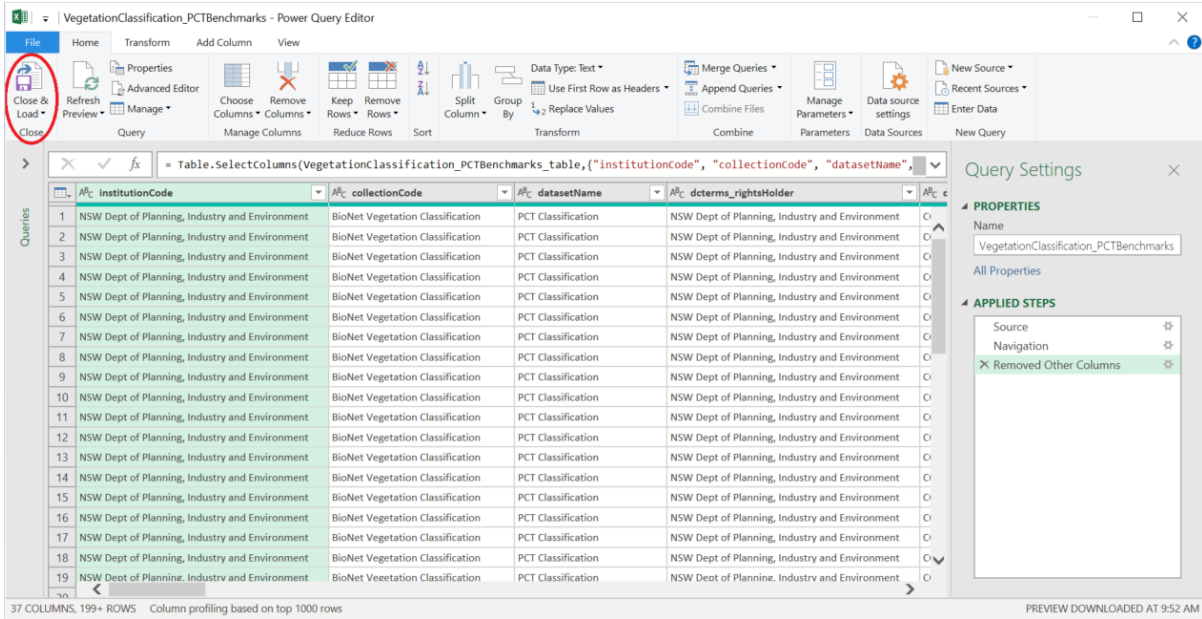


Figure 15 Selected columns displayed in Power Query Editor (top 1,000 rows only)

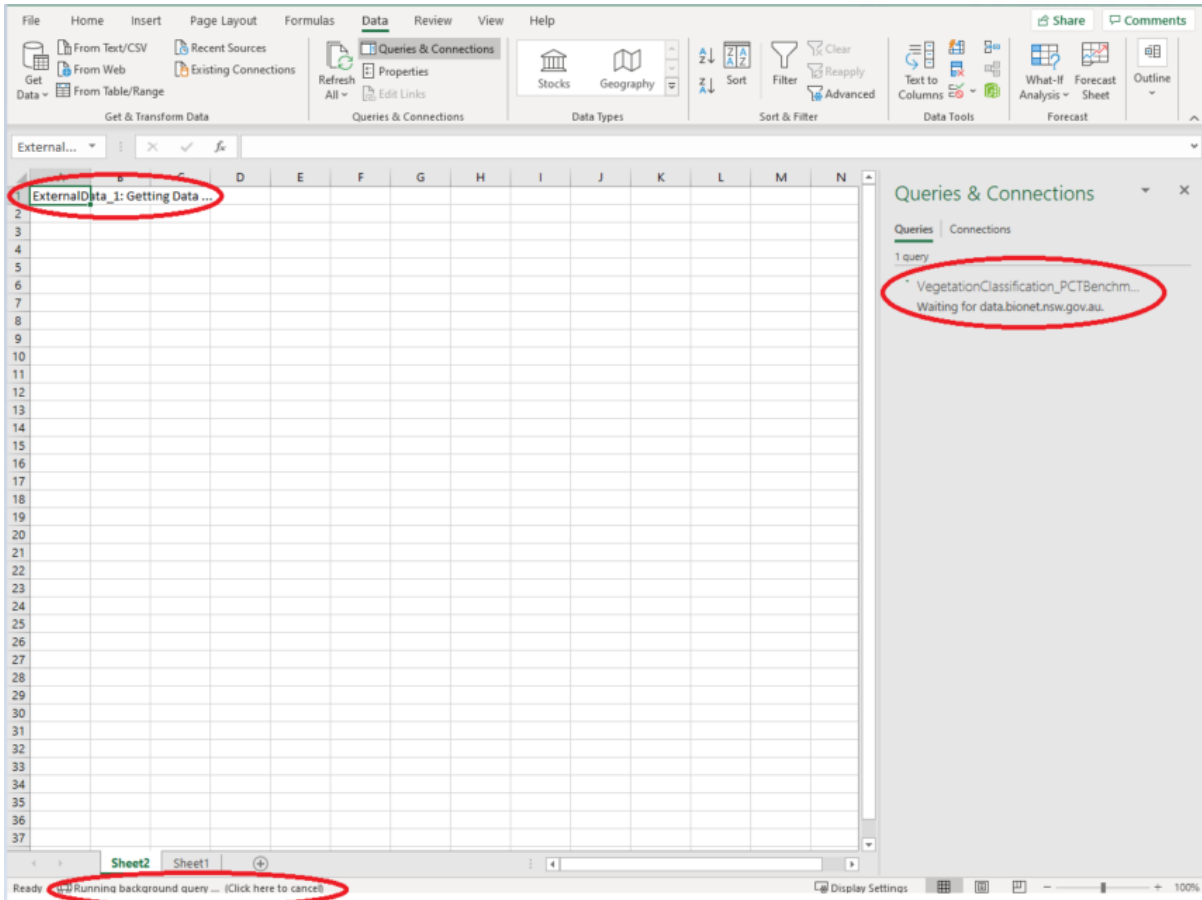


Figure 16 Execution of Power Query: up-to-date data being retrieved via the BioNet Web Services

How to access Vegetation Condition Benchmark Data from BioNet

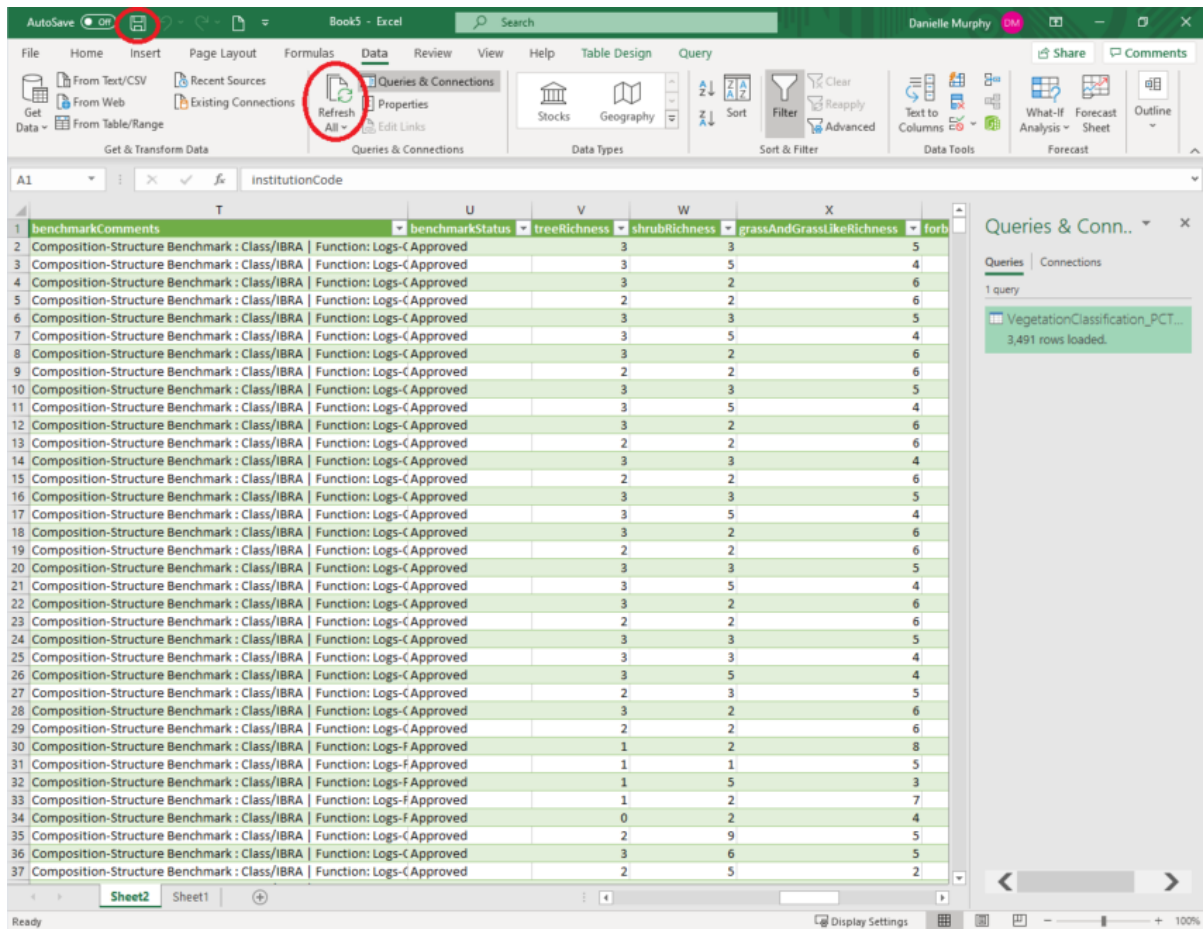


Figure 17 Spreadsheet populated with benchmark data

Step 6: Save the Excel spreadsheet.

Step 7: To obtain up-to-date data at any time, open the 'Data' menu and click on 'Refresh All'. Wait for the Power Query to run. Save your updated file.

More information

- [BioNet Plant Community Types Benchmarks data Power Query](#)
- [BioNet resources](#)
- [BioNet Vegetation Classification application](#)
- [BioNet Vegetation Classification user manual](#)
- [How to access the BioNet Web Service using Excel and Power Query: A BioNet Quick Guide](#)

You can also contact the BioNet team at bionet@environment.nsw.gov.au.