BioNet Vegetation Classification user manual

Public and edit applications

November 2018

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Part A Introduction

This manual supports the New South Wales Office of Environment and Heritage's (OEH) BioNet Vegetation Classification public and edit applications.

The manual comprises five parts:

- Part A: Introduction
- Part B: Using the Vegetation Classification public and edit applications
- Part C: Using the Edit Functions in the Vegetation Classification Edit Application
- Part D: Using the Administration Functions in the Vegetation Classification Edit Application
- Part E: Appendices and other information.

It is presented as a step-by-step approach. Additional documentation is provided as links from this document and from the further information links provided in the web application pages.

> This manual replaces the VIS Classification (public user manual), the VIS Classification edit user manual (parts 1–3) and the VIS Classification quick guides. It contains instructions for both the public and edit applications. The screenshots in this manual (with the exception of Part C) are taken from the public application and where the screen differs slightly in the edit app the difference is noted. Therefore, some of the screenshots throughout may not exactly match what you see on your screen, depending on your level of access.

Any queries about this manual can be directed to bionet@environment.nsw.gov.au.

1. Background

1.1 What is BioNet?

Before we get into the BioNet Vegetation Classification application, it is important to first understand the terminology around 'BioNet'. BioNet is a system of biodiversity information governed by the Office of Environment and Heritage which includes a number of data collections maintained across several applications and portals. These applications include BioNet Vegetation Classification, BioNet Atlas, BioNet Threatened Biodiversity Profiles and BioNet Vegetation Maps. Table 1 provides a summary of the names of the BioNet data collections we hold and relevant applications ('user interface') you can use to access them.

Table 1 Summary of names for BioNet data and systems

Data (what we hold)				Interface (how you access)	
Repository	**Collection**	**Collection (abbrev.)**	**Dataset**	**User interface (UI)**	**Application program interface (API)**
BioNet	Species Sightings	Sightings	*Numerous, e.g.*: OEH, Scientific Licence, BirdLife Aus, Forests NSW.	BioNet Atlas	BioNet Web Services
	Species Names	Species	Species Names	BioNet Atlas	BioNet Web Services
	Threatened Biodiversity Profiles	Threatened Biodiversity	Threatened Species, Threatened Ecological Communities, Key threatening processes, Endangered Populations.	Threatened Biodiversity Profiles BioNet Atlas	BioNet Web Services
	Systematic Surveys	Surveys	*Numerous, e.g.:* Syd Metro flora survey, Everlasting Swamp NP fauna survey	BioNet Atlas	–
	Vegetation Classification	Classification	Plant Community Type (PCT) Classification, PCT Clearing, PCT-Threatened Biodiversity Associations, Vegetation Condition Benchmarks, Vegetation Class and Formation Classification.	BioNet Vegetation Classification	BioNet Web Services

Data (what we hold)			Interface (how you access)	
NSW Landscapes	Landscapes	Mitchell NSW Landscapes	BioNet Vegetation Classification	BioNet Web Services
Vegetation Maps	Vegetation Maps	State Vegetation Type Maps. Non-standardised Vegetation Type Maps Threatened Ecological Community Maps	SEED data portal	–
Distribution Maps	Species Distribution Maps	Numerous, E.g. BioNet indicative Threatened species distributions	SEED data portal	–
	Threatened Ecological Community Distribution Maps	To be developed	SEED data portal	–

Historically names were applied solely to the applications (rather than the data contained within) and as the applications evolved and their names changed, this caused some confusion. Figure 1 provides a brief summary of BioNet's development history capturing the historical names that applications have been referred to. For further background to the current naming structure, refer to the BioNet naming protocol.

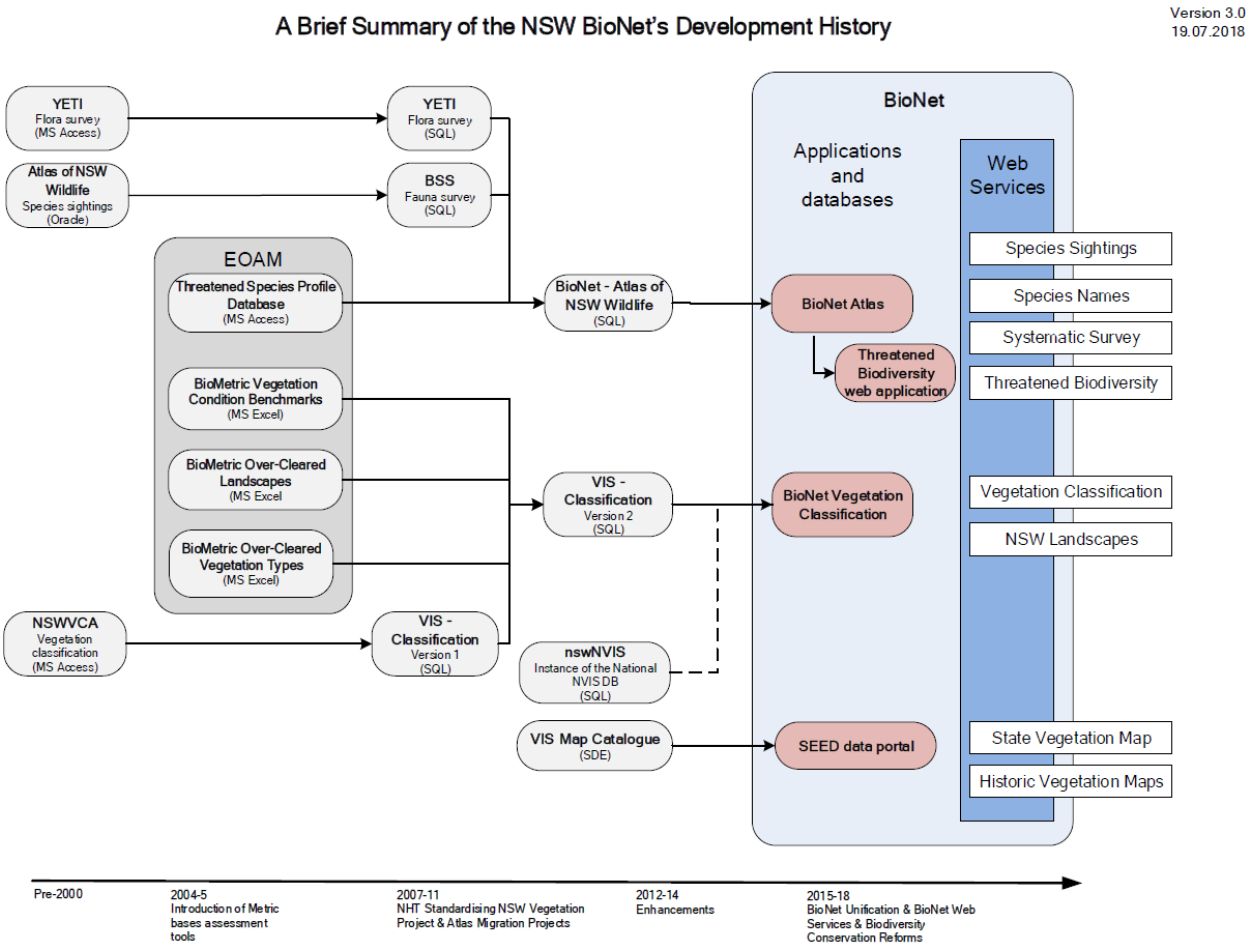


Figure 1 Summary of BioNet's development history

1.2 What is BioNet Vegetation Classification?

The BioNet Vegetation Classification (formerly known as VIS Classification) database is the repository for information about plant community types (PCTs) in New South Wales (NSW) and NSW Landscapes. The classification database is an integral part of the NSW Vegetation Information System (NSW VIS), which aims to provide a single, integrated source for vegetation information in NSW. The core components of BioNet Vegetation Classification are depicted in Figure 2.

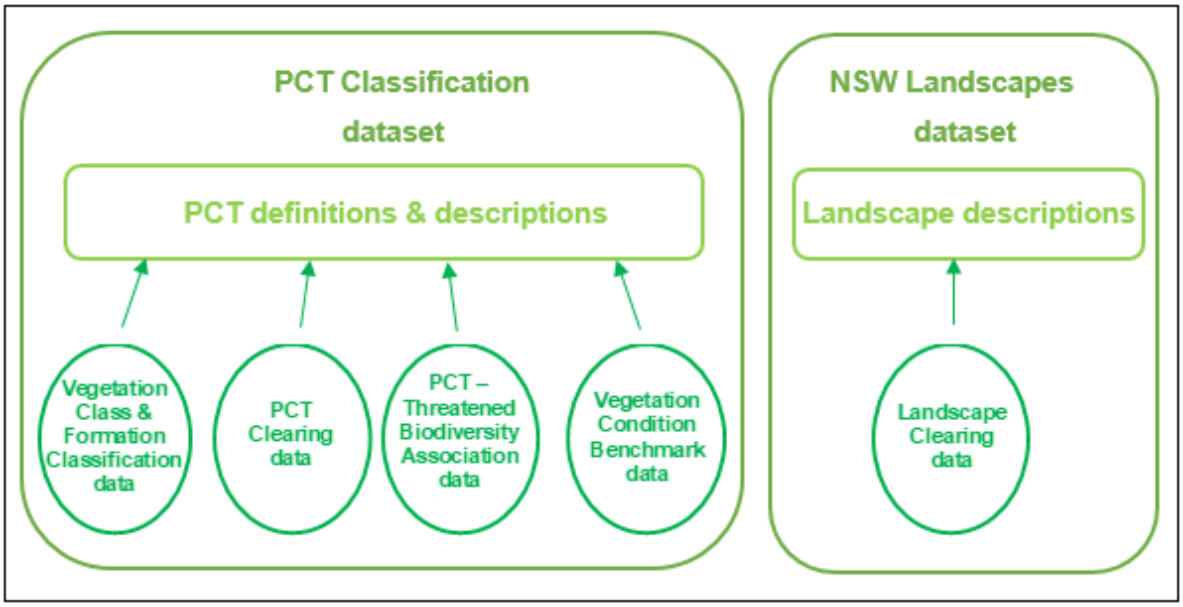


Figure 2 **Datasets contained in BioNet Vegetation Classification. Of the PCT – Threatened Biodiversity Association data, only PCT-TEC associations are actually maintained in BioNet Vegetation Classification**

The aim of the NSW BioNet Vegetation Classification database is to produce a consistent hierarchical vegetation classification of New South Wales PCTs and to provide public access to information on these PCTs. This version of the Vegetation Classification database is a further development of the previous VIS Classification database. This further builds on the original NSW VCA (Vegetation Classification and Assessment) database developed by the Royal Botanic Gardens Trust (RBGT) and published in the scientific journal *Cunninghamia* (Benson 2006; Benson, *et al.* 2006; Benson 2008; and Benson *et al.* 2010).

Historically, the NSW PCT Classification was constructed by integrating two existing vegetation classification databases in 2011: the NSW Vegetation Classification and Assessment database developed by the RBGT; and the Over-Cleared BioMetric Vegetation Types Database used in Property Vegetation Planning and BioBanking assessment processes. By integrating this information into one system VIS Classification established a single NSW Master PCT list as the focal point for both vegetation type mapping and regulatory assessment processes.

Further background information on the development of the NSW Vegetation Information System and its components can be found on the BioNet website.

1.3 Governance and accountabilities

The BioNet Vegetation Classification database is maintained by the BioNet Team, Biodiversity Information Systems Team (BIST), located in the Native Vegetation Science Branch, Science Division of OEH.

Please direct all queries to bionet@environment.nsw.gov.au.

The development of the NSW Vegetation Information is being coordinated by the Biodiversity Information Systems Team within the Science Division of the NSW Office of Environment and Heritage (OEH). This team is developing and supporting the NSW Vegetation Information, BioNet Atlas, Threatened Biodiversity Profiles and other native vegetation and biodiversity projects and programs as part of OEH's strategic leadership of native biodiversity information management. One of the key objectives for the team and the

NSW Vegetation Information databases, is to ensure effective access to and appropriate use of, the full range of vegetation information for New South Wales, including plot, classification and mapping data and products.

2. Getting started

2.1 BioNet Vegetation Classification: registration and homepage

The public and edit applications access two different, yet similar databases. Once logged in there are many similarities but the registration, access and log in methods are quite different.

For issues using Internet Explorer, see Appendix 1.

When you have finished your BioNet Vegetation Classification session, please remember to log out of the application by clicking on 'Logout'.

2.1.1 Registering to use the public application

To register to use the BioNet Vegetation Classification, go to the Public User Login Registration page.

Click on 'New user Register here' to open the new user registration page. A conditions of use page will appear (see Figure 3).

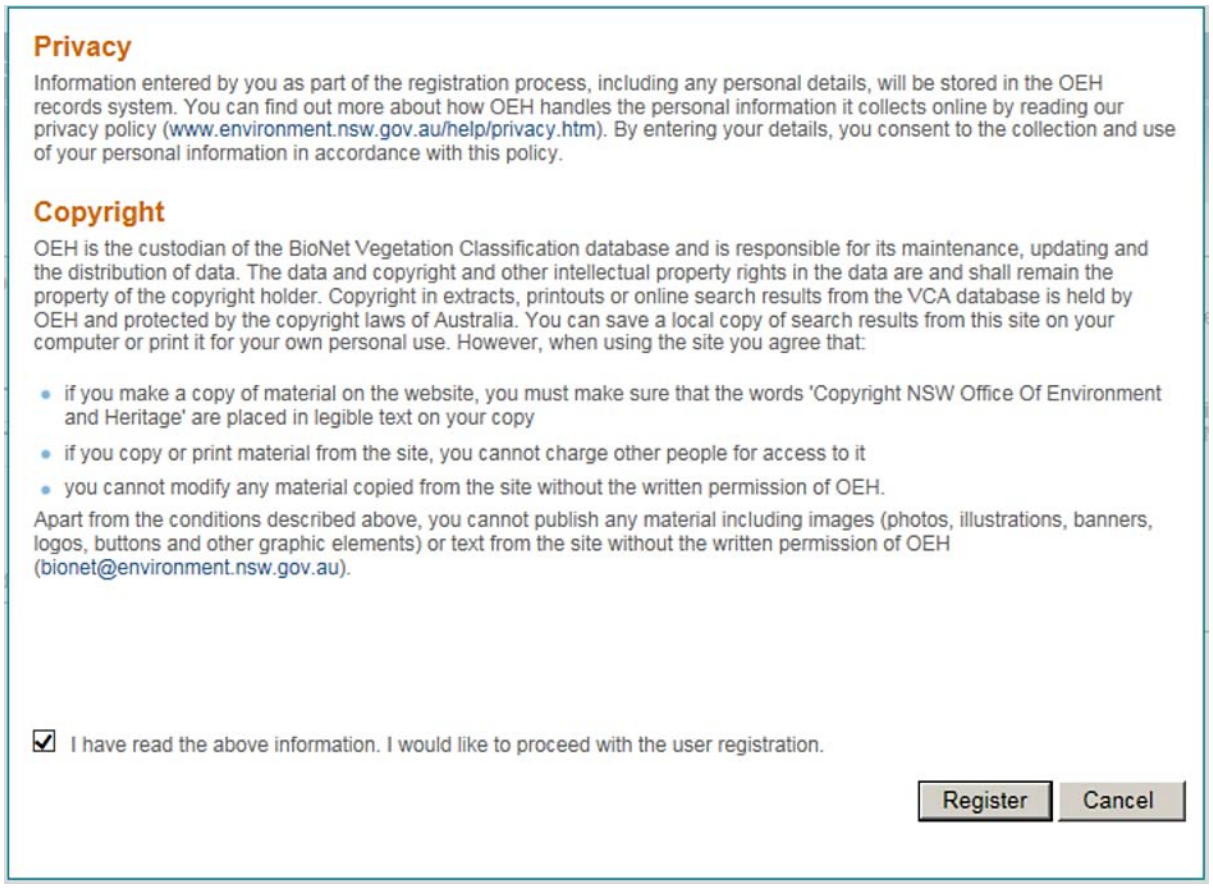


Figure 3 Conditions of use page

1. Please read the conditions, then click the check box to accept the conditions if you wish to proceed. The 'Register' button will now become active.
2. Click on the 'Register' button to open the registration screen (see Figure 4).

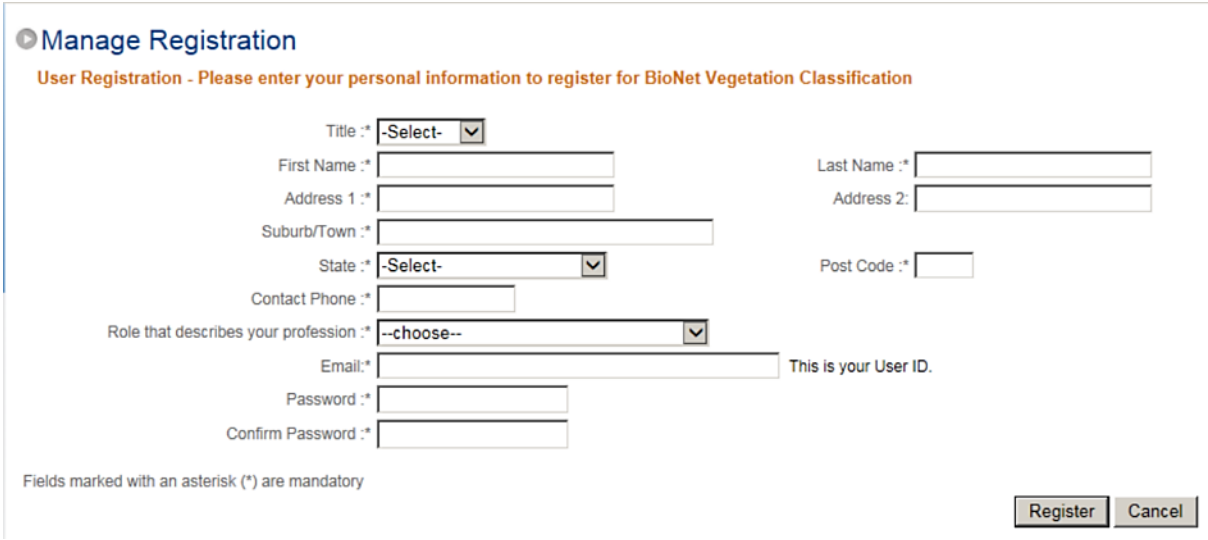


Figure 4 User registration page

Fill in the required details as indicated for each field. Include the area code and do not use spaces in the phone number field. Do not use any symbols except underscore in the password fields.

Once you are registered in the system you will be automatically directed to the BioNet Vegetation Classification public application homepage.

You will also receive an email (to the email address you provided) noting your registration and with details of your user name (= email address) and password. Please keep a copy of this email for future reference. Please note that when logging in, user name and password details must be **typed** in, not copied and pasted, else they will not work.

Keep your user name and password secret, as per usual online security recommendations.

To login, go to the login page and enter your user name and password.

If you forget your password, click on the 'Forgot password?' link and a new system-generated password will be emailed to your registered email address. Make sure you type this password in when logging in, do not copy and paste. After logging in, proceed to the 'Manage registration' section to enter your own password, if desired.

2.1.2 Managing your public registration

Once logged in, you can manage your own user registration details, including changing contact information and your password. Click on 'Manage registration' on the top navigation bar. Click 'Confirm' at the bottom of the screen to save your changes.

2.1.3 Accessing the edit application

Most internal and external users do not require access to the BioNet Vegetation Classification edit application.

If you require access as an edit user, you will have to send a request to the BioNet Vegetation Classification application Administrator. Note, the only types of edit users are:

- approved Vegetation Classification project team members
- approved Statutory Data editors
- approved Threatened Biodiversity Accountable Officers who maintain Plant Community Type to Threatened Ecological Community association data.

To obtain access to the BioNet Vegetation Classification edit application, send a request to bionet@environment.nsw.gov.au, including a statement as to why you require access and attach permission from your manager. External users who require read-only access to the Edit application also need to email access requests to the support mailbox.

Go to the login page. Please enter your network user name if you are an OEH employee (in the format DEC\user name) and password and click 'Login'. For other users, please use the username you are provided.

2.2 Homepage features

2.2.1 News & Bulletins

Click on the 'News & Bulletins' tab on the homepage, next to the 'Home' tab (see Figure 5). News & Bulletins summarises important notifications and alerts in relation to major changes to PCTs or the database itself, including decisions by the PCT Change Control Panel and general information of system changes. Links to further information may be provided (see Figure 6).

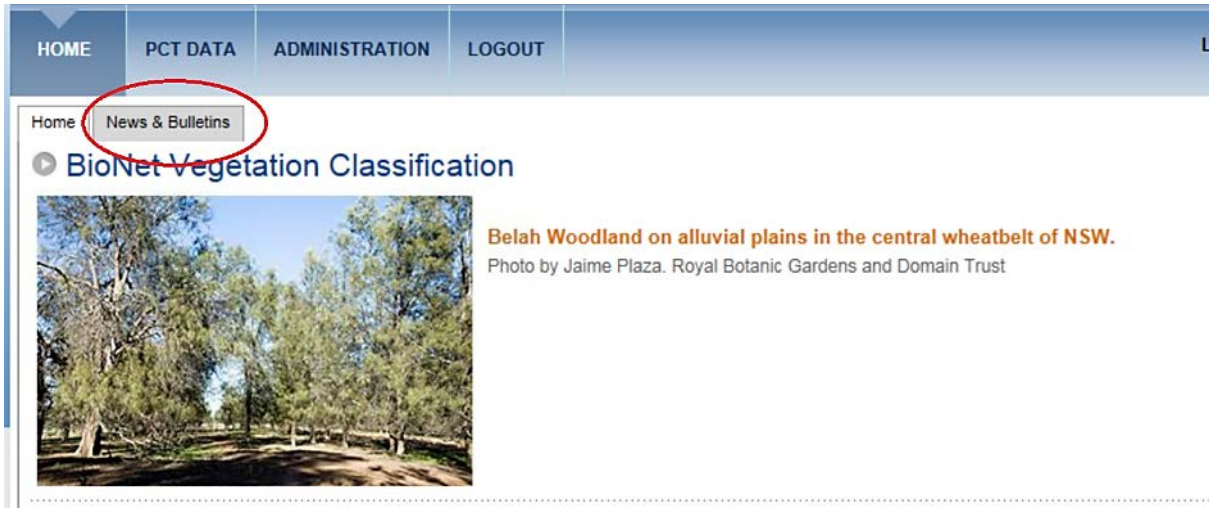
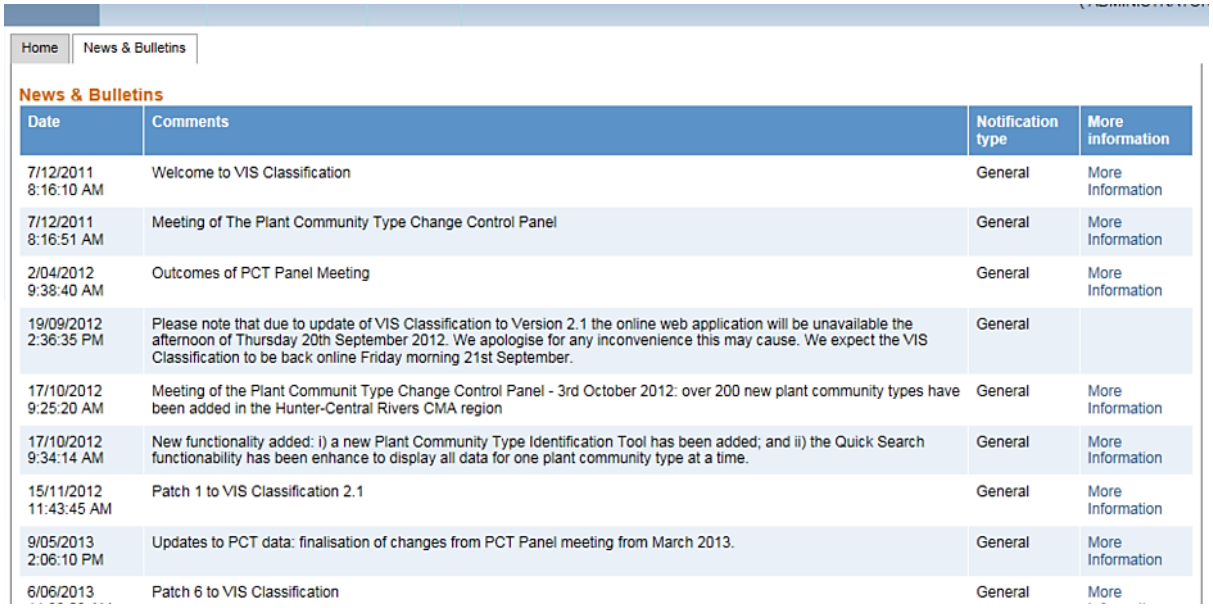


Figure 5 News & Bulletins link on the homepage



Date	Comments	Notification type	More information
7/12/2011 8:16:10 AM	Welcome to VIS Classification	General	More Information
7/12/2011 8:16:51 AM	Meeting of The Plant Community Type Change Control Panel	General	More Information
2/04/2012 9:38:40 AM	Outcomes of PCT Panel Meeting	General	More Information
19/09/2012 2:36:35 PM	Please note that due to update of VIS Classification to Version 2.1 the online web application will be unavailable the afternoon of Thursday 20th September 2012. We apologise for any inconvenience this may cause. We expect the VIS Classification to be back online Friday morning 21st September.	General	
17/10/2012 9:25:20 AM	Meeting of the Plant Communit Type Change Control Panel - 3rd October 2012: over 200 new plant community types have been added in the Hunter-Central Rivers CMA region	General	More Information
17/10/2012 9:34:14 AM	New functionality added: i) a new Plant Community Type Identification Tool has been added; and ii) the Quick Search functionability has been enhance to display all data for one plant community type at a time.	General	More Information
15/11/2012 11:43:45 AM	Patch 1 to VIS Classification 2.1	General	More Information
9/05/2013 2:06:10 PM	Updates to PCT data: finalisation of changes from PCT Panel meeting from March 2013.	General	More Information
6/06/2013	Patch 6 to VIS Classification	General	More

Figure 6 News & Bulletins

Periodic updates to data holdings are also published separately as release notes, available at the NSW BioNet quick guides, manuals and datasheets webpage.

2.2.2 Timer countdown

A time counter is displayed at the top right-hand corner of the application screen. Users are allowed 60 minutes before the system automatically logs off if there has been no page activity. When the counter gets down to less than 1 minute, a warning message will appear. You can reset the timer back to 60 minutes by clicking on ‘Home’, ‘PCT Data’ or ‘Manage Registration’ on the top navigation bar, by editing a PCT or clicking on the ‘Reset’ button (see Figure 7).

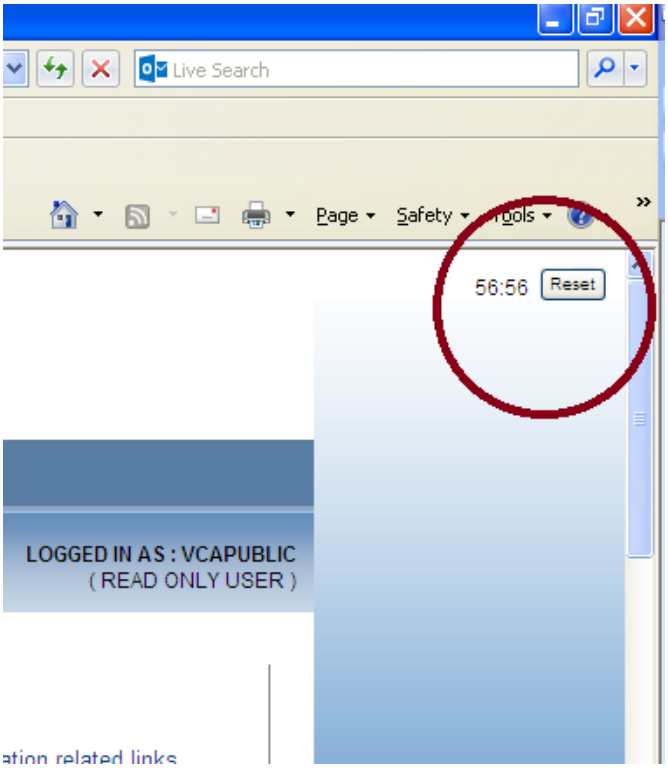


Figure 7 Timer countdown on the homepage

Part B Using the BioNet Vegetation Classification public and edit applications

Users can access data in the BioNet Vegetation Classification in three ways (see Figure 8). All are accessed via the 'PCT Data' tab in the top navigation bar:

- **'**Search and Display PCT' drop-down menu item: allows access to all data for one PCT at a time. This provides the maximum retrieval of data, but the search must be repeated for each PCT you want information for. Use this for in-depth understanding of one particular PCT. **This is called 'Edit' in the edit application.**
- 'Plant Community Identification' drop-down menu item: provides a way to search and retrieve summary information on a range of PCTs by creating and running a series of queries. The results – or matches – against those criteria are then listed in a tabular format and further refinement of the results can be undertaken by filtering the results table of matching PCTs. This is a more interactive way to identify a range of PCTs and to obtain a quick overview of the main data that defines or describes that PCT (e.g. vegetation structure, species composition). Users can also open individual PCTs to view in more detail from the search results.
- 'Reports/Exports' drop-down menu item: is used to export data in spreadsheets or in a report format (word and pdf documents). This will guide you through the creation of queries to retrieve the data you need for one or many PCTs, or even retrieve data for all the PCTs in the database. This function is useful if you are after information for a particular vegetation class or within a particular area (e.g. an IBRA region) and want to be able to view and use the information outside the Vegetation Classification system. 'Reports/Exports' is also the way users can search and retrieve data regarding NSW Landscapes and their % cleared estimates.

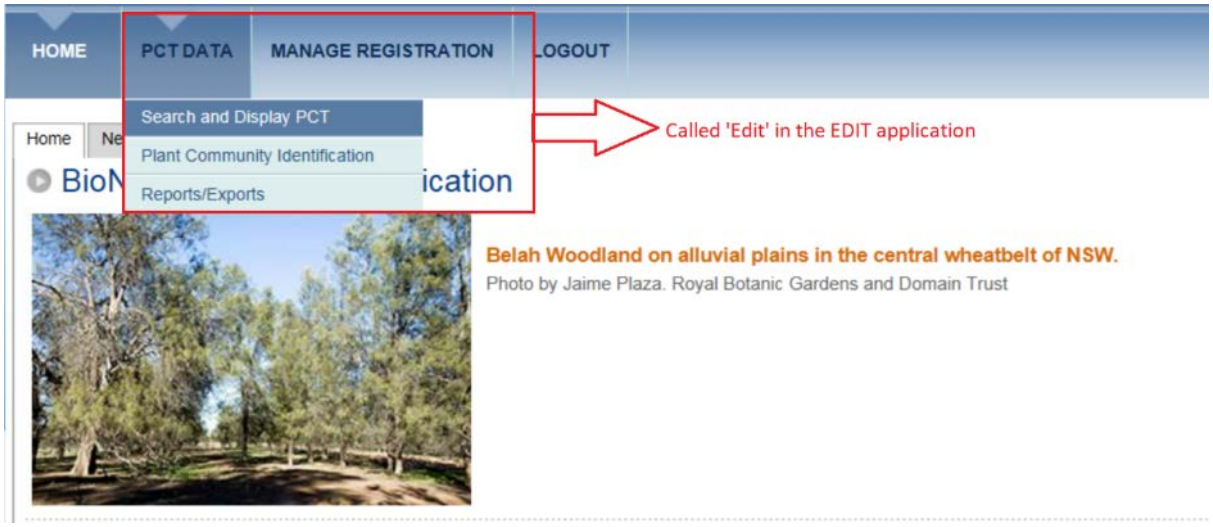


Figure 8 'PCT Data' options on the homepage

3. Search and display plant community type (PCT) data

Access this function by clicking on the ‘Search and Display PCT’ drop-down menu item under the ‘PCT Data’ tab in the top navigation bar.

> Not all fields in the BioNet Vegetation Classification applications have been fully populated for all plant communities. Key fully populated fields are displayed in the top half of the Search screen under the heading ‘Statewide Search Fields’. These fields are suitable for statewide searches and if used will return a complete list search result for those fields. You should search using these fields if you require a comprehensive list of available PCTs across New South Wales.
>
> Coverage for the remaining fields in the BioNet Vegetation Classification applications is incomplete and searches using these fields may retrieve only partial results. Those fields displayed in the bottom half of the Search screen under the heading ‘Additional fields’ are less consistently populated and may not produce a comprehensive search result when used (see Section 2.1).
>
> Also see Section 5.1 for information about setting up searches.

3.1 Searching PCT Data

The fields for the ‘Statewide search’ are either text fields (the first four fields) or drop-down menu fields (the bottom six fields) (see Figure 9).

The additional fields allow you to search by threatened ecological communities (TEC Act and TEC name) and by local government authority (LGA).

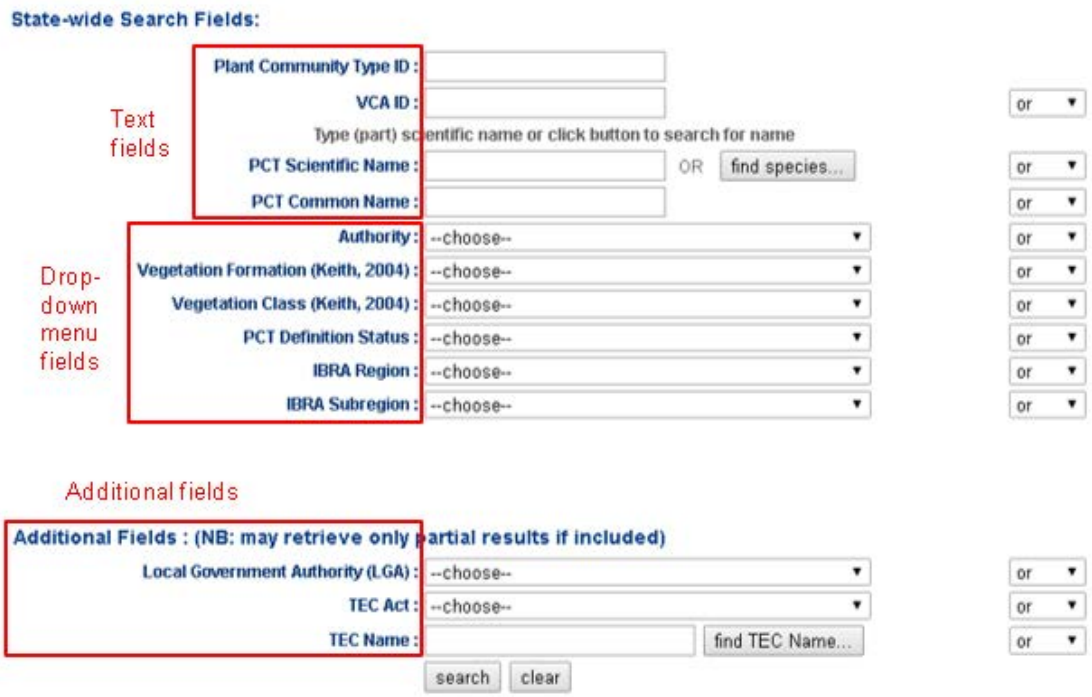


Figure 9 Search fields using both text fields or drop-down menu items

For the text fields, the ID fields will match exactly on the identifier entered, while the PCT Scientific Name and PCT Common Name will select on partial match.

For PCT Common Name, 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 Common Name field will retrieve all PCTs with ‘red gum’ in their common name.

To select via the PCT Scientific Name, either type directly into the field, or click on the find species button (see Figure 9). This opens the species search screen (see Figure 10).

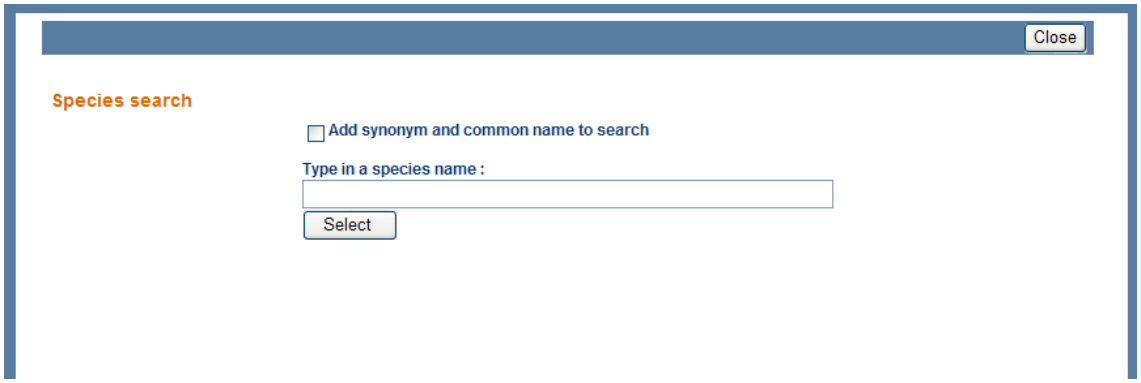


Figure 10 The ‘Species search’ is used to search for and select flora species by scientific or common name

Type at least the first three letters of a species scientific name in the ‘Type in a species name’ field at the top. Alternately, click the ‘Add synonym and common name to search’ box and type in at least the first three letters of a species common name. When you stop typing, the system will auto-populate a list of species matching the characters you have typed. For example, if you type ‘euc’, a list will appear with all species listed with scientific names that begin with ‘euc’ (see Figure 11). You can then scroll down through the list. To add a species from this list, click once on the name and it will be entered into the field.

To select the species you want, click the ‘Select’ button and the name will be added to the criteria list in the ‘PCT Scientific Name’ field.

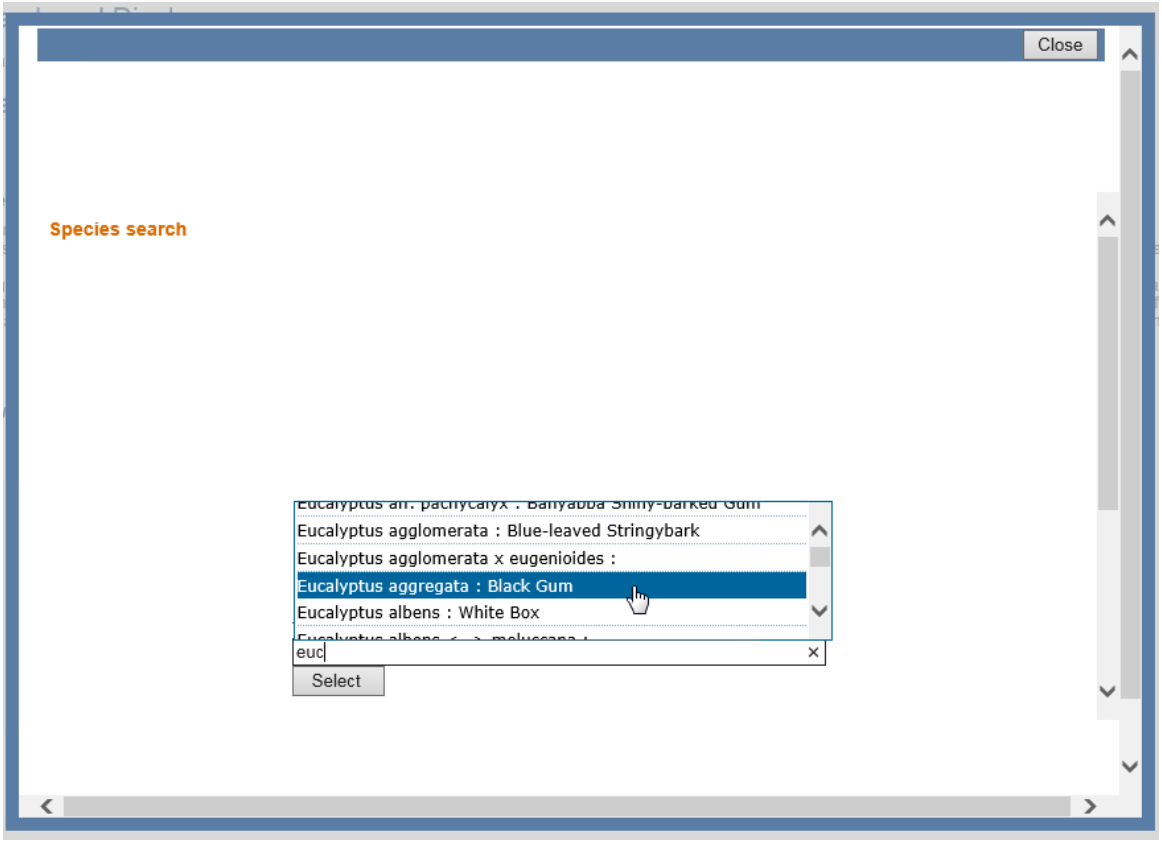


Figure 11 Use the 'Species search' window to select a species by scientific or common name

To use one of the drop-down fields, click the drop-down arrow next to the relevant field, then click to select the entry you want (see Figure 12).

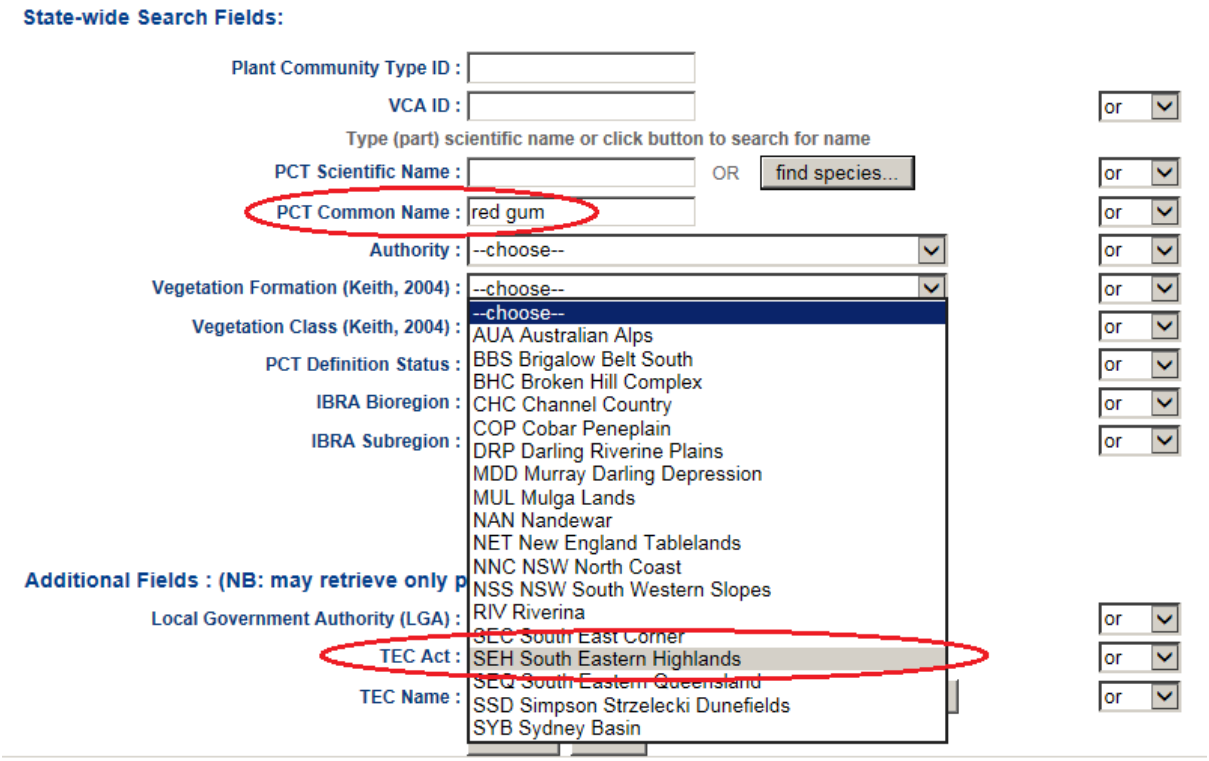


Figure 12 Using the text fields and drop-down menu items to search for plant community type

The system will display the results in the area below the search fields at the bottom of the page. It will also tell you how many records match your search term/s (see Figure 13).

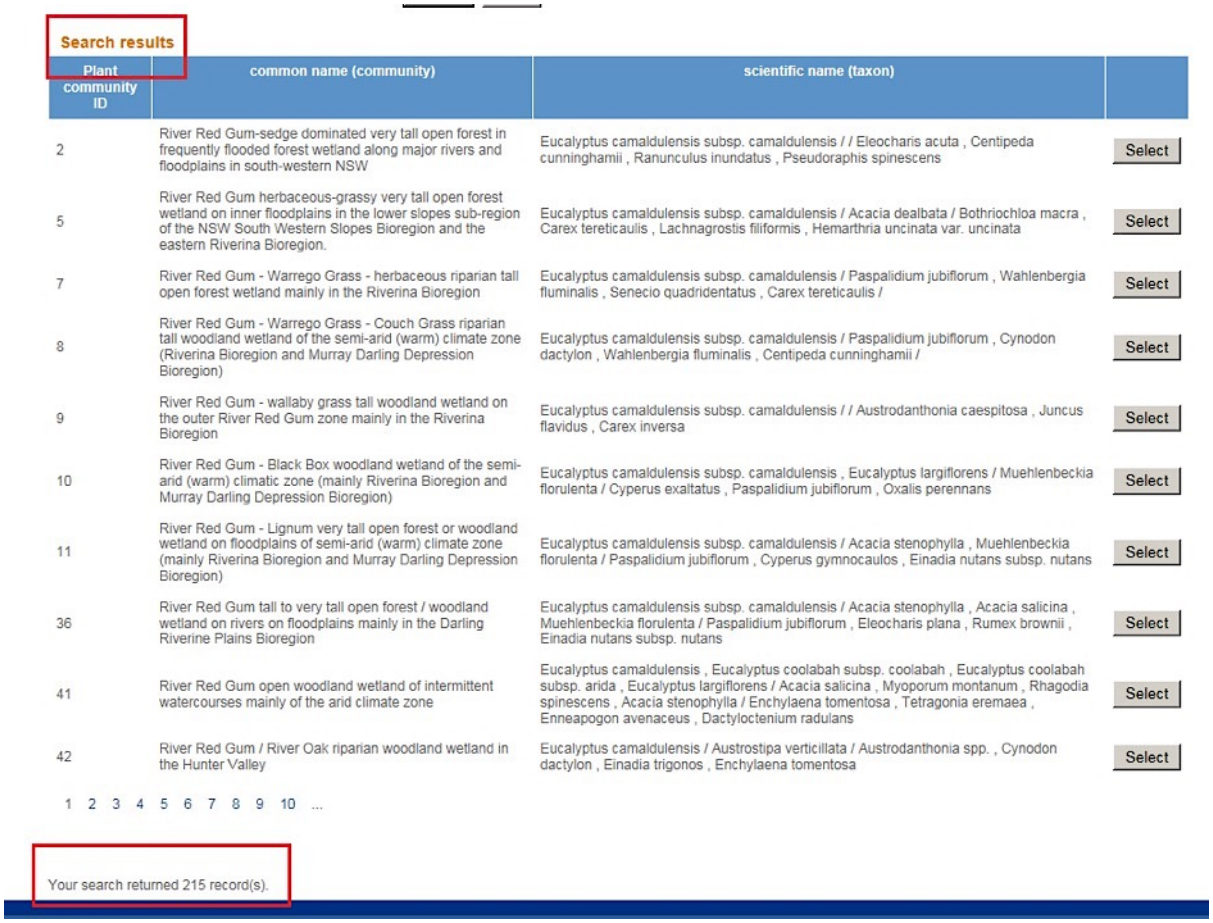


Figure 13 Search results screenshot

If you want to create a search using more than one term, either type in the full or partial terms in the free text fields and select the relevant entries via the drop-down fields. When you have completed entering your terms, hit ‘Enter’ on your keyboard, or the ‘Search’ button at the bottom of the screen and the system will display the results in the area below the search fields at the bottom of the page as shown previously.

You can modify the terms to refine your search at any time. To clear all the terms in the fields and the list of matched results, click the ‘Clear’ button at the bottom of the page.

When you are using multiple fields to create your search, you can specify how you want the terms to interact. This means setting a condition where ALL terms must be met, or where ANY of the terms are met. These two types of interactions are chosen via the drop-down fields to the right of the relevant field.

As an example, selecting Alpine Herbfields from the Vegetation Class (Keith 2004) field, then selecting Broken Hill Complex from the IBRA Bioregion field and leaving the interaction term as the default ‘or’ will retrieve a list of all PCTs that are either in the Broken Hill Complex IBRA Bioregion or are defined as within the Alpine Herbfields Vegetation Class (see Figure 14).

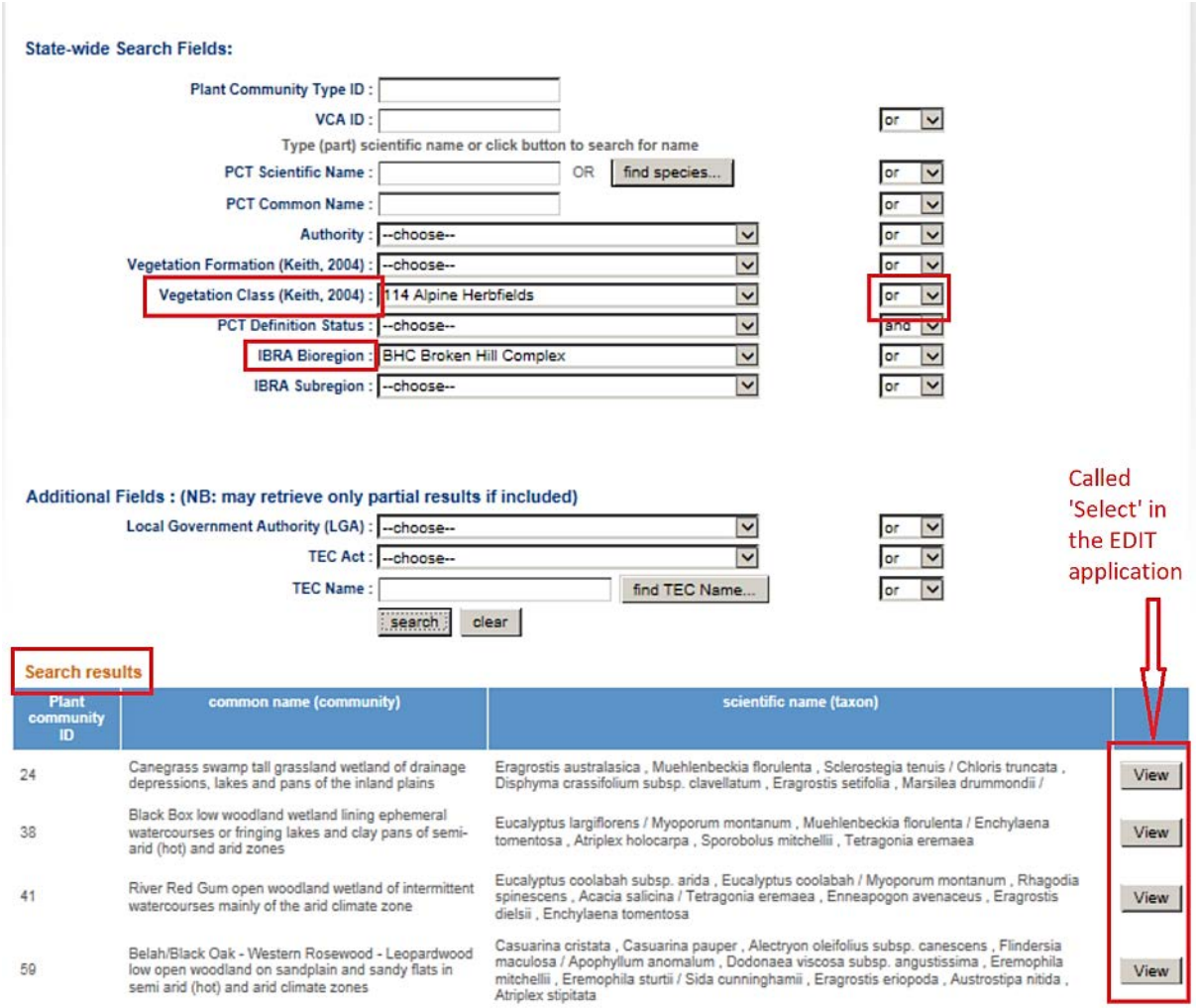


Figure 14 Using ‘or’ when entering search fields

However, altering the interaction term for the second criteria (i.e. the Vegetation Class) to ‘and’ will alter the search so that the system will retrieve PCTs that are both in the Broken Hill Complex IBRA Bioregion AND in the Alpine Herbfields Vegetation Class (see Figure 15).

In this instance, no results will be retrieved, as (unsurprisingly) there are no Alpine Herbfields in the Broken Hill Complex IBRA Bioregion. The fact that no matches were found will be indicated at the bottom of the (now empty) ‘Search results’ section.

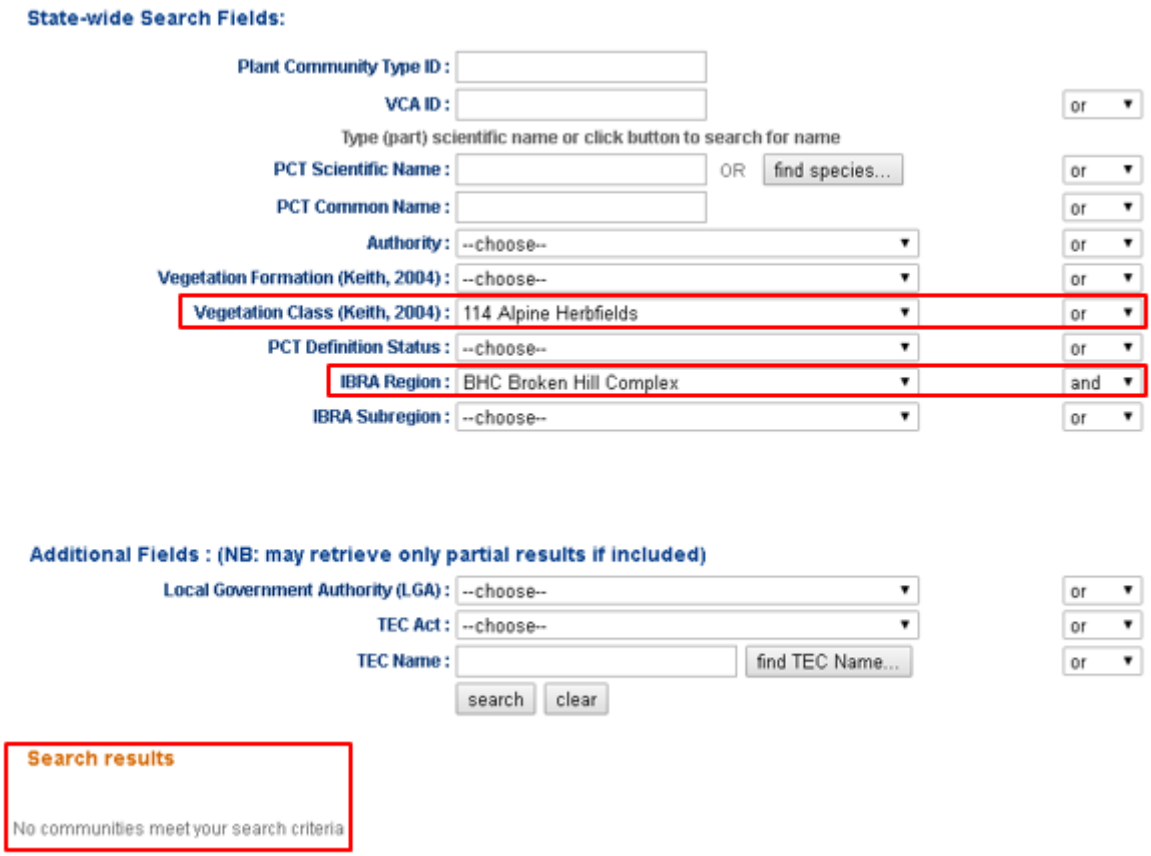


Figure 15 Using 'and' when entering search fields

> **Note:** it is the **second** interaction term that determines whether the query will be an 'and' (intersection) or an 'or' (union) search.
>
> The easiest way to ensure you are building the correct query is to:
>
> * set both terms to **'and'** if you want to search for PCTs that match **both** criteria
>
> * set both terms to **'or'** if you want to search for PCTs that match at least one of the criteria

3.2 Displaying and viewing PCT Data

When you want to view the data for the (or one of the) PCTs listed in the Search results, click the 'View' button to the right of the relevant PCT name (see Figure 16).

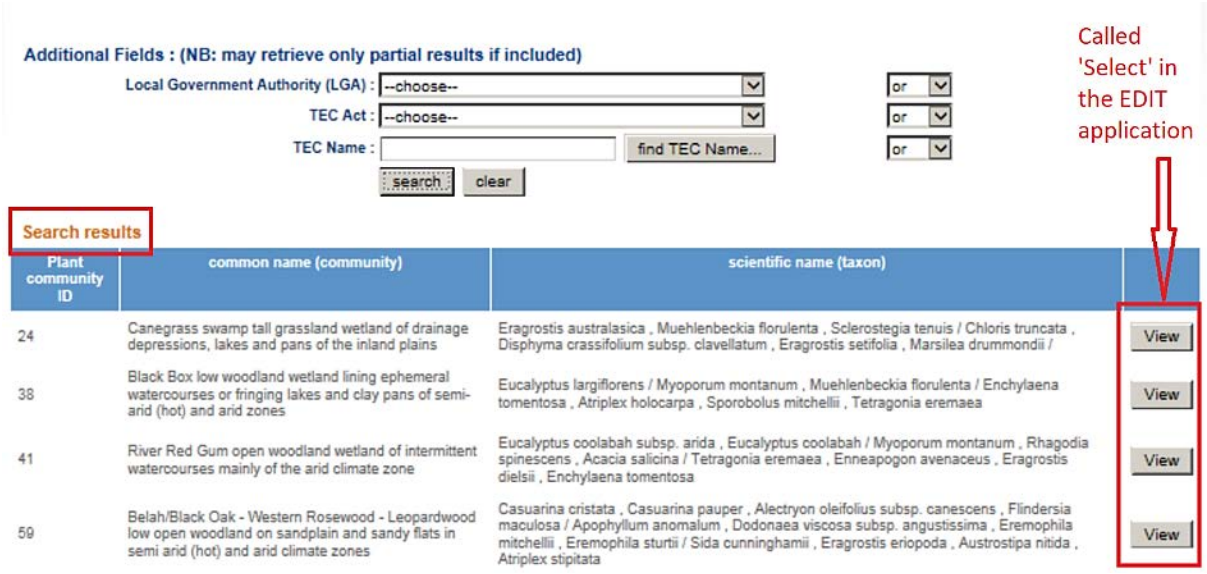


Figure 16 Viewing PCT Data

This will retrieve for display all of the data held for that PCT. There are more than 200 fields to be retrieved and displayed so it may take some time for the system to finish the retrieval. When the data are retrieved, the BioNet Vegetation Classification tabbed display will appear with the data for that PCT in the relevant fields.

The data are organised into eight broad topic areas as indicated by the titled tabs – by default the screen will appear with the 'Vegetation community details' tab active/open. For each tab, data are further organised in sections within that tab, as indicated by the blue bars with white text that describes that section – by default, the 'Community Name and Classification Level' section opens first (see Figure 17).

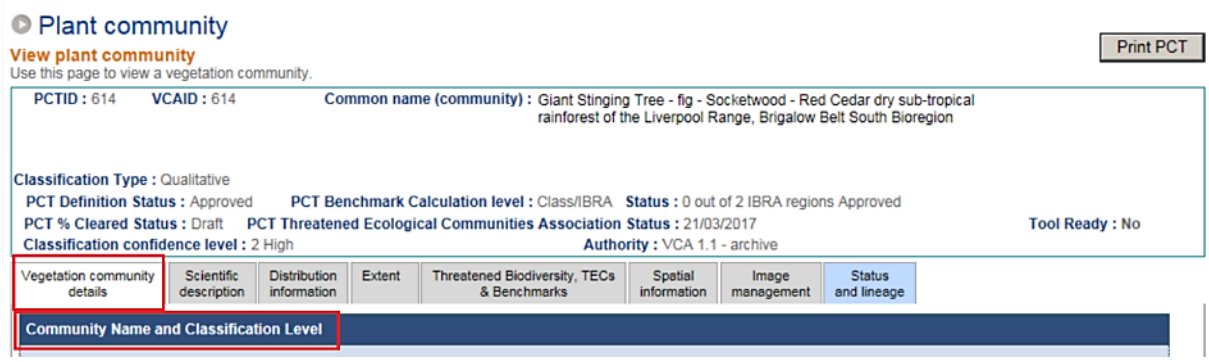


Figure 17 PCT tabbed display showing the 'Community Name and Classification Level' section

The section header bars operate as accordions (i.e. click to open one while automatically closing the currently open one). So, clicking on the 'Vegetation Formation & Class' section heading will open the 'Vegetation Formation & Class' section while automatically closing the 'Community Name and Classification Level' section (see Figure 18).

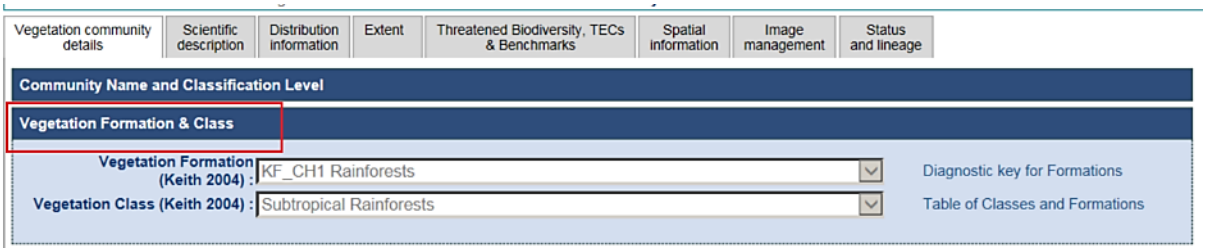


Figure 18 Tabs under the 'Vegetation community details' drop-down menu item

To navigate through the information, click on one of the eight major tabs to open a major data group area, then use the section headings to open and close the relevant information.

In a number of places, links provide further information on various aspects of the data displayed (in the EDIT application, these links assist with data entry). For example, the three text links at the top of the Community Structure section within the 'Scientific description' tab (see Figure 19) open three different pdf documents providing details on the community structure information provided. Each document opens within a separate window, so to return to the application simply click on 'x' to close each window tab.

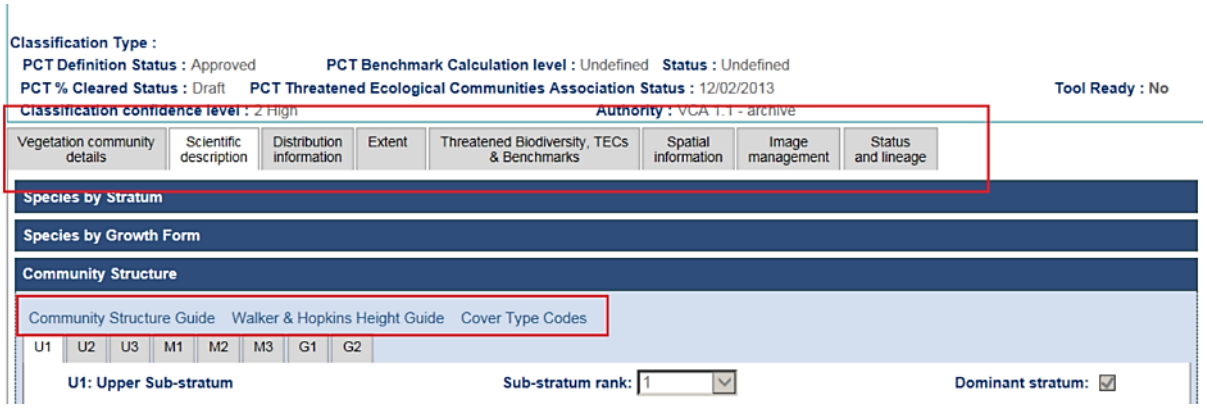


Figure 19 'Community Structure' section within the 'Scientific description' tab

A 'Print PCT' button has been included in the header section, to print key PCT information. It prints the same information available in the community profile report as a pdf document (see Figure 20).

Figure 20 The 'Print PCT' button

4. Plant Community Identification

The Plant Community Identification tool allows you to build a set of search criteria and then display the results that match your criteria. You can also modify the criteria and view summary information on selected communities (see Sections 4.1 to 4.4). You can export your matched results as .csv or .doc files (see Section 4.5) or click on links to open individual PCTs in separate windows.

Click on 'Community Identification' in the drop-down menu under 'PCT Data' in the top navigation bar.

This will open the main Plant Community Identification page (see Figure 21).

All searches will be added to the 'Selected search criteria' box (shown to the right of the search criteria, as in Figure 21). Note, all searches use the 'Any (or)' option (i.e. results may meet as few as one search criterion). Results can be filtered to create 'All (and)' searches (see Section 4.3.2).

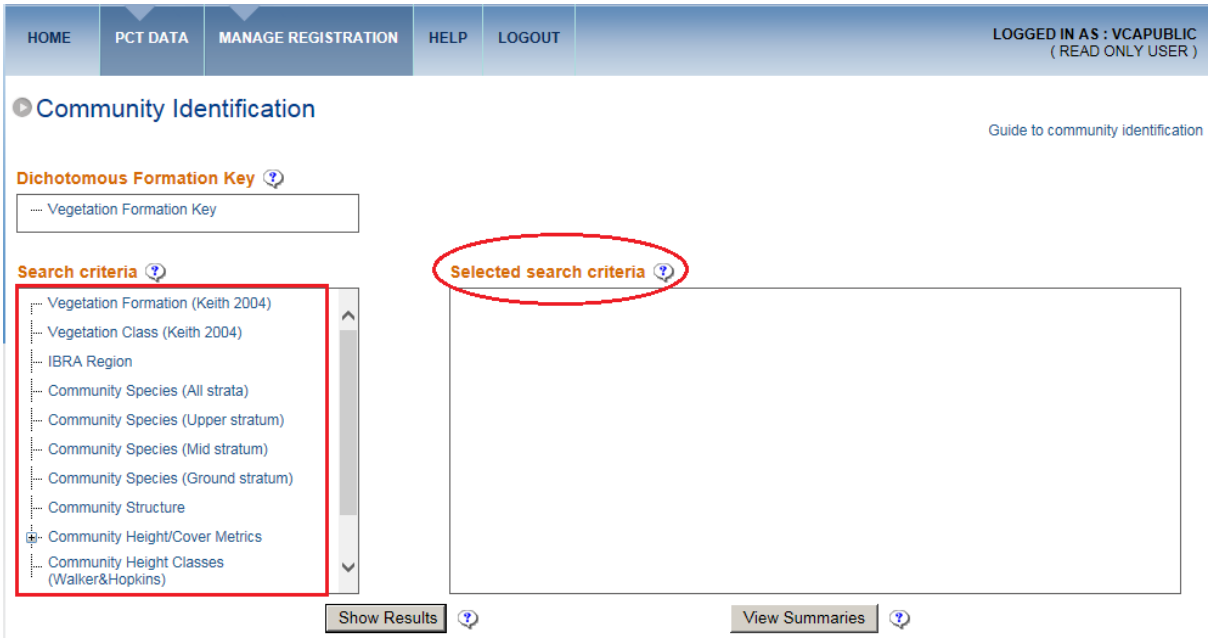


Figure 21 Main 'Plant Communication Identification' tool page

Note that background information is available for the various sections via the '?' icons; just click the relevant icon to get a pop-up screen for that section (see Figure 22).

Click outside the pop-up screen to close it.

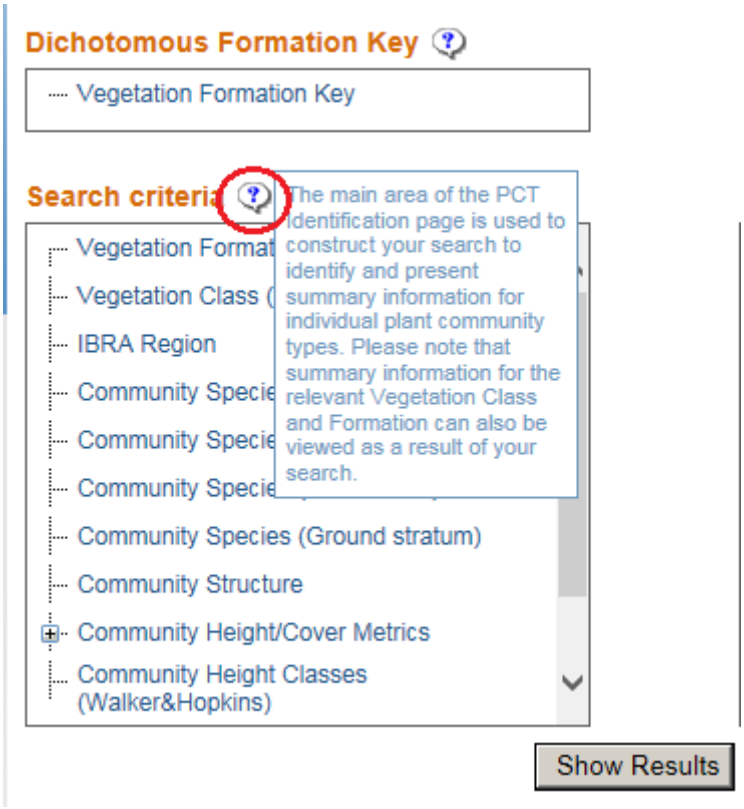


Figure 22 Background information '?' icon

4.1 Dichotomous Formation Key

The Dichotomous Formation Key is an optional way to select Vegetation Formations and Classes (Keith, 2004). Both Formation and Class may also be selected directly via the search criteria (see Section 4.2.2). The Dichotomous Formation Key provides a way to determine the Formation and/or Class using diagnostic information.

The key is a series of questions arranged in couplets, each with two alternative answers (e.g. 'A' and 'A*'). To use the key, read both alternative answers, choose the answer that most accurately defines the Vegetation Formation then go to the next couple of questions and continue clicking on the most accurate answer until you reach a formation name (italics). Note that for some formations there is more than one possible path to arrive at the formation (after Keith 2004).

1. To open the Dichotomous Formation Key, click on 'Vegetation Formation Key' (see Figure 23).

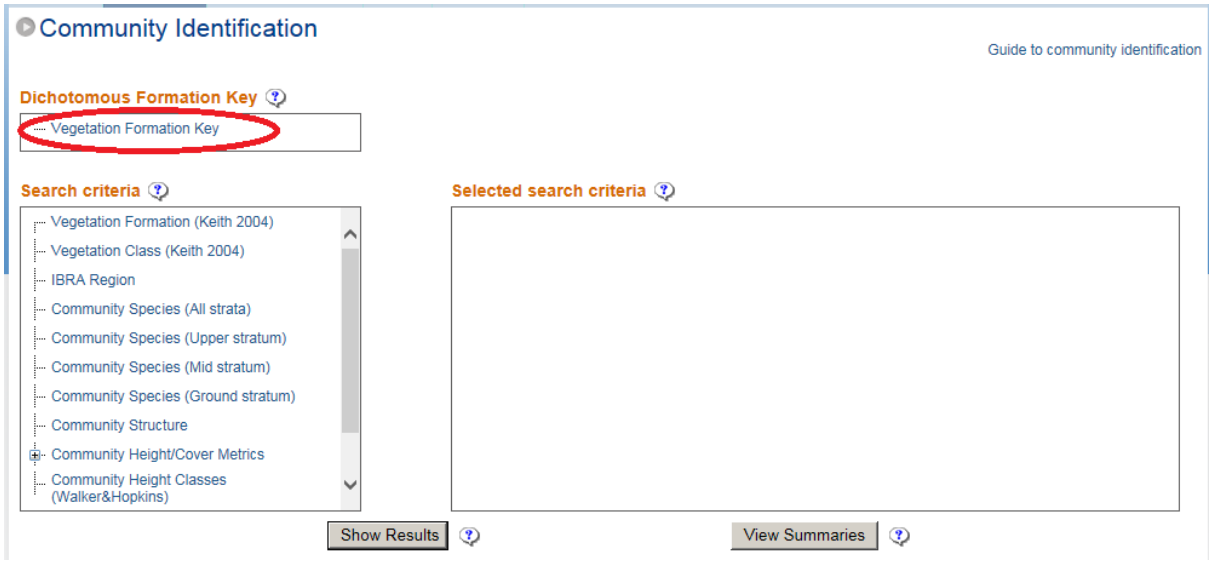


Figure 23 Vegetation Formation Key

2. This will open the first level of the key. To open the next levels in the key, click on the '+' sign to the left of the relevant option (see Figure 24).

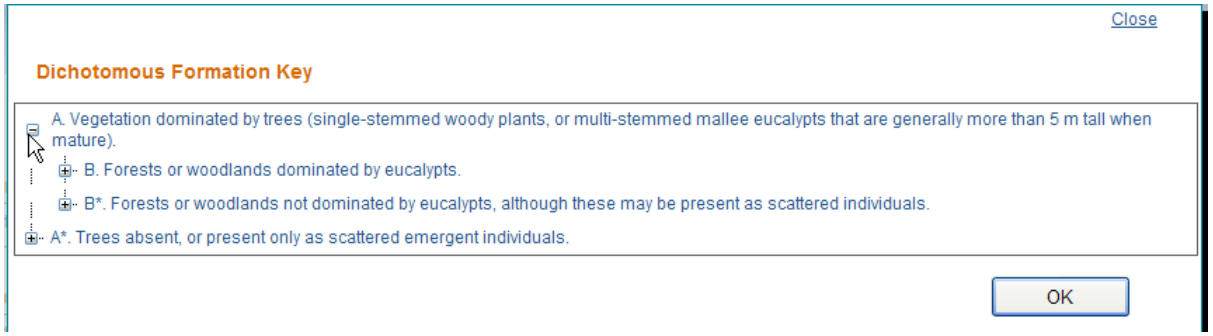


Figure 24 Different levels of the Vegetation Formation Key

3. To close a level, click on the '–' sign next to the relevant level. You can open each level independent of other levels (i.e. unless you close a level, it will remain open).
4. Keep choosing the appropriate path until you reach the Formation description; this will be marked by a capital 'F' icon. Click once to highlight the desired Formation (it might take a second or two for the selection to be highlighted) (see Figure 25).

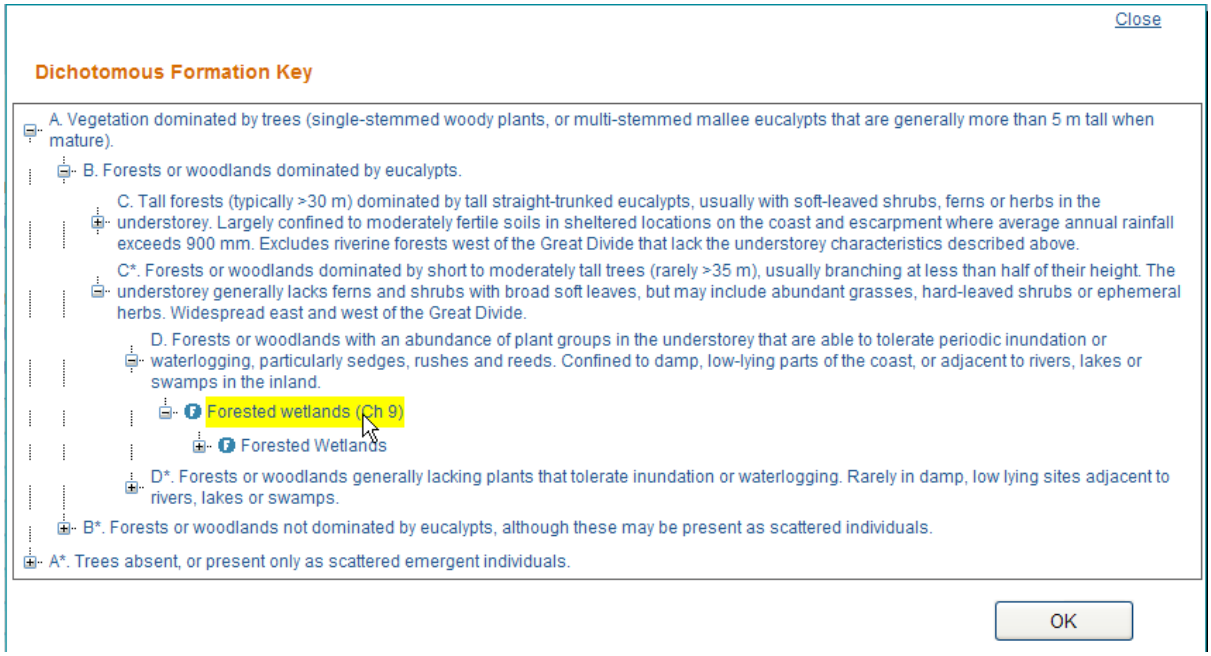


Figure 25 Highlighted selection of the Dichotomous Formation Key

5. You can also select a Vegetation Class by opening the Formation list (click once on the '+' sign) which will open the Vegetation Classes for that Formation; the Classes are denoted by the capital 'C' icon. Click once to select the desired Vegetation Class and then click 'OK' (see Figure 26).

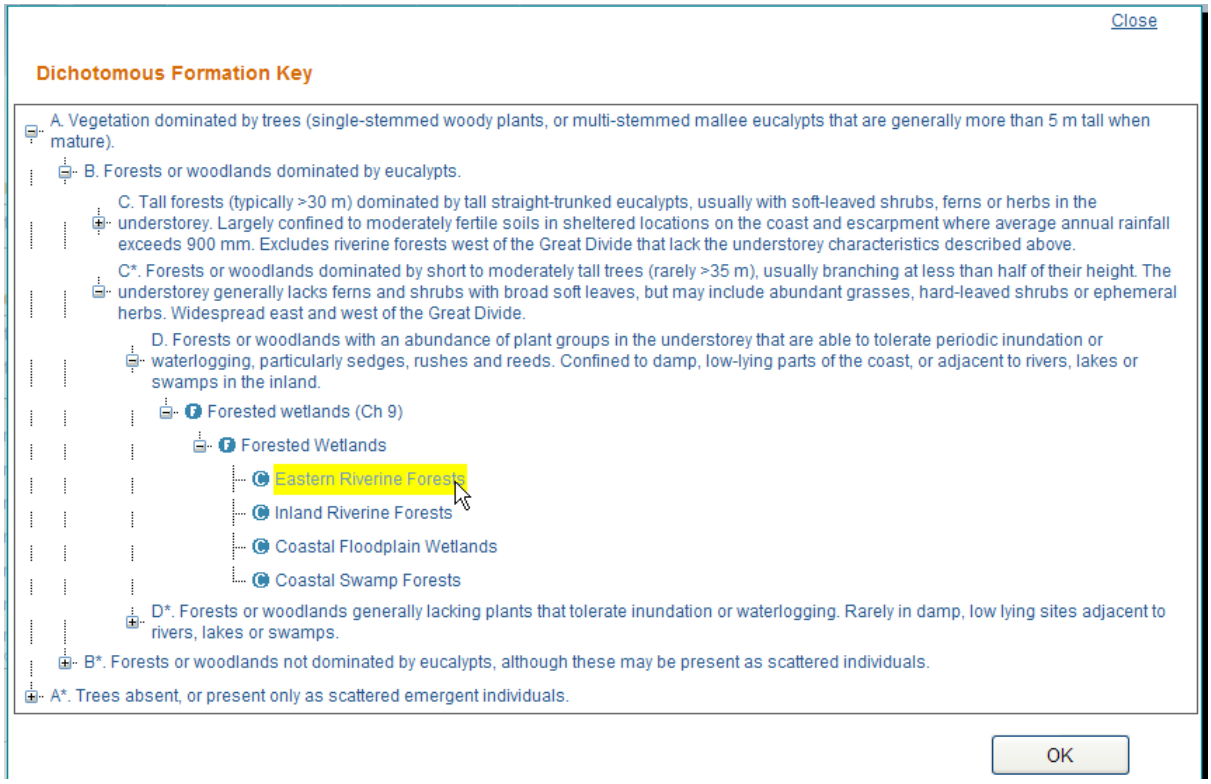


Figure 26 Vegetation Class of the Dichotomous Formation Key

6. The selected Vegetation Formation (or Class) will be added to the ‘Selected search criteria’ box. To change or remove the selected criteria, click the ‘Edit Criteria’ or ‘Delete criteria’ links on the right of the relevant criterion (see Figure 27).

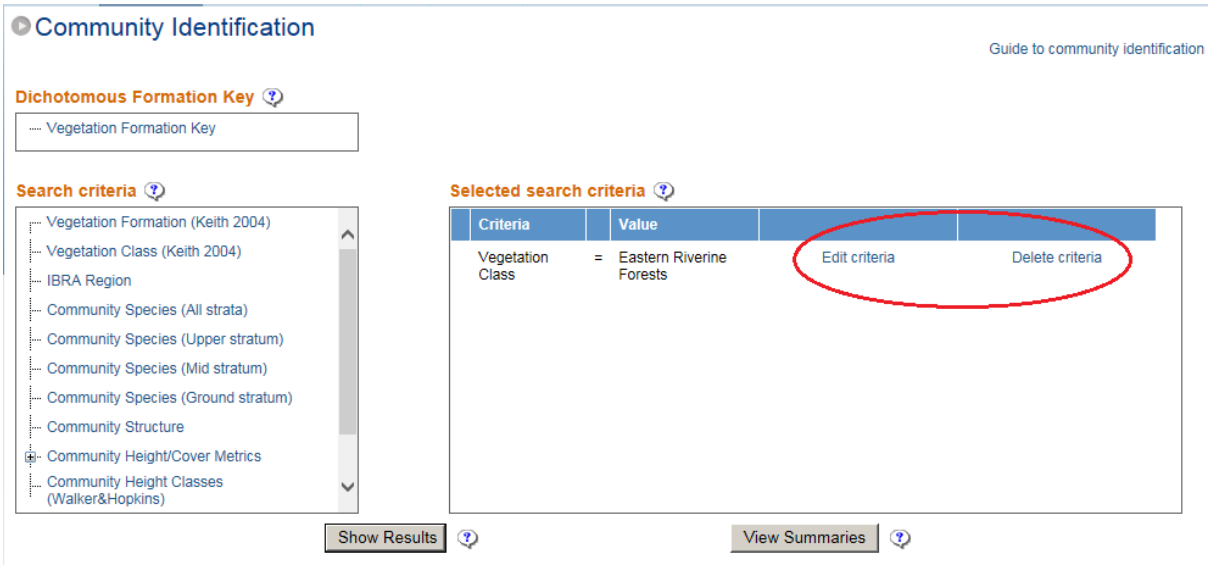


Figure 27 Options to edit or delete criteria once in the ‘Selected search criteria’ box

4.2 Plant Community Identification tool search criteria

The main area of the Community Identification tool page is used to construct your search to identify and present summary information for individual PCTs. Summary information for the relevant Vegetation Class and Formation can also be viewed as a result of your search.

Note that the Community Identification tool searches within the BioNet Vegetation Classification application you are using. Thus, the Public application tool searches within the Public application. Similarly, the Edit application tool searches within the Edit application, which includes PCTs with statuses not published to the Public application.

4.2.1 IBRA Regions

To select an Interim Biogeographic Regionalisation for Australia (IBRA Region) (see Figure 28):

1. Click ‘IBRA Region’ to bring up the list.
2. Click once to highlight the relevant IBRA Region.
3. Click ‘OK’ to enter the selected IBRA Region into the ‘Selected search criteria’ box.

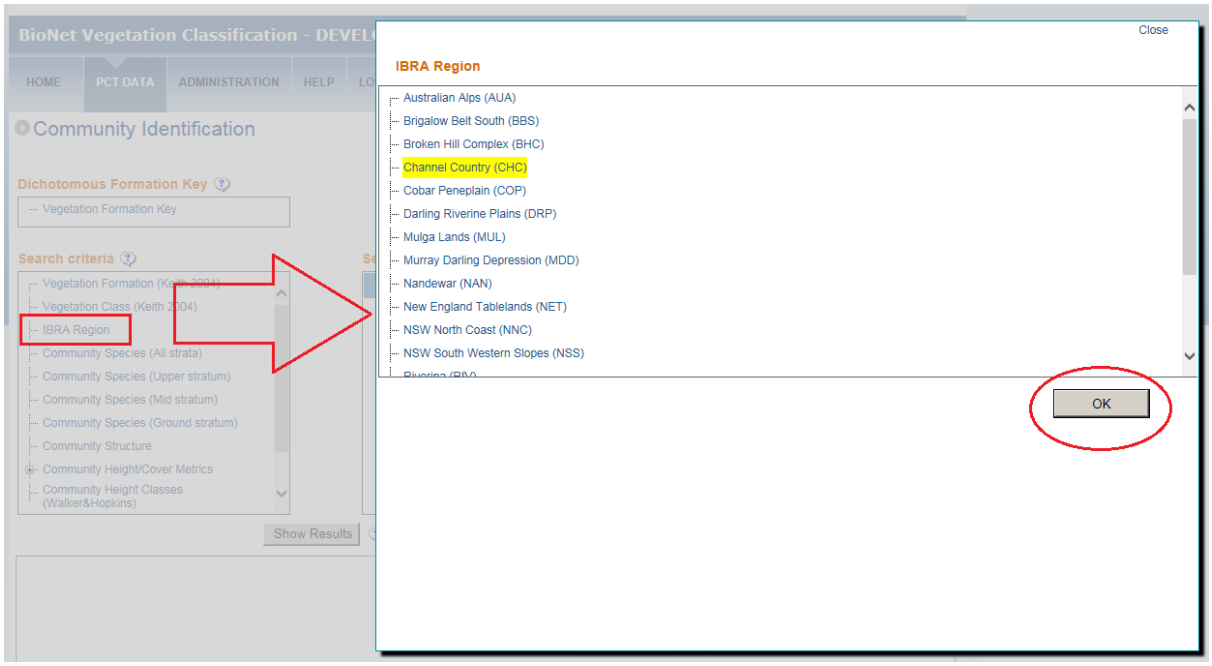


Figure 28 Selecting an IBRA Region

4.2.2 Vegetation Formation and Class

In addition to using the Dichotomous Formation Key, Vegetation Formation and Class can also be selected:

1. Click the 'Vegetation Formation (Keith 2004)' menu option (see Figure 29). The list of Formations will appear (see Figure 30).

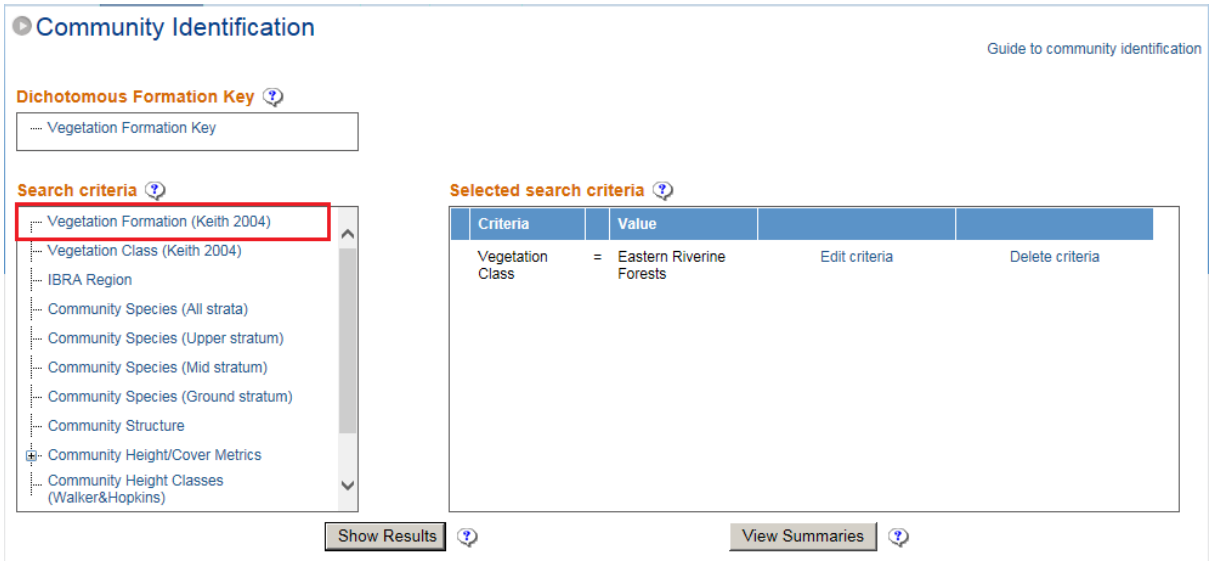


Figure 29 Vegetation Formation (Keith 2004) menu

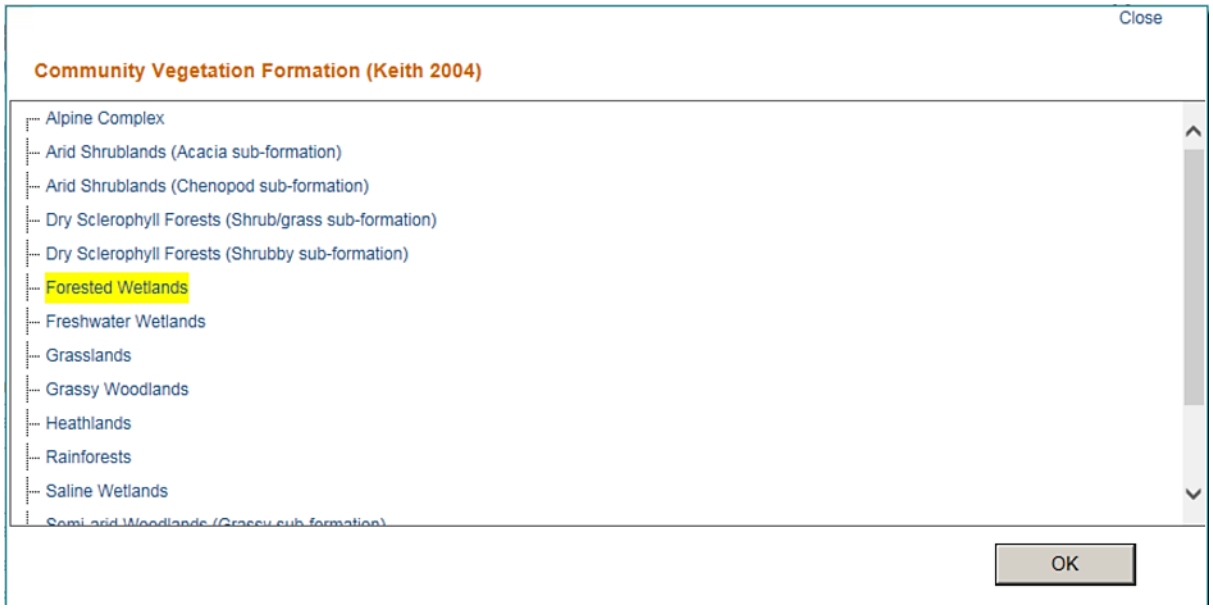


Figure 30 List of Formations under the Vegetation Formation (Keith 2004) menu

2. Click once to highlight the relevant Formation, then click OK to add it to the criteria (if you select the same Formation again, it will be added twice).
3. To select a Vegetation Class, click the Vegetation Class (Keith 2004) menu option. The Vegetation Classes will be grouped within their relevant Formations (see Figure 31).

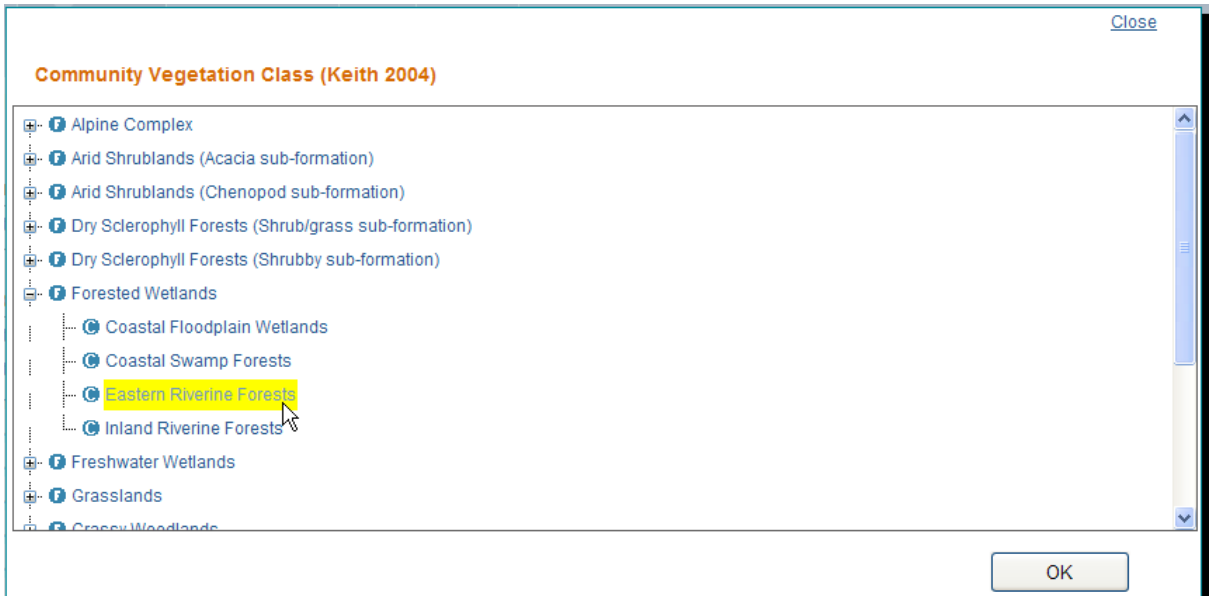


Figure 31 Vegetation Formation and Vegetation Class search criteria

4. Click on the '+' sign next to the appropriate Formation to open the list of relevant Classes.
5. Click once to highlight the relevant Vegetation Class (see Figure 31).
6. Click 'OK'. The selected Vegetation Class will be entered into the 'Selected search criteria' box on the top right (see Figure 32).
7. You can also click the 'Close' link if you change your mind and decide not to select a Class.

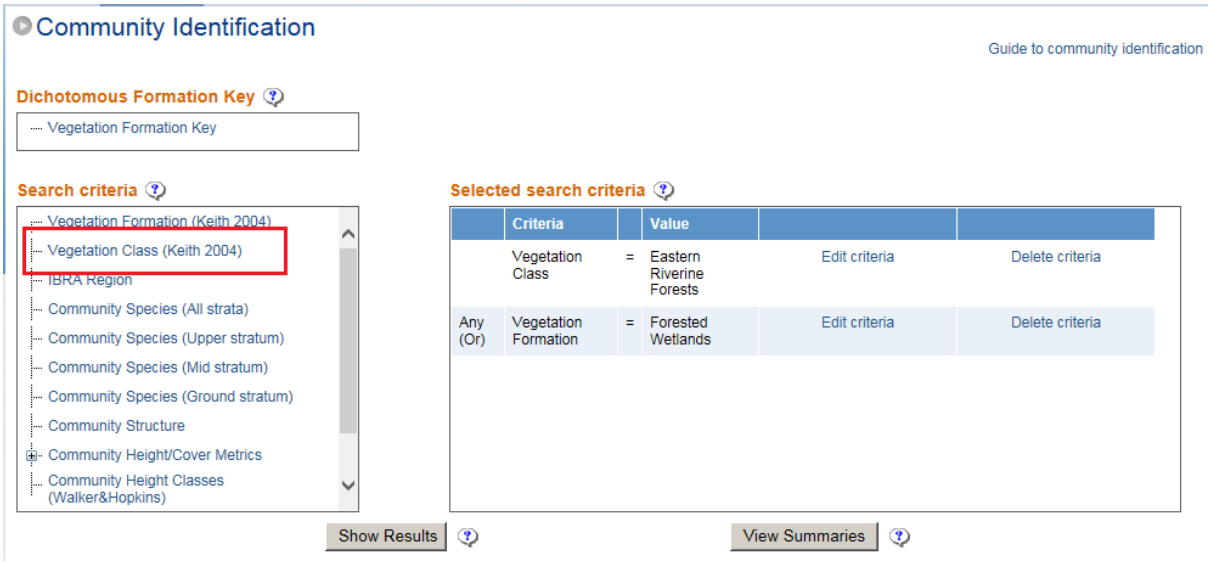


Figure 32 Selecting Vegetation Classes under Vegetation Formations (Keith 2004)

8. To change or remove the selected criteria, click the 'Edit criteria' or 'Delete criteria' links on the right of the relevant criterion (see Figure 32).

4.2.3 Community species: all strata; or upper, middle or ground stratum

You can select PCTs by the scientific or common names of species recorded in the community. The method to select Community Species is the same for the 'All strata', 'Upper', 'Middle' and 'Ground' strata. Using the 'All strata' option searches for a species listed in any of the species lists (i.e. Upper, Middle or Ground). If you want to select a species from within only one stratum, then use the relevant option (see Figure 33).

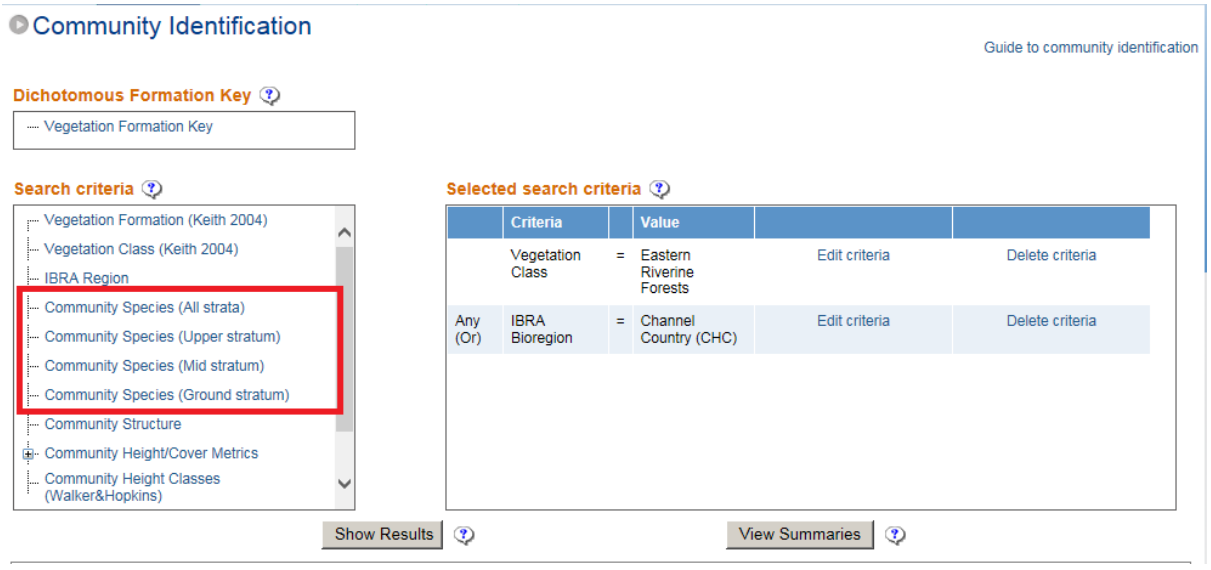


Figure 33 Selecting species from Community Stratum

Only the 'Upper stratum' is detailed here, as an example. For selection of species:

1. Click the 'Community Species (Upper stratum)' menu option. This will open the species selection screen (see Figure 34).
2. To search for a species, you can use only the scientific name, or include the common name in the search – check or uncheck the 'Add common name to search' button as

required. The field will auto-search based on any three or more letters entered into the 'Type in a species name' field once there is a pause of two seconds in typing and will retrieve matches for species names commencing with these letters. So, typing 'euc' will retrieve all species with genus name beginning with 'euc' (see Figure 34).

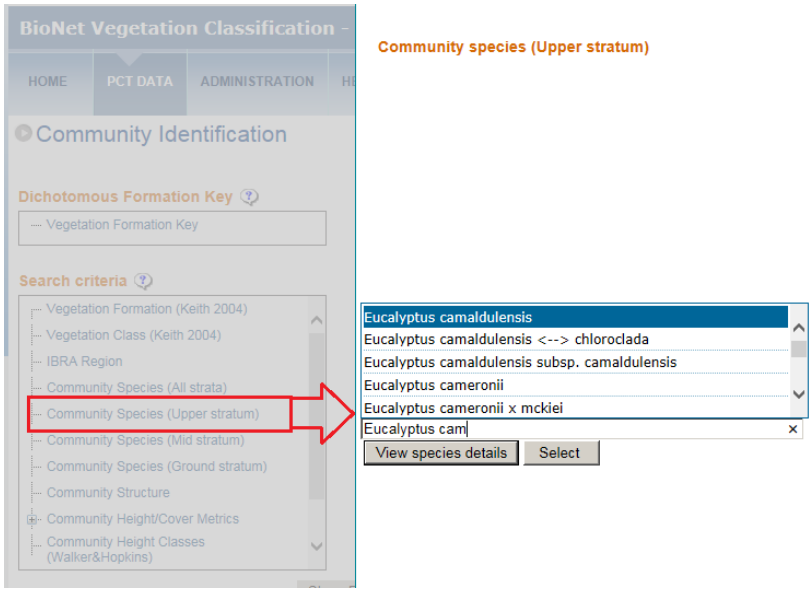


Figure 34 Searching for community species using the full scientific name

3. To use the species suffix to search on rather than select from a list based on genus, you can either type the full genus name and at least three letters of the species name, or type three (or more) letters of the genus name, then '+' and three or more letters of the species name (e.g. 'euc+cam'). The '+' option must be closed up text (i.e. 'euc + cam' with spaces will not retrieve search results) (see Figure 35).

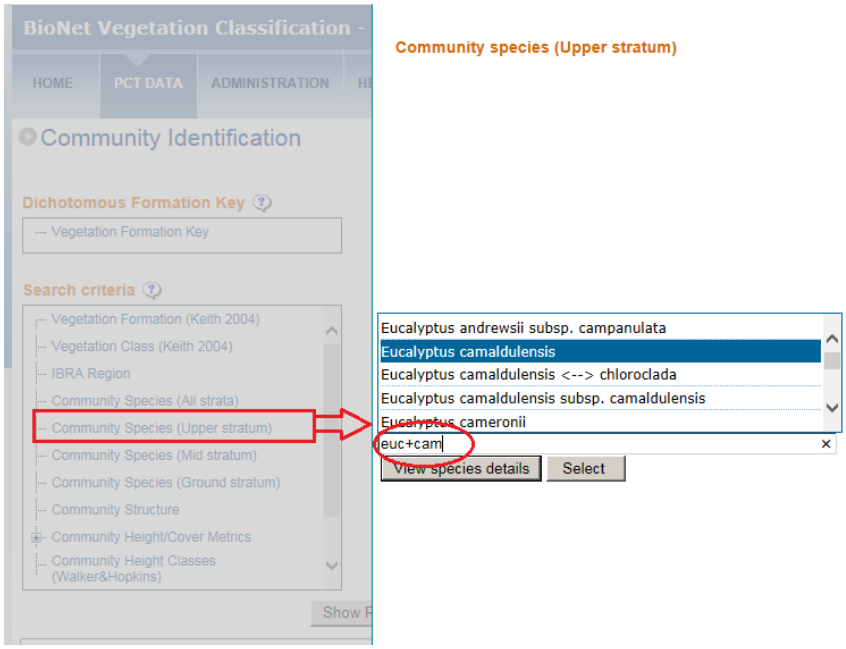


Figure 35 Searching for community species using '+'

4. When the relevant species name appears, click once to select the name.
5. Click 'OK' to make it a search criterion. The selected name will appear in the 'Selected search criteria' box at the top right.

6. If you want to view details on the species once it is entered into the species name field, click the ‘View Species details’ button. This will link directly to the PlantNet database (Royal Botanic Gardens and Domain Trust) in a separate browser window and retrieve the information on the species. When you have finished, close the window to return to the species selection page.

4.2.4 Community Structure

To search by Community Structure (e.g. ‘Woodland’, ‘Open Woodland’) (see Figure 36):

1. Click the ‘Community Structure’ option from the criteria list. This will open the list of available Community Structure terms. Each of these terms contains the list of relevant community structures as defined in Walker and Hopkins (1990) for that growth form group (N.B. Woodland contains ‘forest’ as well as ‘woodland’ types).
2. Click on the ‘+’ sign next to the relevant group to open the community structure terms within that group.
3. Click once to highlight the relevant term.
4. Click ‘OK’ to add the term to the search criteria. The selected term will appear in the ‘Selected search criteria’ box at the top right.

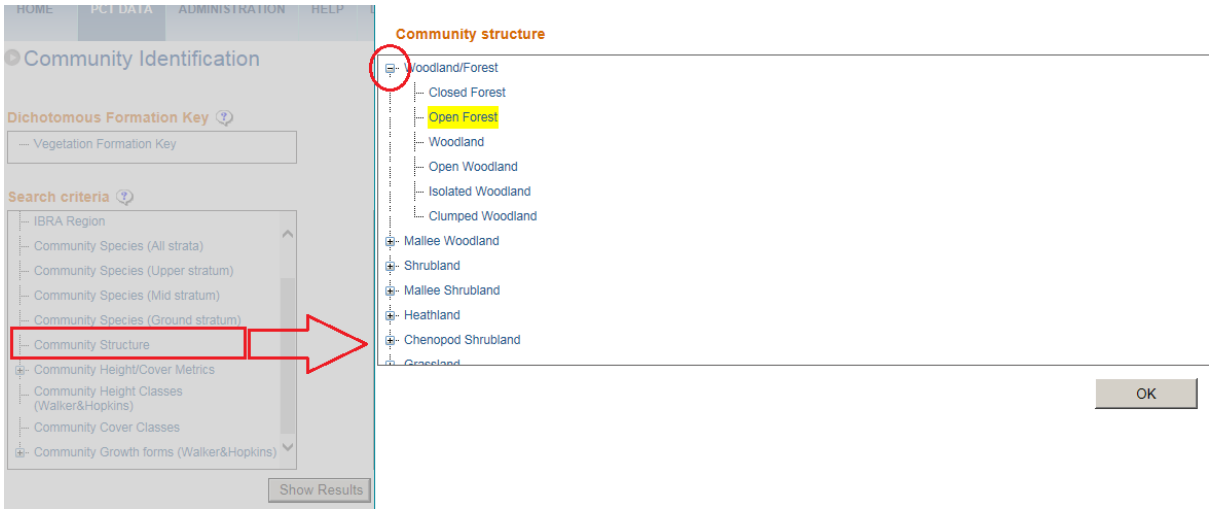


Figure 36 Searching by Community Structure

4.2.5 Community Height/Cover Metrics

You can search for PCTs by specifying actual measures of structure in terms of height and cover for the community (see Figure 37):

1. Click on the ‘+’ sign next to the ‘Community Height/Cover Metrics’ option in the Search Criteria list to open the two available paths.
2. Click on ‘Community Height’ to open the relevant dialogue box.
3. Select the appropriate operator for the mean height you are interested in. Note it is only possible to search on one end of a range as searching on both will select all. If a range is wanted, then use ‘Community Height Classes’, which are separated into growth forms (see Section 4.2.6).

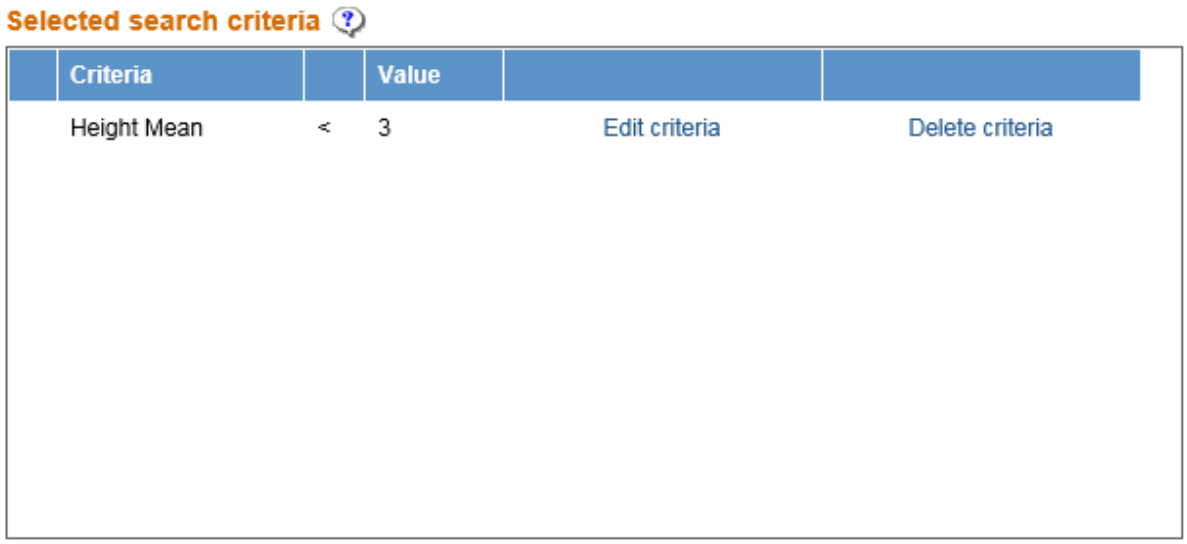


Figure 37 Searching for PCTs using specific metrics

4. Enter the actual figure (integer) to represent the mean height in metres.
5. Click ‘OK’ as shown below (Figure 38 defines mean height equal to 5 metres). The selected term will appear in the ‘Selected search criteria’ box at the top right.

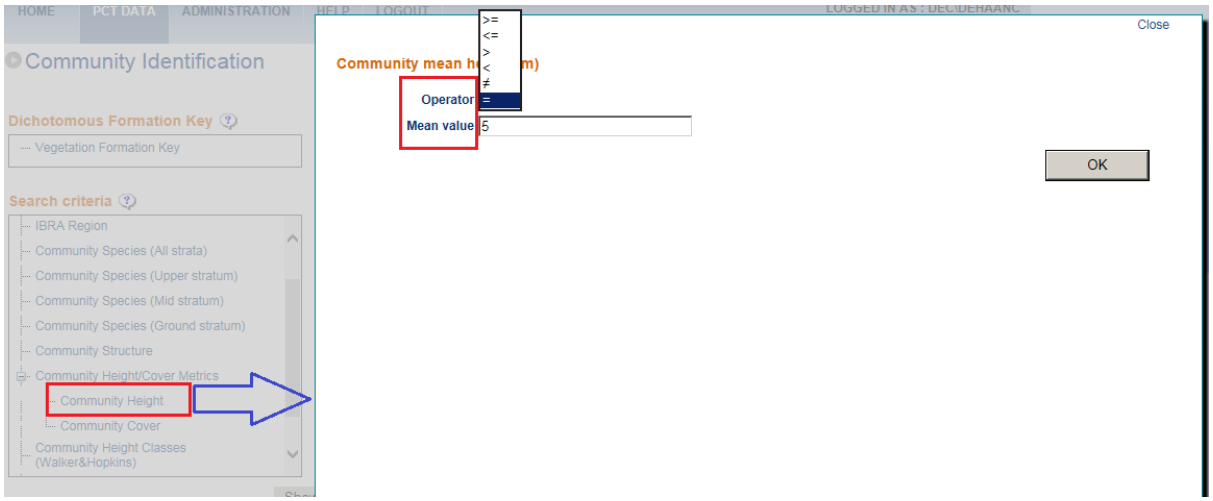


Figure 38 Searching for PCTs with a height equal to 5 metres

6. Click on ‘Community Cover’ to open the relevant dialogue box. Select the appropriate operator for the mean cover value you are interested in. The operators are the same as those for ‘Community Height’.
7. Note it is only possible to search on one end of a range as searching on both will select all. If a range is wanted, then use ‘Community Cover Classes’. Enter the actual figure (integer) to represent the cover percentage (Figure 39 defines mean cover based on Crown or Canopy Cover type equal to or greater than 15%).
8. Select the Cover Type you want to use and then click ‘OK’. The selected term will appear in the ‘Selected search criteria’ box.

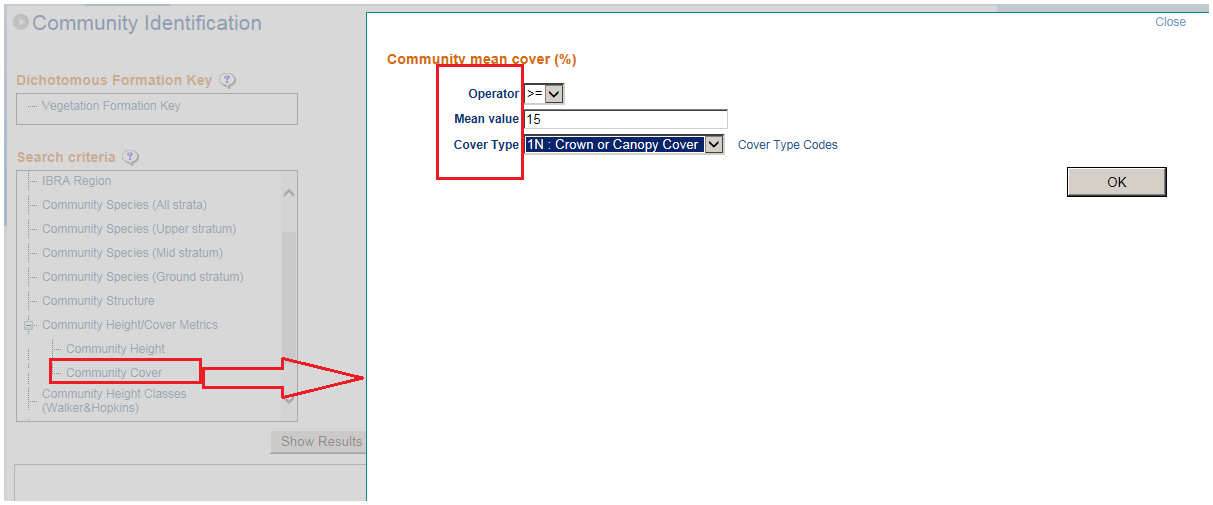


Figure 39 Searching for PCTs with mean Crown or Canopy Cover greater than or equal to 15%

Further information on cover types is provided in Walker and Hopkins (1990), specifically pages 66–77.

4.2.6 Community Height Classes

To search by Community Height Classes (see Figure 40):

1. Click on ‘Community Height Classes’ in the Search Criteria list to bring up the list of Height Classes. Each of these terms contains the list of relevant Community Height Classes as defined in Walker and Hopkins (1990) for that growth form group.
2. Click on the ‘+’ sign next to the relevant group to open the Community Height Classes within that group.
3. Click once to highlight the relevant term.
4. Click ‘OK’ to add the term to the search criteria. The selected term will appear in the ‘Selected search criteria’ box at the top right.

Figure 40 Searching by Community Height Classes

4.2.7 Community Cover Classes

To search by Community Cover Class (see Figure 41):

1. Click on ‘Community Cover Classes’ in the Search Criteria list to bring up the list of Cover Classes.
2. Click on the relevant cover class.
3. Click ‘OK’ to add the term to the search criteria. The selected term will appear in the ‘Selected search criteria’ box.

Figure 41 Searching by Community Cover Class

4.2.8 Community Growth Forms

You can search for PCTs by specifying the growth forms within the community across all strata (see Figure 42):

1. Click on the ‘+’ sign next to the ‘Community Growth Forms (Walker and Hopkins)’ option in the Search criteria list to open the two available paths as shown below (N.B. you may need to scroll down the list to view these).
2. Click on ‘Growth Forms (Walker and Hopkins)’ to bring up the list of growth forms.
3. Open the subsections of growth forms by clicking the ‘+’ sign next to the appropriate term, then click once to highlight the desired growth form.
4. Click ‘OK’ to add the growth form to the search criteria. The selected term will appear in the ‘Selected search criteria’ box.

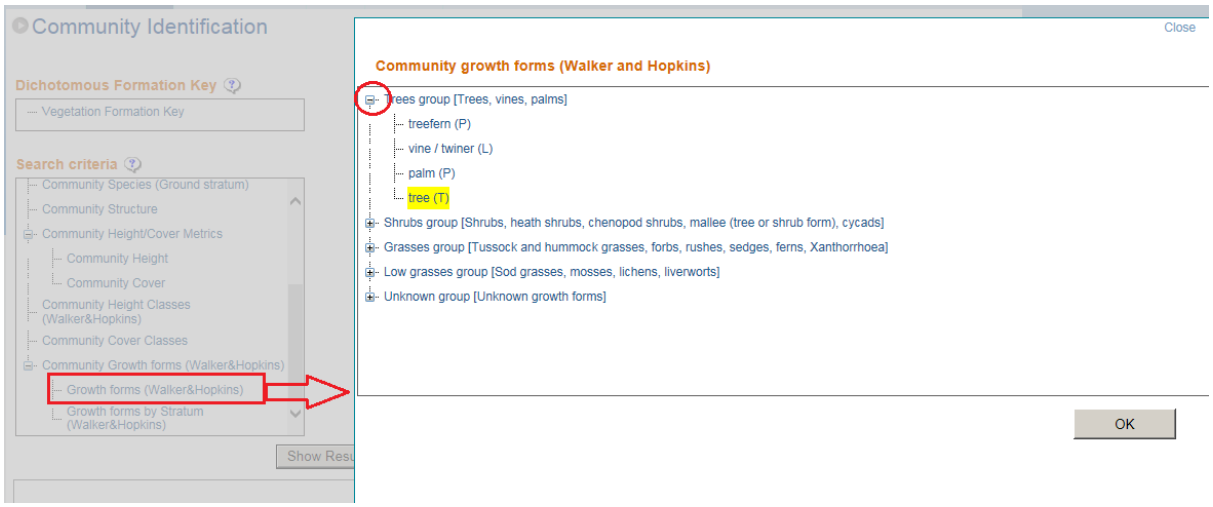


Figure 42 Searching by Community Growth Forms across all strata

You can search for PCTs by specifying the growth forms within specific strata (see Figure 43):

1. Click on ‘Growth Forms by Stratum (Walker & Hopkins)’. The Stratum selection screen will appear.
2. Open the sublists by clicking the ‘+’ sign until you reach the list of available growth form.
3. Click once on the relevant growth form.
4. Click ‘OK’. The selected term will appear in the ‘Selected search criteria’ box at the top right.

Figure 43 Searching by Community Growth Forms within specific strata

4.3 Plant Community Identification – showing results

While you are building your search criteria, you can display the PCTs currently matching your selected criteria. To do this:

1. Click the ‘Show Results’ button and the results will be displayed in the results section at the bottom of the page. The results area presents the matching list within a hierarchy of Vegetation Formation, Vegetation Class and PCT, as denoted by the column names.
2. To group the results alphabetically by one of these, drag the column name into the area above marked ‘Drag a column header and drop it here to group by that column’ (see Figure 44).
3. Note, you can also group the results by one of the selected search criteria. As per the initial sort order, the PCTID will be sorted within each grouping. Further, you can group by multiple criteria to give groupings within groupings.

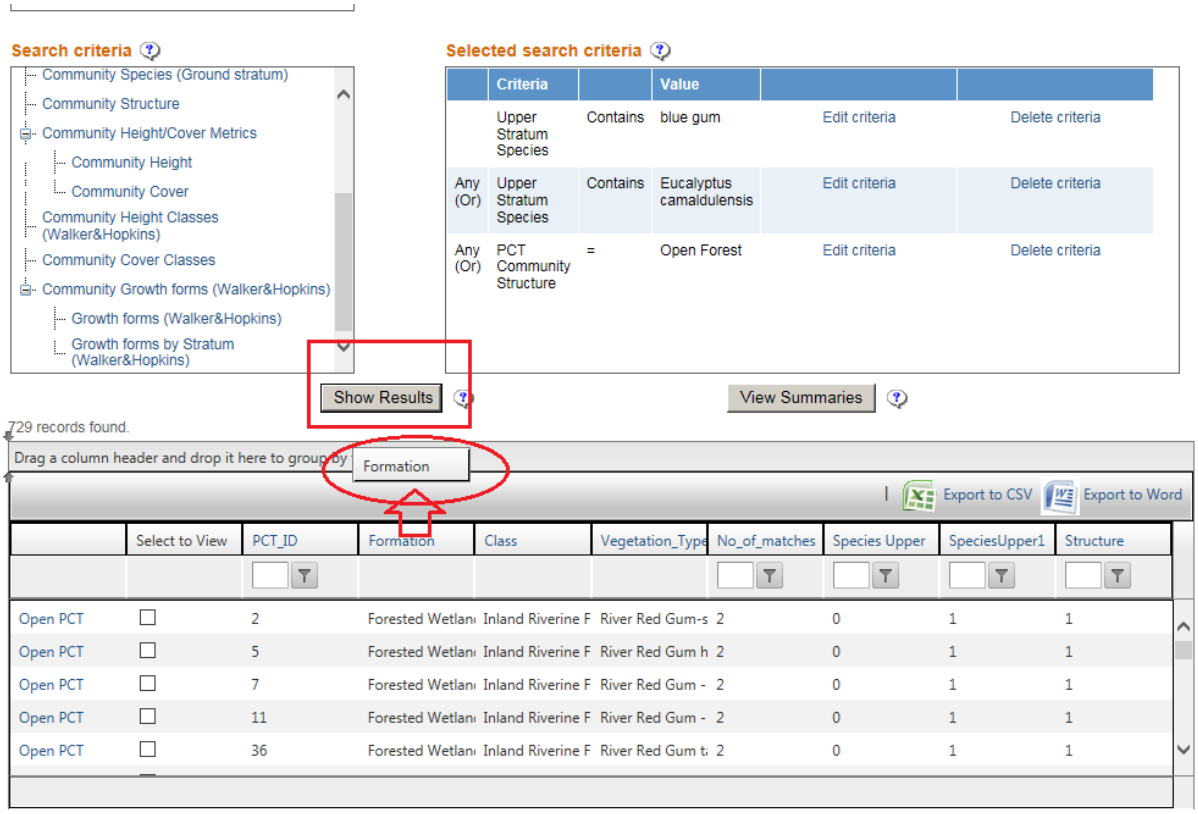


Figure 44 Displaying PCT search results by Formation

3. To remove the grouping, click the ‘x’ on the column name in the sort area. The list will revert to the non-sorted list (see Figure 45).

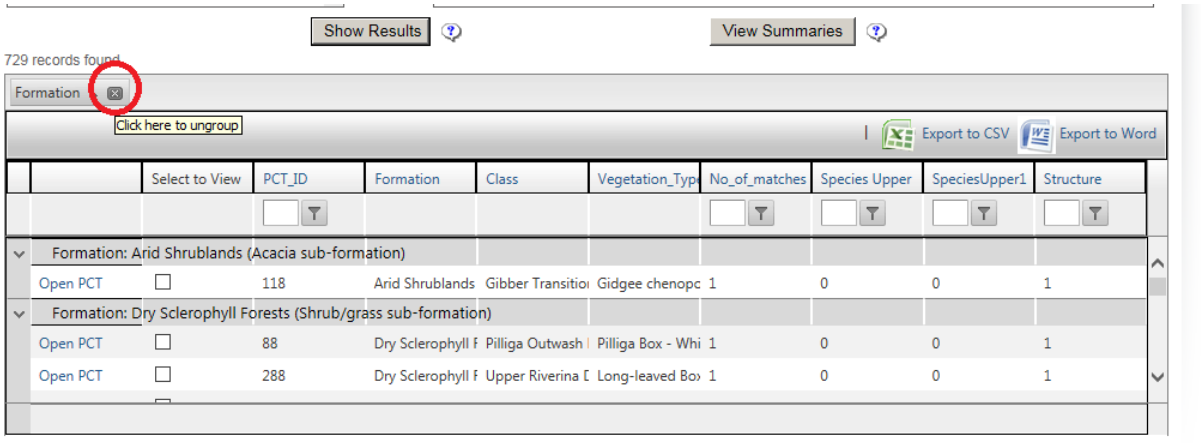


Figure 45 Removing the grouping to revert to a non-sorted results list

4. For each PCT displayed, the total number of criteria matched is shown in the column labelled ‘No_of_matches’. Each of the search criteria used is listed in a separate column with 0 or 1 in the row for each PCT listed to indicate if the PCT is matched (1) or not (0) on that criteria. When the list of PCTs are displayed, the PCT ID is included in the search results (see Figure 46).

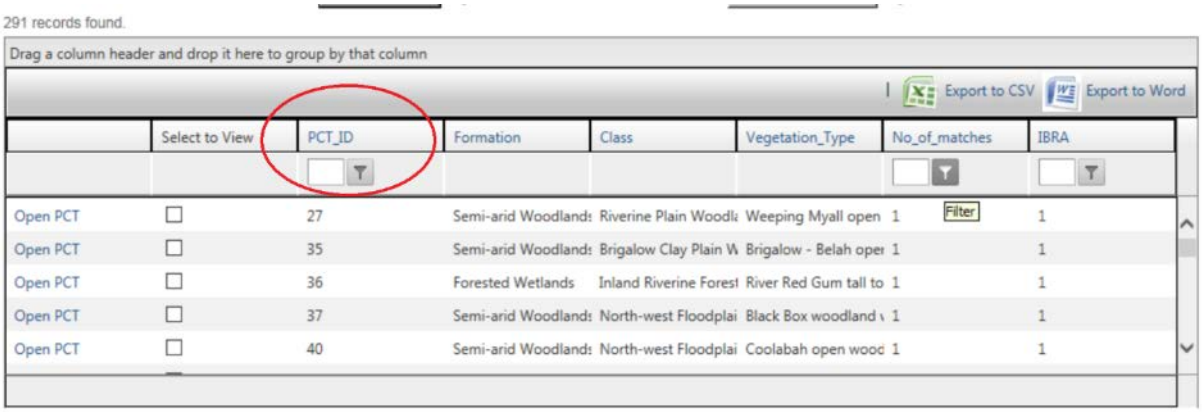


Figure 46 Displaying the PCT_ID in the search results

5. On this screen, an ‘Open PCT’ link has been created to the ‘PCT Display’ screen (see Figure 47). This allows users to open the selected PCT directly from the results area, bypassing the need to go through ‘Search and Display PCT’. The selected PCT will open in a new window and can be closed at any time.

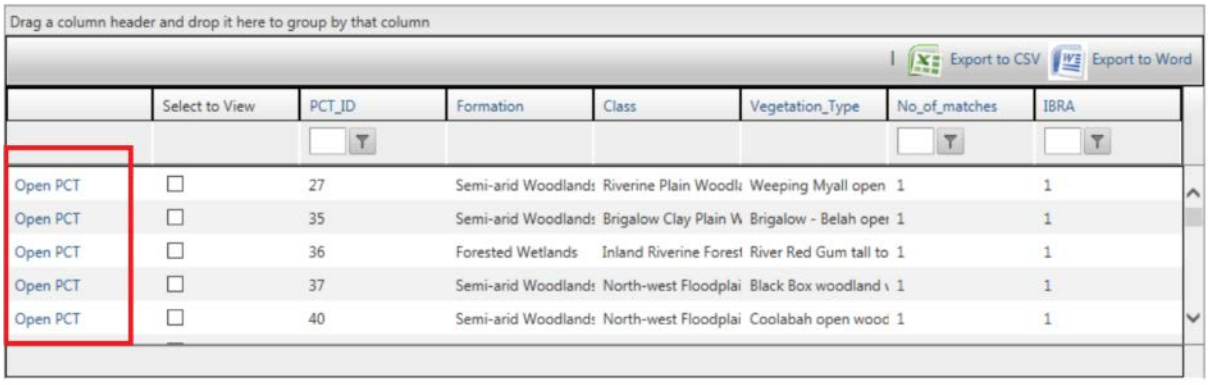


Figure 47 Opening the PCT link through the search results

4.3.1 Sorting results

By default, the results are sorted by the Number of Matches; highest number of matches listed first; and then by PCTID in ascending order.

To sort the results list in ascending or descending order for any column:

1. Click on the relevant column header (‘Keith Class’ is used as the example in Figure 48).

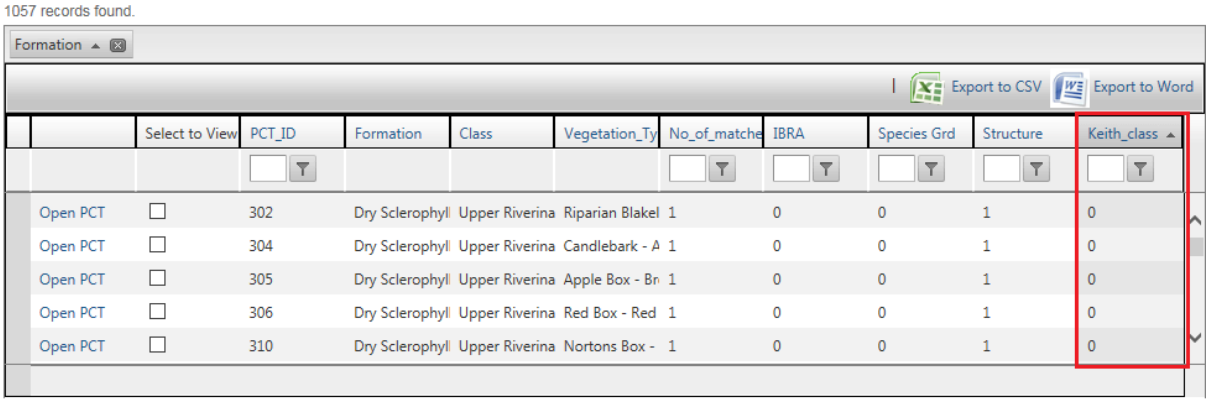


Figure 48 Sorting results by Vegetation Class

2. Click on the column header again to reverse the sort order. The column currently used to sort the results will be shown as dark grey.
3. Adjust the width of the columns by moving the cursor over the split between any two columns – when the cursor changes to the column width adjust icon, click and hold to drag the width of that column to the desired width. However, the column width will revert to default each time a new set of results is displayed.

4.3.2 Filtering results

It is possible to filter the results so that, for example, only those PCTs that match multiple search criteria are shown in the results table. This is analogous to creating 'All (and)' searches. To apply a filter to further refine the results:

1. Type the desired number to filter by into the box under the column name (see Figure 49).
2. Click the 'Filter' icon in that column and select the desired operation from the list (see Figure 49).

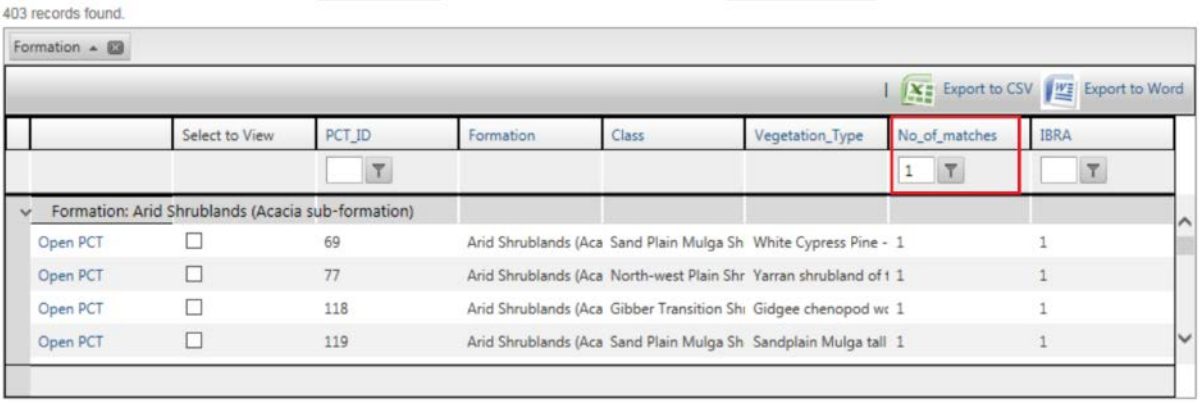


Figure 49 Filtering results by 'No_of_matches'

3. The results will reflect your changes. In the example in Figure 50, the selection for 'LessThanOrEqualTo' 1 was the filter used from the 'No_of_matches' column. You can also apply filters simultaneously on different columns.

Figure 50 The selection for 'LessThanOrEqualTo' 1 was the filter used from the 'No_of_matches' column

4.4 PCT Identification – viewing summaries

Once results are displayed in the results area, you can view summary Vegetation Formation, Vegetation Class and PCT-level information for the listed PCTs ('Types'):

1. To view summaries for all the PCTs listed, leave the 'Select to View' selection boxes unchecked.
2. To select individual PCT/s from the list, check the selection boxes next to the relevant PCT/s listed (see Figure 51). You can check as many as you like but the retrieval of the summaries may slow down if a large number are selected.
3. Once you have selected the PCTs you want to view, click the 'View Summaries' button.

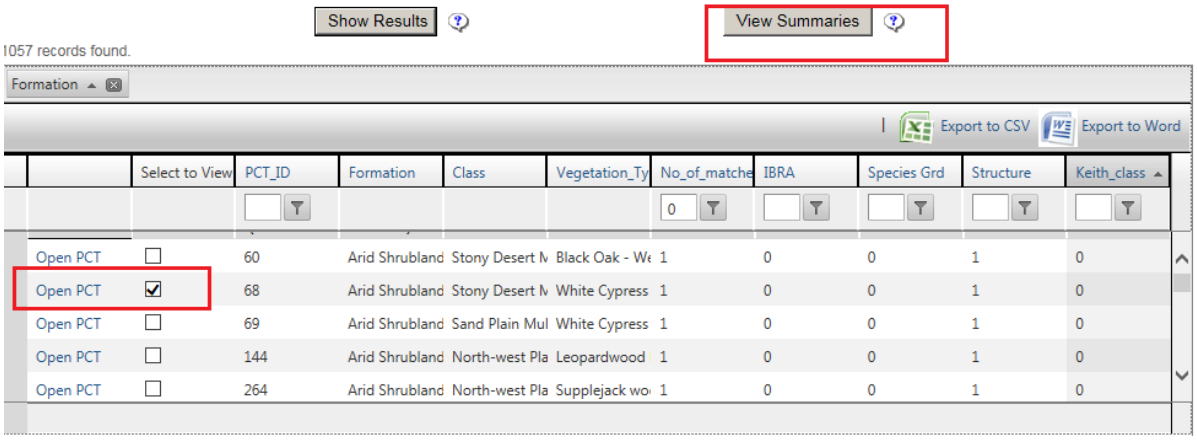


Figure 51 Viewing summaries

4. The page opens with the PCTs to be viewed nested within their relevant Vegetation Formation (see Figure 52).
5. To view the Vegetation Classes and PCT names, click on the relevant '+' signs to open those subgroups.
6. Click on one of the names (PCT, Class or Formation) in the 'Search results' area on the left and the summary information (including an image and map if one is available) will be displayed in the 'Overview' area on the right (see Figure 52).

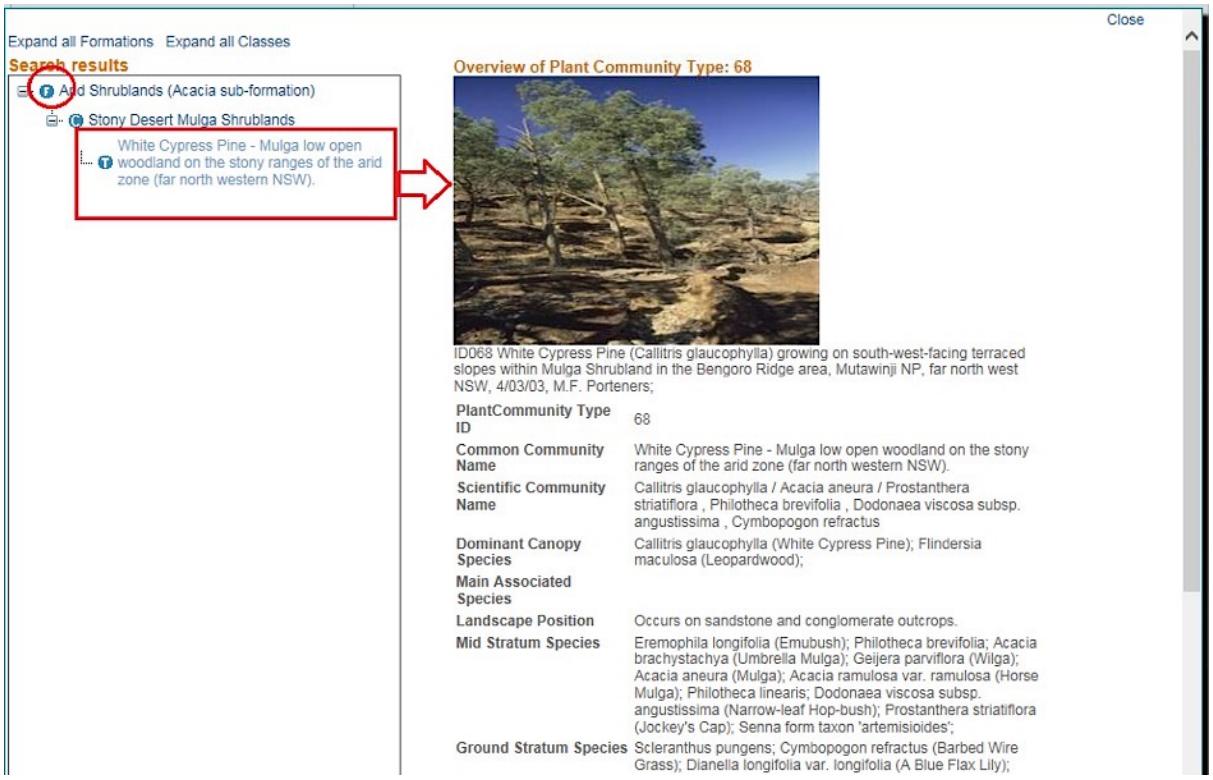


Figure 52 Viewing the Formation ('F'), Class ('C') and summary overview for the PCT ('T')

7. To view another summary overview, click on another name.
8. Click 'Close' at the top, or the 'OK' button at the bottom of the page to exit the Summary View screen.

4.5 PCT Identification tool – exporting lists

You can export the list of matched PCTs at any time (provided types are listed in the results area, after 'Show Results' has been clicked). The options are to export as a .csv file (suitable for opening in a spreadsheet program such as MS Excel) or as a .doc file (see Figure 53). The data will be exported in the order defined in the search Results section.

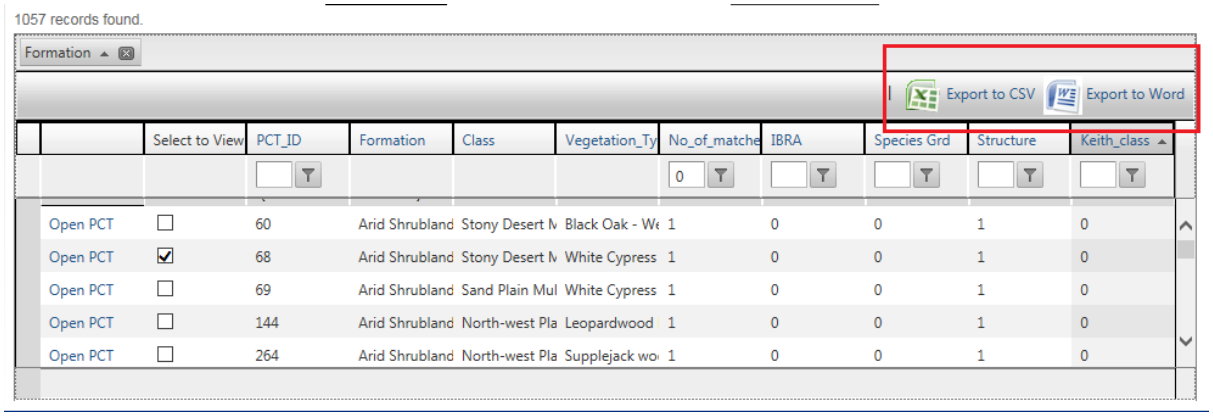


Figure 53 Exporting the list of matched PCTs to csv or Word

To export the file:

1. Click the ‘Export to CSV’ icon or ‘Export to Word’. Depending on your browser settings, the file may open directly, a pop-up may appear, or a Save dialogue box may open (see Figure 54).

Figure 54 The Save dialogue box

2. Choose the option you require by clicking on the relevant button. If you click ‘Save’, the directory window will open to allow you to choose where to save the file and to rename the file as desired.
3. Click ‘Save’ to save the file according to the selections you have made.
4. If you click ‘Open’ in the previous step, the file will automatically open in the default application you have set for opening .csv or .doc files (e.g. Excel or Word, respectively).

5. Reports and exports

The report function is used to produce a report summarising the characteristics of selected entities as a .pdf or .doc. The export function allows you to export the data into tables in a .csv document, to use the data for subsequent analysis. However, the search functions are the same whether you want to export data or produce a report.

Most reports and exports are for PCTs. In addition, there is also the option to report/export data for NSW Landscapes, which provides data about the landscapes and their % cleared estimates.

To export data or produce reports of data for PCTs and NSW Landscapes, choose 'Reports/Exports' from the drop-down menu under the 'PCT Data' top navigation bar (see Figure 55).

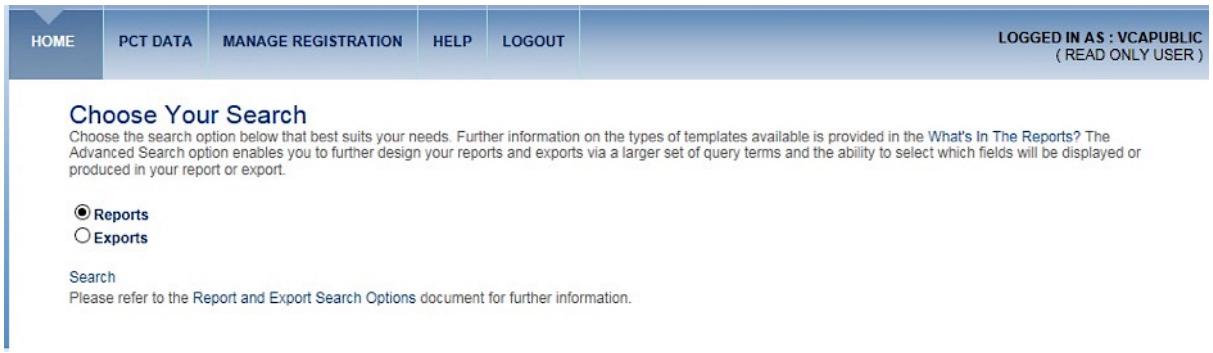


Figure 55 Reports/Exports options for PCT and NSW Landscapes data

Please read the information under 'Choose Your Search' and in the following sections to understand the nature and limitations of search options for both exporting and reporting data.

5.1 Statewide advanced searches

Only some fields in the BioNet Vegetation Classification application have been fully populated for all PCTs, including:

- PCT ID
- authority
- classification confidence level
- common name
- scientific name
- vegetation class
- vegetation formation
- IBRA Region
- IBRA Subregion
- upper stratum species (where relevant)
- middle stratum species (where relevant)
- ground stratum species
- PCT definition status

- PCT % cleared estimate
- community benchmark data
- references.

Building fairly simple searches (e.g. 2–3 criteria) based on fully populated fields will return comprehensive results. Click on the hyperlinked text to the 'Report and Export Search Options' on the search page for further information.

If you wish to customise your search, options are to select 'Customised terms' in Step 2 and/or to use the 'Advanced options' features.

5.1.1 Step 1: select report template

Choose 'Reports/Exports' from the drop-down menu under the 'PCT Data' top navigation bar, then select between 'Reports' or 'Export's and click on 'Search' (see Figure 55).

When the desired template is selected in Step 1, the relevant search fields for that template are loaded into the 'Select communities by' query box in Step 2 (Figure 56 shows the Community profile report). Also note that the appropriate list of fields to be exported will be populated into the 'Advanced options' area at the bottom of the page.

By default, the selection in the 'Select communities by' query box will show the 'common terms' option, with all fields unchecked.

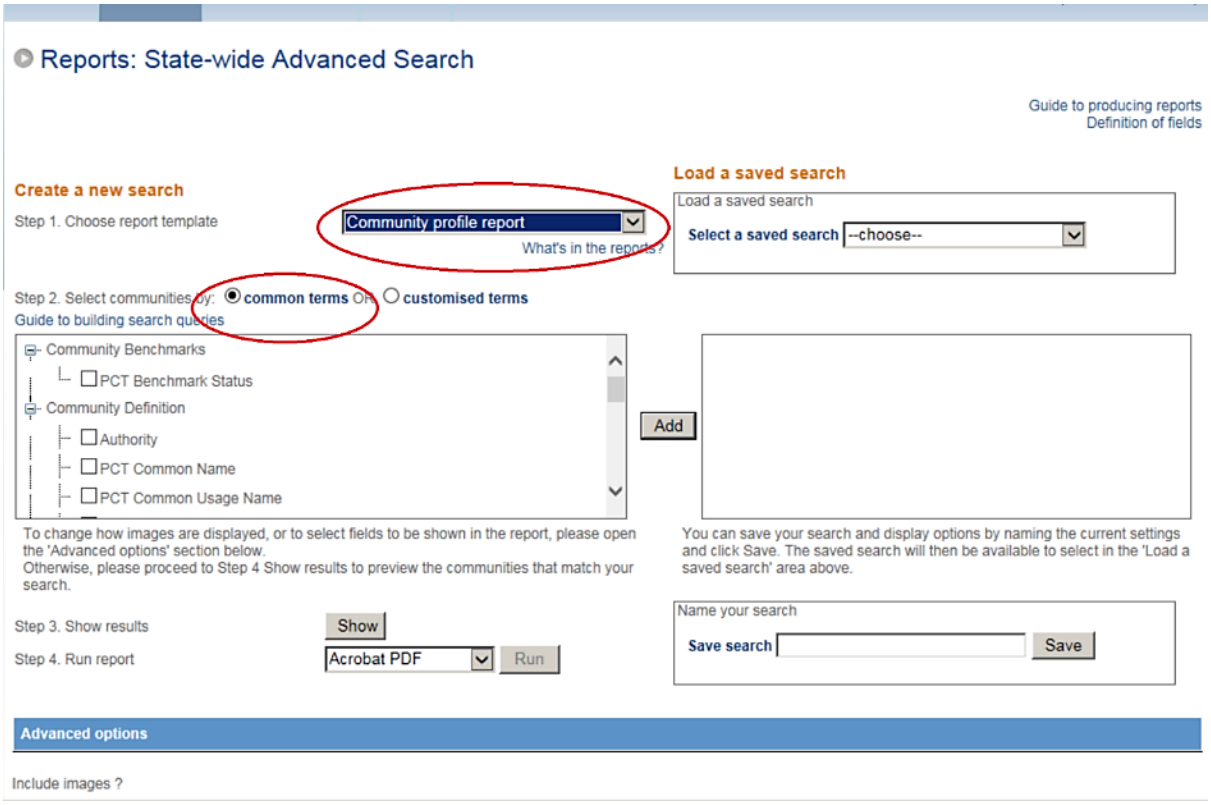


Figure 56 Community profile report option showing potential query or search terms

5.1.2 Step 2: select communities using common terms

There are two ways to build your search query (i.e. criteria that the system will use to retrieve the relevant PCTs) – via common terms or customised terms (see Section 5.3 for instructions about making customised terms). Appendix 2 shows you how to export a list of Plant Community Types in a particular IBRA Region.

By default, the ‘common terms’ method is active. This method presents a subset of the total number of fields and tables in the database, representing the most commonly used search terms:

1. Scroll down the list to see what fields are available.
2. Check one of the search field boxes. The ‘Add’ button should now become active (i.e. no longer greyed-out).
3. Click the ‘Add’ button to open the ‘Search condition’ window for the selected criterion (see Figure 57).

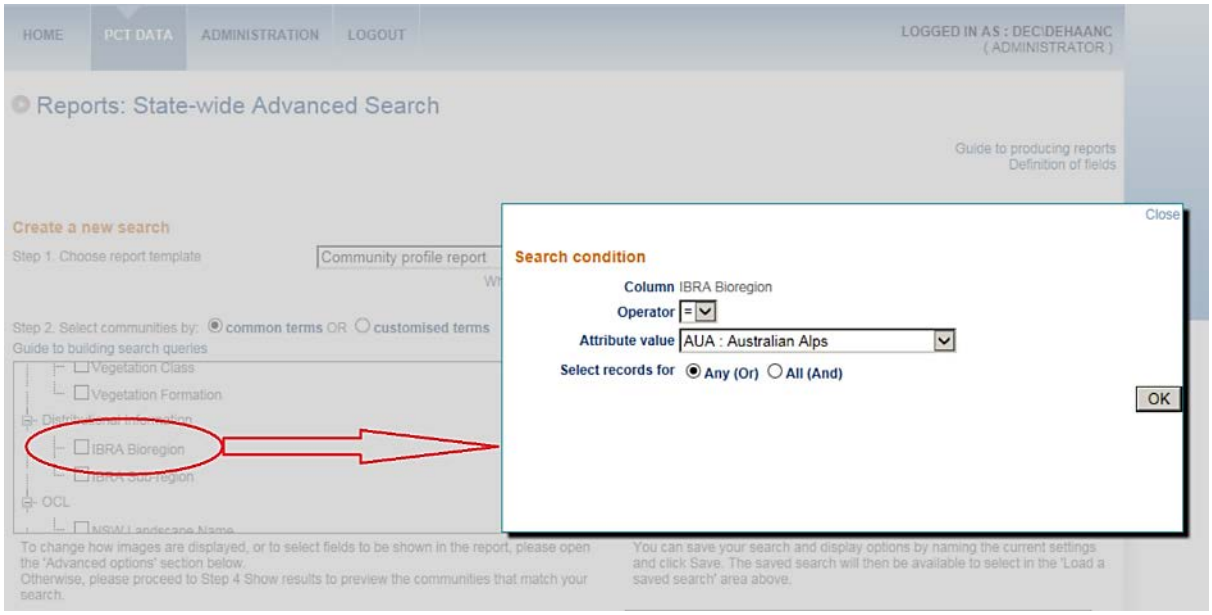


Figure 57 Specifying the ‘Search conditions’ for a selected criterion

4. Click on the ‘Operator’ drop-down menu to view and select the options. These will vary according to the type of data in the relevant field.
5. When you have selected the ‘Operator’, select the ‘Attribute value’ from the drop-down menu next to the field (see Figure 57).
6. Select the term you want by clicking once on the relevant entry. The ‘Search condition’ window should now show your choices.
7. Select the type of operator you want applied for this criterion, either ‘Any (Or)’ or ‘All (And)’. If you are using only one criterion, this term is not relevant. The ‘Select records for’ terms operate between the criteria, so that selecting ‘Any (Or)’ will include communities that meet either of the criteria, while ‘All (And)’ will include only communities that meet both criteria simultaneously.

   Limit the query to 2-3 search criteria else it will slow the system and the search may stall.

   Note, the order of criteria is crucial to getting the result you want, as the first criteria creates a subset that the second criteria are matched to. Using the same criteria and swapping their order can therefore produce different results.

8. Click ‘OK’ to retain the criteria. The selected criteria should now appear in the ‘Search query build box’ to the right (see Figure 58).

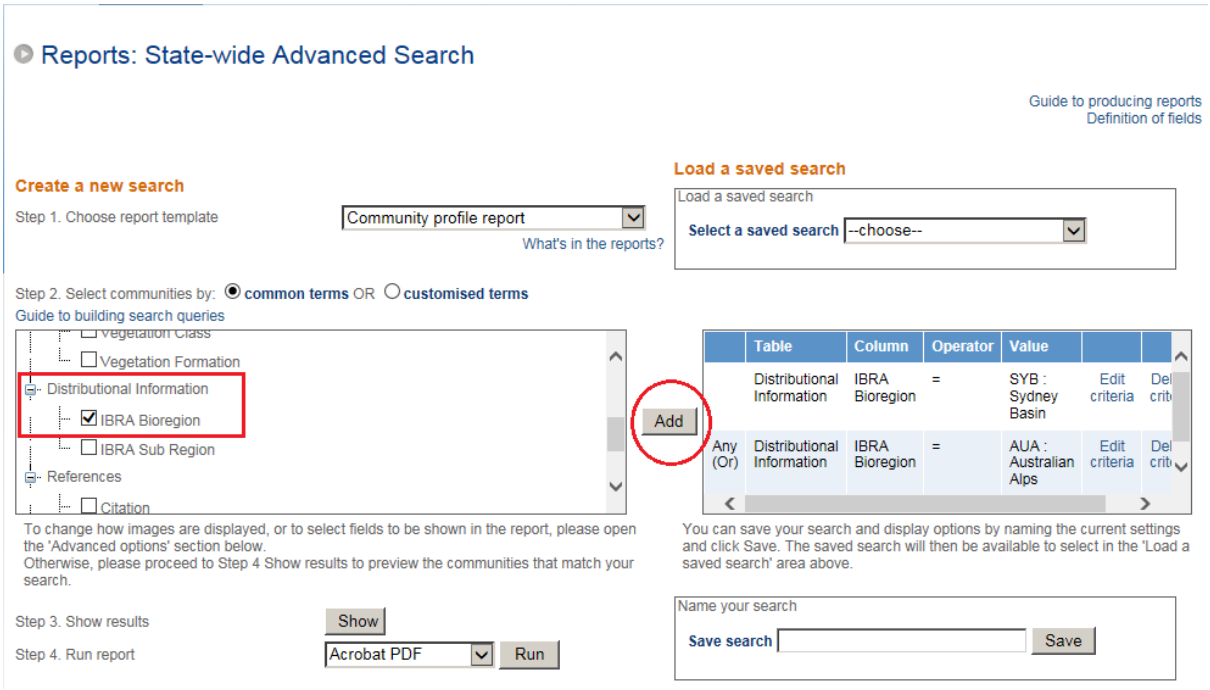


Figure 58 Adding criteria to the 'Search query build box'

9. Delete or edit the criteria in this 'Search query build box' by clicking on the 'Edit criteria' or 'Delete criteria' text separately for each criterion (see Figure 59). The 'Edit criteria' option will take you back to the 'Search condition' window with the current criteria shown. The 'Delete criteria' will remove that criterion entirely from the compiled list.

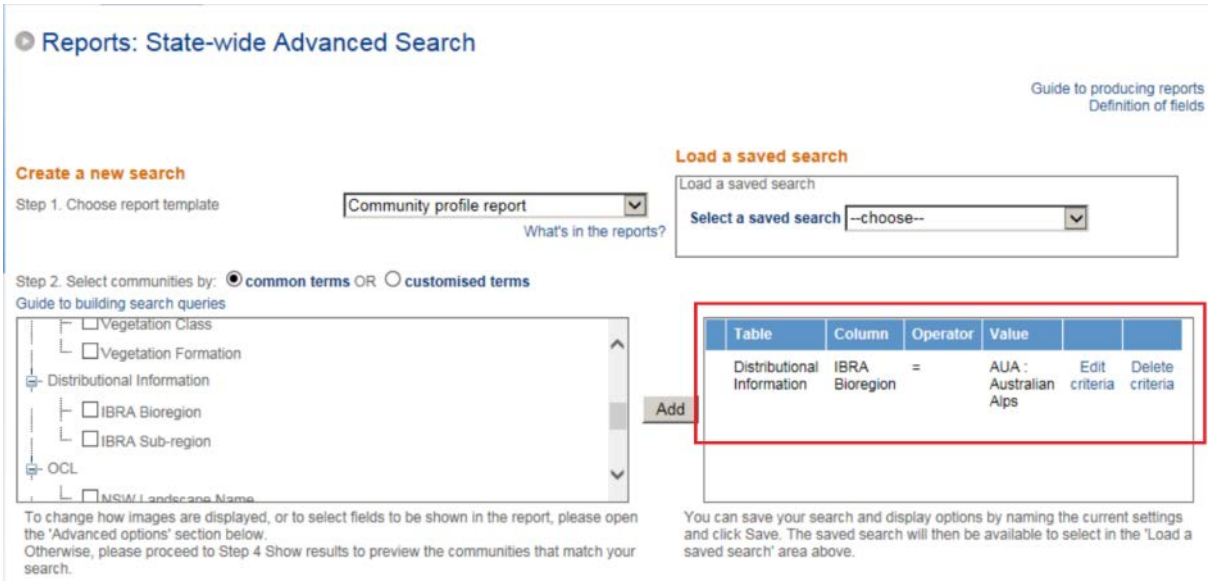


Figure 59 Deleting or editing criteria from the 'Search query build box'

Appendix 2 shows examples for frequently used report/export queries.

Advanced options

The 'Advanced options' area at the bottom of the screen provides additional functionality to both choose:

- to produce or not produce images in the report

- which fields will be displayed in the report/export.

Images options

For the reports option, choose the 'yes' option under 'Include images?' if you want images included. This option only applies to reports that have images in their template (e.g. long reports do, a simple list of communities does not). If the template you choose does not have images, then this field does nothing.

This option does not apply to exports.

Fields to display

There are a few default fields that will be included in the report/export option even if all fields are 'off' (not ticked).

However, you can customise which additional fields are displayed. The 'Choose fields for report' area provides a list of the fields currently set to be produced in the chosen report or export template (see Figure 60). By default, all the fields are checked as 'on' as all fields in the template will be produced. You can simplify your report/export by turning off any number of fields. The fields are arranged according to the tables within the database. You can turn individual fields off (and back on) or turn off (and back on) all fields in each table.

As you alter the display fields, the 'Fields that will be displayed' box on the right will refresh to reflect the changes.

Figure 60 Customising report/export display fields

5.1.3 Step 3: show results

When you are happy with your selection criteria:

1. Click the 'Show' button. This opens a list of the entities (PCTs for most reports, or NSW Landscapes for that report) that meet your criteria (see Figure 61). This step is essential for compiling the search query and cannot be skipped.

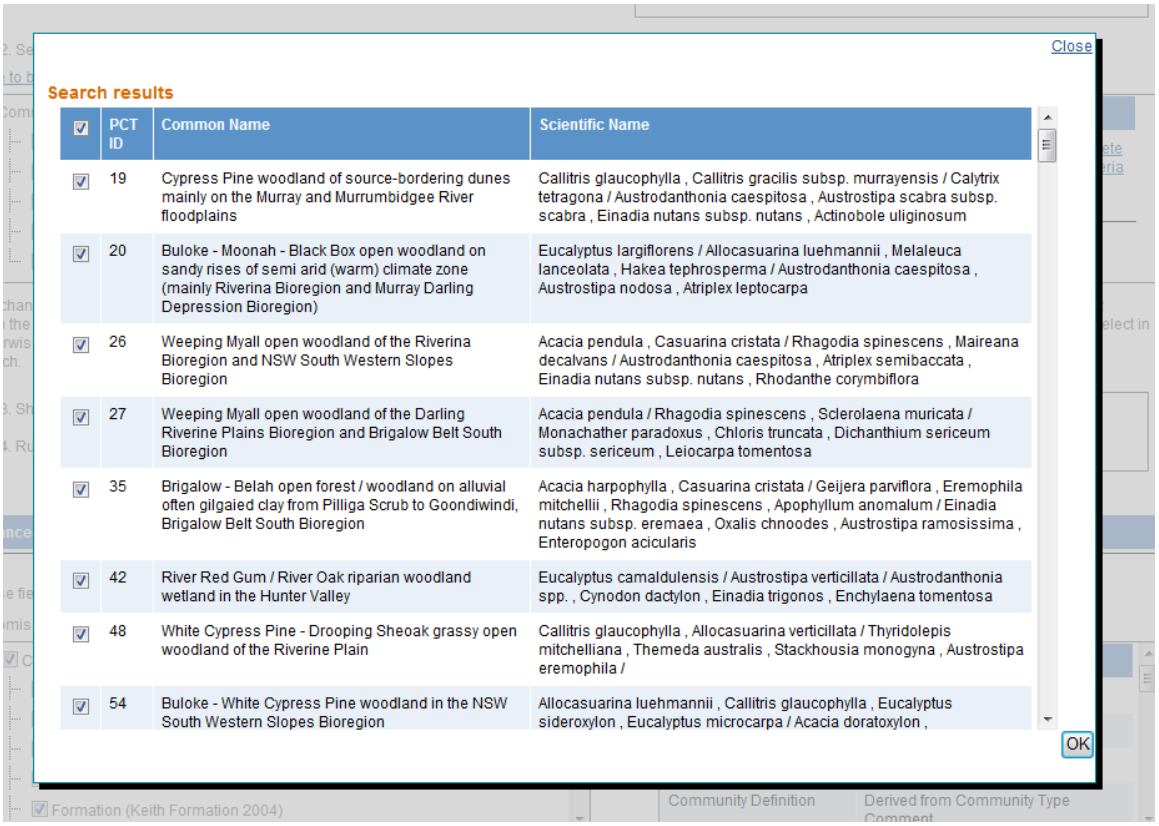


Figure 61 Showing the PCT Data results

2. By default, all the matching PCTs are shown checked – that is, they will be in the report/export. You may need to scroll down the page to see the full list of communities. To modify, either uncheck individual PCTs in the list, or uncheck the top check box next to the PCT ID column header to deselect all PCTs. You can then reselect any by clicking individual communities or recheck all.
3. When you are happy with the PCTs selected, click ‘OK’ to save these as the ones to be run in the report. Click ‘Close’ if you don’t want to save your changes. However, this will revert to the default position (i.e. all PCTs will appear in the report).

5.1.4 Step 4: run report/export

When you are ready:

1. Choose to produce the report as an Acrobat PDF or as a Word file.
2. Click ‘Run’ to produce the report/export. Depending on the size of the report/export (i.e. number of PCTs selected and number of fields/columns to be displayed), this may take a few minutes.
3. For reports (not exports), the Word or PDF report may be displayed on screen in a separate window once the system and server have processed the request, depending on which browser you are using.

> To allow reports to appear as a new pop-up screen, please ensure that ‘block pop-ups’ is not turned on. Refer to Appendix 1 for instructions on how to turn off the pop-up block.

4. For PDF reports and Word reports displayed on screen in a separate window, you can view, save and print the PDF report from this screen. If you are using Internet Explorer the save, print etc. actions box will appear at the bottom of the active window when the

cursor is moved to this area. Clicking on the right-hand symbol allows the user to perform other tasks such as emailing.

5. If you are using IE, you will have the choice of Open/Save/Cancel to access the Word report (see Figure 62) after the server has processed the request.

Figure 62 Opening or saving Word reports when using IE

6. Note, if you are exporting, then when you click ‘Run’, a pop-up will appear.
7. Click ‘Download CSV File’ to save the export file. Clicking ‘Close’ will cancel the operation.
8. A second pop-up will appear. Click ‘View downloads’.
9. A third pop-up will appear. Click ‘Open’ or ‘Save’ the file as relevant. ‘Close’ will cancel the operation but the ‘Download CSV’ dialogue box will remain.
10. Open to access the information in an Excel spreadsheet.

5.2 Saving report/export criteria

Once you have created your report/export query, you can save the search set up to retrieve and run later, thus removing the need to create the search query again. To do this:

1. Give the current search set up a name in the ‘Name your search’ box on the right.
2. Click ‘Save’. This will save the set up to your log in (i.e. only you have access to this saved search).

To retrieve the saved search:

1. Select it from the ‘Load a saved search’ box in the top right, by selecting it from the list.
2. Click once on the relevant saved search. This will automatically populate the fields for the search as they were saved to that Search name.

To modify an existing saved search:

1. Retrieve and load it.
2. Make your changes.
3. Save it using the same name. This will overwrite the existing saved set up.

You can create multiple saved searches but remember to change the saved name if you do not want to overwrite an existing saved search (see Figure 63).

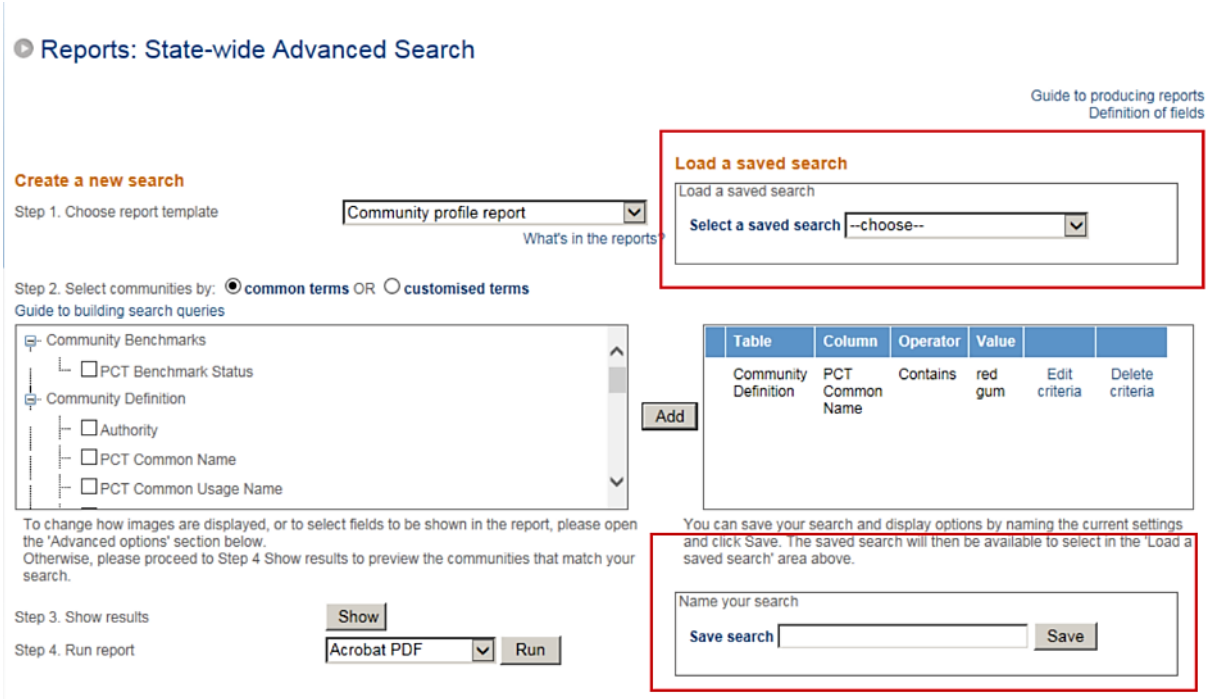


Figure 63 Loading and saving searches

5.3 Select communities using customised terms

The alternative approach to selecting communities for your reports or export is to customise the terms or criteria that are used in building your search query (see Figure 64):

1. Click the button next to the ‘customised terms’ option at Step 2. The list of fields will refresh to display the full list of fields available to create your query. The number of fields varies with the report selected, so setting up your query may be time consuming. However, you will be able to save and retrieve your query as part of a saved search once you have created it (see Section 5.2).
2. The fields initially are collapsed within the tables that the fields belong to. Click on the ‘+’ symbol next to the category (table or field grouping) to expand it and see the fields contained therein.
3. Refer to Section 5.1.2 for instructions for selecting the terms to build your query.
4. Collapse a category at any time by clicking on the ‘–’ symbol against an open category menu.

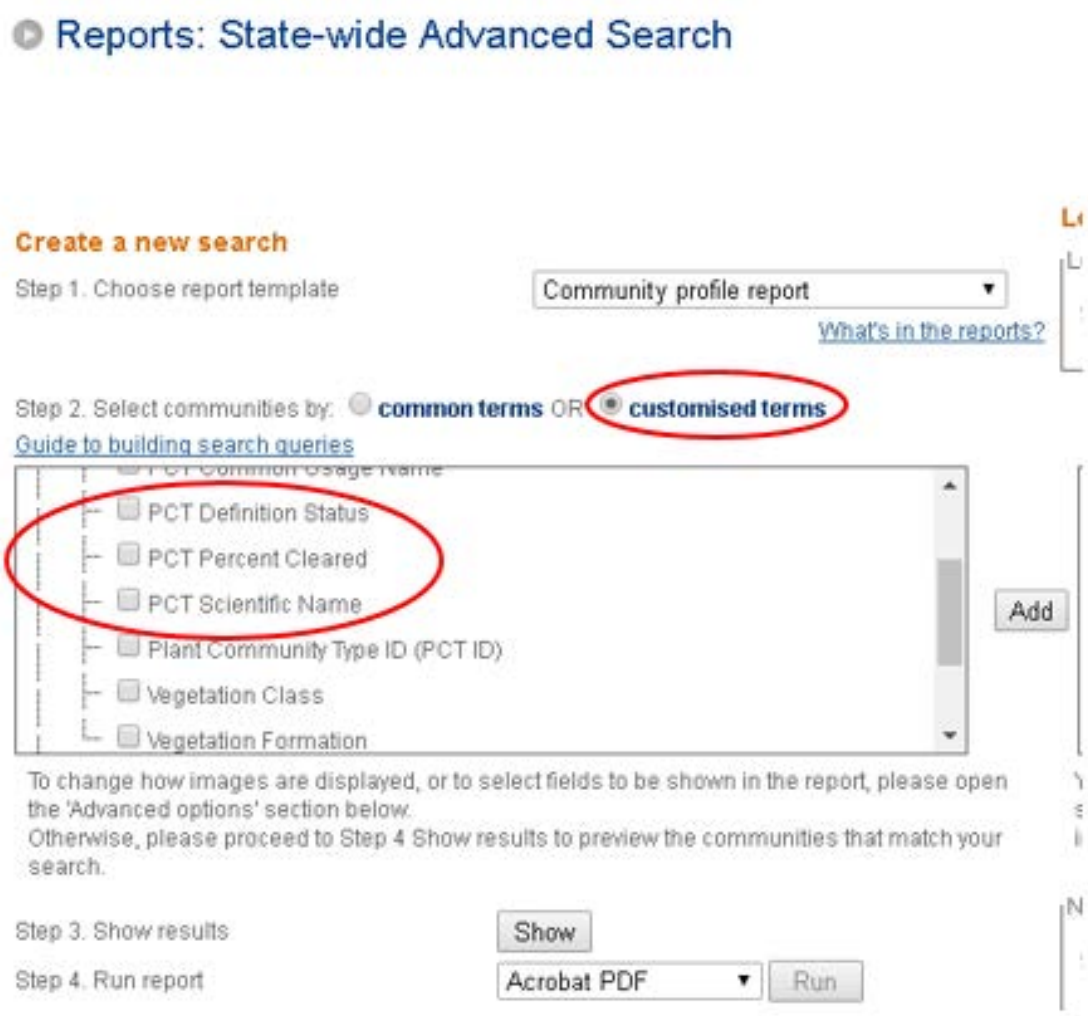


Figure 64 Building a report/export query using customised search terms

Definitions of the table categories (i.e. ‘terms’) and fields are provided via the hyperlinked ‘Definitions of fields’ document.

Part C Using the Data Management Functions in the BioNet Vegetation Classification Edit Application

Part C of this manual deals with functionality and processes specifically regarding the editing and management of data within the Vegetation Classification edit application. The fields described herein are also visible as read-only in the Public application and to read-only users of the Edit application.

Five distinct user roles exist in the BioNet Vegetation Classification Edit (Secure) application. In summary their main functions and access requirements are:

- Classification Edit user
  - upload and import PCT Data
  - manually enter, edit and maintain all PCT Data
  - access benchmark and PCT % cleared data
  - run system reports
- Statutory Data Edit user
  - upload and import benchmark data
  - manually enter and edit benchmark data
  - upload and import PCT % cleared data
  - manually enter and edit PCT % cleared data
  - enter and edit Over-cleared Landscapes data
- TR Edit user (TEC Relationship Edit User)
  - edit and maintain PCT-TEC data
  - edit limited number of relevant ‘Descriptive Attributes’ fields
- Read-only user
  - view PCT UI – all fields, all PCTs
  - run user reports/exports (all PCTs)
- Administrator
  - oversee data management
  - manage user access rights for users
  - manage data status changes
  - minor data edits
  - export data for all fields and change logs
  - requires access to all menus and functionality

For a detailed matrix showing edit access rights for the three edit user roles refer to Appendix 3.

> Note: PCTs may be either Quantitative or Qualitative. This is indicated in the ‘Classification Type’ field in the top banner of the PCT User Interface.
>
> Some field differences exist between these two PCT types, most notably whether species are listed ‘by Stratum’ (Qualitative PCTs) or ‘by Growth Form’ (Quantitative PCTs). Field editability differences also exist between these PCT types. More fields are editable within the application for qualitative PCTs than for qualitative PCTs. The number of differences will increase with future releases.

Process and Business Flow diagrams relating to management of PCT, PCT Clearing and Benchmark data are provided in Appendix 6.

6. Editing plant community type data via the 'My work' tab

The functionality to create PCTs has been removed from the BioNet Vegetation Classification application and now exists solely in the Systematic Flora surveys module of the BioNet Atlas application. Refer to the BioNet Atlas user manual, available from the BioNet resources web page

6.1 'My work' tab

Edit users are assigned particular PCT IDs to work on. These will be listed under the 'My work' tab on the Vegetation Classification home page (see Figure 65). The number of PCTs assigned to each user may vary depending on their user role.

Figure 65 BioNet Vegetation Classification homepage, showing 'My work' tab

1. To open data for one of these communities, click on the 'My work' tab. In the 'My Work (Plant communities assigned to me)' area you should see the list of plant community types assigned to you (see Figure 66). Scroll to the required PCT ID or use the filter function to select it without scrolling.

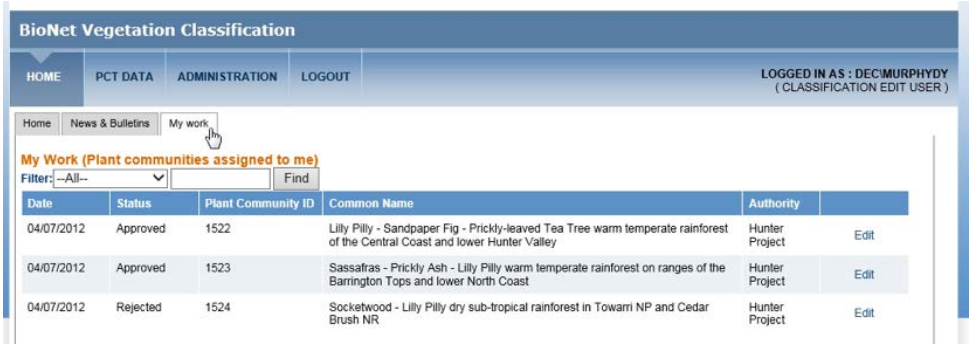


Figure 66 Accessing assigned PCTs for editing via the 'My work' tab

2. Select the PCT to work on by clicking ‘Edit’ next to the relevant plant community type in the list. This will open up the full PCT edit user interface. It will be apparent that the interface is in edit mode because the ‘Save’ button (in the top right of the screen) will not be greyed-out.

> The ‘My work’ tab list of PCTs comprises only those plant community types to which the user has been given edit access. However not all fields are able to be edited by all user types – this is tightly controlled by the assigned user role.
>
> Edit users are also able to access all plant community types via the ‘PCT Data’ > ‘Edit’ workflow, including those not assigned to them for editing. Those not assigned for editing will be visible as read-only (as indicated by the greyed-out ‘Save’ button).

6.2 Editing a Plant Community Type

It is recommended that edit users undertake their edit work via the ‘My work’ tab. As non-assigned PCTs can also be viewed (as read-only) via the ‘PCT Data’ > ‘Edit’ workflow (see Section 3.1), edit users may be confused accessing PCTs this way, only to realise that they cannot edit them.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

After selecting a PCT from the ‘My work’ area, the PCT User Interface (UI) will open showing the selected PCT, with the Community Name and Classification Level section open by default. The ‘Save’ button will be activated, indicating that the application is in edit mode (see Figure 67).

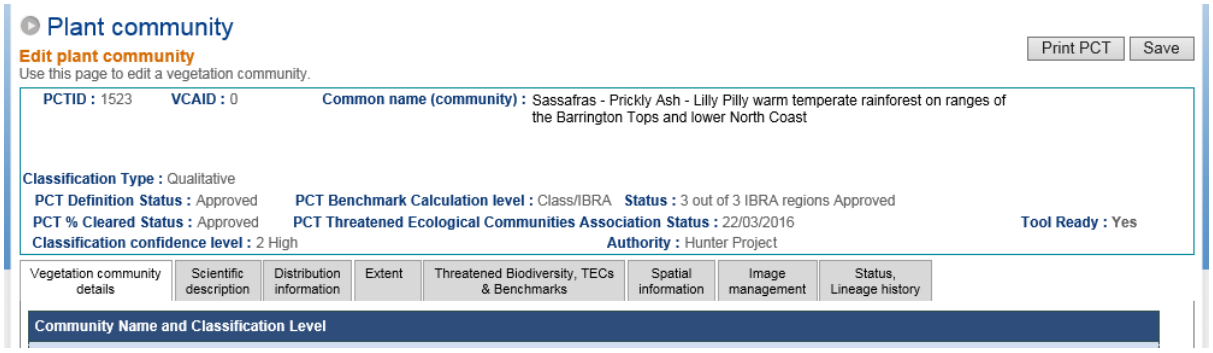


Figure 67 PCT open in edit mode

At the top of the page, summary information for the community is displayed and will be displayed at the top of every page while you are viewing and editing this community.

Check that this is consistent with the community you want to edit. This information is display only (i.e. you cannot edit these fields within this panel). Data for some of these fields are entered during the Create New PCT procedure in the BioNet Systematic Flora Surveys data collection. The various status fields are editable in other sections of the PCT UI or via relevant Administration sections and ‘Classification confidence level’ is editable in the Community Name and Classification Level section.

The ‘Classification Type’ field indicates whether the PCT is ‘Qualitative’ or ‘Quantitative’. This will determine which fields are visible and which are editable within the application.

Within each tab, information is arranged into sections. These sections are denoted by the section headings in the blue bars (rows) under the general information area tabs.

7. ‘Vegetation community details’ tab

Data in this section are editable by Classification Edit Users and Administrators only.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Functionality to upload and import core PCT Data is accessible via the ‘Administration > System utilities > Upload/Import PCT Data Management Routines’ drop-down menu item.

7.1 ‘Community Name and Classification Level’ section

When a PCT first loads and opens or when you click on the ‘Vegetation community details’ tab, the ‘Community Name and Classification Level’ section should be open (Figure 68).

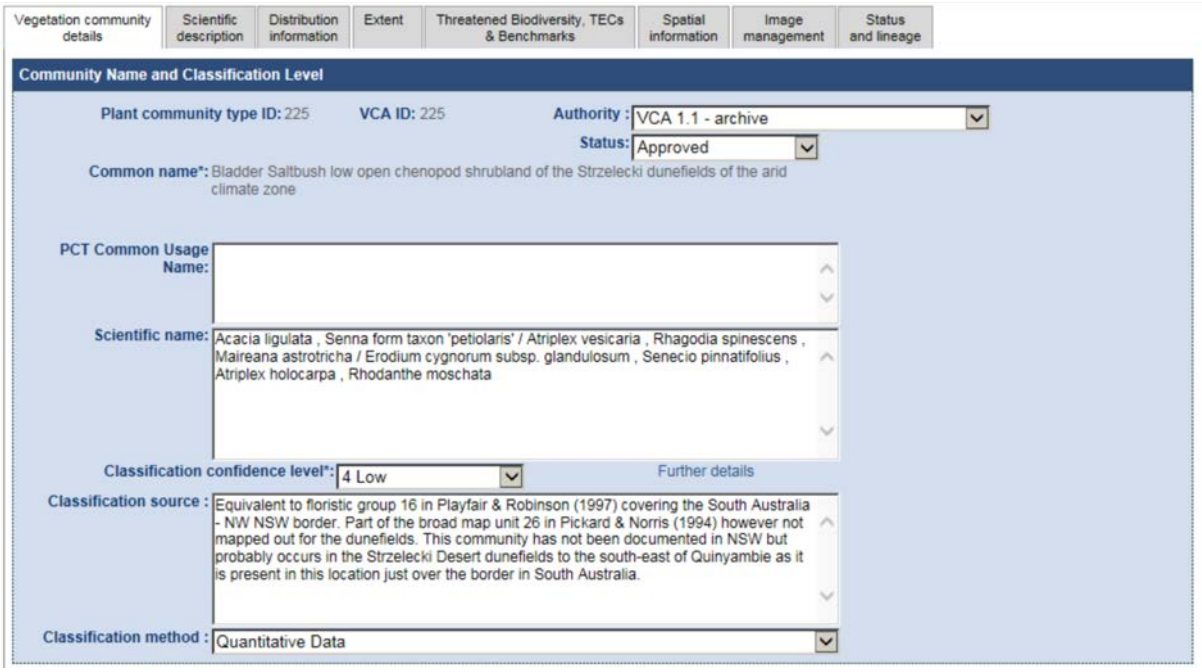


Figure 68 ‘Community Name and classification Level’ section

The ‘Plant community type ID’, ‘PCT Common Usage Name’ and ‘Authority’ fields are populated with data directly from the BioNet Systematic Flora Surveys data collection via the ‘Upload/Import PCT Core data (use to establish PCT)’ functionality (see Section 7.3). For all PCTs (i.e. Qualitative and Quantitative), the first two of these fields are not editable in the BioNet Vegetation Classification application. In due course, the ‘Authority’ field will also cease to be editable in the BioNet Vegetation Classification application.

The fields in this Section are as follows:

- ‘Plant community type ID’ and ‘VCA ID’ provide the identification numbers for the plant community type in each of the relevant datasets. These fields are not editable on this page.

- ‘Authority’ is an abbreviated name of the Classification Project which described and defined the PCT, or collated existing classification data from multiple sources for a region to support legislative biodiversity assessment methods, metrics and tools.
- ‘Status’ is the ‘PCT Definition Status’ as endorsed by the PCT Change Control Panel. The PCT Definition Status indicates the status of the PCT definition and description and does not make reference to the status of any associated statutory datasets (PCT % Cleared data; PCT Benchmark data; PCT-TEC association data; PCT-Threatened Biodiversity association data) required for a PCT to be ‘Tool ready’.
- PCT ‘Common Name’ is a text field populated from BioNet Systematic Flora Survey data collection and is the shortest name that adequately summarises the key descriptive attributes of the community. Where two names are similar, the variation in terms in the name should highlight the key attributes that delineate between the types. Although flexibility to allow for the clear naming of a plant community type is acknowledged, the format and conventions for creating common names detailed in Appendix 4 should be followed.
- ‘PCT Common Usage Name’ is the colloquial name used for a plant community type.
- PCT ‘Scientific Name’ currently comprises dominant species compiled from the strata species lists. The format of the PCT Scientific Names will soon be updated to reflect the naming convention outlined in Appendix 4 but with the use of species scientific names in lieu of species common names.
- ’Classification confidence level’ is assigned based on the relative rigor of each community type classification. It is populated from a drop-down menu.
- ‘Classification source’ is a text edit field to allow additional information to be recorded pertaining to the source of the classified plant community type. This field is equivalent to the ‘Authority(s)’ field in the VCA1.1 (see Benson 2006).
- ’Classification method’ is a drop-down menu. It is equivalent to the ‘Authority qualifiers’ field in the VCA1.1 (see Benson 2006).

7.2 ‘Vegetation Formation & Class’ section

The ‘Vegetation Class’ field (and from it the ‘Vegetation Formation’ field) can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the ‘Upload / Import PCT Core data (use to establish PCT)’ functionality (see Section 7.3). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To edit the data in the ‘Vegetation Formation’ and ‘Vegetation Class’ fields, use the drop-down menus to the right of the fields (see Figure 69).

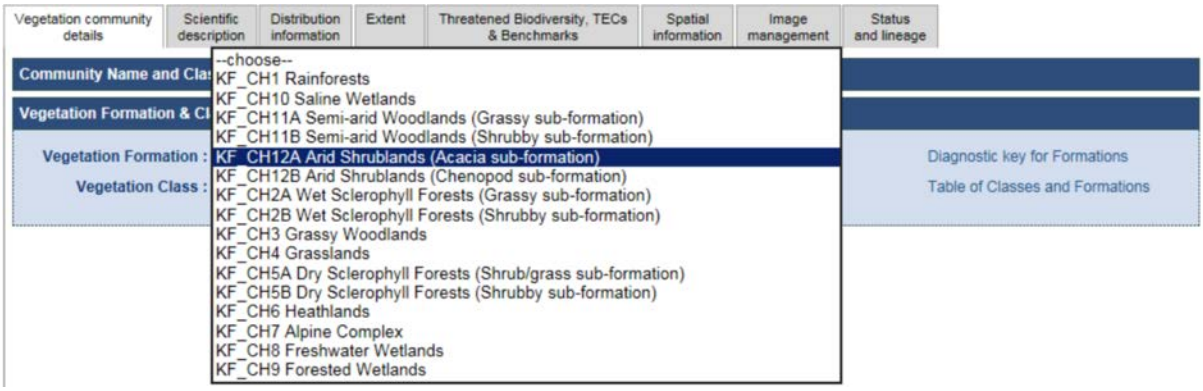


Figure 69 Drop-down menu used to select ‘Vegetation Formation’

> The Vegetation Class and Formation are linked. Only the logical classes belonging to a formation will be allowed. If you select ‘Rainforests’ as the Formation, the class list will refresh so that only vegetation classes that are part of ‘Rainforests’ Formation can be selected.

Further information is provided via the ‘Diagnostic key for Formations’ and the ‘Table of Classes and Formations’ hyperlinked text to the right of these fields. These will open the relevant pdf document in separate windows.

7.3 ‘Administration’ – ‘Upload/Import PCT Core data (Use to establish PCT)’ menu

PCT Core data are maintained by Classification Edit Users and Administrators.

Functionality to bulk upload and import replicate data is accessed via the following pathway:

1. Under the ‘Administration’ drop-down menu item on the top navigation bar, click on ‘System utilities’ (see Figure 70).

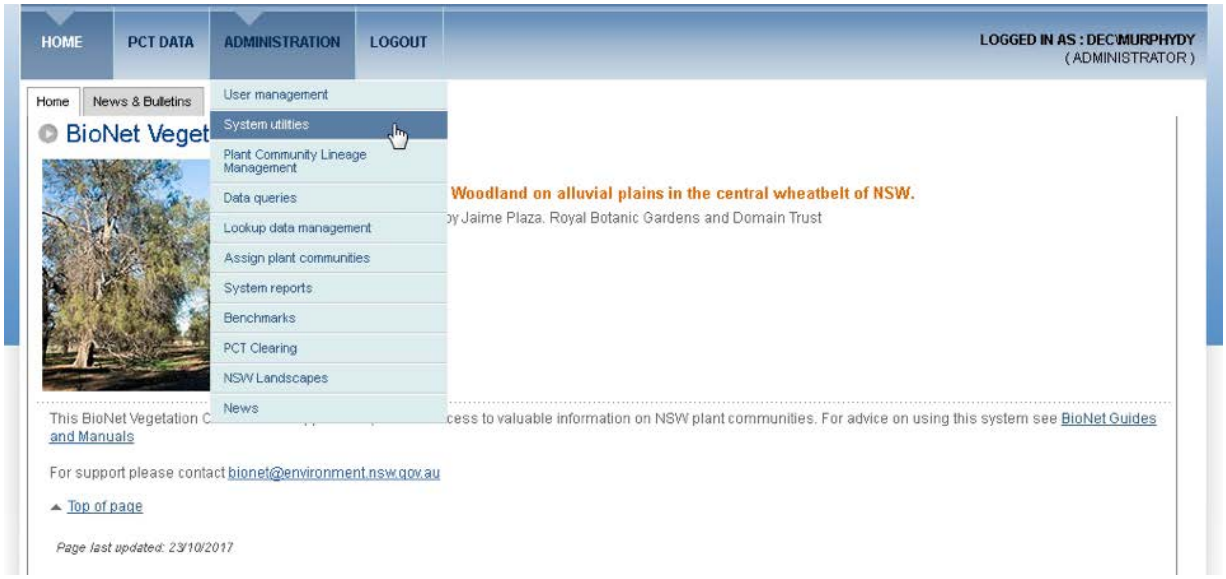


Figure 70 Use the ‘Administration – System utilities’ menu to access data upload / import functionality

2. This opens the ‘Data Administration Tools’ menu (see Figure 71).
3. Click on the ‘+’ symbol beside the ‘Upload / Import PCT Data Management Routines’ item
4. Click on the ‘+’ symbol beside the ‘1. Upload/Import PCT Core data (Use to establish PCT)’ item.
5. Click on ‘1a. Upload data’.

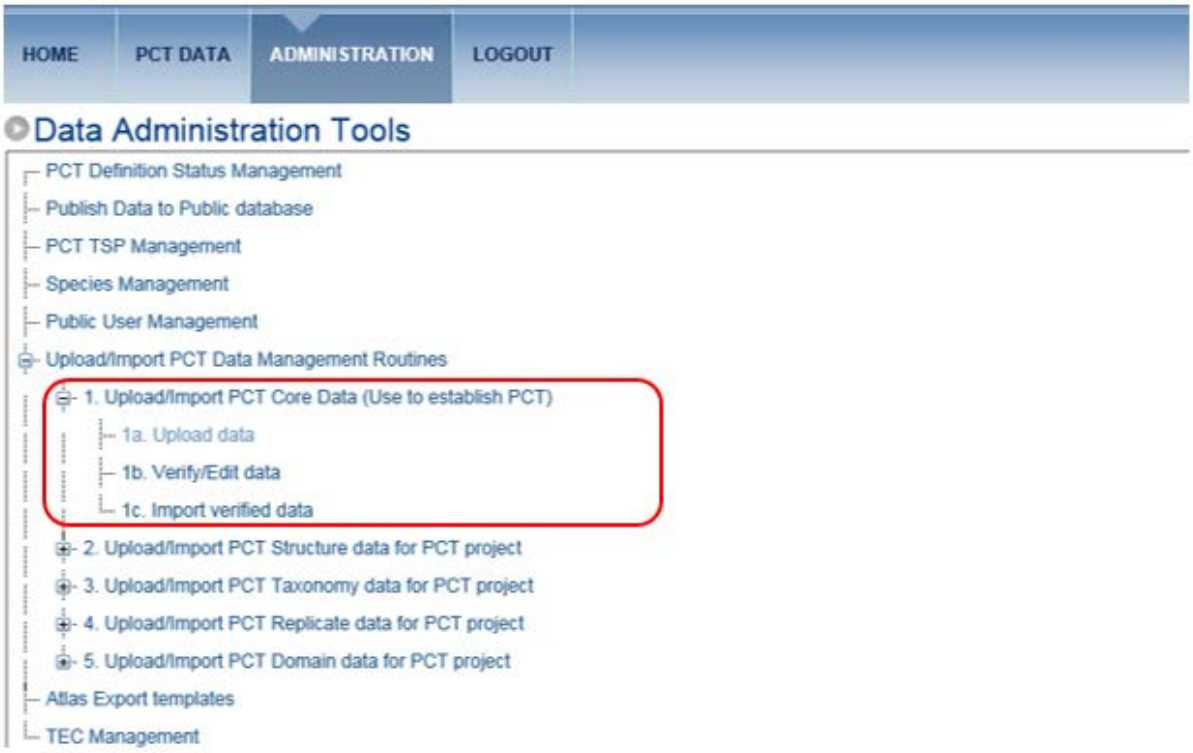


Figure 71 Accessing the replicate data upload/import functionality

6. The ‘PCT Core data’ upload page will open (see Figure 72).

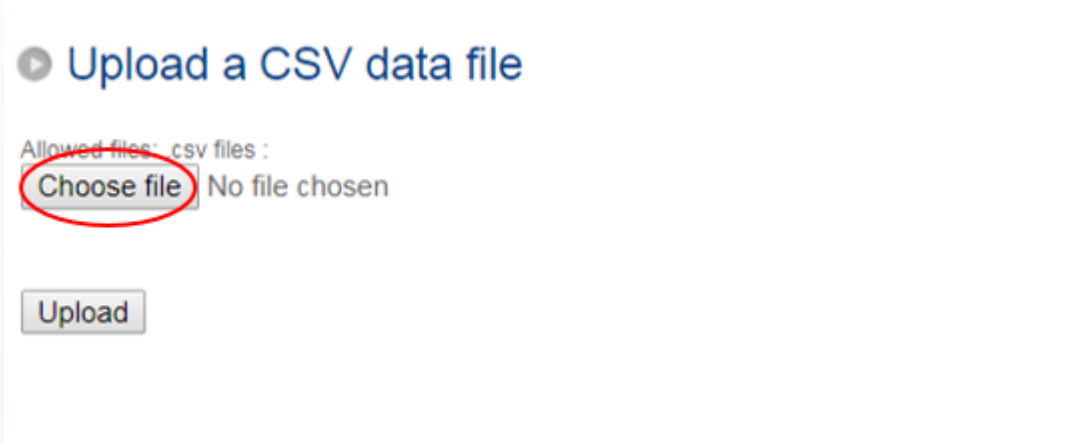


Figure 72 Browse to find the correctly formatted csv file for upload

7. Click on the ‘Choose File’/‘Browse’ button to locate the csv file to be uploaded (see Figure 72). The csv file must be in the correct format as per the ‘PCT Core Data Upload Import’ Excel template (summarised in Appendix A5.1).
8. Select the csv file and click on ‘Open’ to upload the file (see Figure 73).

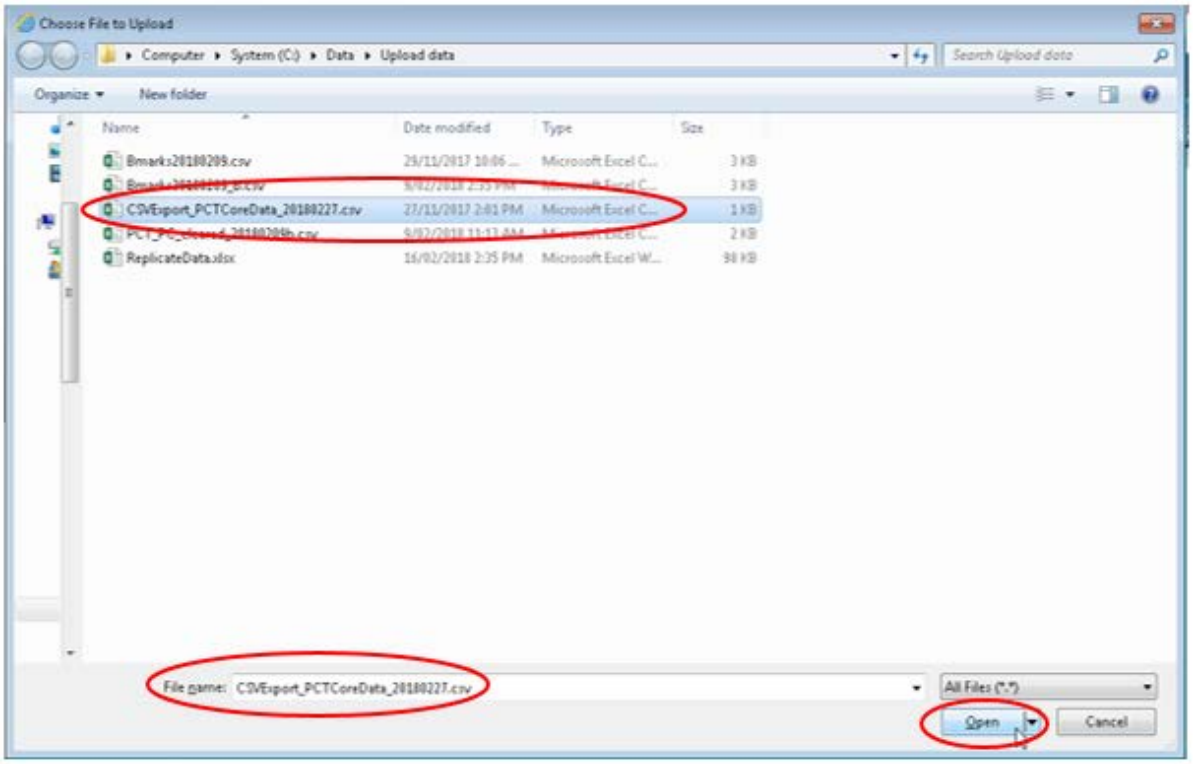


Figure 73 Select and upload the correctly formatted csv file

9. The csv file name will be listed. Click on the ‘Upload data’/‘Upload’ button (see Figure 74).

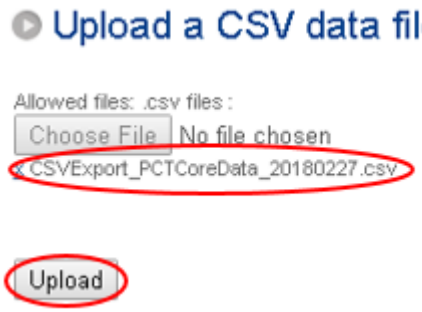


Figure 74 Click to upload the PCT core data

10. The upload will be processed, and results given (see Figure 75). Any errors will need to be corrected in the csv file, saved and re-uploaded.

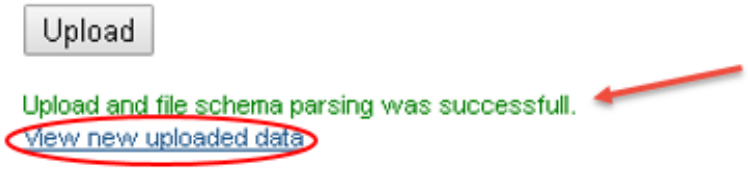


Figure 75 Result for correctly uploaded data

11. Click on the ‘View new uploaded data’ hyperlink (see Figure 75) to select the uploaded data for checking.
12. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘1. Upload/Import PCT Core data

(Use to establish PCT)' > '1b. Verify/Edit data' (Figure 71) and navigate to the last page to select the uploaded data for checking.

13. The most recently uploaded file will be the last file on the last page.
14. Click on the 'View data' link (see Figure 76). Alternatively, click on 'Delete' to remove the uploaded data.

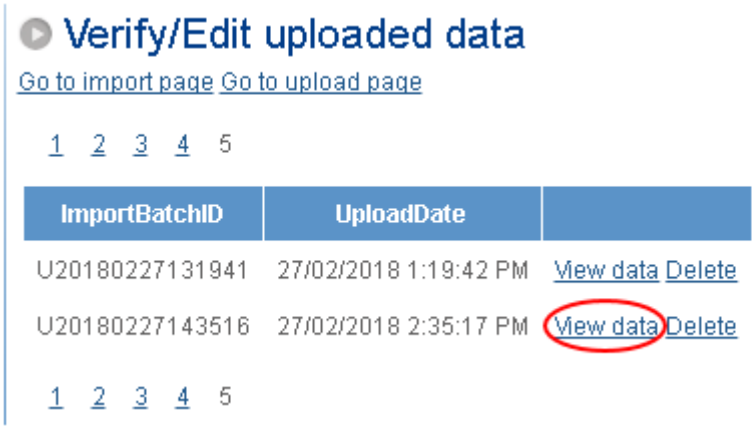


Figure 76 Select the relevant uploaded data for checking

15. Review the data to be uploaded, using the scroll bars to view all rows and fields (see Figure 77). Records can be filtered by status.
16. If errors are encountered, the individual record can be edited (click 'Edit' for that data row) or deleted (click 'Delete' for the data row). However, ideally the entire uploaded data file should be deleted by clicking 'Delete' against the corresponding 'ImportBatchID' (see Figure 76). Correct the source data (which should be the BioNet Atlas Systematic Flora Surveys module), create a new csv file and upload following previous steps.
17. If the reviewed data are correct, click the 'Verify data' button (see Figure 77).

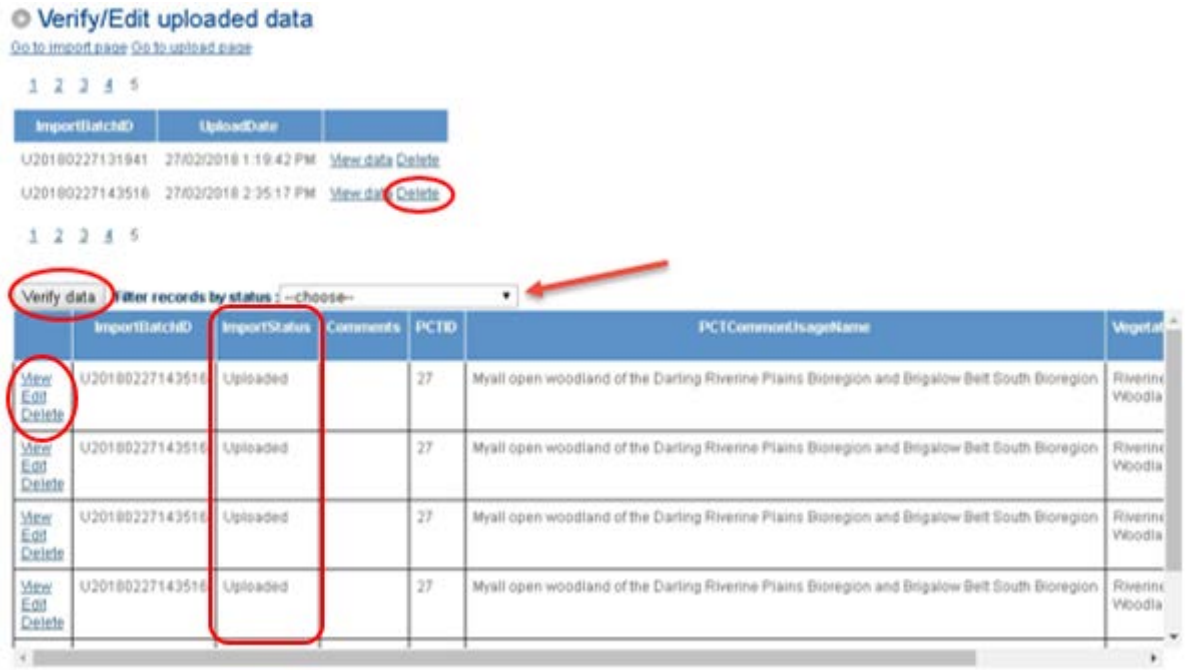


Figure 77 Review and verify the uploaded data prior to importing

18. Check that the verification succeeded (see Figure 78). If successful, click on the 'Go to import page' link (see Figure 78).

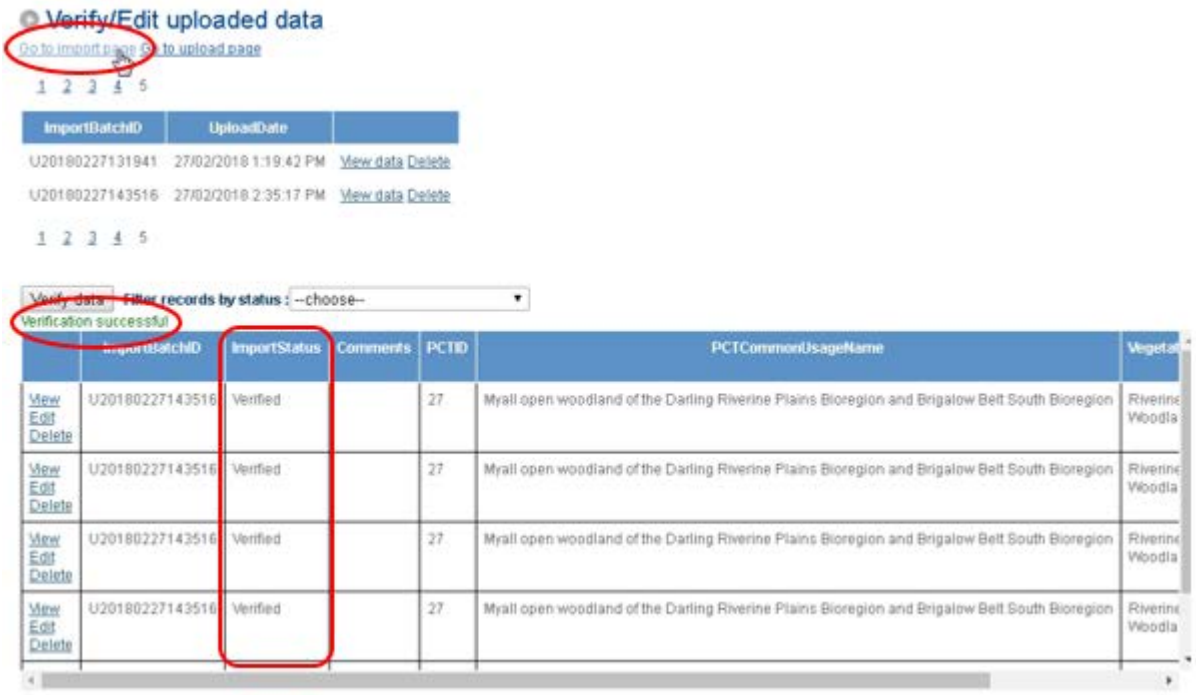


Figure 78 Review the verification outcome message

19. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘1. Upload/Import PCT Core data (Use to establish PCT)’ > ‘1c. Import verified data’ (Figure 71) and navigate to the last page to select the verified data for importing.
20. On the ’Import verified data’ page, select the correct ImportBatchID (usually the last one on the last page) by clicking on ‘View data’ to visually confirm that you have the correct data.
21. Having checked the data, populate the ‘Select a primary user for the import records’ by selecting from the drop-down list and click on the ‘Import’ button (see Figure 79).

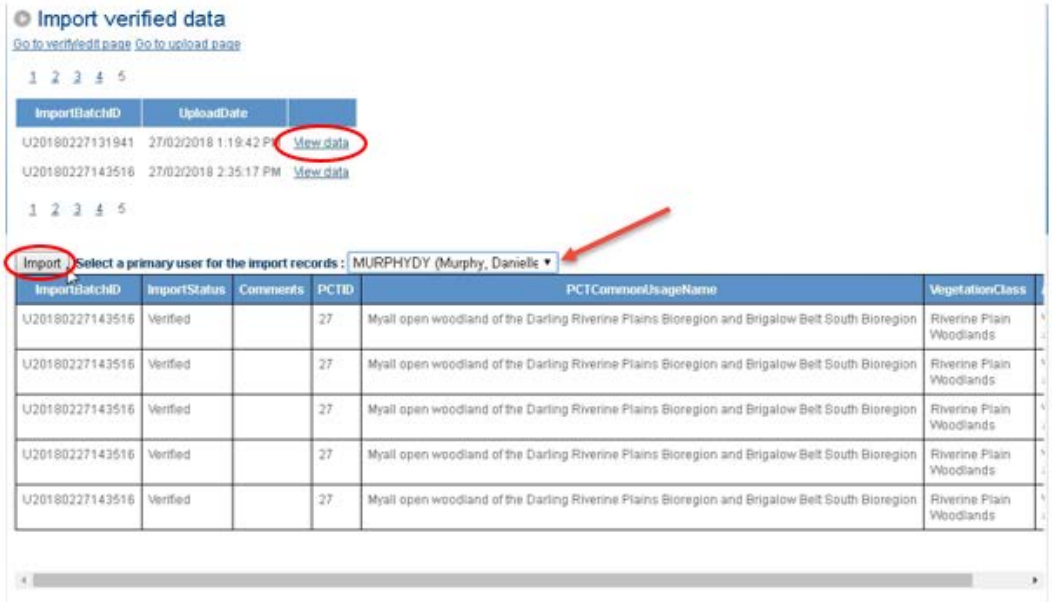


Figure 79 Select a primary user and then import the data

22. Confirm by clicking on OK to question ‘Are you sure you want to do this?’
23. Check the import results (see Figure 80).

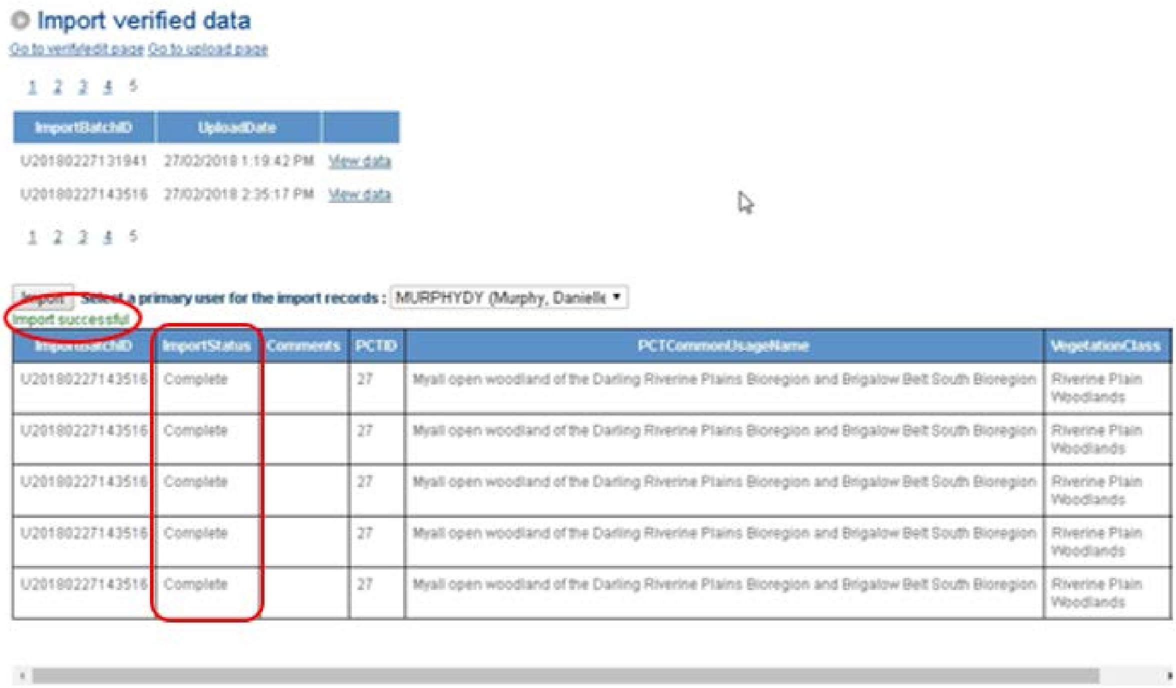


Figure 80 Confirm that the import was successful

24. Finally, open each of the relevant PCTs in the User Interface to check that the uploaded data are visible and correct (see Figure 81). Note, any errors will need to be corrected by editing the csv file and re-importing. Also check that the PCT Definition Status is correct (Draft-Working for new PCTs; Approved - Under Edit for existing PCTs being edited). The fields populated from the PCT Core data template are all core fields, the editing of which will trigger an automatic status change from Approved to Approved – Under Edit.

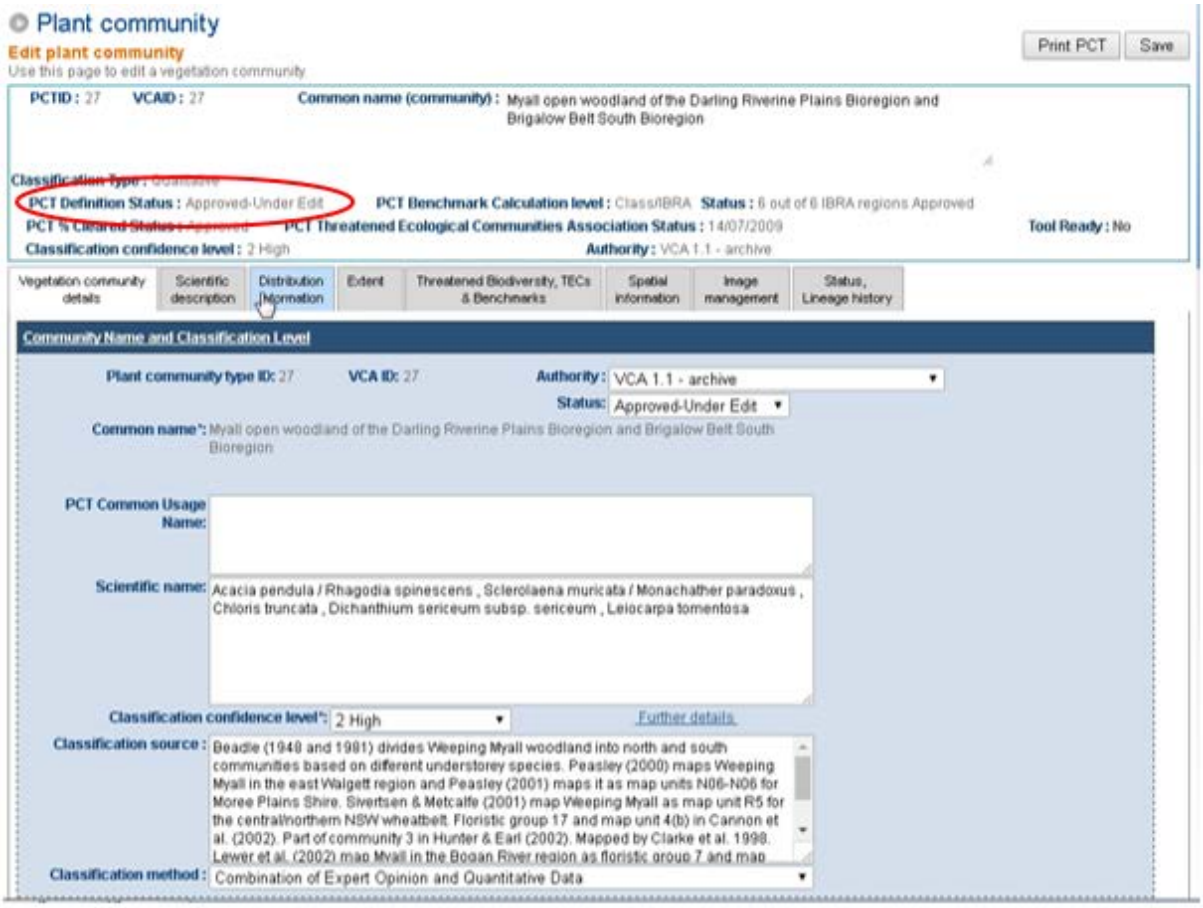


Figure 81 Open the PCT User Interface to check for newly imported data and PCT Definition Status

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

8. ‘Scientific description’ tab

The data accessed via this tab are predominantly editable only by Classification Edit Users and Administrators. The exception to this is the field ‘Fire regime’, which is also editable by Threatened Biodiversity Edit users.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Functionality to upload and import PCT Taxonomic and Structure data is accessible via the ‘Administration > System utilities > Upload / Import PCT Data Management Routines’ drop-down menu item (see Section 8.3 and Section 8.5, respectively).

Click on the ‘Scientific description’ tab to navigate to this information area. The ‘Species by Stratum’ section should be open by default; Figure 82 is opened at ‘References’ to illustrate all section headings (except ‘Species by Growth Form’ which is not visible for Qualitative PCTs).

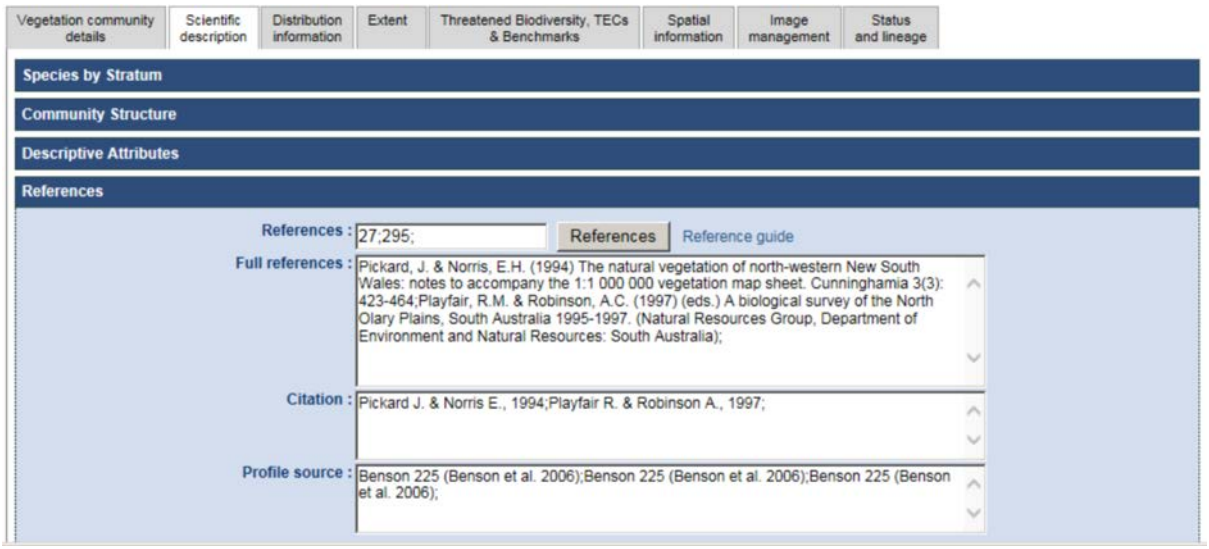


Figure 82 ‘Scientific description’ tab showing the four sections contained therein for a Qualitative PCT

8.1 ‘Species by Stratum’ section

PCT floristic data are populated in this Section for Qualitative PCTs. The floristic data for Quantitative PCTs are populated in the ‘Species by Growth Form’ Section (see Section 8.2).

Note that the ‘Species by Stratum’ section is not visible for Quantitative PCTs.

1. If it is not already, open the ‘Species by Stratum’ section (see Figure 83).
2. Modify the data for the ‘Species upper stratum’ field by clicking the ‘Edit’ button to the right of the ‘Species upper stratum’ box. The edit page will open (see Figure 84). This edit page provides a means to enter species according to the sub-stratum each occupies.

Figure 83 Accessing the 'Species by sub-stratum (Upper)' edit window

3. Tabs are for entering information at the sub-stratum level. Information at the stratum level is compiled from data entered for each of the component sub-strata (e.g. Upper stratum data are compiled from U1, U2 and U3 data). To enter data only at a stratum level, simply enter data for the first sub-stratum of each stratum only (i.e. U1, M1 and G1).

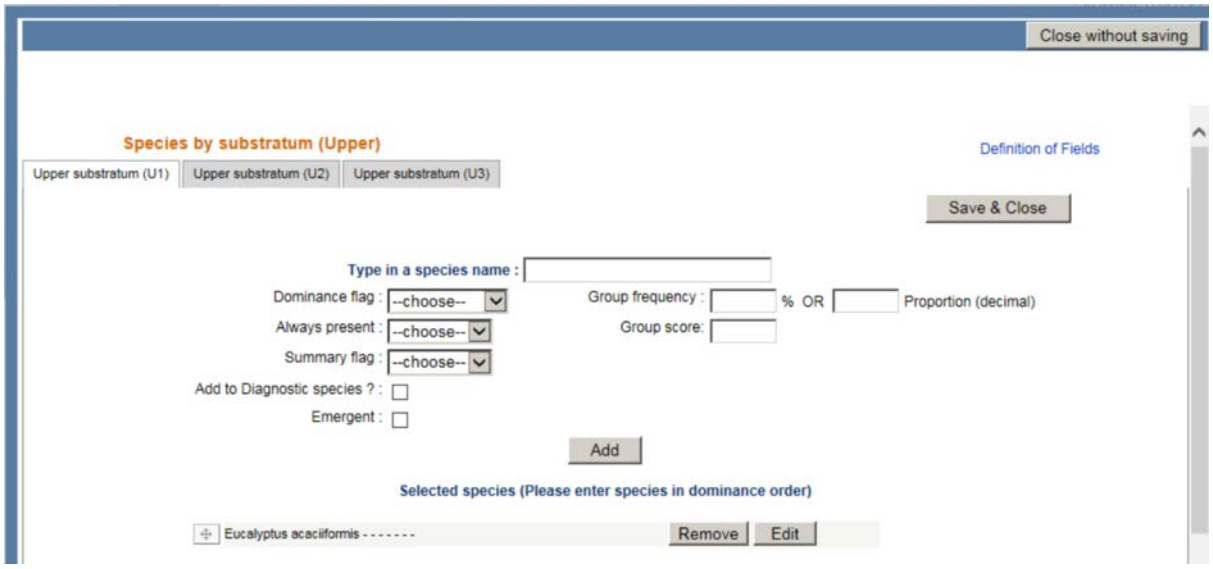


Figure 84 Edit window for the three Upper stratum sub-strata (U1, U2 and U3), with U1 shown here

These 'Species by sub-stratum' edit windows have four main functions:

- add species names
- edit species information
- add diagnostic species
- alter species dominance order
- remove species names

8.1.1 Add species names

1. To search for a species, type at least the first three letters of a species scientific name in the 'Type in a species name' field at the top. When you stop typing, the system will auto-populate the field with a list of species matching the characters you have typed. For example, if you type 'euc', a list will appear with all species listed with scientific names that begin with 'euc'. To use the species suffix to search on rather than select from a list

based on genus, you can either type the full genus name and at least three letters of the species name, or type three (or more letters) of the genus name, then '+' and three or more letters of the species name (e.g. 'euc+cam'). The '+' option must be closed up text (i.e. 'euc + cam' with spaces will not retrieve search results).

2. Scroll down through the list. To add a species from this list, click once on the name and it will be entered into the field.
3. When you have the species you want, proceed to provide additional information for that species according to the fields, i.e. the 'Dominance flag', 'Frequency', 'Always present' and 'Summary flag' by selecting the relevant data from the drop-down menus.
4. The 'Emergent' check box should only appear in the 'Upper sub-stratum (U1)' tab. Check this box if the species you entered is more appropriately considered as an emergent rather than a true canopy species.
5. When you are happy with the information you have entered, click the 'Add' button and the species name will be added below in the 'Selected species' area. Note: if you do not click on the 'Add' button the species will not be added to the sub-stratum.
6. Click 'Save and Close' to save your changes, or 'Close without saving' to close the edit window and not save your changes. The changes you made should now be reflected in the species list.

8.1.2 Edit species information

1. To edit the information for any species in the 'Selected species' area, click on the 'Edit' button to the right of the species name (see Figure 84).
2. This will remove the species from the 'Selected species' area and populate it into the fields above, where edits can be made.
3. When you are happy with the information you have edited, click the 'Add' button and the species name will be added below in the 'Selected species' area.
4. You will need to reposition the species in the correct dominance order (as per Section 8.1.4) before saving.
5. Click 'Save and Close' to save your changes, or 'Close without saving' to close the edit window and not save your changes. The changes you made should now be reflected in the species list.

> **NOTE:** once you have clicked on the 'Edit' button and moved a species out of the 'Selected species' area, clicking in 'Close without saving' will **not** prevent this species from disappearing from the corresponding species by stratum list in the 'Species by Stratum' section – i.e. **the data will be lost**.

8.1.3 Add diagnostic species

For all sub-strata tabs, there is an additional check box 'Add to diagnostic species?' (see Figure 85). This check box is the means by which species are added to the 'Diagnostic species' field in the 'Descriptive Attributes' section.

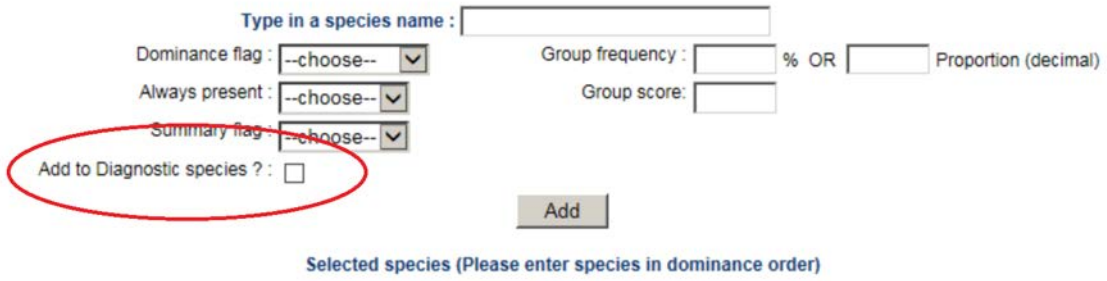


Figure 85 Check the 'Add to Diagnostic species?' box to add the species to the 'Diagnostic species' field

8.1.4 Alter species dominance order

1. When there are two or more species in the 'Selected species' area, you can change the order in which they are listed. To do this, roll the mouse pointer over the arrow box to the left of the species name in the list (see Figure 86).

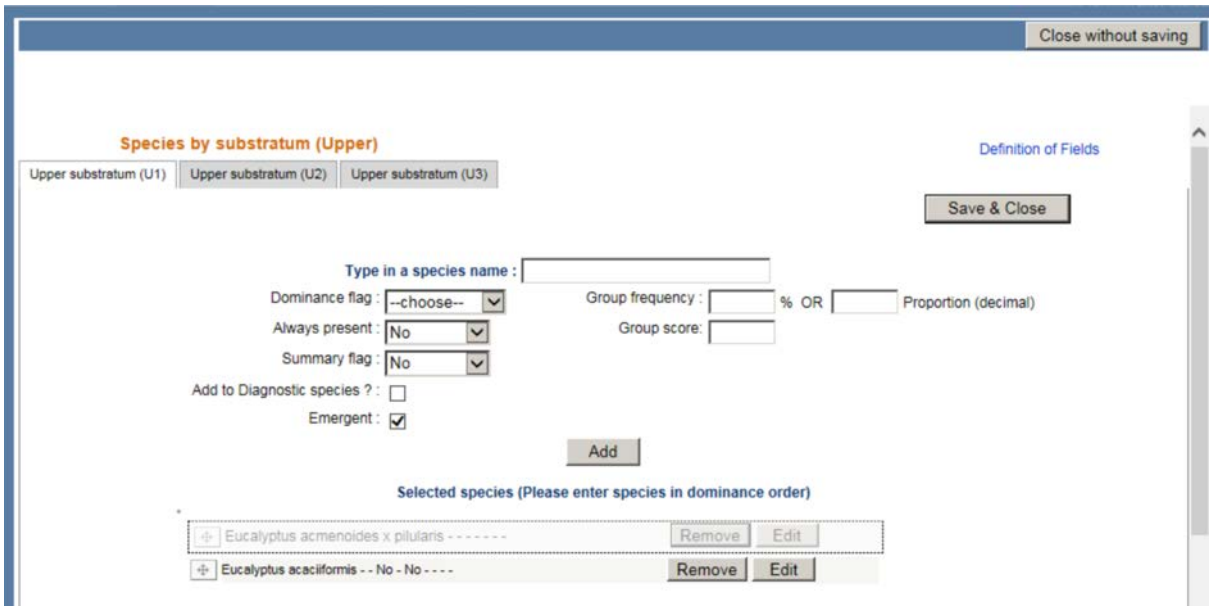


Figure 86 Changing the species dominance is a click and drag process

2. When the mouse pointer changes, click and hold and drag the selected name up or down.
3. Release the mouse button to place the selected species name in the new position.
4. Click 'Save and Close' to save your changes, or 'Close without saving' to close the edit window and not save your changes. The changes you made should now be reflected in the species list.

8.1.5 Remove species names

1. Click on the 'Remove' button to the right of the species name (see Figure 84).
2. Click 'Save and Close' to save your changes, or 'Close without saving' to close the edit window and not save your changes. The changes you made should now be reflected in the species list.

8.2 'Species by Growth Form' section

PCT floristic data are populated in this Section for Quantitative PCTs. The floristic data for Qualitative PCTs are populated in the 'Species by Stratum' Section (see Section 8.1). Note that the 'Species by Growth Form' section is not visible for Qualitative PCTs.

The six 'Species by Growth Form' fields are populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Taxonomy data for PCT project' functionality (see Section 8.3) and are not editable in the BioNet Vegetation Classification application.

Within this section, PCT floristic data are grouped according to their pre-determined dominant growth form group, of which there are six:

- Tree
- Shrub
- Grass and Grass-like
- Forb
- Fern
- Other

For each growth form group, a table displays the following data:

- Species
- Group frequency
- Median cover score

The data are displayed in order of decreasing group frequency (see Table 2 for example).

Table 2 Example of Tree growth form species data

Species	Median Cover Score	Group Frequency (%)
Acmena smithii	5 - 25%	96
Ceratopetalum apetalum	>25 – 50%	80
Synoum glandulosum subsp. glandulosum	<5%, common	68
Cryptocarya glaucescens	<5%, common	64
Doryphora sassafras	5 - 25%	60
Syncarpia glomulifera	<5%, common	44
Schizomeria ovata	<5%, uncommon	36
Pittosporum undulatum	<5%, uncommon	36

Median Cover Score is the median foliage cover class (including leaves and branches) of species in replicates attributed to the PCT.

Group Frequency is the proportion of replicates assigned to the PCT in which the species was present, grouped by primary growth form group.

8.3 ‘Administration’ - ‘Upload/Import PCT taxonomy data for PCT project’ menu

PCT floristic data are maintained by Classification Edit Users and Administrators. PCT floristic data take one of two forms:

- ‘Species by stratum’ data – this is the existing format for all PCTs. Bulk upload/import functionality no longer exists for this data format. Thus, any data inputs of this format must be undertaken manually henceforth (see Section 8.1).
- ‘Species by growth form’ data – this new data format is under development for the new Quantitative format PCTs. Bulk PCT floristic data upload/import functionality is for data of this format and is accessed and operated as follows.

1. Under the ‘Administration tab on the top navigation bar, click on ‘System utilities’ (see Figure 87).

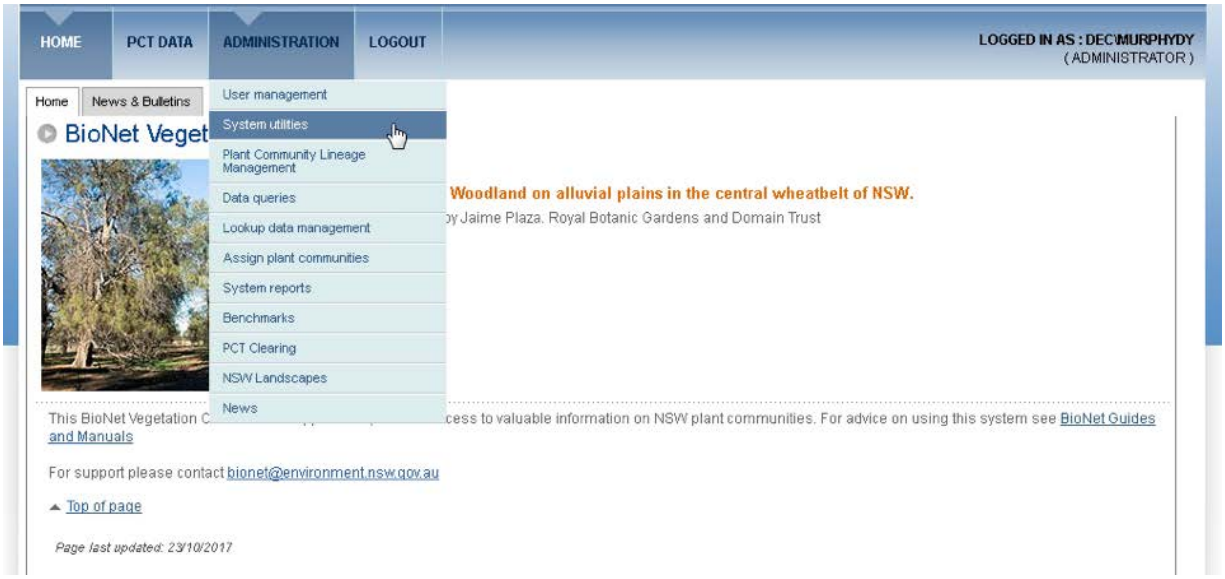


Figure 87 Use the ‘Administration – System utilities’ menu to access data upload/import functionality

2. This opens the ‘Data Administration Tools’ menu (see Figure 88).
3. Click on the ‘+’ symbol beside the ‘Upload/Import PCT Data Management Routines’ item
4. Click on the ‘+’ symbol beside the ‘3. Upload/Import PCT Taxonomy data for PCT project’ item.
5. Click on ‘3a. Upload data’.

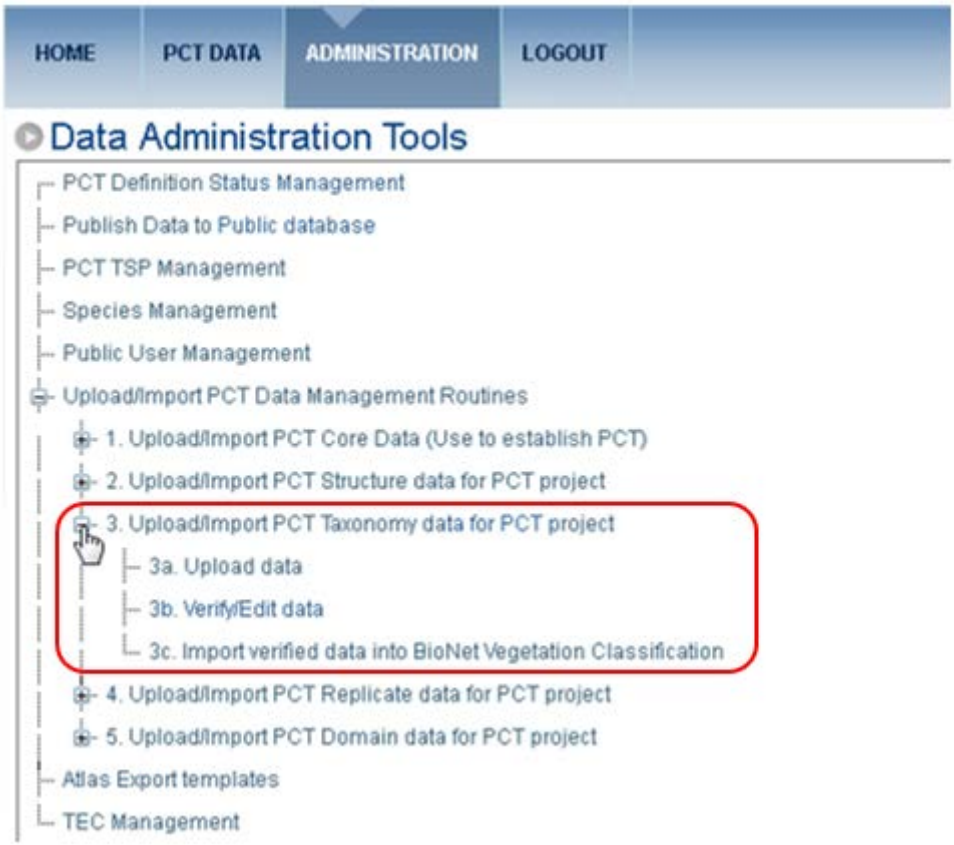


Figure 88 Accessing the replicate data upload/import functionality

6. The 'PCT Taxonomy data' upload page will open (see Figure 89).'

Figure 89 Browse to find the correctly formatted csv file for upload

7. Click on the 'Choose File'/'Browse' button to locate the csv file to be uploaded (see Figure 89). The csv file must be in the correct format as per the 'PCT Taxonomy Data Upload/Import' Excel template (summarised in Appendix A5.2).
8. Select the csv file and click on 'Open' to upload the file (see Figure 90).

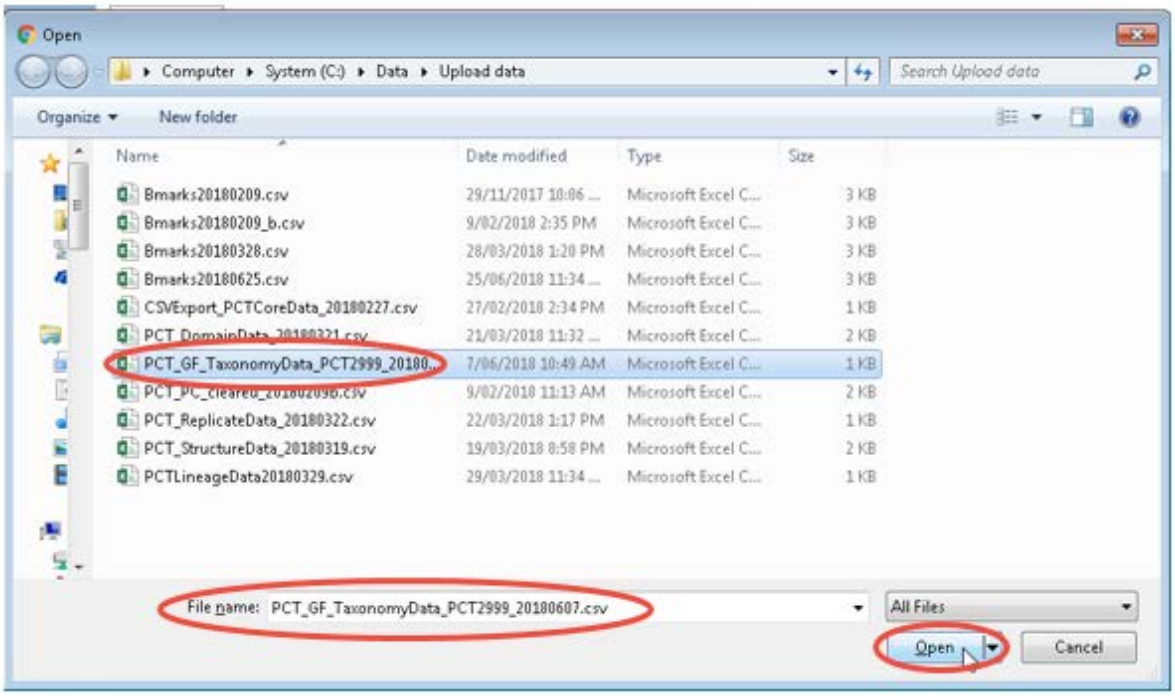


Figure 90 Select and upload the correctly formatted csv file

9. The csv file name will be listed. Click on the 'Upload data'/'Upload' button (see Figure 91).

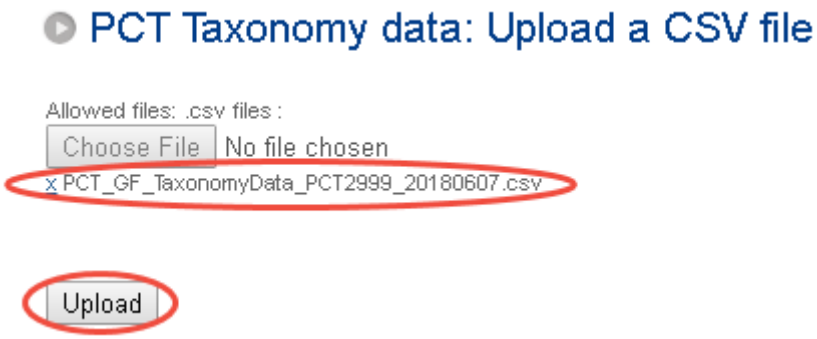


Figure 91 Click to upload the PCT core data

10. The upload will be processed, and results given (see Figure 92).

Figure 92 Result for correctly uploaded data

11. Any errors will need to be corrected in the csv file, saved and re-uploaded (see Figure 93).

Figure 93 Upload error messages. Hopefully yours won't look like this

12. Click on the 'View new uploaded data' hyperlink (see Figure 92) to select the uploaded data for checking.
13. Alternatively, click on 'Administration' tab on the top navigation bar > 'System utilities' > 'Upload/Import PCT Data Management Routines' > '3. Upload/Import PCT Taxonomy data for PCT project' > '3b. Verify/Edit data' (Figure 88) and navigate to the last page to select the uploaded data for checking.
14. The most recently uploaded file will be the last file on the last page.
15. Click on the 'View data' link (see Figure 94). Alternatively, click on 'Delete' to remove the uploaded data.

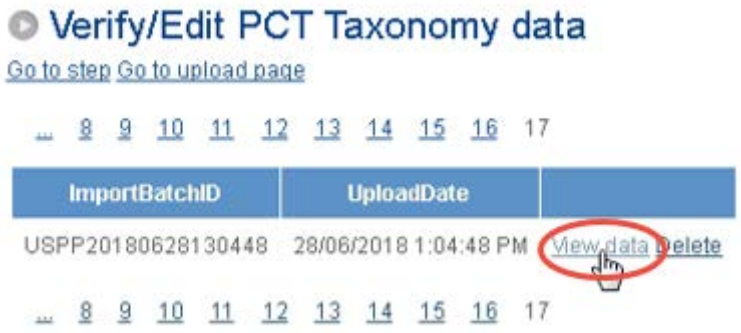


Figure 94 Select the relevant uploaded data for checking

16. Review the data to be uploaded, using the scroll bars to view all rows and fields (see Figure 95). Records can be filtered by status.
17. If errors are encountered, the individual record can be edited (click 'Edit' for that data row) or deleted (click 'Delete' for the data row). However, ideally the entire uploaded data file should be deleted by clicking 'Delete' against the corresponding 'ImportBatchID' (see Figure 95). Correct the source data (which should be the BioNet Atlas Systematic Flora Surveys module), create a new csv file and upload following previous steps.
18. If the reviewed data are correct, click the 'Verify data' button (see Figure 95).

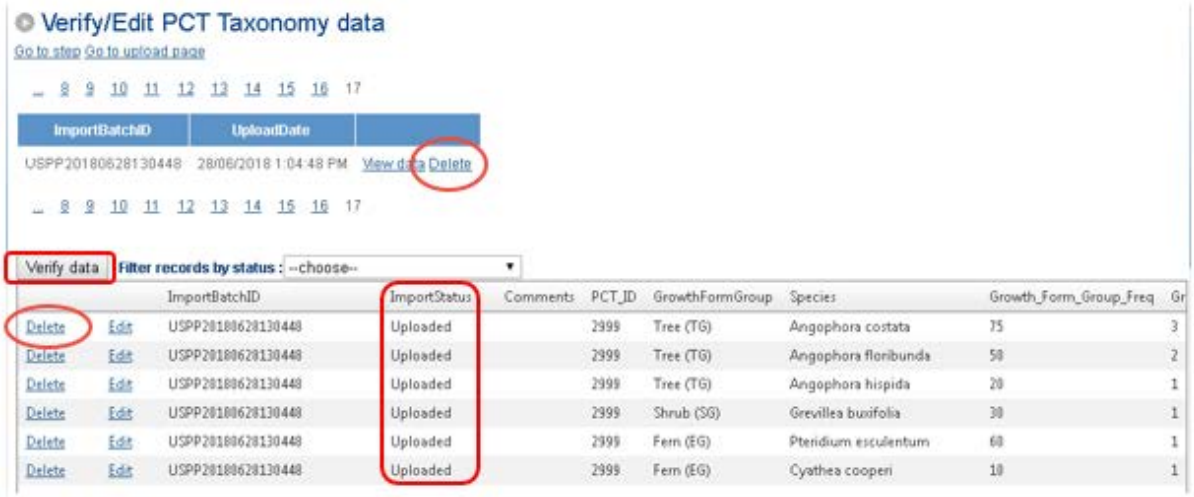


Figure 95 Review and verify the uploaded data prior to importing

19. Check that the verification succeeded (see Figure 96). Note that the verification process will identify errors in species spelling. If successful, click on the ‘Go to import page’ link.

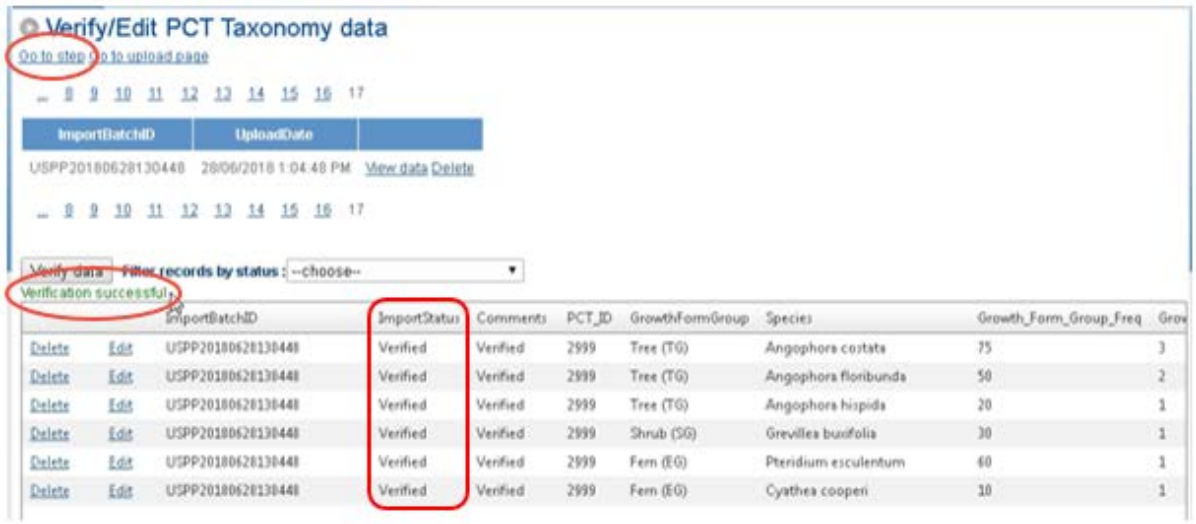


Figure 96 Review the verification outcome message

20. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘3. Upload/Import PCT Taxonomy data for PCT project’ > ‘3c. Import verified data into BioNet Vegetation Classification’ (Figure 88) and navigate to the last page to select the verified data for importing.
21. On the ’Import verified PCT Taxonomy data’ page, select the correct ImportBatchID (usually the last one on the last page) by clicking on ‘View data’ to visually confirm that you have the correct data (Figure 97).
22. Having checked the data, populate the ‘Select a primary user for the import records’ by selecting from the drop-down list and click on the ‘Import’ button (see Figure 97).

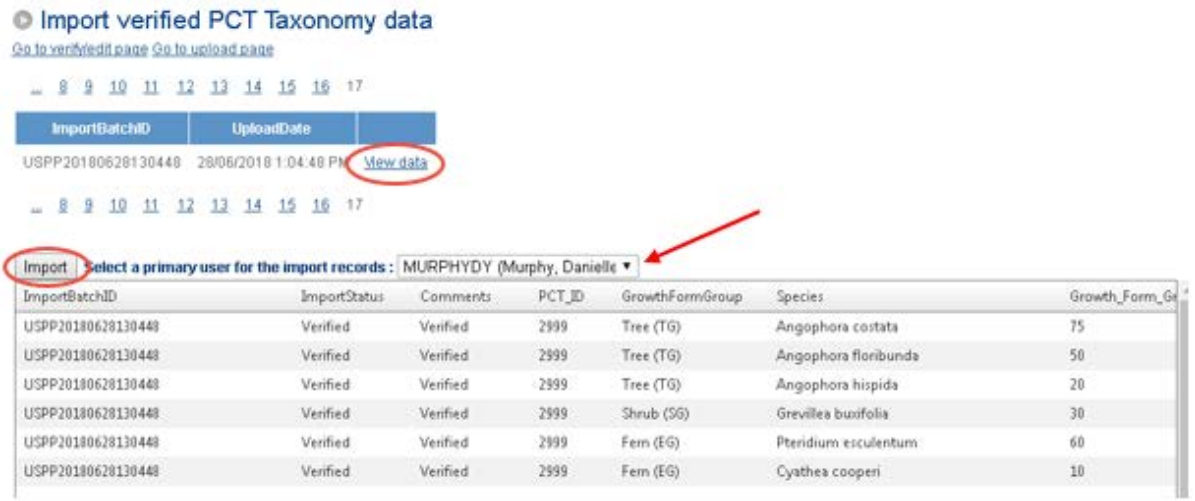


Figure 97 Select a primary user and then import the data

23. Confirm by clicking on OK to the question 'Are you sure you want to do this?'
24. Check the import results (see Figure 98).

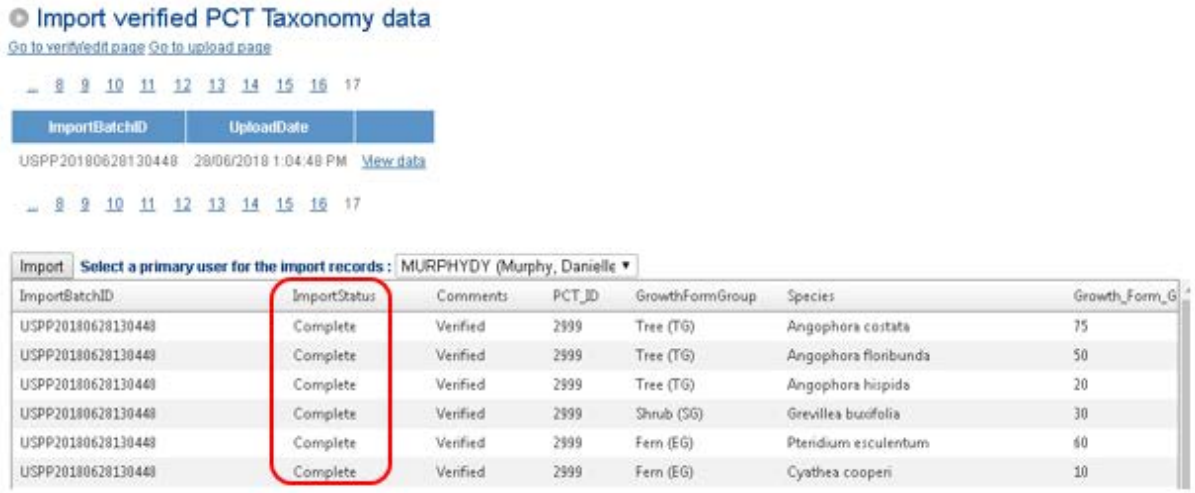


Figure 98 Confirm that the import was successful

25. Finally, open each of the relevant PCTs in the User Interface to check that the uploaded data are visible and correct (see Figure 99). Note, any errors will need to be corrected by editing the csv file and re-importing. Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The fields populated from the PCT Taxonomic data template are currently not core fields, hence editing these fields will not trigger a status change from Approved to Approved - Under Edit.

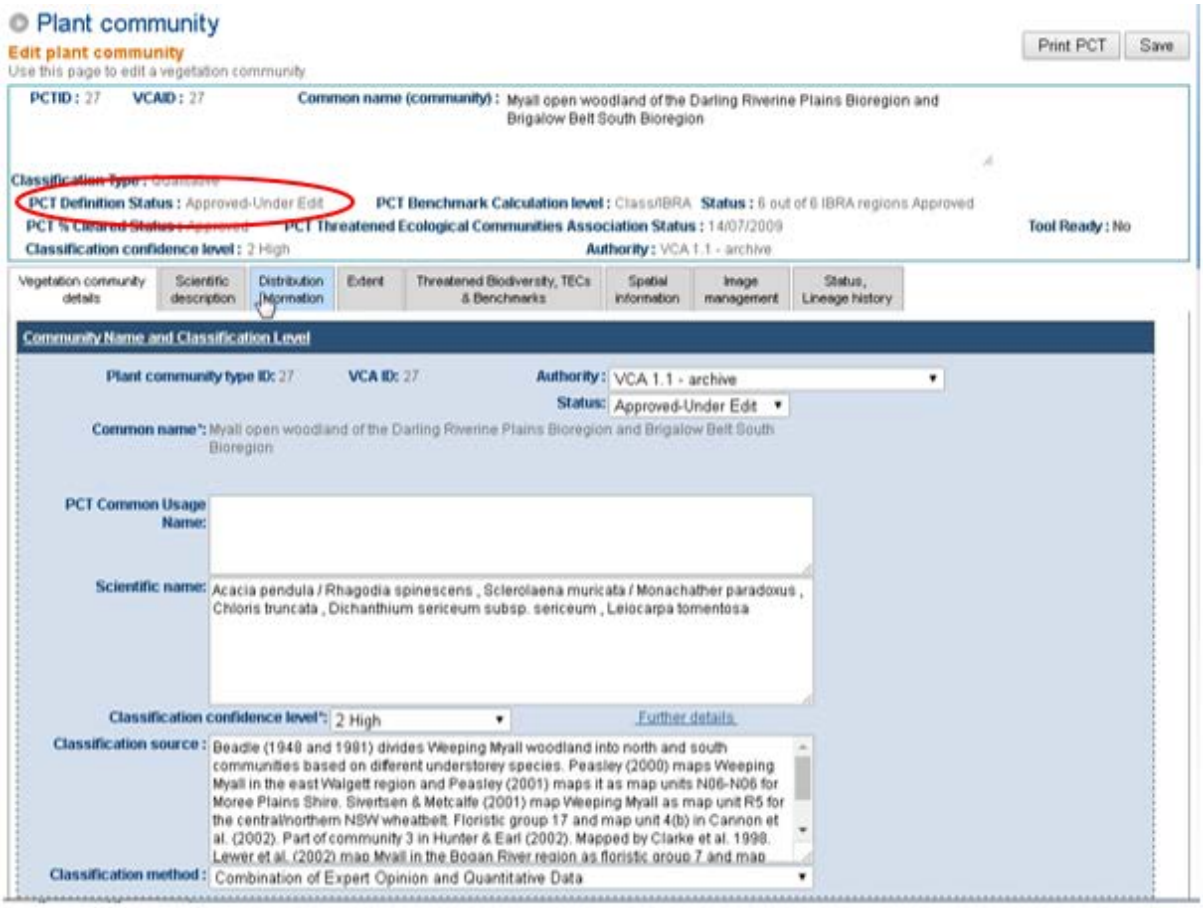


Figure 99 Open the PCT User Interface to check for newly imported data and PCT Definition Status

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

8.4 'Community Structure' section

The conceptual framework for this section is based on standard concepts of vegetation structure and is designed to enable consistent classification of PCT structures, in line with the NSW Vegetation Type Mapping standards. In addition, this section is meant to provide information consistent with the requirements of the Commonwealth's National Vegetation Information System, for which the NSW Native Vegetation Information Science Branch, OEH has created a stand-alone application to collate and export information to the Commonwealth system.

Further explanation on the conceptual framework for community structure as used in the Vegetation Classification applications is provided in the 'Structural Terms' hyperlinked document in the 'Species by Stratum' section in the application.

1. Click on the 'Community Structure' heading row to open the section (see Figure 100).

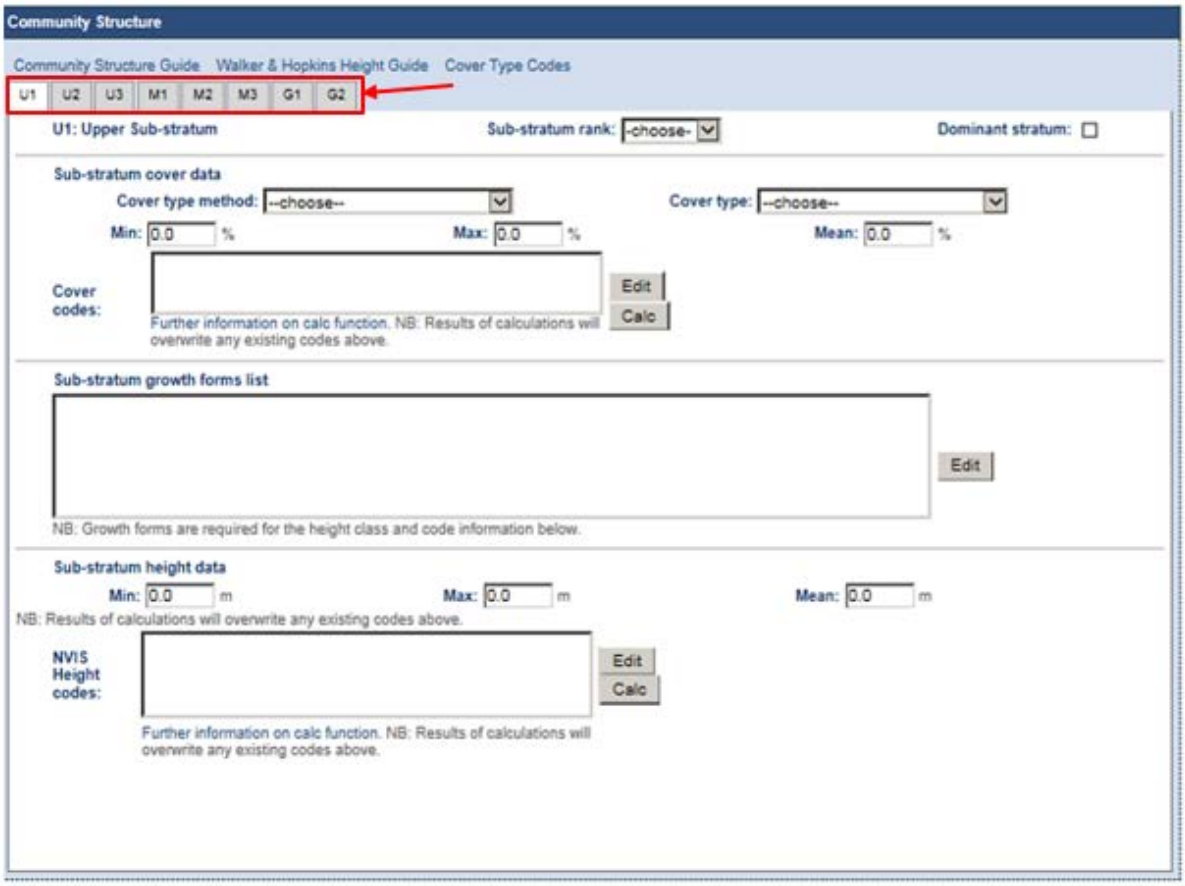


Figure 100 'Community Structure section used to enter and edit cover and height data by sub-strata

> Please note that for most PCTs currently there is only data entered for the highest sub-stratum for each stratum, i.e. U1, M1 and G1. Instructions here pertain to the 'U1' tab – the first sub-stratum in the upper stratum. Please repeat the steps for the other sub-strata, i.e. U2, U3, M1, M2, M3, G1 and G2 tabs as required.
>
> Background guides for users can be accessed via the three hyperlinked text headings at the top of the Community Structure section in the application.
>
> The 'Community Structure Guide' provides general information on the concepts underpinning the Community Structure data.
>
> The 'Walker & Hopkins Height Guide' links to a table that details the ranges within that schema.
>
> The 'Cover Type Codes' guide provides explanations of the cover type codes which can be used to specify the type of measure used for the cover values.

2. By default, the uppermost sub-stratum ('U1') tab should be highlighted and open. To navigate between the sub-strata, simply click the relevant tab.
3. User instructions are provided here for 'U1' tab. Use the same procedures for other tabs (i.e. sub-strata).
4. 'Sub-stratum rank' records the order of importance of the sub-stratum within the stratum. Select from 1, 2 or 3 to rank the sub-strata for each stratum. The 'Dominant stratum' signifies which of the three strata (Upper (U), Mid (M) or Ground (G) is considered the dominant stratum. Please note that only one stratum can be dominant. Clicking this box for any stratum will automatically uncheck anywhere else.

8.4.1 'Sub-stratum cover data' edit

Information on cover is maintained in the 'Sub-stratum cover data' area (see Figure 101).

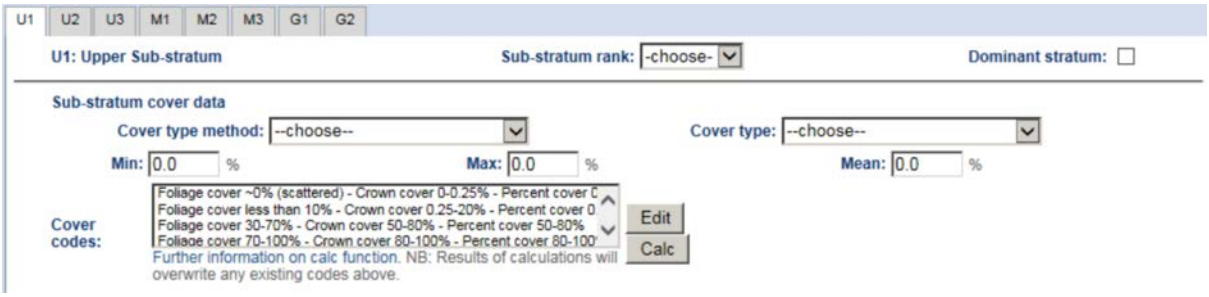


Figure 101 Cover data can be entered and edited for each sub-stratum

To edit these fields:

1. The 'Cover type method' is a drop-down selection for the method used to record and code the cover data.
2. The 'Cover type' selection is determined by what 'Cover type method' is used, so you will need to first select the relevant 'Cover type method' code, then the system will populate the 'Cover type' menu with the appropriate selections to choose from.
3. Select a 'Cover type method', then subsequently a 'Cover type'.

Next in the 'Sub-stratum cover data' area are three fields that enable the entry of metric data for selected statistical measures of the cover, namely the minimum, maximum and mean scores for cover percentages (see Figure 102).

The sub-stratum cover 'Min', Max' and 'Mean' fields can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Structure data for PCT project' functionality (see Section 8.5). For Quantitative PCTs, these data may cease to be editable in the BioNet Vegetation Classification application to ensure consistency with the source data.

These metric data can also be entered and edited manually. To enter/edit sub-stratum cover metric data – Min, Max, Mean:

1. Click on the desired sub-stratum tab (Figure 101).
2. Type in the percentage figure (either as an integer or preferably to one decimal place) for the relevant measure.

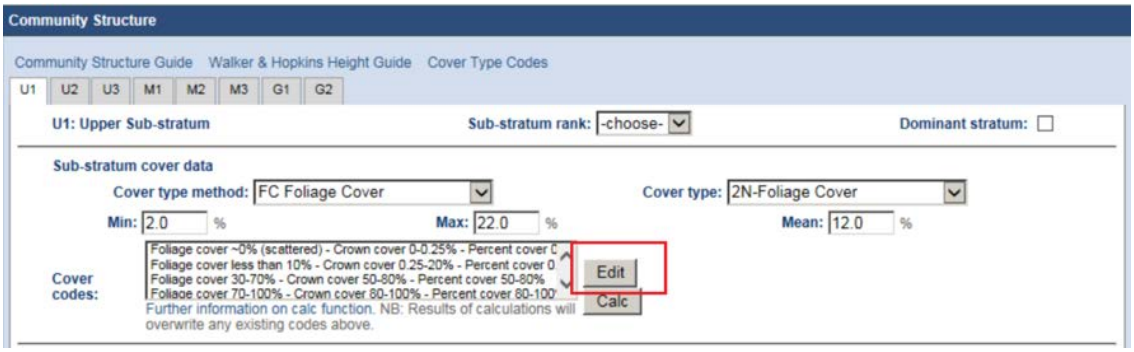


Figure 102 Populating the 'Sub-stratum cover data' fields

Provided that at least the minimum and maximum figures are entered; as well as 'Cover type method' and 'Cover type', these data can be used to calculate the appropriate cover code to be displayed in the 'Cover codes' field.

> Note: the results of the calculation will overwrite any previous values in the ‘Cover codes’ field.

To auto-populate the ‘Cover codes’ field with data calculated from the minimum and maximum percentage cover figures:

1. Click the ‘Calc’ button to the right of the ‘Cover codes’ field (see Figure 103).

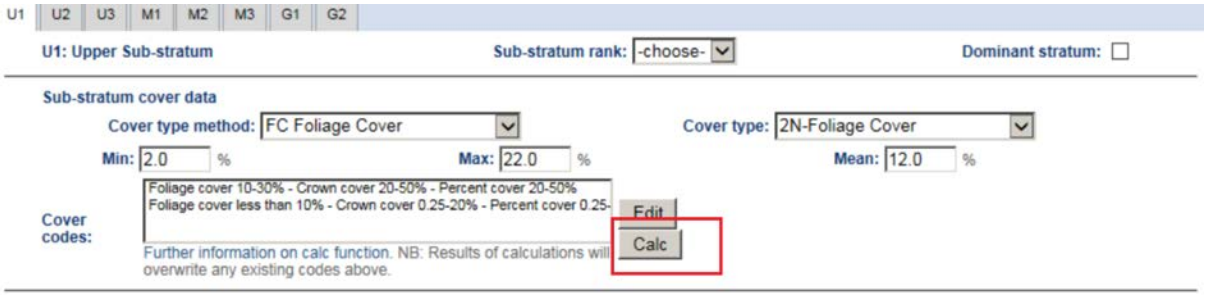


Figure 103 Using the ‘Calc’ functionality to calculate the ‘Cover codes’ field from min and max cover data

2. Edit these data using the ‘Edit’ button, as described previously. **Note**, the Cover codes will be listed in order from most cover to least cover, which may not be the dominance order. To change the order, use the method described below.

Manually editing the ‘Cover codes’ field:

If there are existing cover codes for the community you are working on, these will be displayed in the ‘Cover codes’ field as a list.

Note: the existing data may not have been related previously to a ‘Cover type method’; therefore, each value in the list uses the standard NVIS codes that cross-reference between three of the available codes, namely foliage cover, Crown cover and Percent cover. For the same reason (i.e. pre-existing data), there is no validation check between the selection of ‘Cover type method’ (and subsequently ‘Cover type’) and the data listed in the ‘Cover codes’ field.

To edit the ‘Cover codes’ directly:

1. Click on the ‘Edit’ button next to the ‘Cover codes’ field (Figure 102) to open the edit page (see Figure 104).

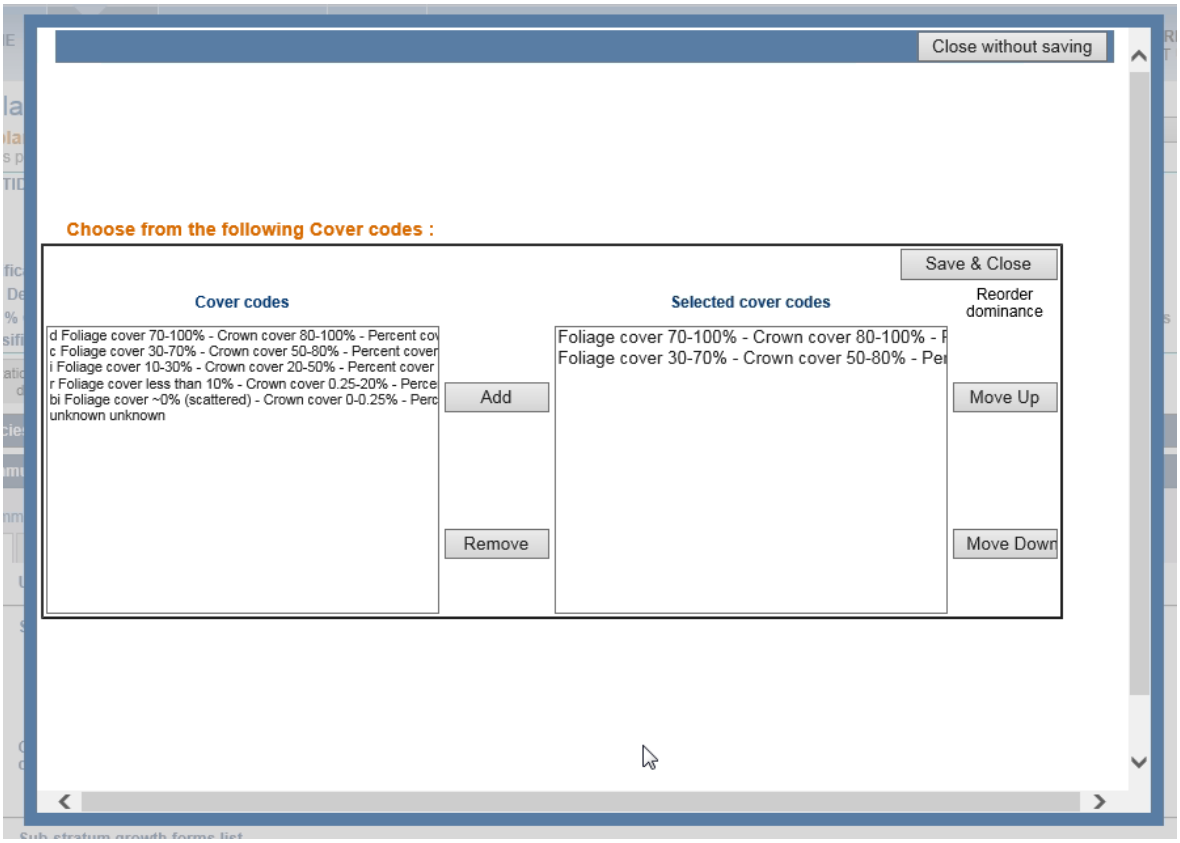


Figure 104 Adding, removing and re-ordering the cover codes for a sub-stratum

To add a code:

1. Click to select a name in the ‘Cover codes’ box on the left.
2. Then click the ‘Add’ button in the middle. The name will be added to the ‘Selected cover codes’ box on the right.

The selected cover codes will be automatically assigned dominance by their position in the list (i.e. first listed is most important, or most indicative of the community).

To change the order of the listed codes:

1. Select by clicking once on a name in the right-hand box.
2. Use the ‘Move Up’ and ‘Move Down’ buttons on the right to alter the listing order.

To remove a code:

1. Click to select a name in the ‘Selected cover codes’ box on the right.
2. Click the ‘Remove’ button in the middle. The name will be removed from the right-hand box.
3. Once you have modified the data as desired, click either the ‘Save & Close’ button to save your changes or the ‘Close without saving’ button in the top right-hand corner to close the edit page without saving your changes.

8.4.2 ‘Sub-stratum growth forms’ edit

To edit the ‘Sub-stratum growth forms list’ data:

1. Click on the ‘Edit’ button next to the ‘Sub-stratum growth forms list’ field (see Figure 105).

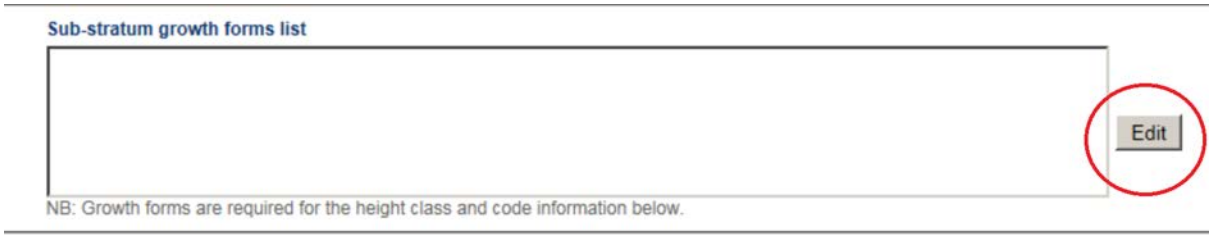


Figure 105 Use the 'Edit' button to access the 'Growth form's edit page for the sub-stratum

2. Click on the Edit button next to the 'Sub-stratum growth forms list' field. The 'Growth forms' edit page will appear (see Figure 106).

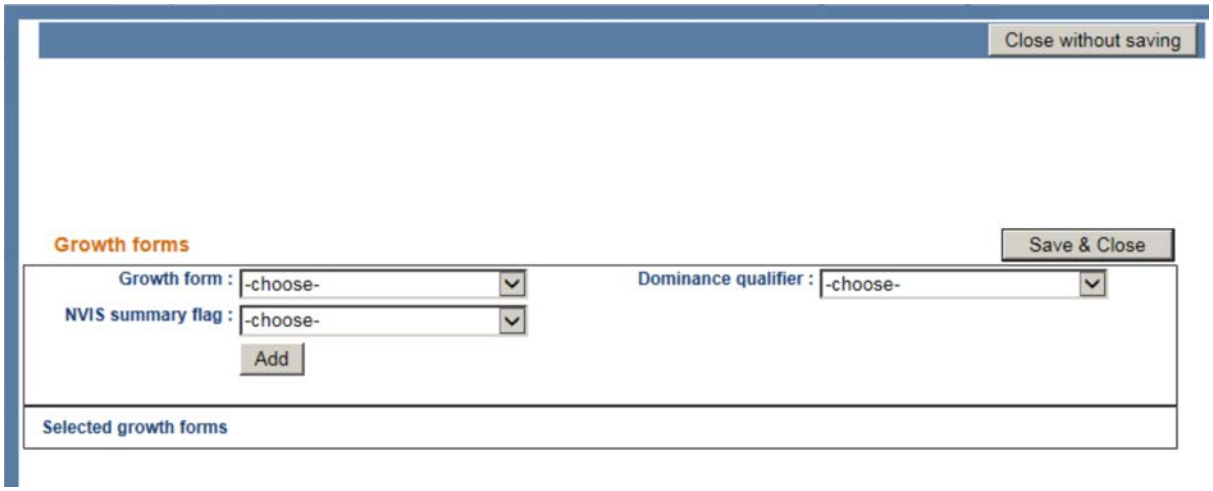


Figure 106 The 'Growth forms' edit page for a sub-stratum

3. Select values from each of the drop-down menus, first for 'Growth form', then for 'Dominance qualifier' and 'NVIS summary flag' (see Figure 107).

Note: the minimum requirement is to enter the growth form for the sub-stratum.

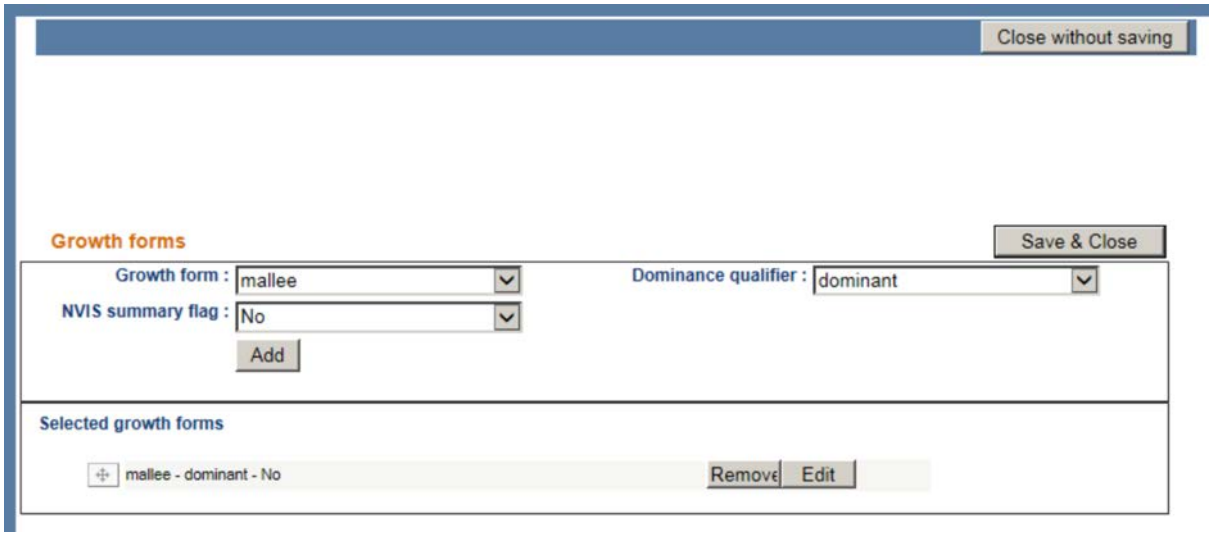


Figure 107 Populating each of the growth forms field for a sub-stratum

4. When you have completed your selections, click 'Add' to add the growth form and the associated data to the 'Selected growth forms' list below (see Figure 108).

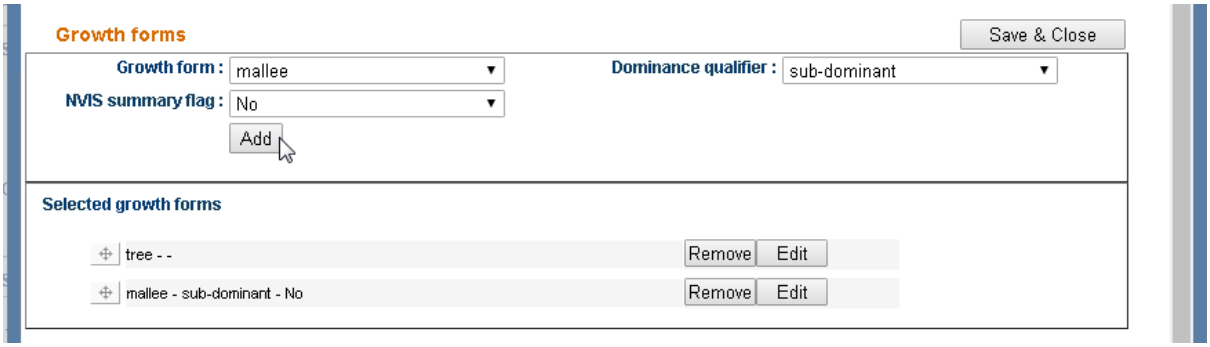


Figure 108 Populating the 'Selected growth forms' list for a sub-stratum

To remove a growth form from the 'Selected growth forms' list:

1. Click the 'Remove' button next to the relevant growth form to remove it and all associated data from the list and from the 'Sub-stratum growth forms list' section for the PCT. **Note**, these data are immediately removed from the PCT, even if you click 'Close without saving'.

To edit a growth form already in the 'Selected growth forms' list:

1. Click the 'Edit' button next to the relevant growth form. This **removes** the growth form from the list and enters the growth form into the 'Growth form' fields above.
2. Add or modify the existing data for that growth form as required. When complete, you must click the 'Add' button to re-add the growth form to the 'Selected growth forms' section (see Figure 109). **Note**, if you do not re-add the growth form in this way it will be **lost (i.e. deleted)** from the 'Selected growth forms' section, even if you click 'Close without saving'.

Figure 109 Editing growth form data already entered. After editing, click the 'Add' button again or the data will be lost

3. The growth forms can and should be placed in dominance order using the arrow symbols as for species by sub-strata.
4. When you have completed your changes, click 'Save & Close' to save the changes, or 'Close without saving' to return to the main screen without saving your changes.

8.4.3 'Sub-stratum height data' edit

Height data are maintained in the 'Sub-stratum height data' area, located at the bottom of the Community Structure section.

At the top of the 'Sub-stratum height data' area are three fields that enable the entry of metric data for selected statistical measures of the sub-stratum height, namely the minimum, maximum and mean scores for height in metres (see Figure 110).

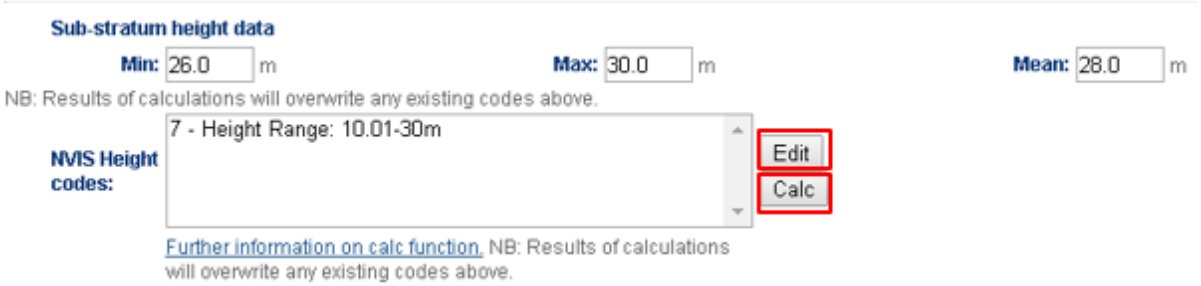


Figure 110 Sub-stratum height data entry area and functionality

The sub-stratum height 'Min', Max' and 'Mean' fields can be populated with data directly from the BioNet Systematic Flora Surveys data collection (in the 'Replicate, NVIS level v' Section) via the 'Upload/Import PCT Structure data for PCT project' functionality (see Section 8.5). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

These metric data can also be entered/edited manually. To edit sub-stratum height metric data – Min, Max, Mean:

1. Click on the desired sub-stratum tab (Figure 100).
2. Type in the desired height value (values will be saved to one decimal place only) for the relevant measure/s.
3. Provided that at least the minimum and maximum figures are entered, these data can be used to calculate the appropriate height code to be displayed in the 'NVIS Height codes' field. To do this, click the 'Calc' button to the right of the 'NVIS height codes' field (see Figure 110). The calculated code(s) will be added to the 'NVIS height codes' field listed on the right.
4. The next fields record the height data as ranges consistent with the height classes in the NVIS height codes.

To edit the NVIS Height codes:

1. Click the 'Edit' button to the right of the 'NVIS Height codes' field (see Figure 110).

To add a height code:

1. Select the relevant code from the 'Height codes' list on the left (see Figure 111).
2. Click the 'Add' button and the selected code will be added to the 'Selected height codes' box on the right.

The selected height codes will be automatically assigned dominance by their position in the list, i.e. first listed is most important, or most indicative of the community.

To change the order of the listed codes:

1. Select by clicking once on a height code in the 'Selected height codes' box on the right.
2. Use the 'Move Up' and 'Move Down' buttons on the right to alter the listing order.

To remove a height code:

1. Click on the relevant code in the ‘Selected height codes’ box on the right to highlight it.
2. Click the ‘Remove’ button.

Once you have modified the data, click either the ‘Save & Close’ button to save your changes or the ‘Close without saving’ button in the top right-hand to close the edit page without saving your changes (see Figure 111).

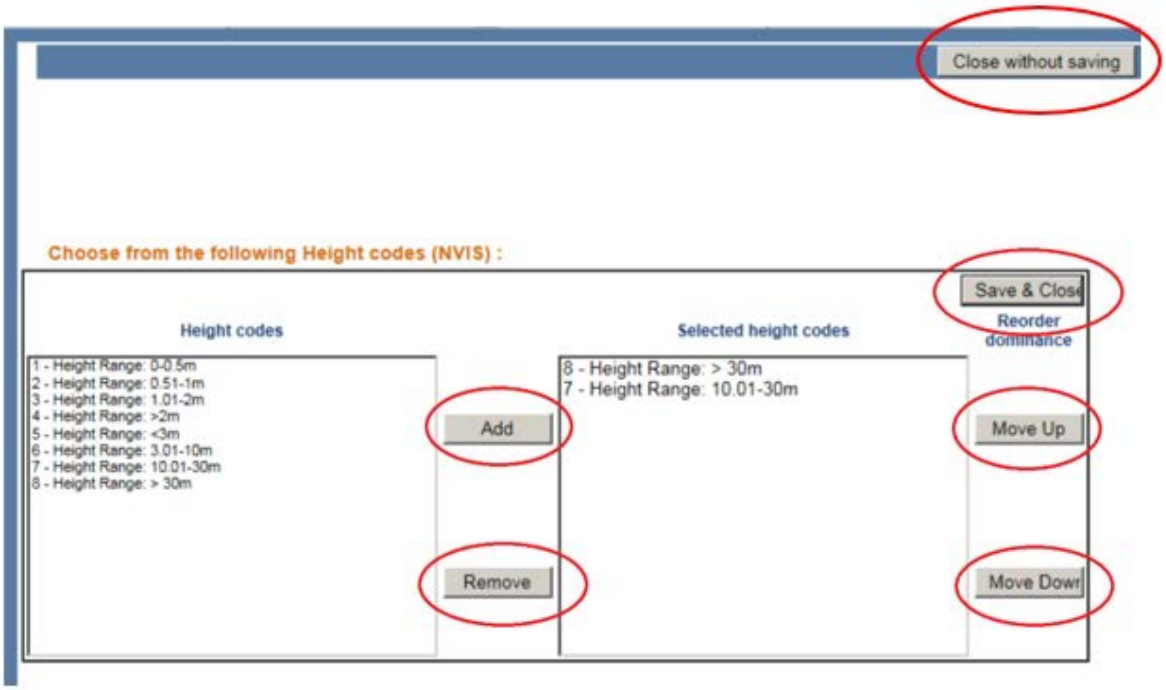


Figure 111 Functionality to add, remove, reorder and save data, or close the ‘NVIS Height code’ edit window

8.5 ‘Administration’ – ‘Upload/Import PCT structure data for PCT project’ menu

PCT structure data are maintained by Classification Edit Users and Administrators.

Functionality to bulk upload and import replicate data is accessed via the following pathway:

1. Under the ‘Administration drop-down menu item on the top navigation bar, click on ‘System utilities’ (see Figure 112).

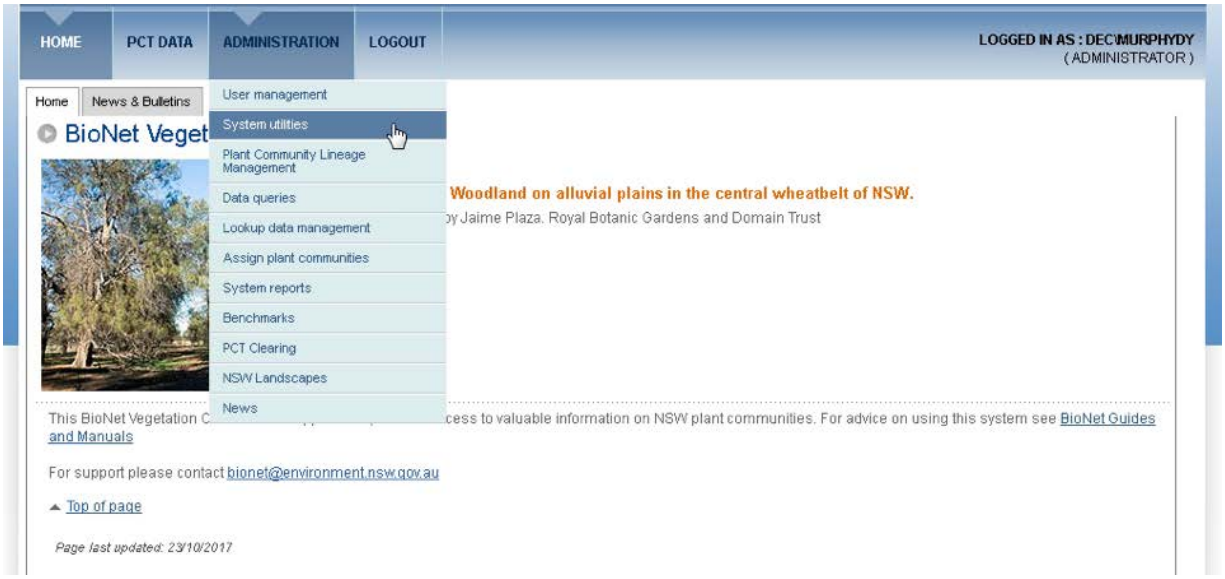


Figure 112 Go to 'Administration' > 'System utilities' to access data upload/import functionality

2. This opens the 'Data Administration Tools' menu (see Figure 113).
3. Click on the '+' symbol beside the 'Upload/Import PCT Data Management Routines' item.
4. Click on the '+' symbol beside the '2. Upload/Import PCT Structure data for PCT project' item.
5. Click on '2a. Upload data'.

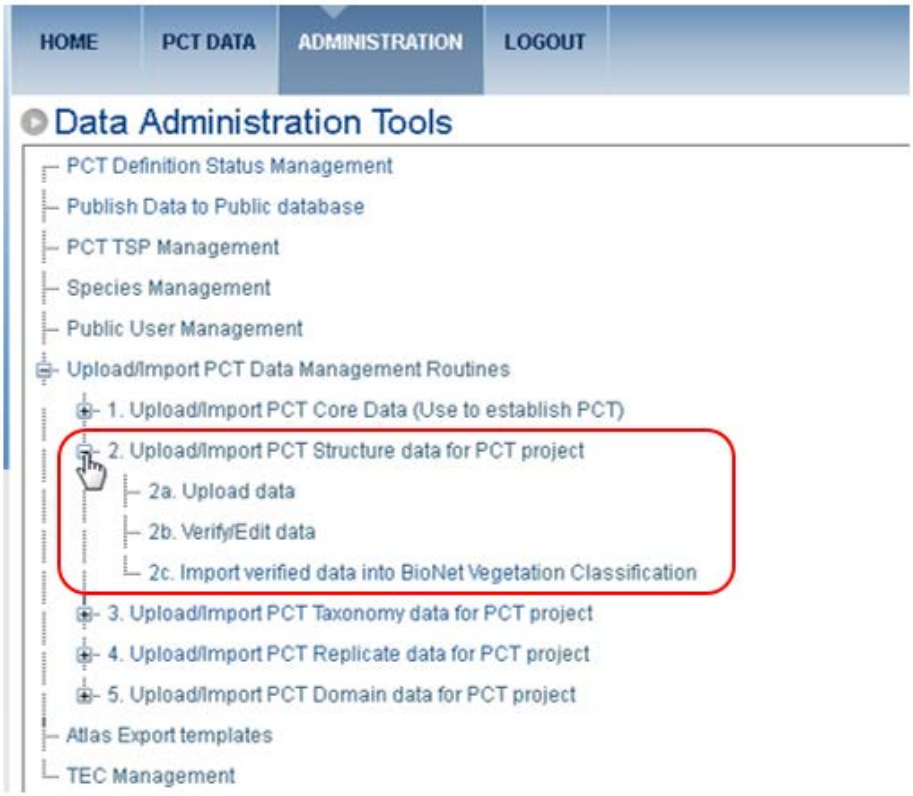


Figure 113 Accessing the replicate data upload/import functionality

6. The 'PCT Structure data' upload page will open (see Figure 114).

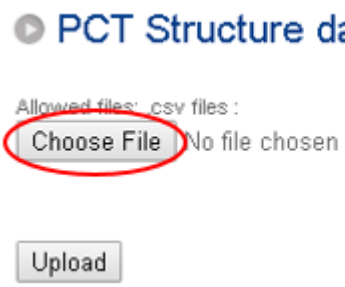


Figure 114 Browse to find the correctly formatted csv file for upload

7. Click on the 'Choose File'/'Browse' button to locate the csv file to be uploaded (see Figure 115). The csv file must be in the correct format as per the 'PCT Structure Data Upload/Import' Excel template (summarised in Appendix A5.3).
8. Select the csv file and click on 'Open' to upload the file (see Figure 115).

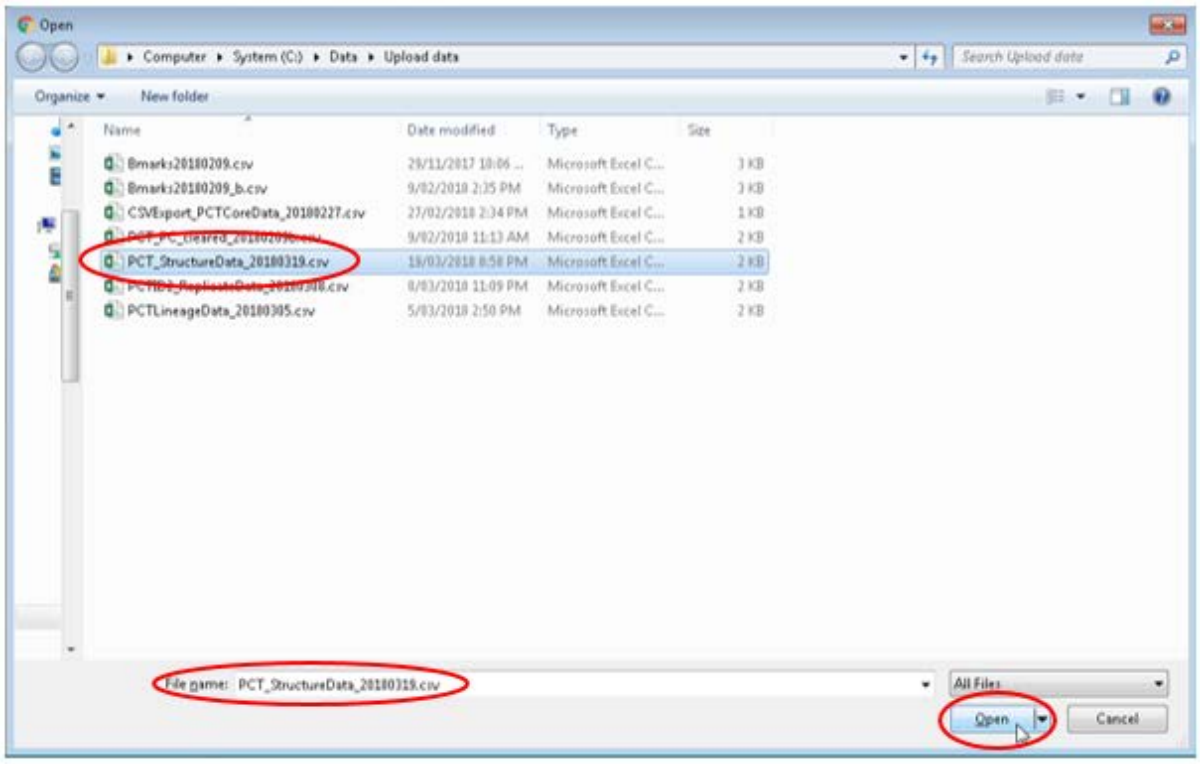


Figure 115 Select and upload the correctly formatted csv file

9. The csv file name will be listed. Click on the 'Upload data'/'Upload' button (see Figure 116).

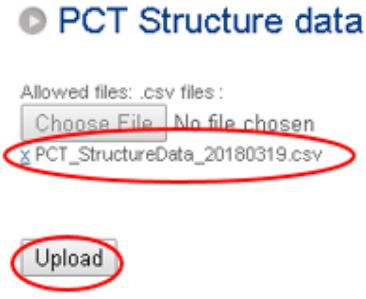


Figure 116 Click to upload the PCT structure data

10. The upload will be processed, and results given (see Figure 117).

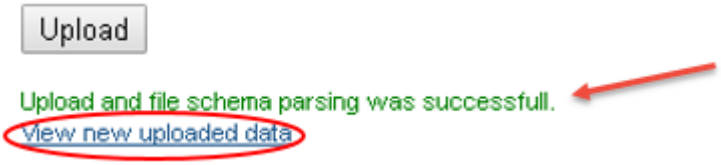


Figure 117 Result for correctly uploaded data

11. Any errors will need to be corrected, saved and re-uploaded (see Figure 118).

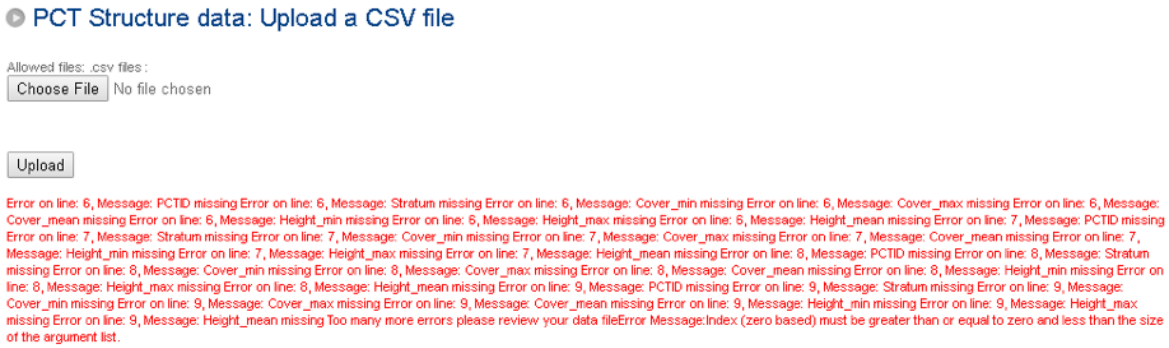


Figure 118 Upload error messages. Correct all data errors and re-upload the csv file

12. Click on the ‘View new uploaded data’ hyperlink (see Figure 117) to select the correct uploaded data for checking.
13. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘2. Upload/Import PCT Structure data for PCT project’ > ‘2b. Verify/Edit data’ (Figure 113) and navigate to the last page to select the uploaded data for checking.
14. The most recently uploaded file will be the last file on the last page.
15. Click on the ’View data’ link (see Figure 119). Alternatively, click on ‘Delete’ to remove the uploaded data.

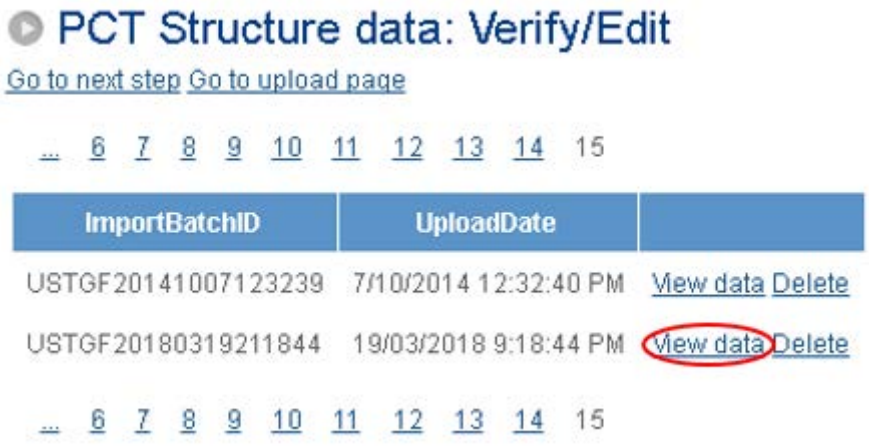


Figure 119 Select the relevant uploaded data for checking

16. Review the data to be uploaded, using the scroll bars to view all rows and fields (see Figure 120). Records can be filtered by status.

17. If errors are encountered, the individual record can be edited (click ‘Edit’ for that data row) or deleted (click ‘Delete’ for the data row). However, ideally the entire uploaded data file should be deleted by clicking ‘Delete’ against the corresponding ‘ImportBatchID’ (see Figure 120). Correct the source data (which should be the BioNet Atlas Systematic Flora Surveys module), create a new csv file and upload following previous steps.
18. If the reviewed data are correct, click the ‘Verify data’ button (see Figure 120).

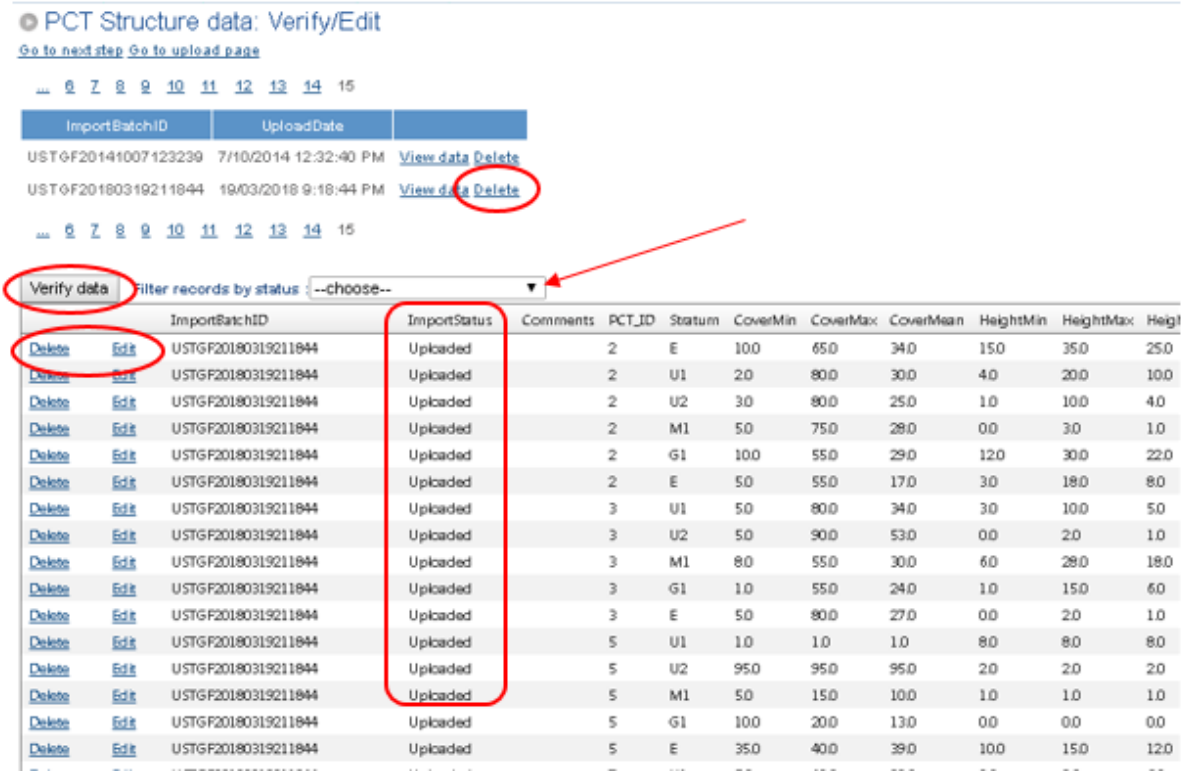


Figure 120 Review and verify the uploaded data prior to importing

19. Check that the verification succeeded (see Figure 121). If successful, click on the ‘Go to import page’ link (see Figure 121).

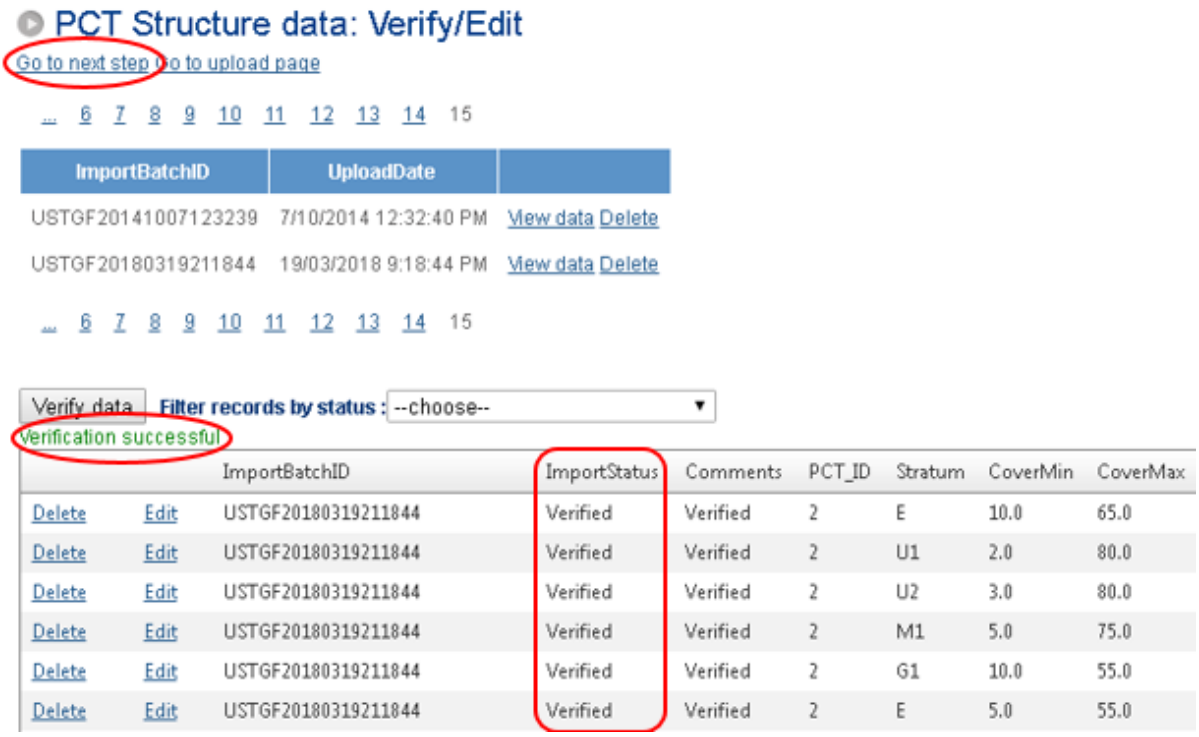


Figure 121 Review the verification outcome message

20. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘2. Upload/Import PCT Structure data for PCT project’ > ‘2c. Import verified data into BioNet Vegetation Classification’ (Figure 113) and navigate to the last page to select the verified data for importing.
21. On the ‘PCT Structure data: Import verified data’ page, select the correct ImportBatchID (usually the last one on the last page). Click on ‘View data’ to visually confirm that you have the correct data (see Figure 122).
22. Having checked the data, populate the ‘Select a primary user for the import records’ by selecting from the drop-down list and click on the ‘Import’ button (see Figure 122).

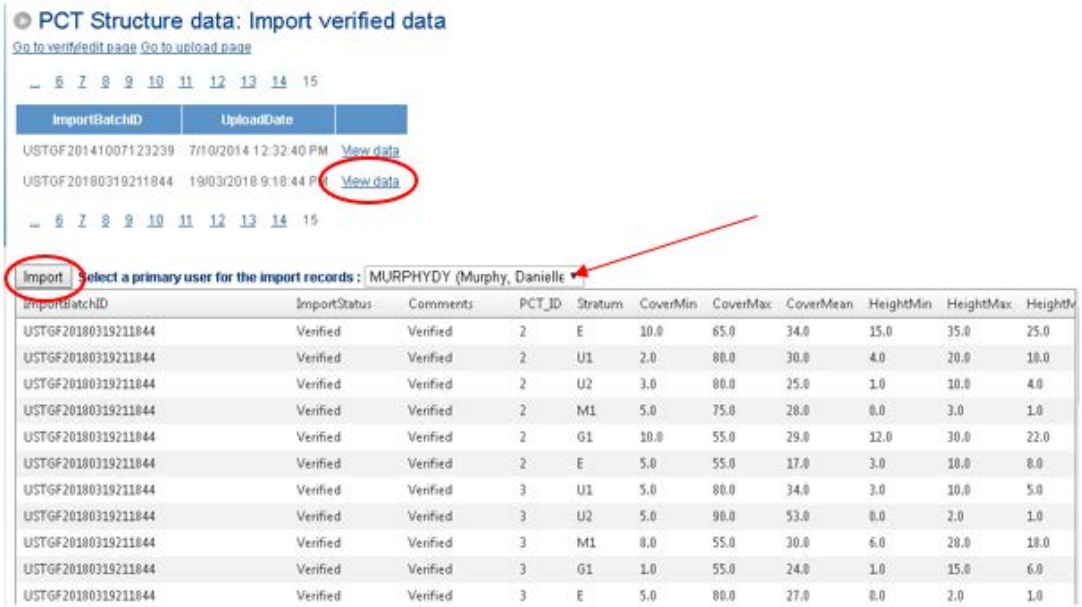


Figure 122 Select a primary user and then import the data

23. Click ‘OK’ to confirm (see Figure 123).

Figure 123 Confirm the import command

24. Check the import results.
25. Finally, open each of the relevant PCTs in the User Interface to check that the uploaded data are visible and correct. Note, any errors will need to be corrected by editing the csv file and re-importing. Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The fields populated from the PCT Structure data template are not core fields, hence editing these fields will not trigger a status change from Approved to Approved – Under Edit.

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

8.6 ‘Descriptive Attributes’ section

Click the ‘Descriptive Attributes’ section heading to open the edit page (see Figure 124).

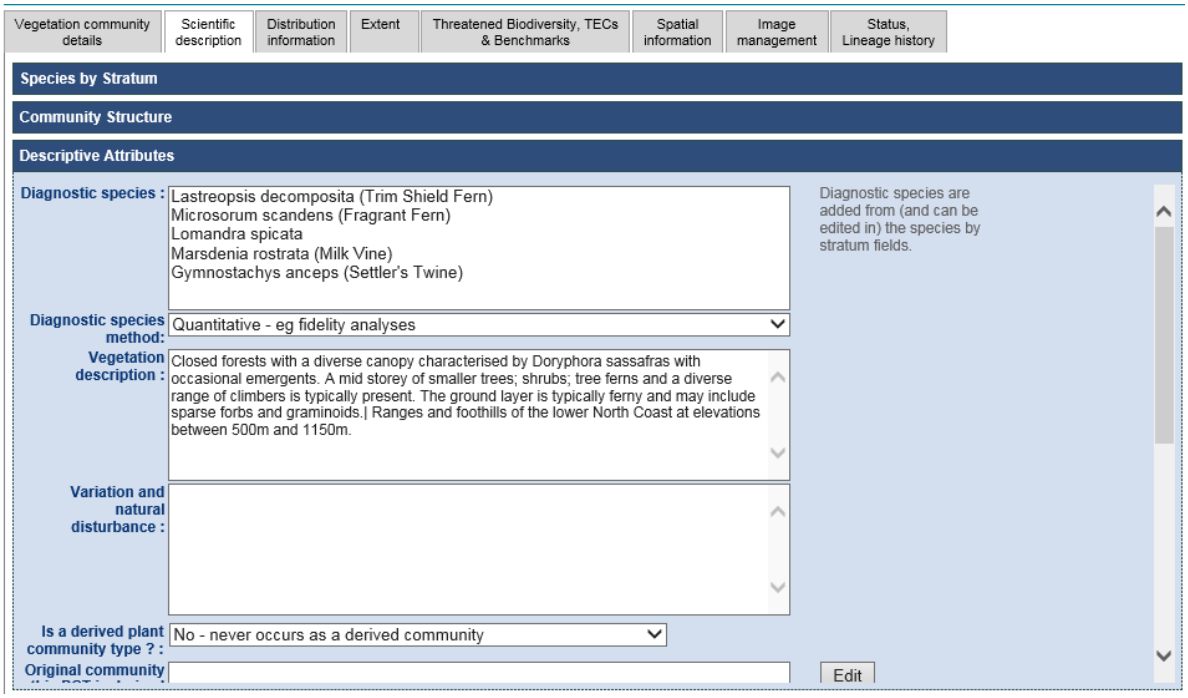


Figure 124 ‘Descriptive Attributes’ section

The ‘Diagnostic species’ field is not editable from this screen. The species (if any) listed in this field are compiled from the ‘Species by sub-stratum’ edit functions when the ‘Add to Diagnostic species?’ option is checked:

1. Check that the species listed in the ‘Diagnostic species’ field reflect any changes you have made previously in the ‘Species by Stratum’ edit windows (see Figure 125).

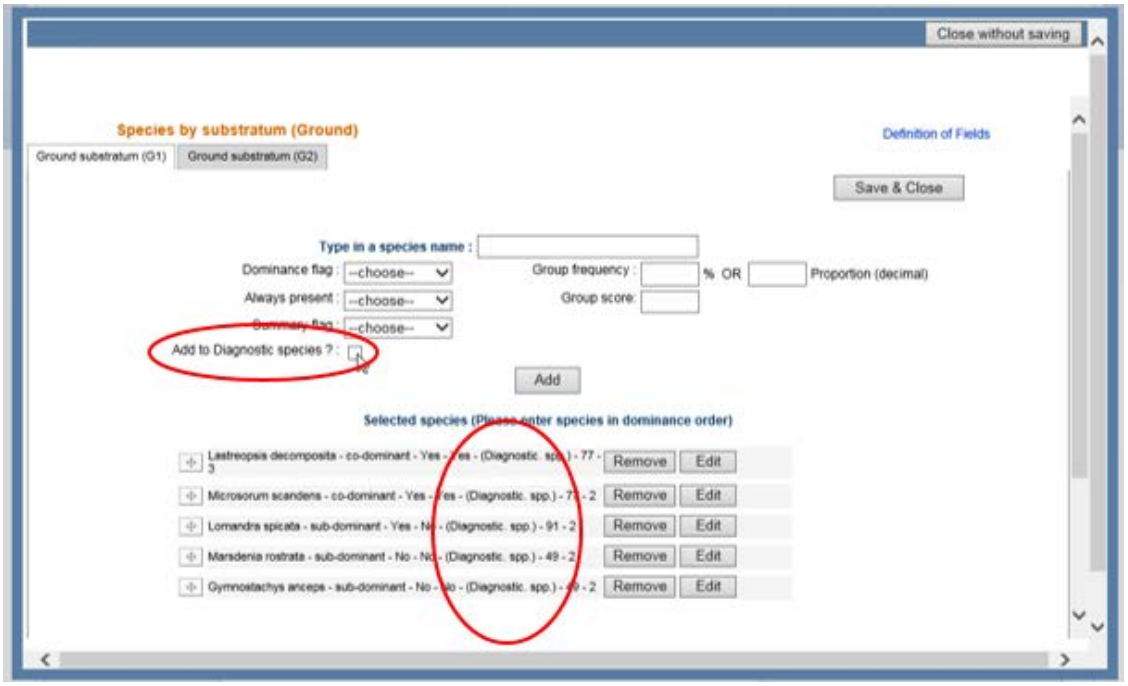


Figure 125 Adding plant species to the ‘Diagnostic species’ field is done in the ‘Species by sub-stratum’ edit windows

2. Select the appropriate method that was used to determine the diagnostic species from the drop-down menu next to the ‘Diagnostic species method’ field (see Figure 126).

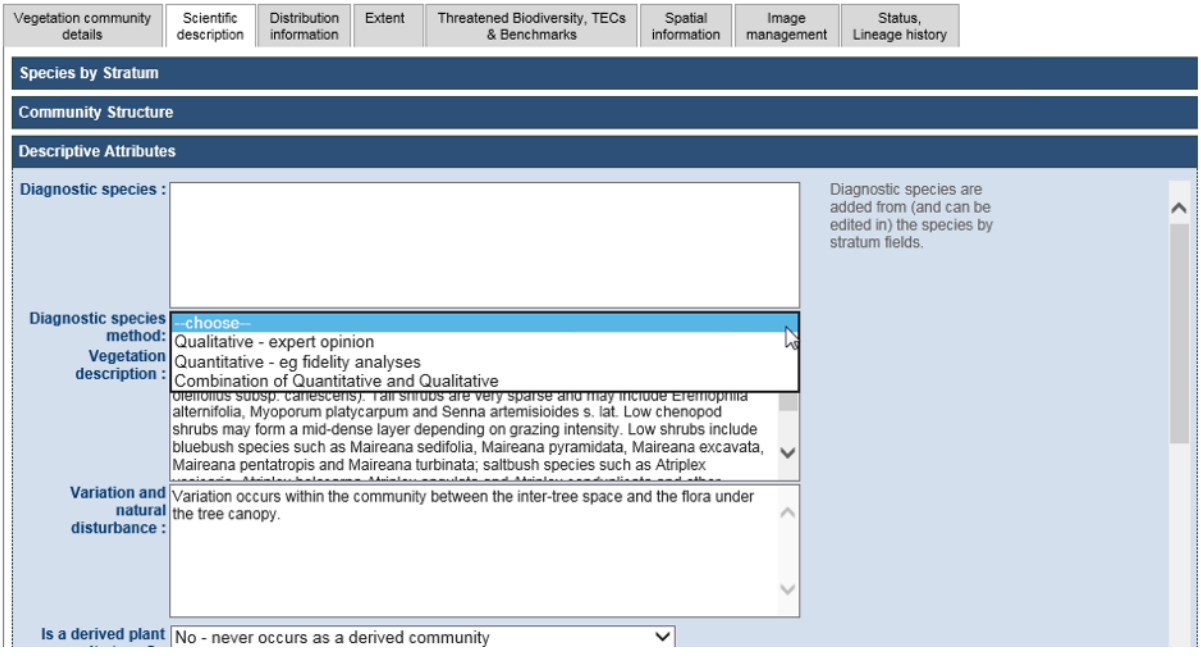


Figure 126 Selecting ‘Diagnostic species method’ from the drop-down list

The next two fields, ‘Vegetation description’ and ‘Variation and natural disturbance’ (see Figure 127) are text entry fields. Type relevant information regarding the known attributes of the PCT into each of these fields.

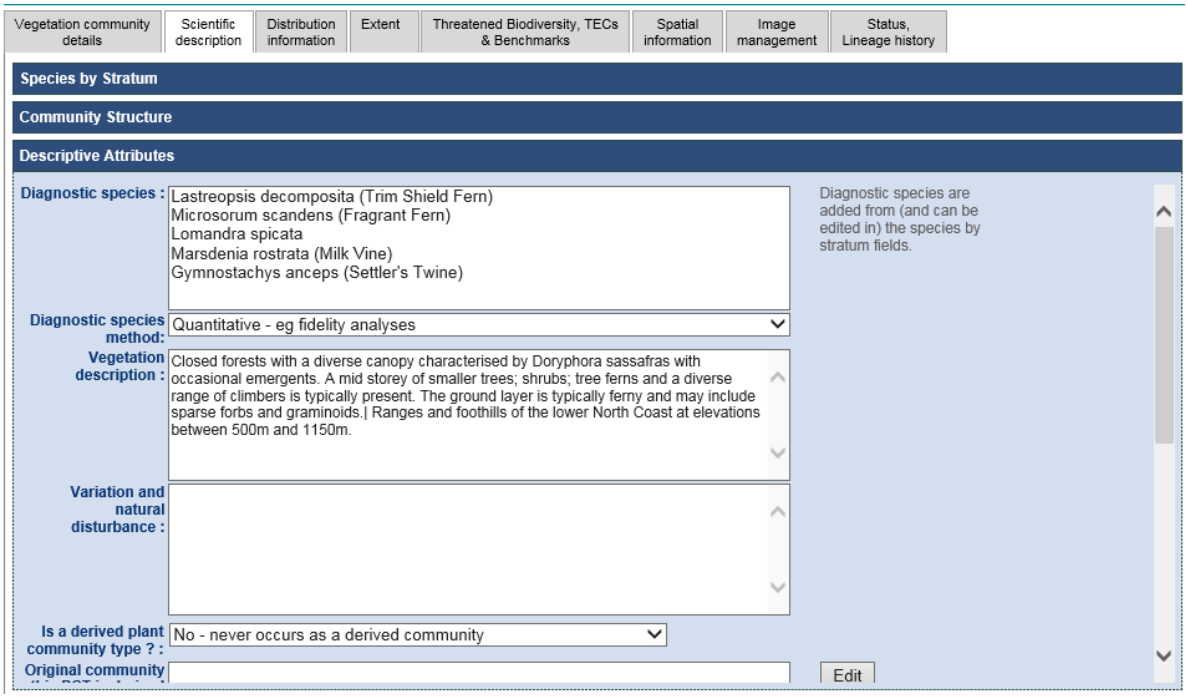


Figure 127 Two text fields – 'Vegetation description' and 'Variation and natural disturbance'

The 'Is a derived plant community type?' field indicates whether the PCT occurs as a derived community, or only as is a check box to record if the plant community type is derived from other PCT/s. Select the appropriate term from the drop-down menu for the 'Is a derived plant community type?' field (see Figure 128).

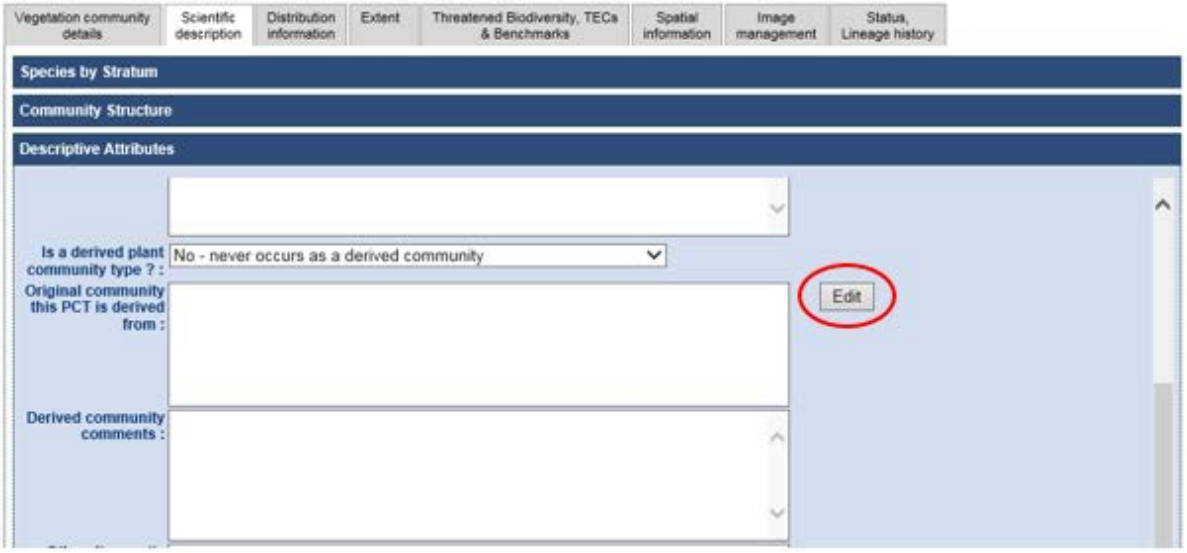


Figure 128 The three fields pertaining to derived status of the PCT

If the PCT occurs as a derived type, select the plant community type/s from which it is derived. To do this, click the 'Edit' button next to the 'Original community this PCT is derived from' field (see Figure 128).

To select a PCT you want to add:

1. Type at least the first three letters of the species name in the 'Search by part of a common name' field (see Figure 129).

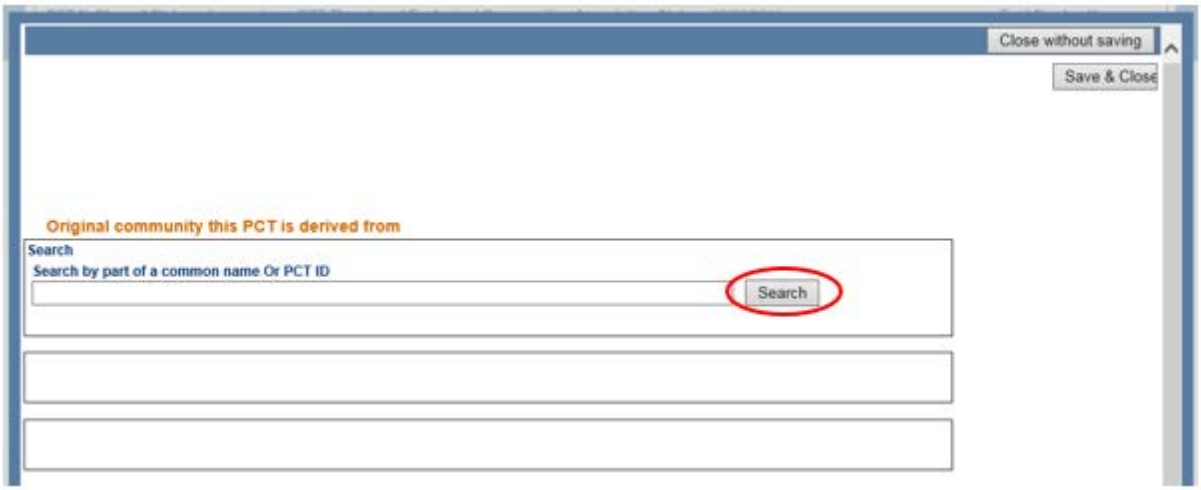


Figure 129 Adding PCTs from which a derived community is thought to be derived

2. Click ‘Search’ and the system will provide a list of PCTs that match the string of characters you have entered (see Figure 130).

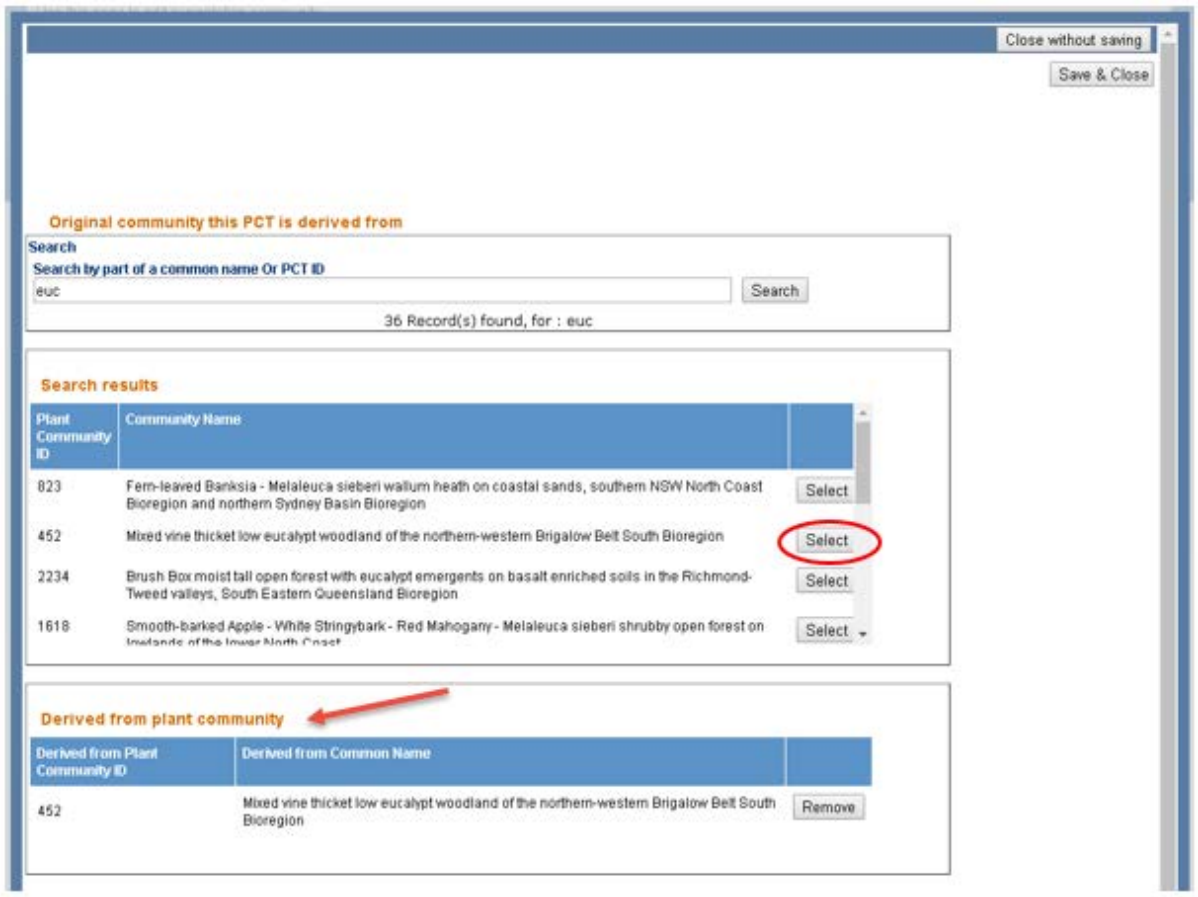


Figure 130 Selecting a PCT from which the PCT being edited can be derived

This is a common name only search, so typing ‘euc’ as above will retrieve only those communities where this occurs in the common name, i.e. ‘euc’ does not retrieve ‘Eucalyptus’ where it only occurs in the scientific name.

3. Click ‘Select’ next to the PCT name you want to add and the name will appear in a new area ‘Derived from plant community’ (see Figure 130).
4. Check that this is the PCT you want to add, then click ‘Save & Close’ to save the data or ‘Close without saving’ to return without saving.
5. Note that multiple PCTs can be added to the ‘Original community this PCT is derived from’ field in this way.

To remove a PCT from the ‘Original community this PCT is derived from’ field:

1. Click the ‘Edit’ button next to the ‘Original community this PCT is derived from’ field (see Figure 128).
2. In the ‘Derived from plant community’ area, click the ‘Remove’ button next to a PCT that is to be removed from this list (see Figure 131).
3. Click on ‘Save & Close’ to save the changes, or ‘Close without saving’ to discard the changes.
4. Check the ‘Original community this PCT is derived from’ field to ensure the desired changes have been made correctly (see Figure 128).

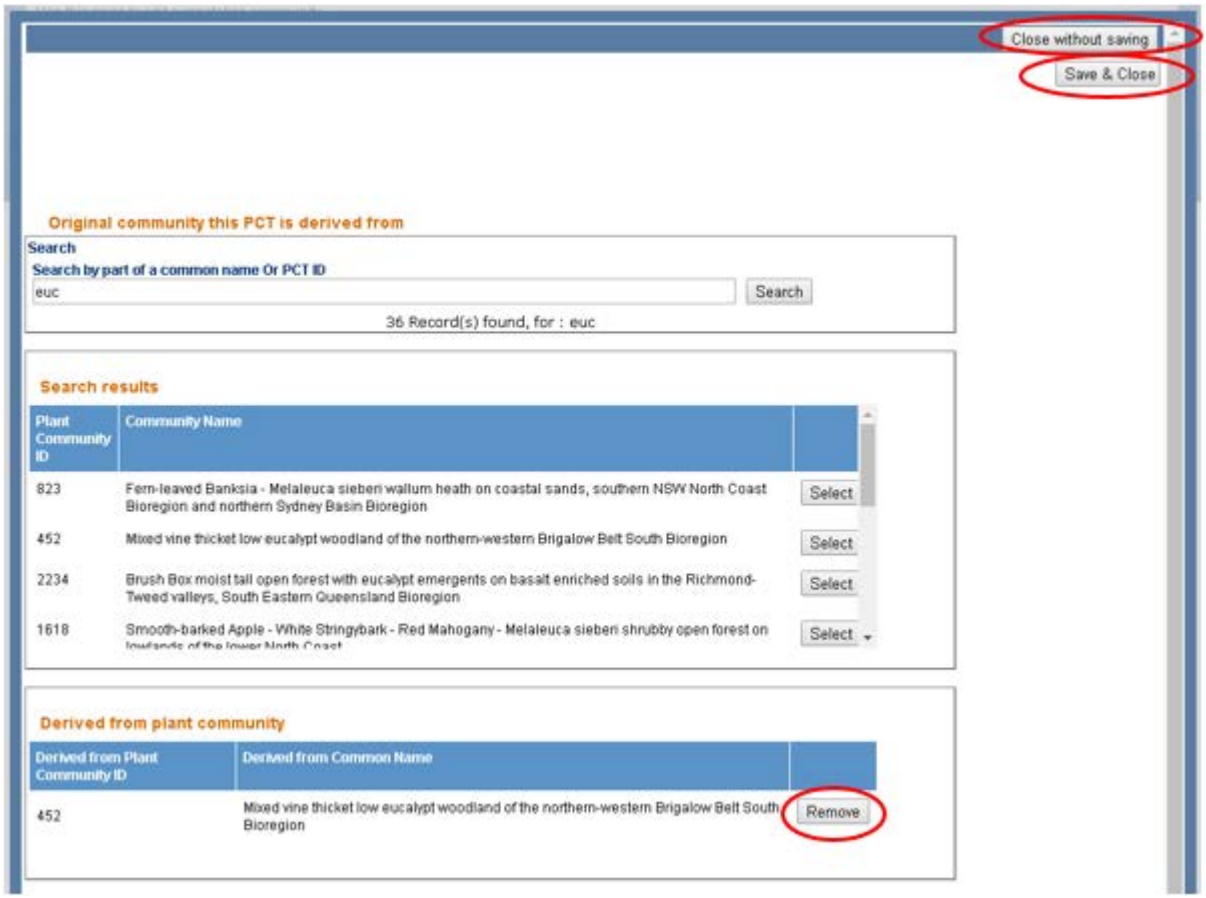


Figure 131 Removing a PCT from the ‘Original community this PCT is derived from’ list

Update the ‘Derived community comments’ field regarding the source of your changes.

The last two fields in the section, ‘Other diagnostic features’ and ‘Fire regime’ (see Figure 132) are both text fields. Type relevant information regarding the known attributes of the PCT into each of these fields.

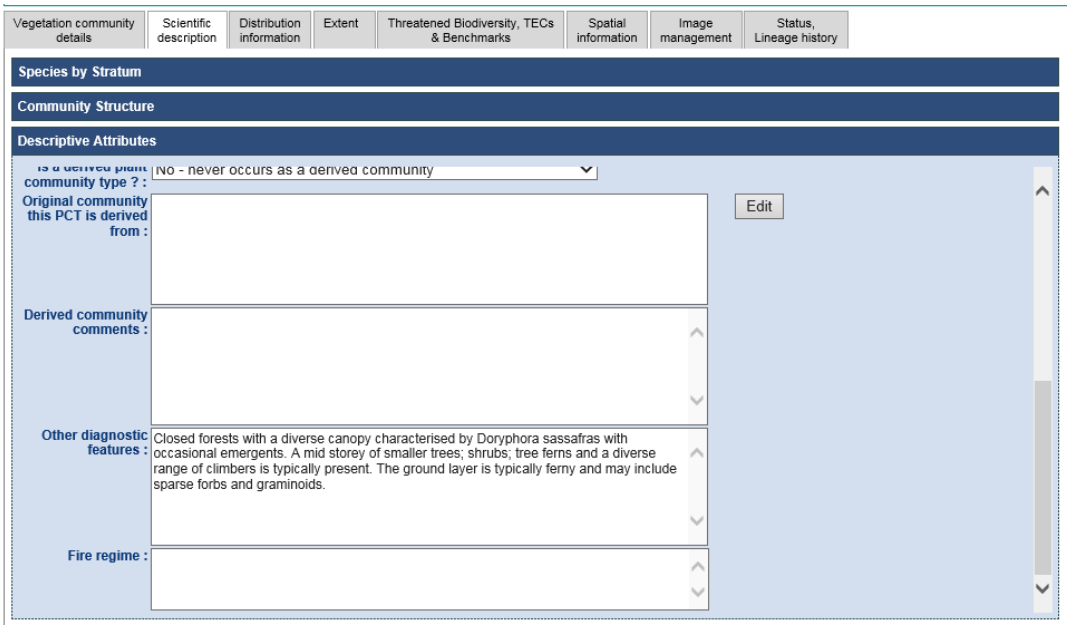


Figure 132 'Other diagnostic features' and 'Fire regime' are both free text fields

8.7 ‘References’ section

Click on the ‘Reference’s heading to open that section.

The four fields visible in this section (see Figure 133) are read-only:

1. The ‘References’ field displays reference codes for the PCT.
2. The ‘Full references’ field displays the complete reference details for each associated reference.
3. The ‘Citation field displays the standard abbreviated citation for each associated reference.
4. The ‘Profile source’ field indicates the specific entity within each associated reference that relates to the PCT open in the PCT UI.

The four fields are populated in the ‘References’ edit screen, accessed by clicking on the ‘References’ button (see Figure 133).

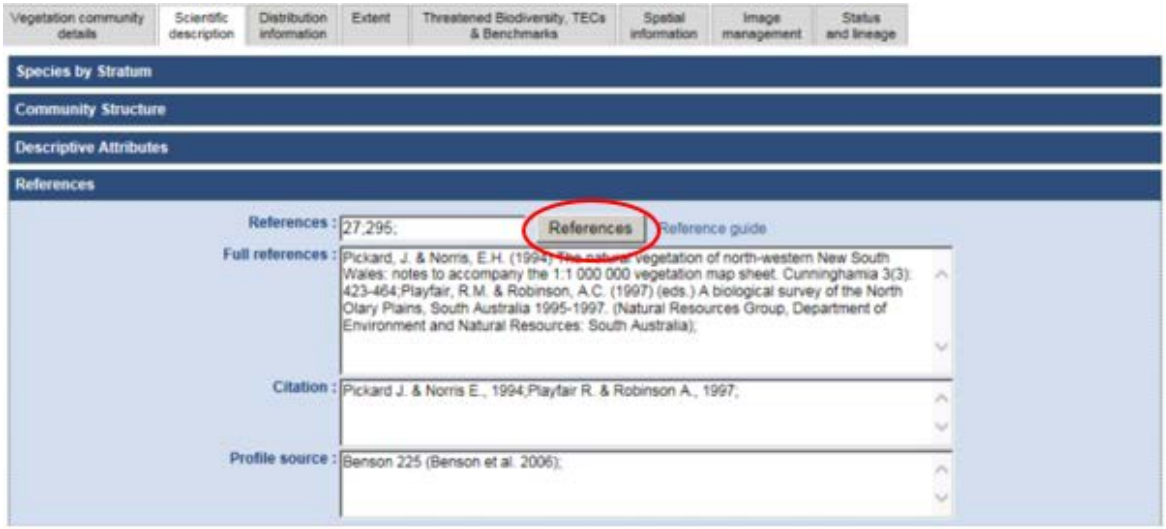


Figure 133 ‘References’ section

To assign a previously entered reference to a PCT:

1. Click the ‘References’ button to open the ‘References’ edit page (see Figure 134).

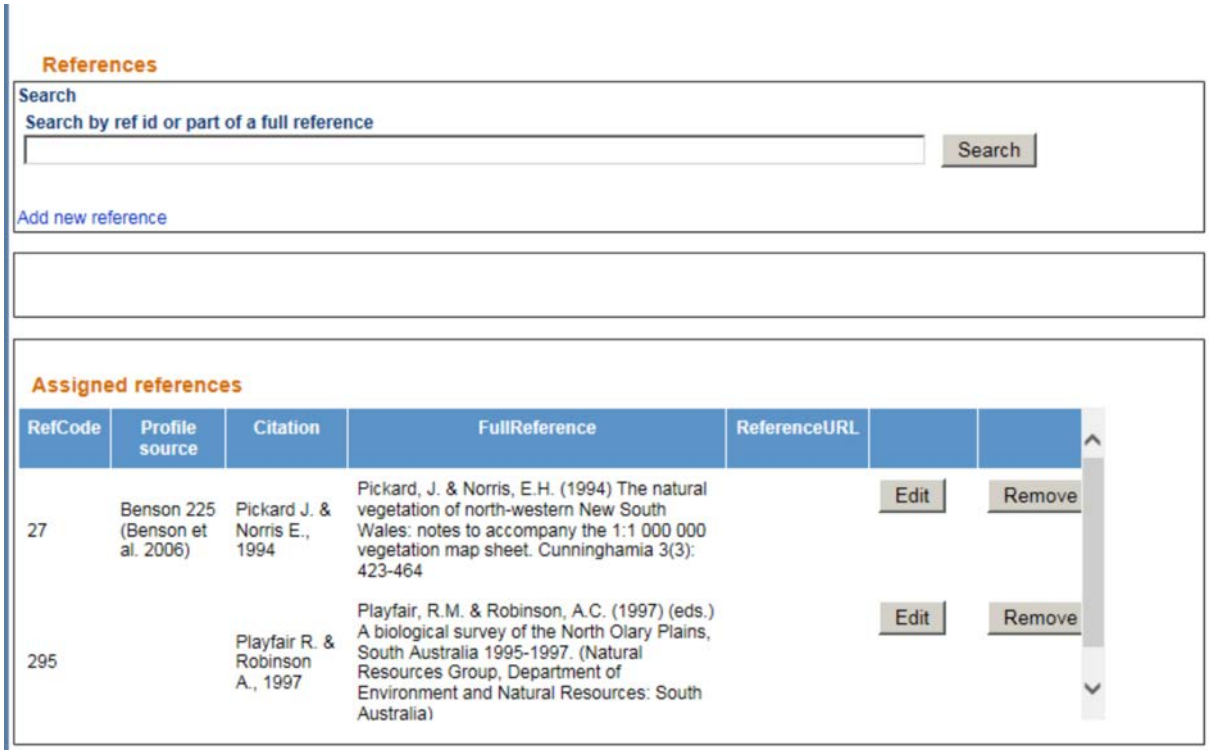


Figure 134 'References' edit window

2. References that are already assigned to the PCT are shown in the 'Assigned references' list. Check the references already assigned before adding a new one to avoid duplicating references.
3. To select a reference you want to add, either type the Reference Code (ID) or at least the three letters of the reference into the 'Search' field.
4. Click 'Search' and the system will provide a list of references in the 'Search results' area that match the string of characters you have entered (see Figure 135).
5. Cross-reference against the references already assigned.

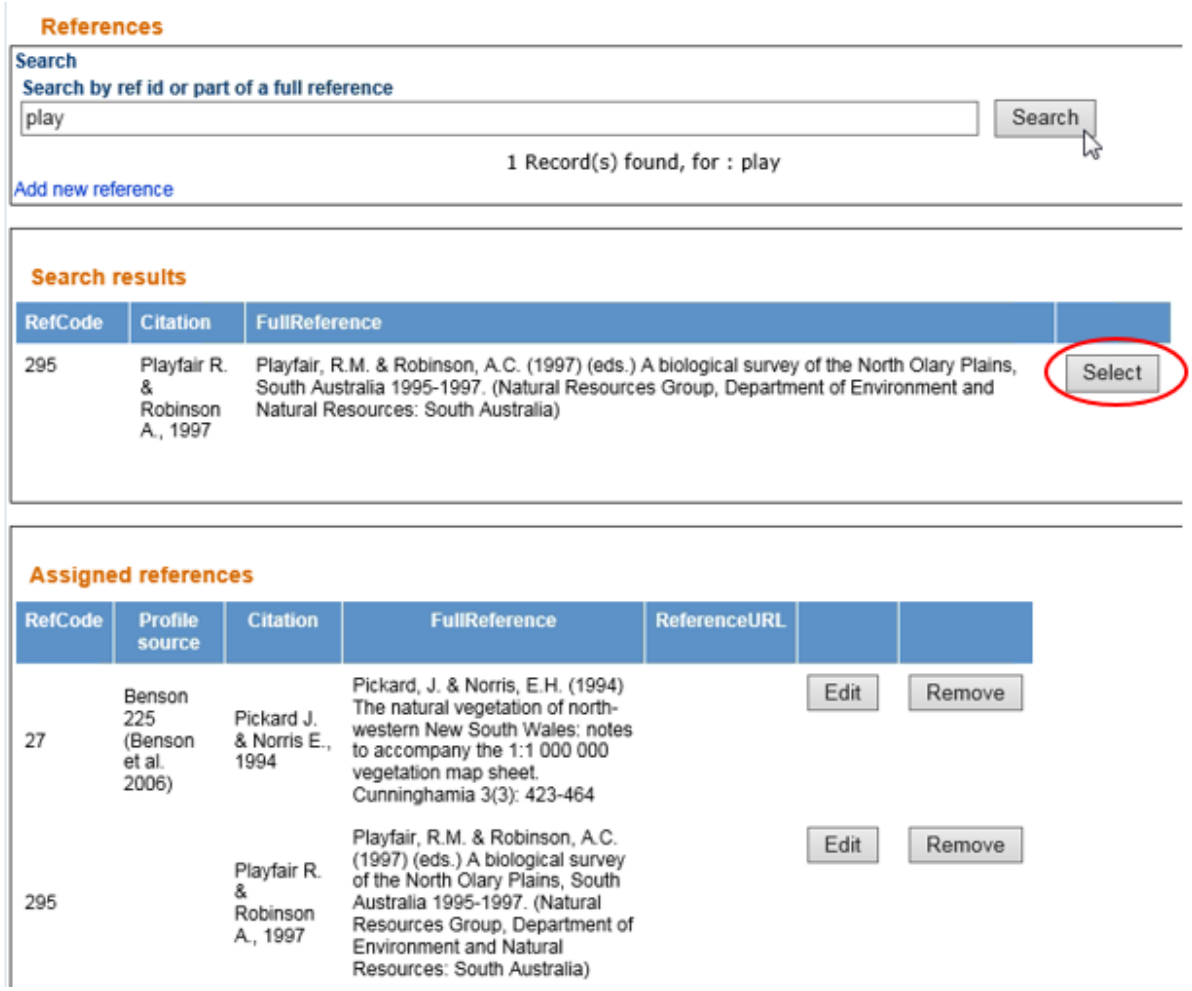


Figure 135 Searching for and selecting a new reference

6. Click ‘Select’ next to the reference you want to add, and it will be auto-populated into the ‘Assigned references’ field. If the reference is already assigned the selection will not be added (i.e. it will not be duplicated).
7. Check that this is the reference you want to add.
8. Click the ‘Edit’ button beside the newly added reference in the ‘Assigned references’ area (see Figure 136).
9. Add ‘Profile source’ details, then click ‘Save’
10. Click ‘Save & Close’ to save the data or ‘Close without saving’. Check that the reference you selected was added correctly (if you clicked ‘Save & Close’).

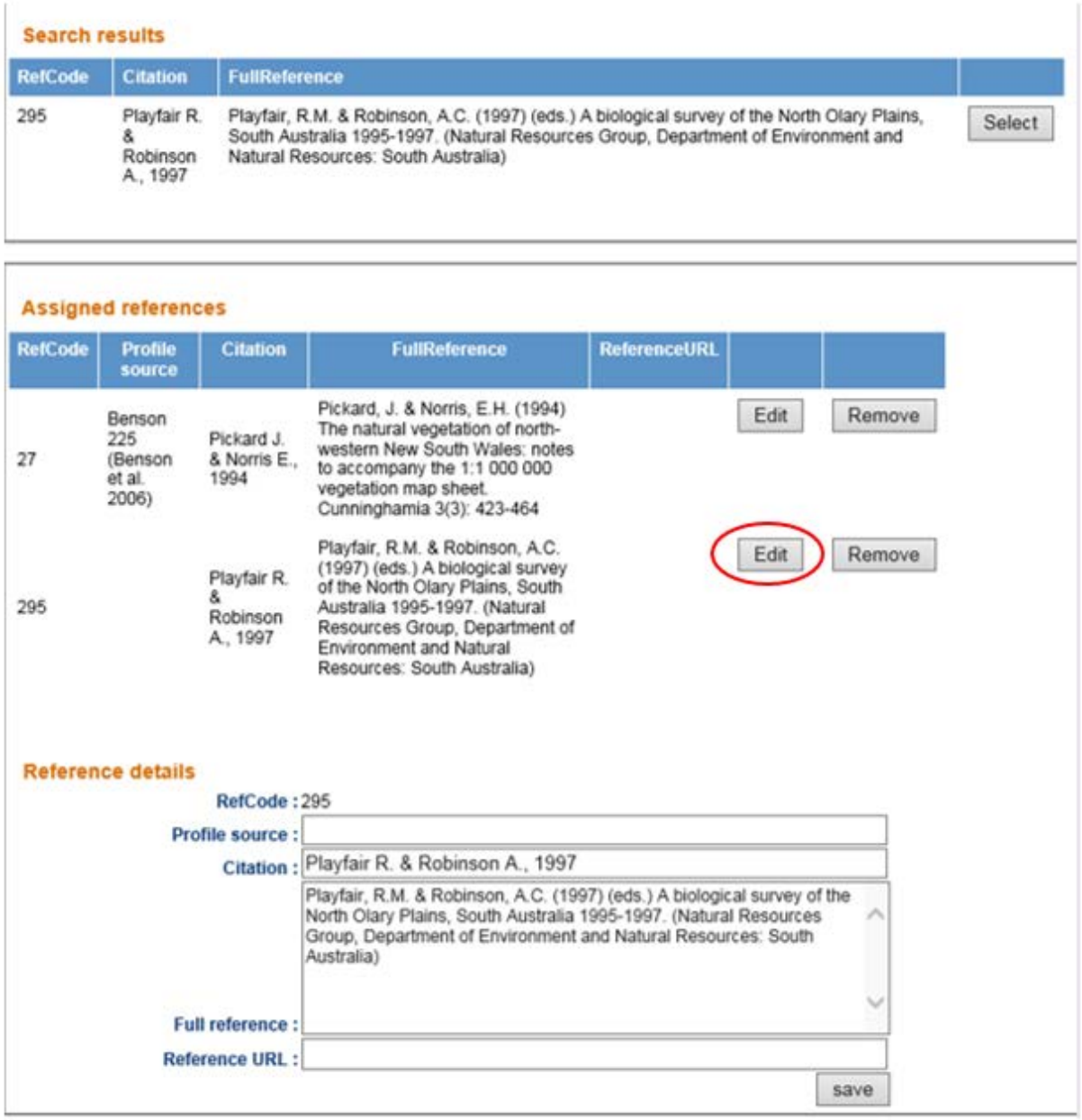


Figure 136 Adding ‘Profile source’ information

To enter a new reference into the Vegetation Classification application:

11. In the ‘References’ section, open the ‘References’ edit window as before.
12. Check that the reference you wish to add does not already exist in the database by typing at least the three letters of the reference into the ‘Search’ field and then clicking on ‘Search’. The system will provide a list of references in the ‘Search results’ area that match the string of characters you have entered. Check these to ensure the reference you wish to add is not already listed.
13. If it is not already present in the database, click the ‘Add new reference’ hyperlinked text below the search field (see Figure 137).

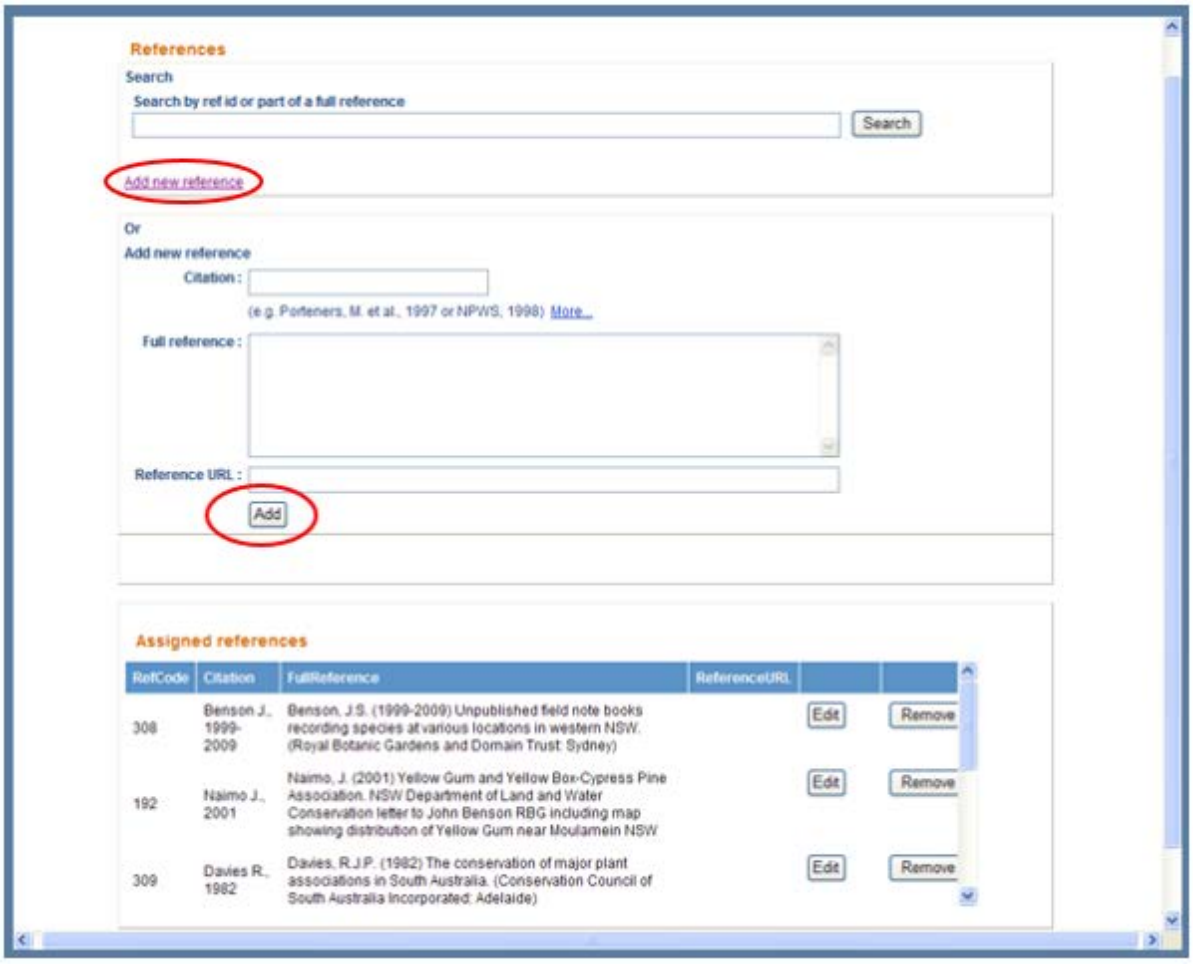


Figure 137 'Add new reference' fields and functionality

14. Type the citation and full reference details as required in the relevant fields. If you have a web address for the reference, you can add this into the 'Reference URL' field.
15. 'Click on the 'Add' button
16. Click 'Save' or 'Close' as before (you may need to scroll up or down to see these buttons). You can also copy and paste the full reference from another source (e.g. a Word document) but any font formats (e.g. italics, underlining) will be lost.

Further information on the correct format for references and citations is provided via the 'More…' hyperlinked text.

9. ‘Distribution information’ tab

The data in this tab are editable by Classification Edit Users and Administrators only.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Functionality to upload and import PCT Domain data is accessible via the ‘Administration > System utilities > Upload / Import PCT Data Management Routines’ drop-down menu item.

Click the ‘Distribution Information’ tab to open the sections in this work area (see Figure 138). By default, the ‘Environmental Regions’ section should be open.

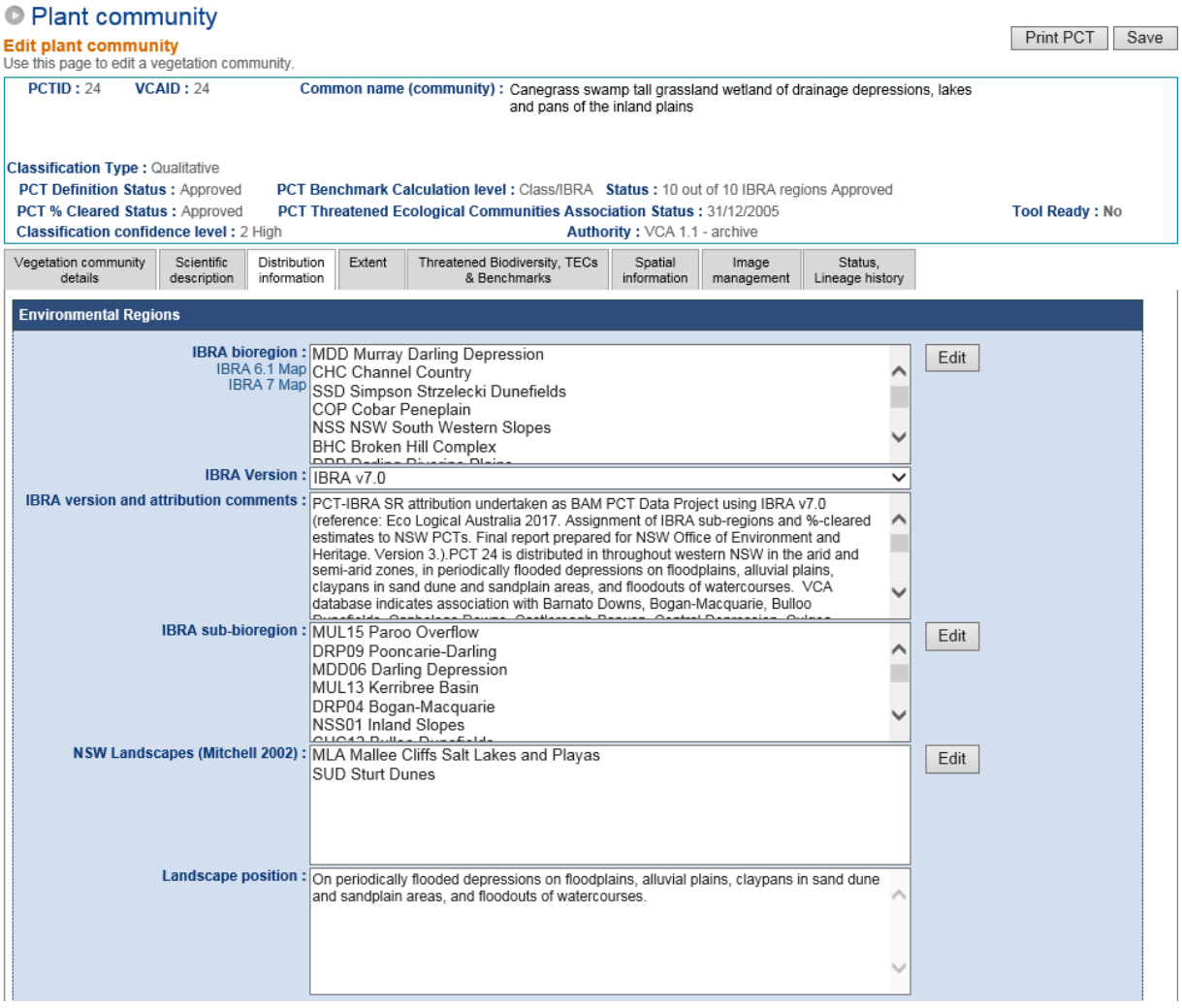


Figure 138 ‘Environmental Regions’ section opens by default in the ‘Distribution information’ tab

9.1 'Environmental Regions' section

9.1.1 'IBRA bioregion'

The 'IBRA bioregions' field can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Domain data for PCT project' functionality (see Section 9.4). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To manually enter new or edit existing 'IBRA bioregions' data, click on the 'Edit' button next to the 'IBRA bioregion' field (see Figure 138). The edit page should appear (see Figure 139).

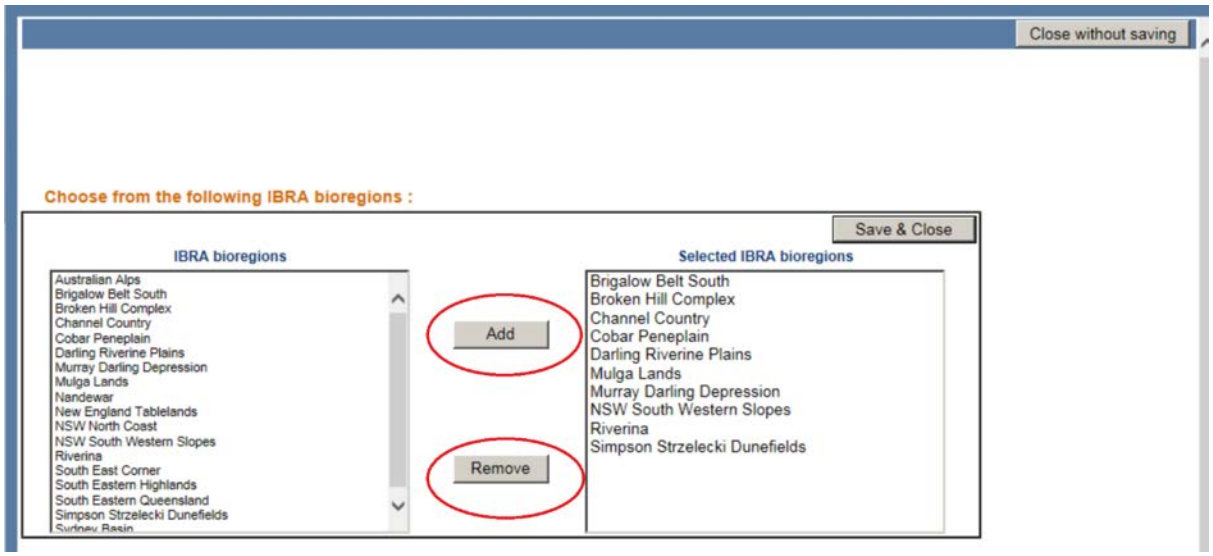


Figure 139 Adding, removing and saving changes to IBRA bioregions assigned to a PCT

To add an IBRA bioregion:

1. Select by clicking once on a bioregion name in the 'IBRA bioregions' box on the left.
2. Click the 'Add' button in the middle. The selected name will be added to the 'Selected IBRA bioregions' box on the right.
3. Click 'Save & Close' to save your changes. Your edits should appear in the main 'IBRA bioregion' field. Alternatively, click 'Close without saving' if you do not want to save your changes.
4. Update the 'IBRA version and attribution comments' field regarding the source of your changes (see Section 9.1.3).

To remove an IBRA bioregion:

1. Select by clicking once on a bioregion name in the 'Selected IBRA bioregions' box on the right.
2. Click the 'Remove' button in the middle. The selected name will be removed from the list.
3. Click 'Save & Close' to enter your changes. Your edits should appear in the main 'IBRA bioregion' field. Alternatively, click 'Close without saving' if you do not want to save your changes.
4. Update the 'IBRA version and attribution comments' field regarding the source of your changes (see Section 9.1.3).

9.1.2 'IBRA Version' field

The 'IBRA Version' is a drop-down menu item (see Figure 140). The 'IBRA version' field is currently limited to IBRA v7.0 because all PCTs were updated to this version as part of the 2017 BAM Data Project. No other IBRA versions are currently available for selection in this field but future versions will be made available for selection when relevant. When multiple options are available, select the relevant option from the drop-down menu.

Note, links to the 'IBRA 6.1 Map' and 'IBRA 7 Map' (under IBRA bioregion field) will open the respective maps (see Figure 140).

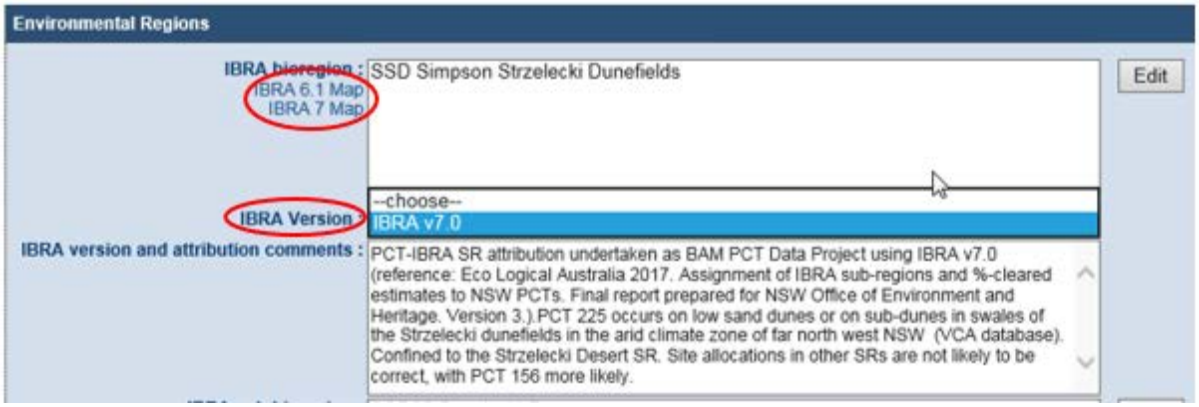


Figure 140 IBRA Version field and map hyperlinks

9.1.3 'IBRA version and attribution comments' field

The 'IBRA version and attribution comments' field is a free text field to store relevant comments about IBRA region and subregion attribution projects and any notes regarding use of IBRA maps versions. This field was updated as part of the 2017 BAM Data Project (ELA 2017).

9.1.4 'IBRA subregion' field

The 'IBRA subregion' field can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Domain data for PCT project' functionality (see Section 9.4). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To manually enter new or edit existing data in this field:

1. Click on the 'Edit' button next to the 'IBRA subregion' field (see Figure 138).
2. Follow steps as per IBRA bioregions (see Section 9.1.1) to add or remove IBRA subregion names (see Figure 141).
3. Click 'Save & Close' to enter your changes. Your edits should appear in the main 'IBRA subregion' field.

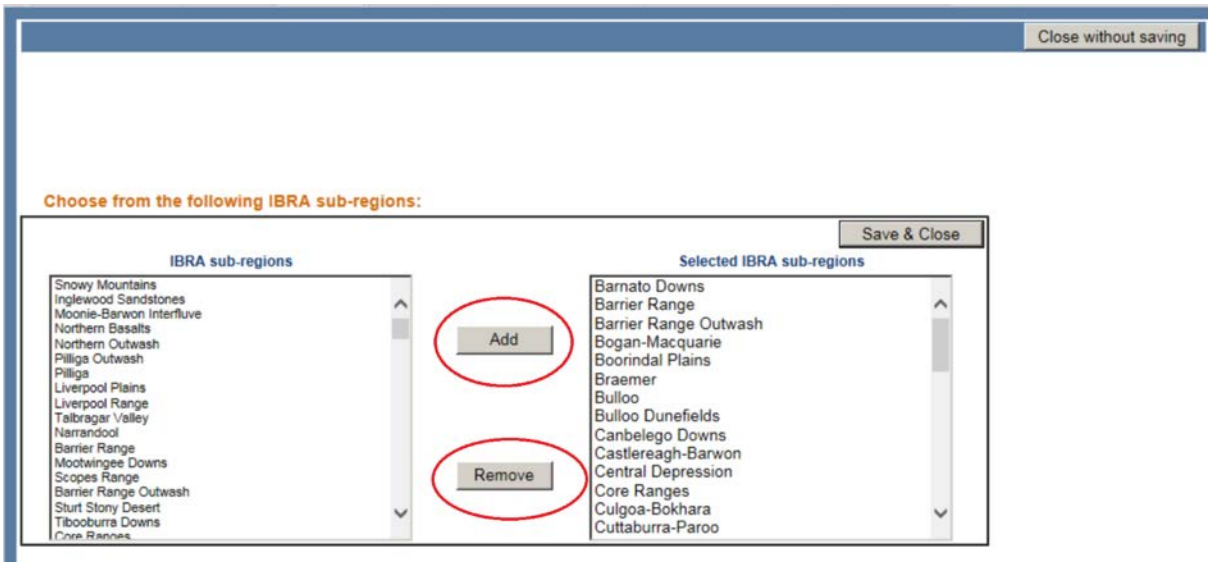


Figure 141 Adding, removing and saving changes to IBRA sub-regions assigned to a PCT

9.1.5 'NSW Landscapes (Mitchell, 2002)' field

The 'NSW Landscapes (Mitchell, 2002)' field can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Domain data for PCT project' functionality (see Section 9.4). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To manually enter new or edit existing data in this field:

1. Click on the 'Edit' button next to the 'NSW Landscapes (Mitchell, 2002)' field in the 'Environmental Regions' section (see Figure 138).
2. Follow steps as per IBRA bioregions (see Section 9.1.1) to add or remove NSW Landscapes names (see Figure 142).
3. Click 'Save & Close' to enter your changes. Your edits should appear in the main 'NSW Landscapes (Mitchell 2002)' field.

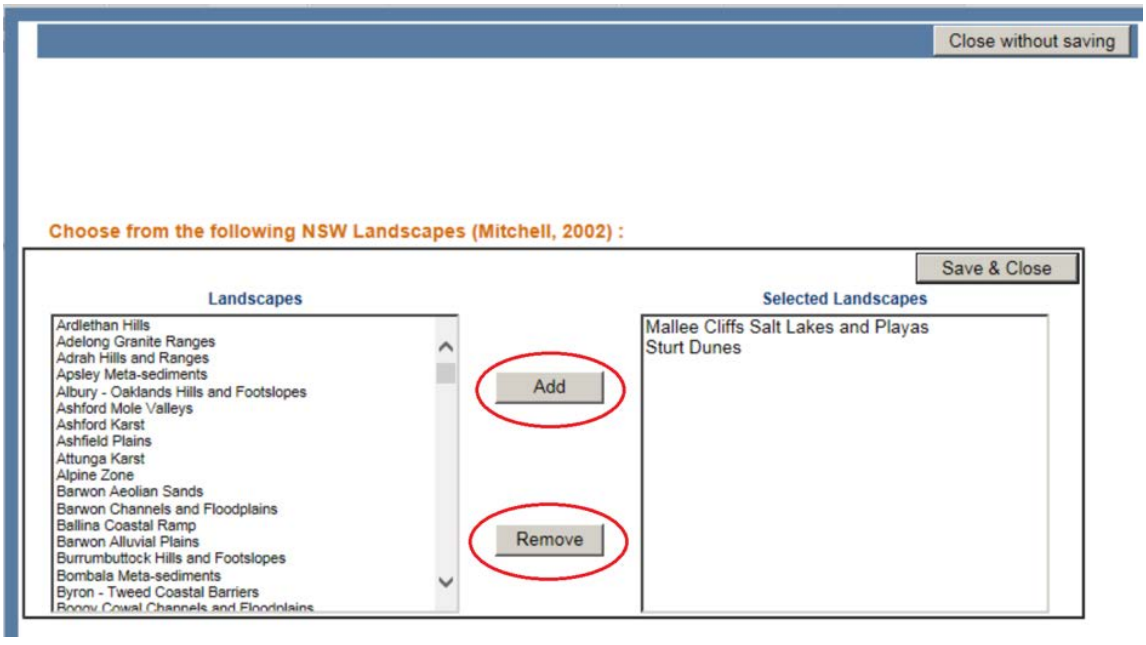


Figure 142 Adding, removing and saving changes to NSW Landscapes assigned to a PCT

9.1.6 'Landscape position' field

The 'Landscape position' field (see Figure 143) is a free text field editable only by Classification Edit Users and Administrators.

Type relevant information regarding the known landscape position of the PCT into this field.

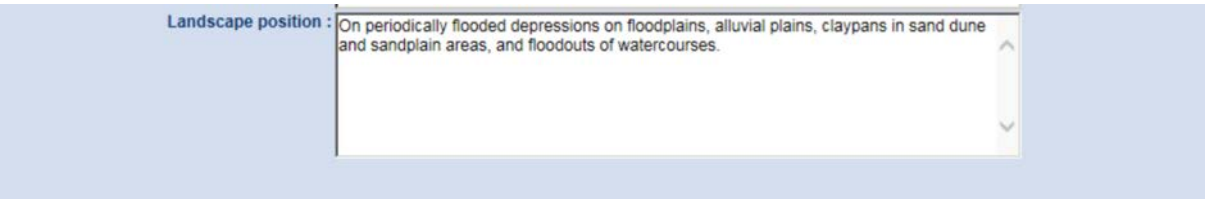


Figure 143 Enter a text description of the PCT landscape position

9.2 'Administrative Areas' section

The data in this section are editable by Classification Edit Users and Administrators only, via upload/import templates and manually.

Click on the 'Administrative Areas' section name to open this section (see Figure 144).

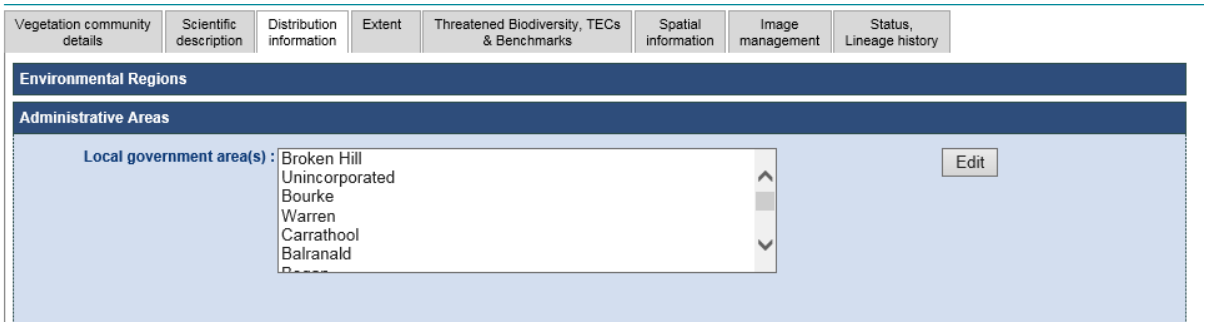


Figure 144 'LGA(s)'is the only field in the 'Administrative Areas' section

9.2.1 'Local Government Area(s)' field

The 'Local government area(s)' field can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the 'Upload/Import PCT Domain data for PCT project' functionality (see Section 9.4). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To manually enter new or edit existing data in this field:

1. Click on the 'Edit' button next to the 'Local government area(s)' field (see Figure 144). The edit page will appear (see Figure 145).
2. Follow steps as per IBRA bioregions (see Section 9.1.1) to add or remove LGA names.
3. Click 'Save & Close' to enter your changes. Your edits should appear in the main 'Local government area(s)' field.

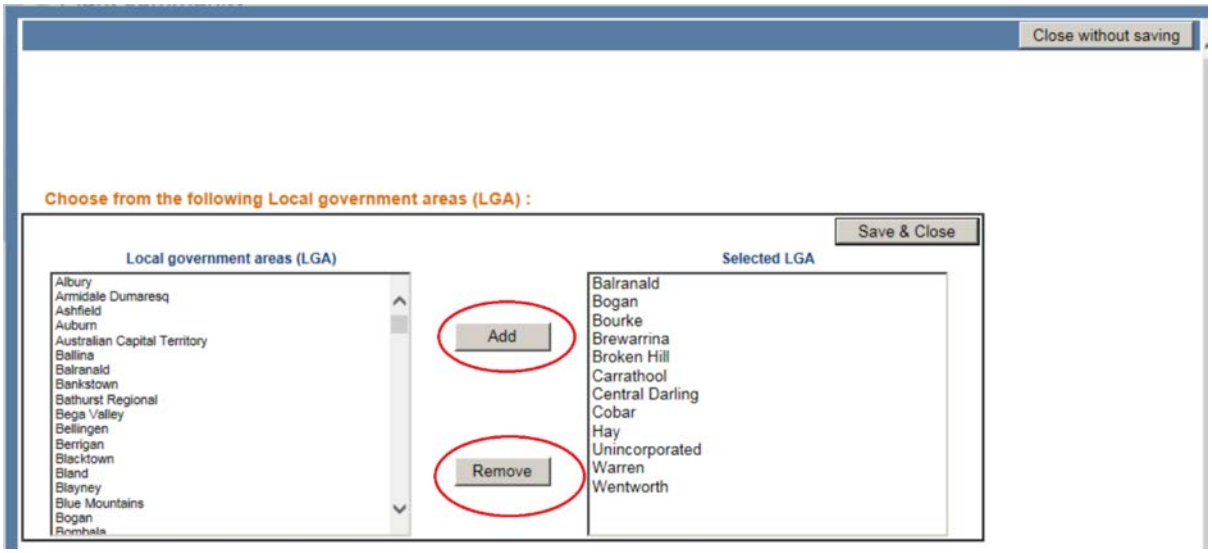


Figure 145 Adding, removing and saving changes to LGAs assigned to a PCT

9.3 'Climate, Landform and Substrate' section

The data in this section (see Figure 146) are editable by Classification Edit Users and Administrators only, some manually and some via upload/import templates.

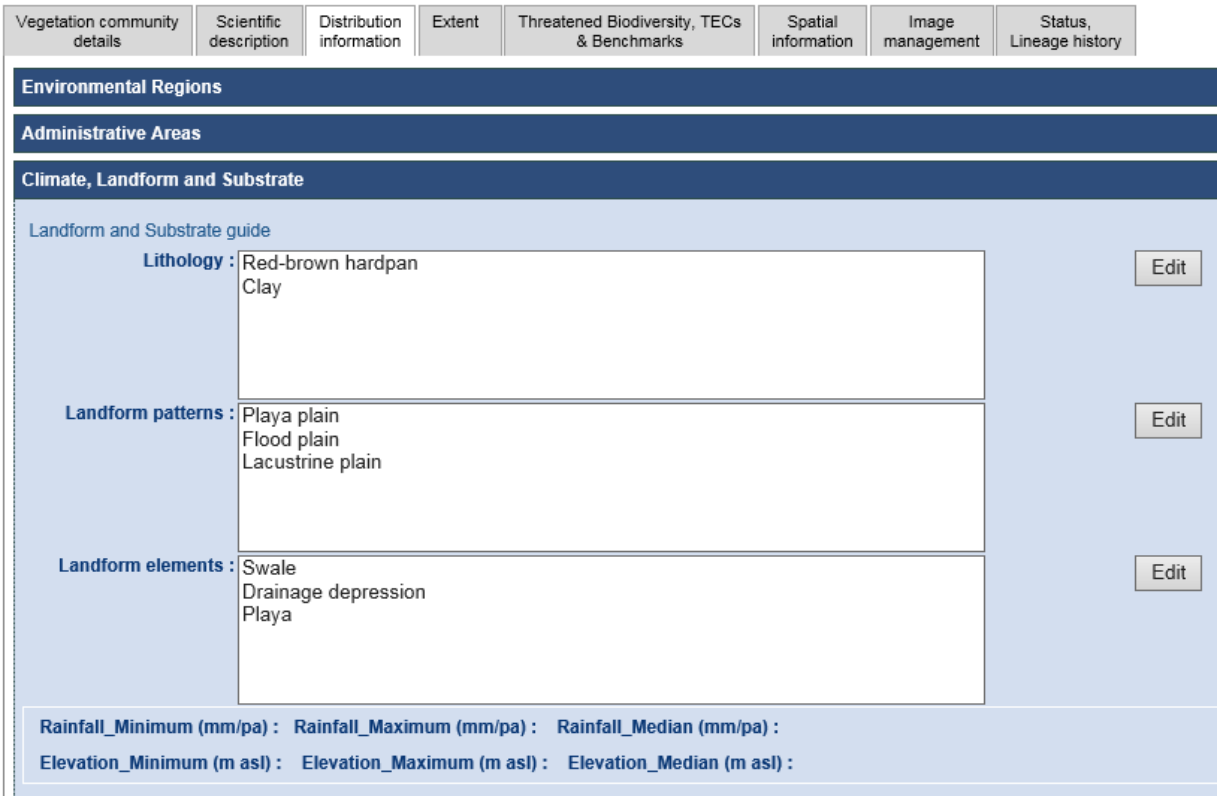


Figure 146 'Climate, Landform and Substrate' section

9.3.1 'Lithology', 'Landform patterns' and 'Landform elements' fields

The first three fields in this section ('Lithology', 'Landform patterns' and 'Landform elements'; see Figure 146) are editable as for previous fields in the 'Distribution Information' tab.

1. To edit these fields, follow the instructions given in Section 9.1.1 for IBRA bioregions.

2. Click ‘Save & Close’ to enter your changes. Your edits should appear in the main fields.

9.3.2 Rainfall and Elevation fields

The remaining fields in this section (Rainfall minimum, maximum and median and Elevation minimum, maximum and median; see Figure 146) are populated with data directly from the BioNet Systematic Flora Surveys data collection via the ‘Upload/Import PCT Domain data for PCT project’ functionality (see Section 9.4) and are not editable in the BioNet Vegetation Classification application.

9.4 ‘Administration’ – ‘Upload/Import PCT Domain data for PCT project’ menu

PCT domain data are maintained by Classification Edit Users and Administrators.

Functionality to bulk upload and import replicate data is accessed via the following pathway:

1. Under the ‘Administration drop-down menu item on the top navigation bar, click on ‘System utilities’ (see Figure 147).

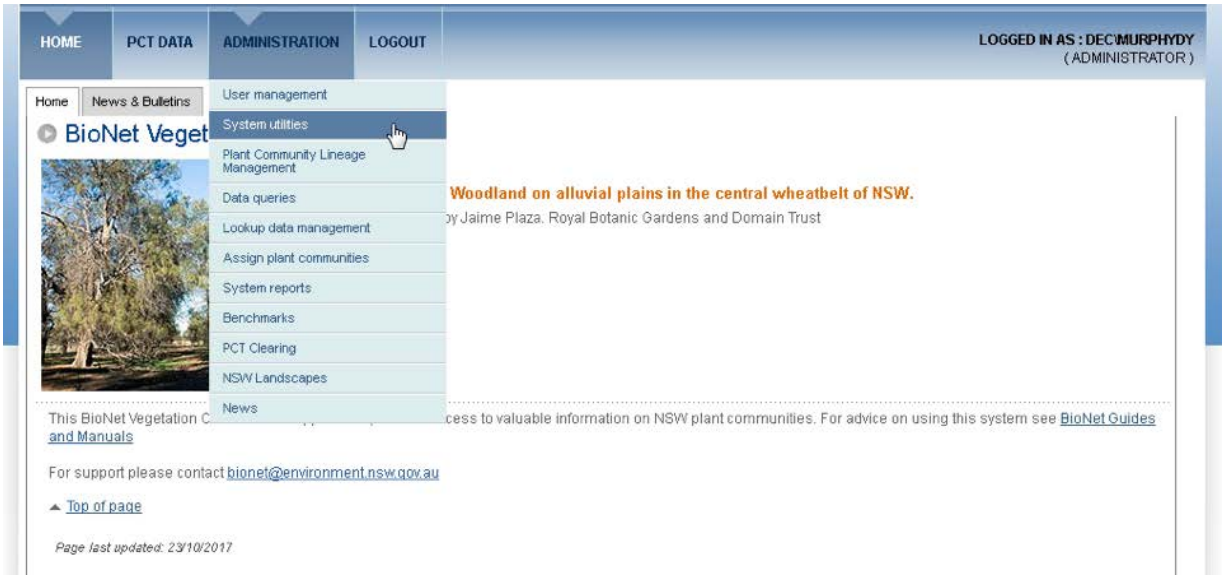


Figure 147 Use the ‘Administration – System utilities’ menu to access data upload/import functionality

2. This opens the ‘Data Administration Tools’ menu (see Figure 148).
3. Click on the ‘+’ symbol beside the ‘Upload/Import PCT Data Management Routines’ item.
4. Click on the ‘+’ symbol beside the ‘5. Upload/Import PCT Domain data for PCT project’ item.
5. Click on ‘5a. Upload Domain data’.

Figure 148 Accessing the replicate data upload/import functionality

6. The ‘PCT Domain data’ upload page will open (see Figure 149).

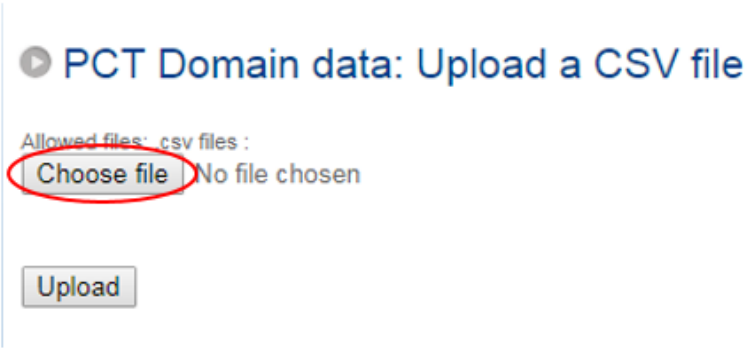


Figure 149 Browse to find the correctly formatted csv file for upload

7. Click on the ‘Choose File’/‘Browse’ button to locate the csv file to be uploaded (see Figure 149). The csv file must be in the correct format as per the ‘PCT Domain Data Upload/Import’ Excel template (summarised in Appendix A5.5).
8. Select the csv file and click on ‘Open’ to upload the file (see Figure 150).

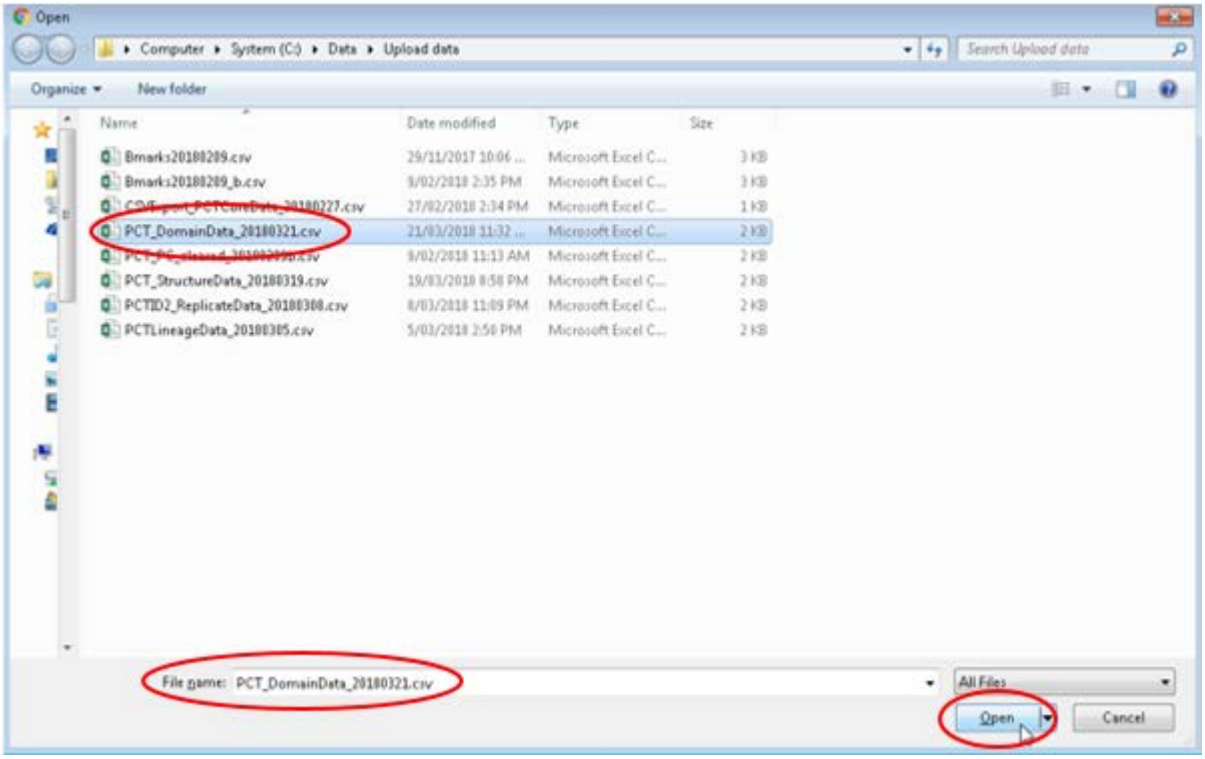


Figure 150 Select and upload the correctly formatted csv file

9. The csv file name will be listed. Click on the ‘Upload data’/‘Upload’ button (see Figure 151).

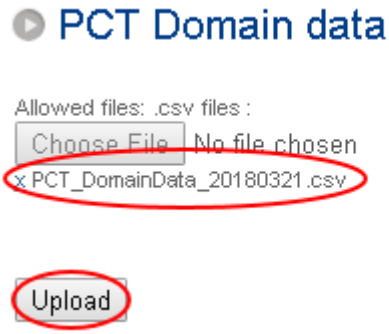


Figure 151 Click to upload the PCT structure data

10. The upload will be processed, and results given (see Figure 152).

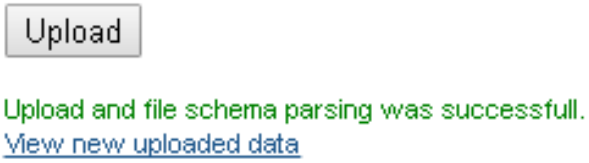


Figure 152 Result for correctly uploaded data

11. Any errors will need to be corrected, saved and re-uploaded (see Figure 153).

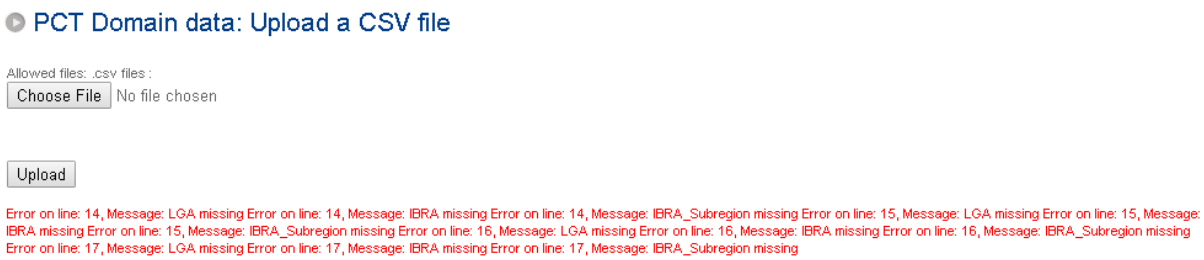


Figure 153 Upload error messages. Correct all data errors and re-upload the csv file

12. Click on the ‘View new uploaded data’ hyperlink (see Figure 152) to select the correct uploaded data for checking.
13. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘5. Upload Domain data’ > ‘5b. Verify/Edit Domain data’ (Figure 148) and navigate to the last page to select the uploaded data for checking.
14. The most recently uploaded file will be the last file on the last page.
15. Click on the ’View data’ link (see Figure 154). Alternatively, click on ‘Delete’ to remove the uploaded data.

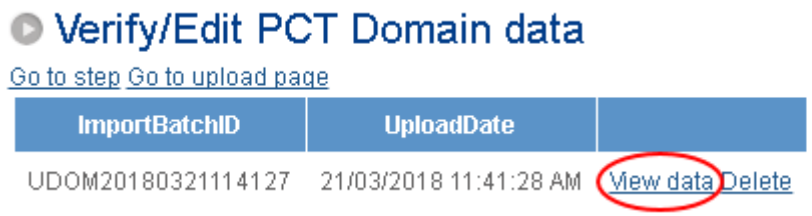


Figure 154 Select the relevant uploaded data for checking

16. Review the data to be uploaded, using the scroll bars to view all rows and fields (see Figure 155). Records can be filtered by status.
17. If errors are encountered, the individual record can be edited (click ‘Edit’ for that data row) or deleted (click ‘Delete’ for the data row). However, ideally the entire uploaded data file should be deleted by clicking ‘Delete’ against the corresponding ‘ImportBatchID’ (see Figure 155). Correct the source data (which should be the BioNet Atlas Systematic Flora Surveys module), create a new csv file and upload following previous steps.
18. If the reviewed data are correct, click the ‘Verify data’ button (see Figure 155).

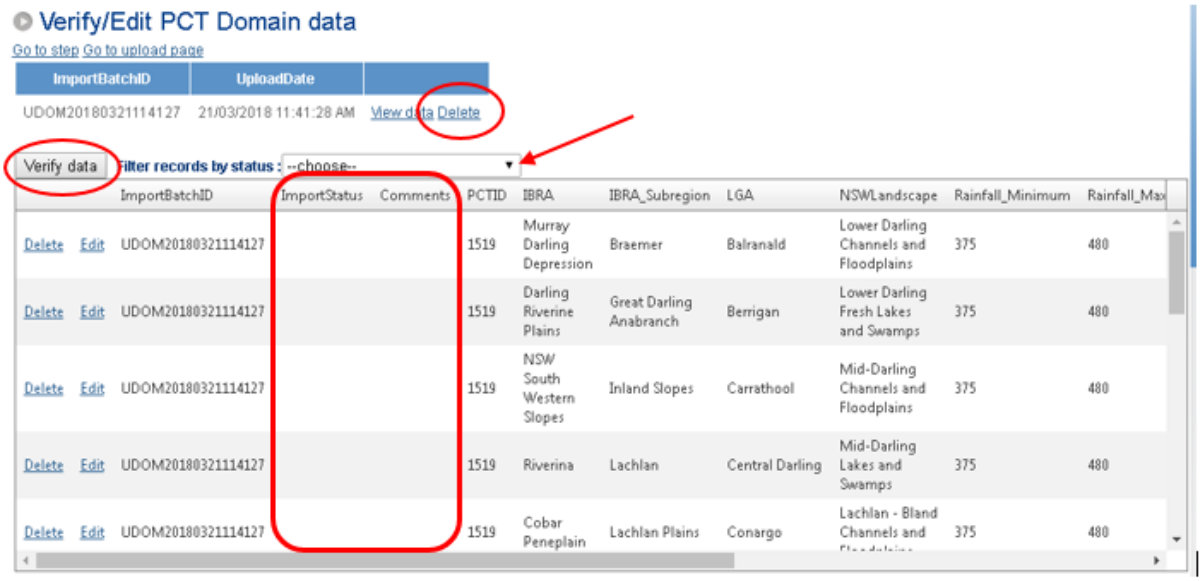


Figure 155 Review and verify the uploaded data prior to importing

19. Check that the verification succeeded (see Figure 156). If successful, click on the ‘Go to step’ link (see Figure 156).

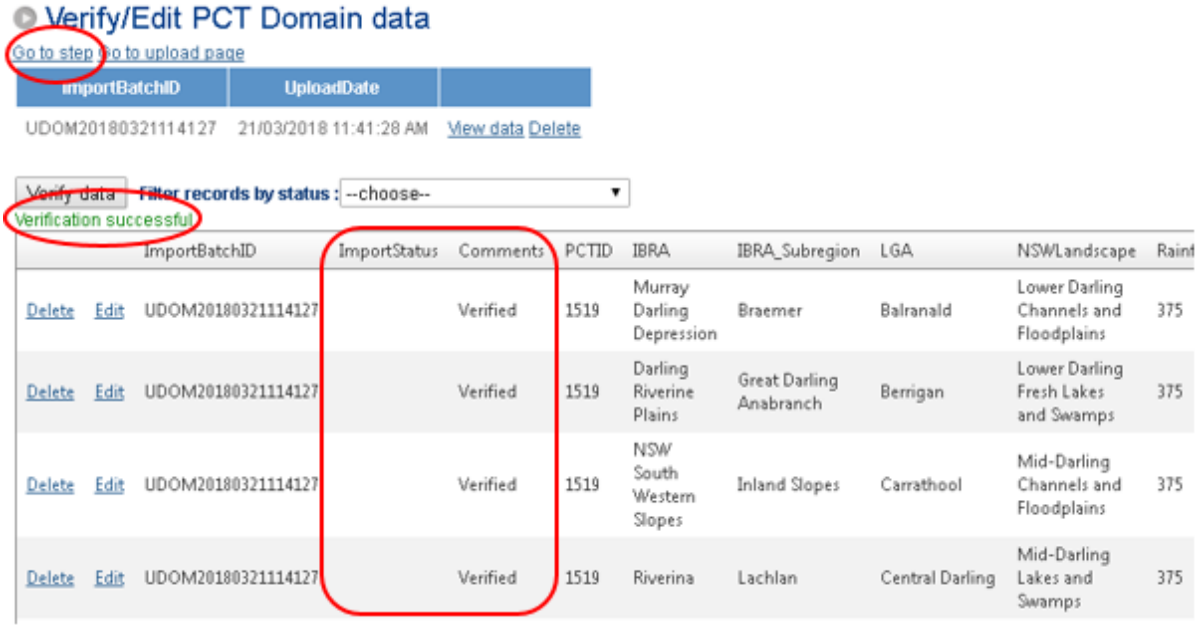


Figure 156 Review the verification outcome message

20. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘5. Upload Domain data’ > ‘5c. Import Domain verified data into BioNet Vegetation Classification’ (see Figure 148) and navigate to the last page to select the verified data for importing.
21. On the ‘Import verified PCT Domain data into BioNet Vegetation Classification:’ page, select the correct ImportBatchID (usually the last one on the last page). Click on ‘View data’ to visually confirm that you have the correct data (see Figure 157).

22. Having checked the data, populate the ‘Select a primary user for the import records’ by selecting from the drop-down list and click on the ‘Import’ button (see Figure 157).

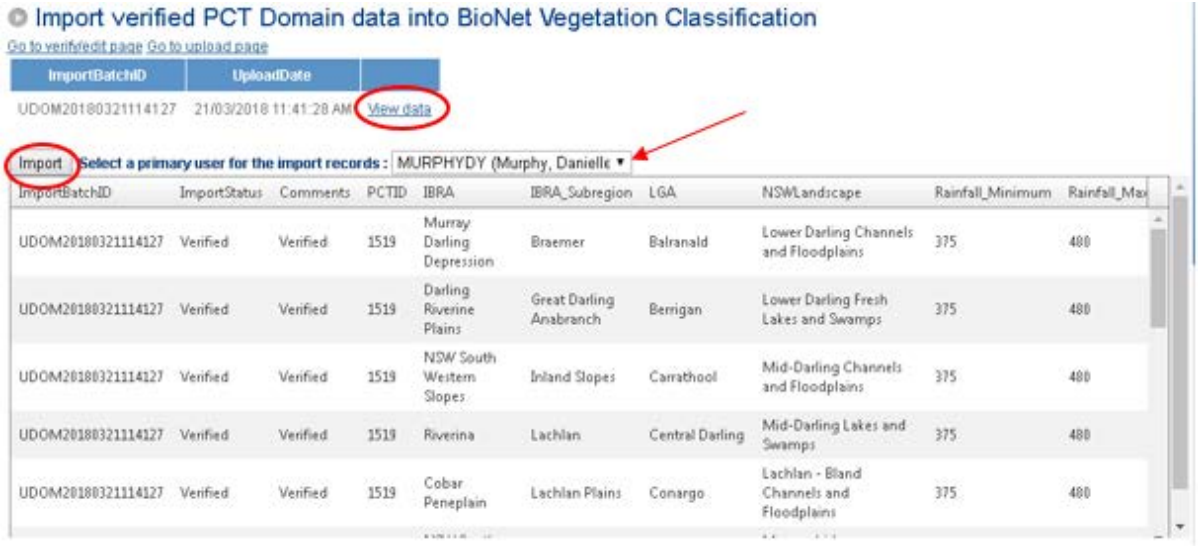


Figure 157 Select a primary user and then import the data

23. Click ‘OK’ to confirm (see Figure 158).

Figure 158 Confirm the import command

24. Check the import results (see Figure 159).

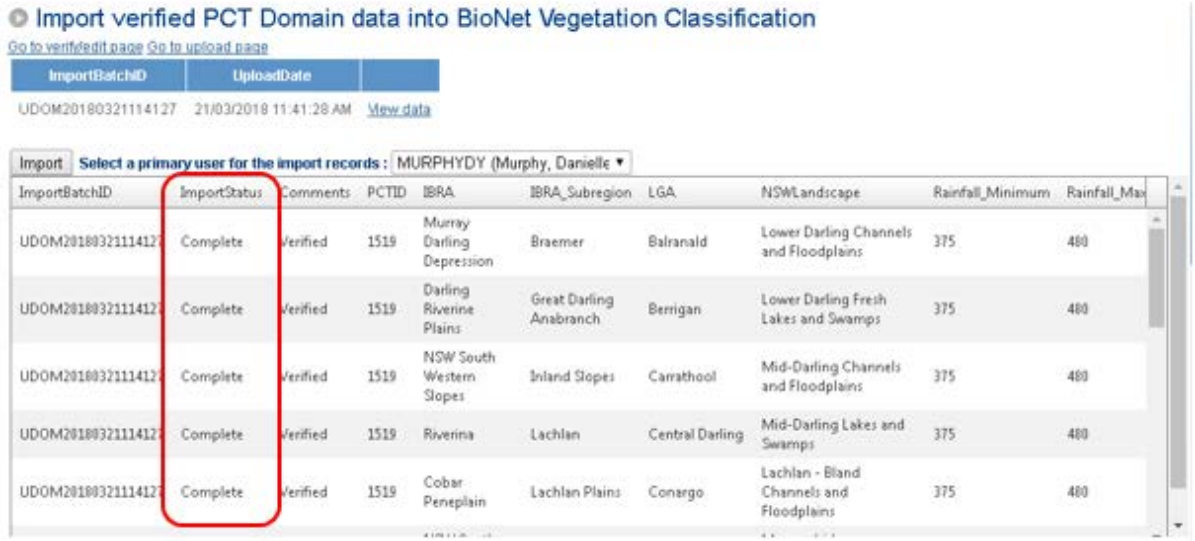


Figure 159 Confirm that the import was successful

25. Finally, open each of the relevant PCTs in the User Interface to check that the uploaded data are visible and correct (see Figure 160). Note, any errors will need to be corrected by editing the csv file and re-importing. Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The fields populated from the PCT Domain data template are not core fields, hence editing these fields will not trigger a status change from Approved to Approved – Under Edit.

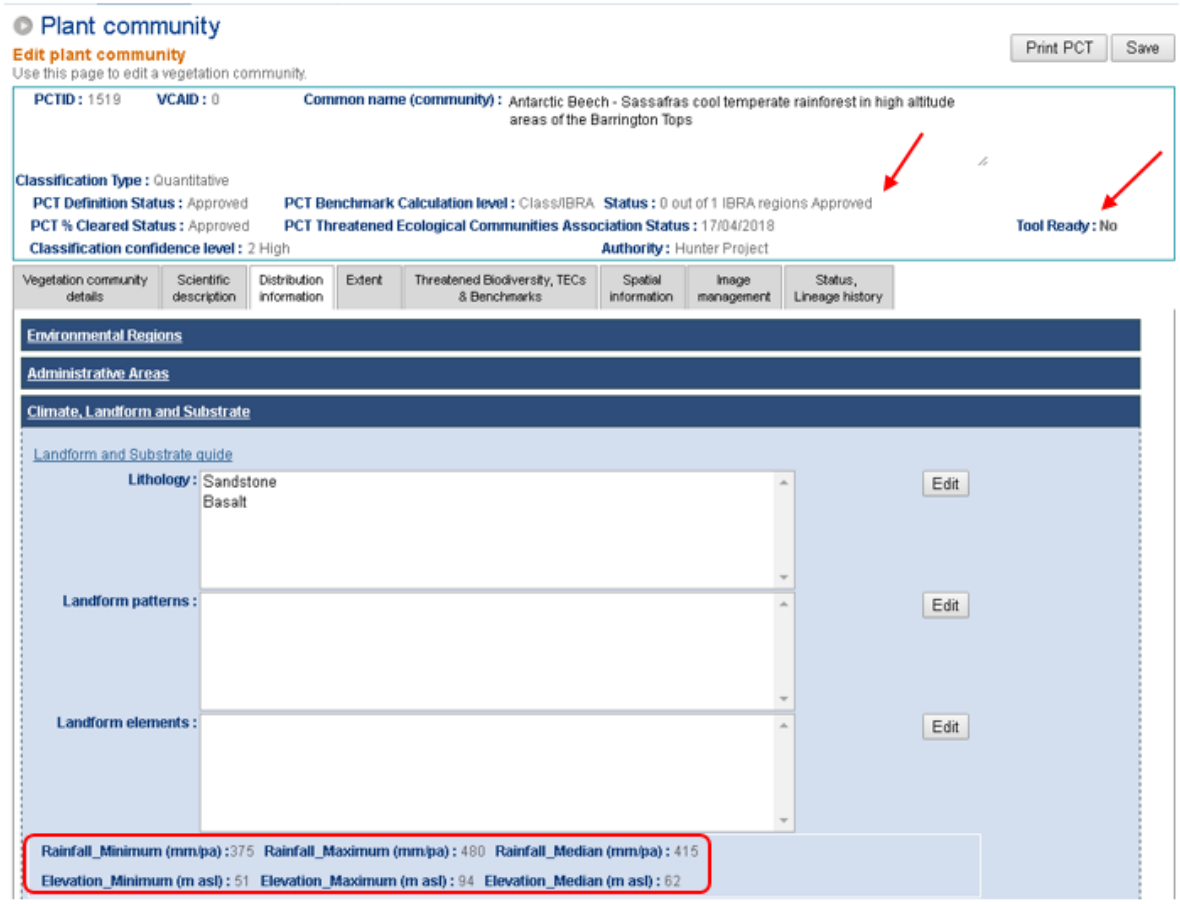


Figure 160 Open the PCT User Interface to check for newly imported data, PCT Definition Status, as well as Benchmark Status and Tool Ready Status

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

10. ‘Extent’ tab

The data in this tab/section are read-only. They are able to be uploaded, edited and managed via the ‘Administration – PCT Clearing’ drop-down menu item by Classification Edit users, Statutory Data Edit users and Administrators.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Click the ‘Extent’ tab to open the ‘Extent’ section (see Figure 161).

10.1 ‘Extent’ section

All fields in the ‘Extent’ section are fully or partially greyed-out indicating their read-only status (see Figure 161).

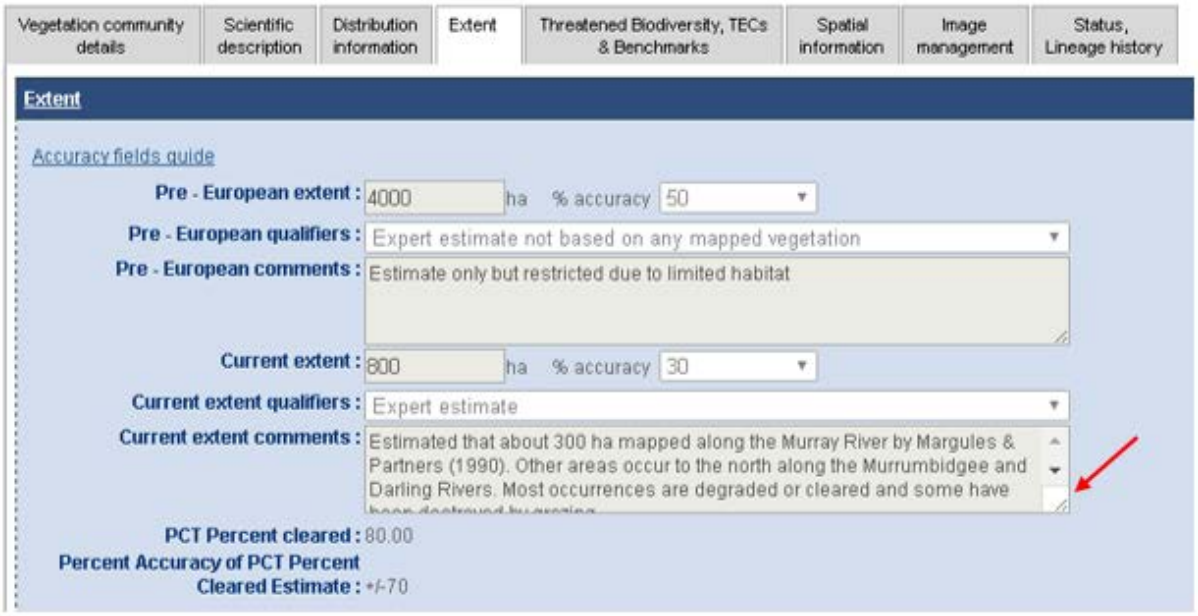


Figure 161 ‘Extent’ section and tab. Note the text box expansion tab (red arrow)

Functionality to upload, import, edit and manage PCT extent (including % cleared) data are accessible via the ‘Administration > ‘PCT Clearing’ drop-down menu item (see Section 10.2).

10.2 ‘Administration’ – ‘PCT Clearing’ menu

PCT % cleared and extent data are maintained by Statutory Data Edit users, Classification Edit Users and Administrators. The ‘PCT Clearing’ menu item can only be seen by these users (see Figure 162).

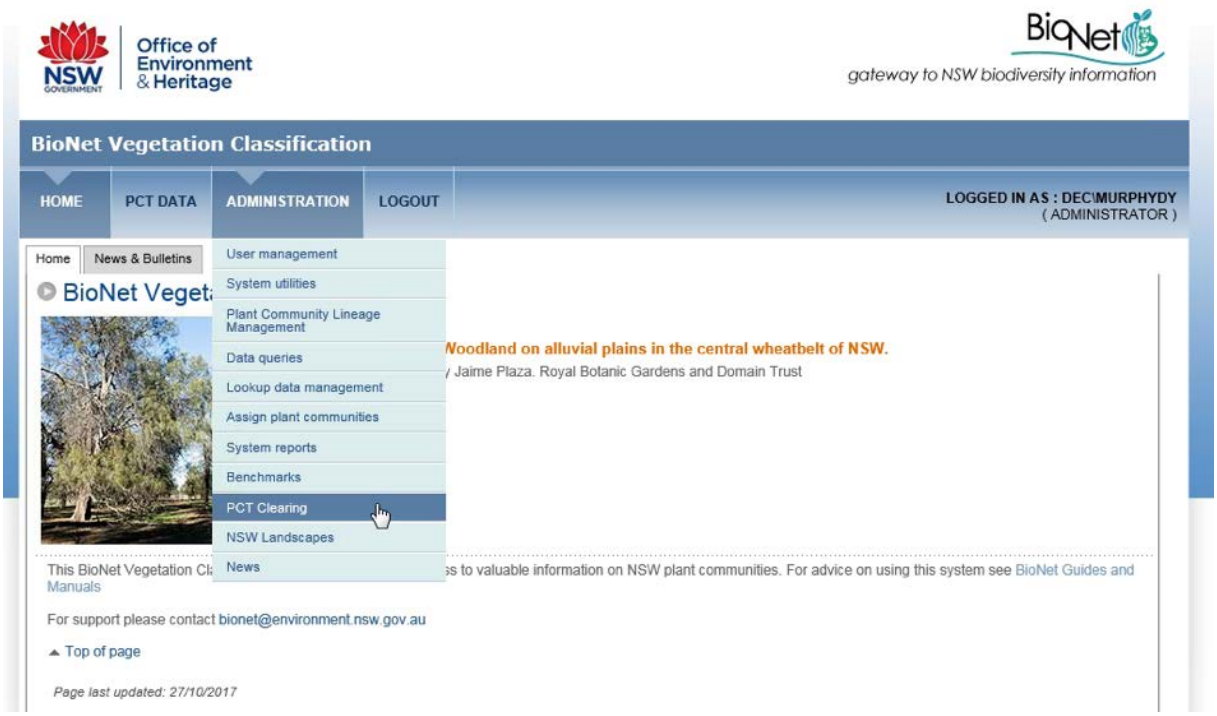


Figure 162 Accessing the 'Administration – PCT Clearing' menu and functionality

10.2.1 Uploading PCT % cleared and extent data

To upload and import bulk PCT clearing and extent data into the Vegetation Classification application:

1. Click on the 'Go to PCT Clearing data upload page' hyperlink (see Figure 163).

Figure 163 Access the upload/import functionality via the hyperlink

2. Click on the 'Choose File'/'Browse' button to locate the csv file to be uploaded (see Figure 164). The csv file must be in the correct format as per the 'PCT Percent Cleared Upload Import' Excel template (summarised in Appendix A5.6).

> **Note:** for uploaded files the system does **not** verify that the % cleared value is correct for the Pre-European Extent and Current Extent estimates given. Statutory Data Edit Users are responsible for ensuring all data are correct prior to upload.

Figure 164 Browse to find the correctly formatted csv file for upload

3. Select the csv file and click on ‘Open’ to upload the file (see Figure 165).

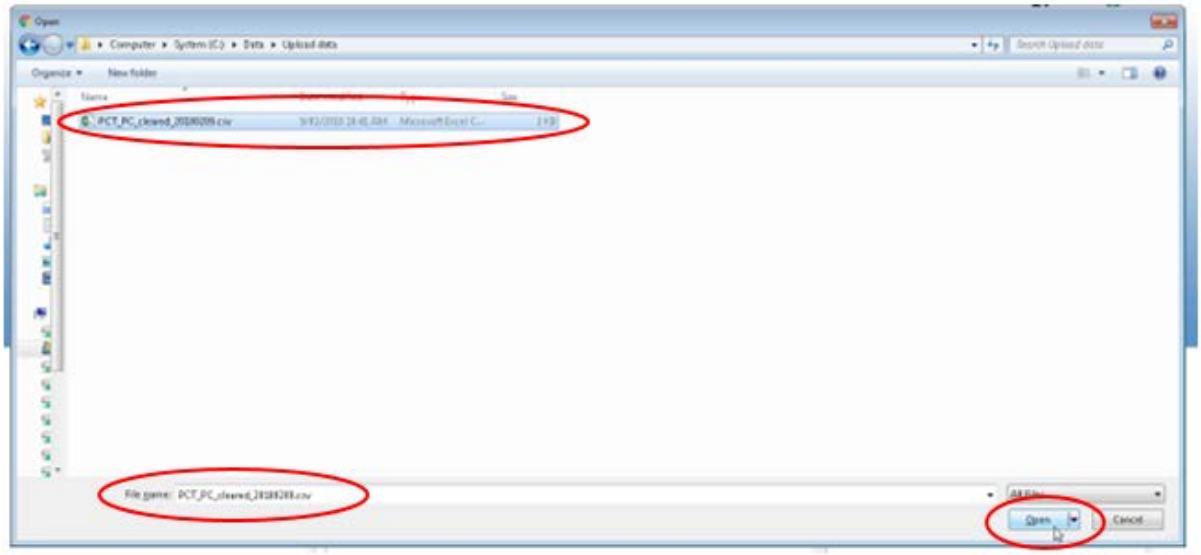


Figure 165 Select and upload the correctly formatted csv file

4. The csv file name will be listed. Click on the ‘Upload data’ button (see Figure 166).

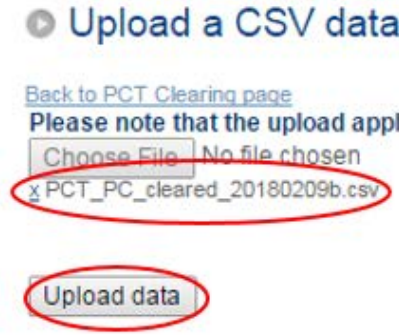


Figure 166 Click to upload the PCT %cleared data

5. The upload will be processed, and results given (see Figure 167).

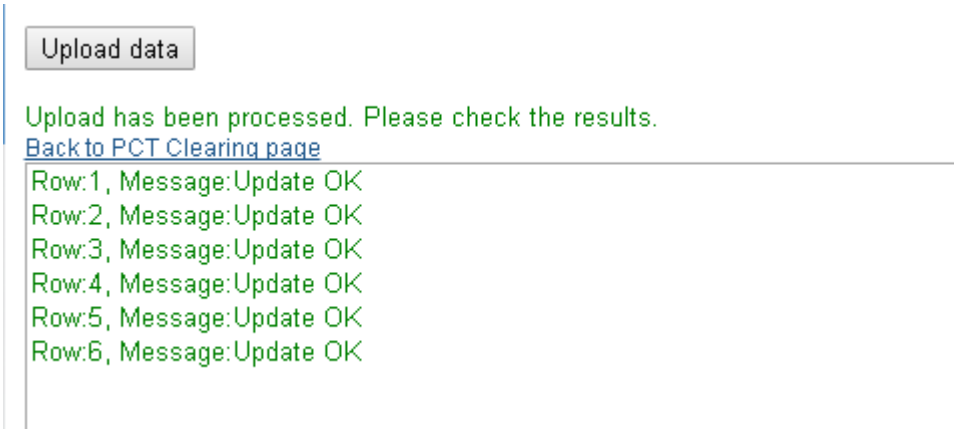


Figure 167 Result for correctly uploaded data (one message per row of data)

6. Any errors will need to be corrected, saved and re-uploaded (see Figure 168).

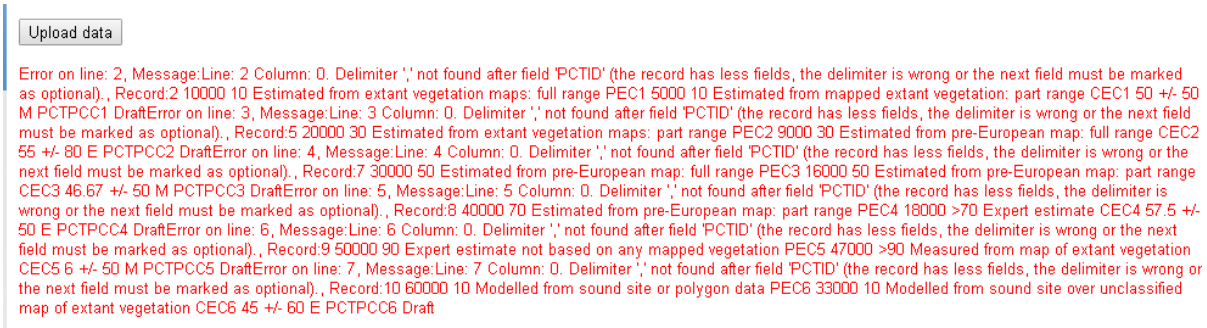


Figure 168 Upload error messages. Hopefully yours won't look like this

7. Click on the 'Back to the PCT Clearing page' hyperlink (see Figure 167) to search on, check and/or edit results as per Section 10.2.2.

10.2.2 Viewing and editing PCT % cleared and extent data

Currently data can only be viewed for one PCT at a time.

To search for and view PCT % cleared and extent data:

1. Enter the PCT ID to be viewed and/or edited and click on 'Search' (see Figure 169).
2. The data will be displayed below. Use the scroll bar to view all the data fields.

Figure 169 Searching on a PCT ID open view/edit functionality

3. To view the data in a single screen without scrolling, click the 'View' hyperlink in the left-most field (see Figure 169).

4. The data will be displayed in a single pane below (see Figure 170). All fields are greyed or inactive.
5. To close, click ‘Close without saving’ (see Figure 170).

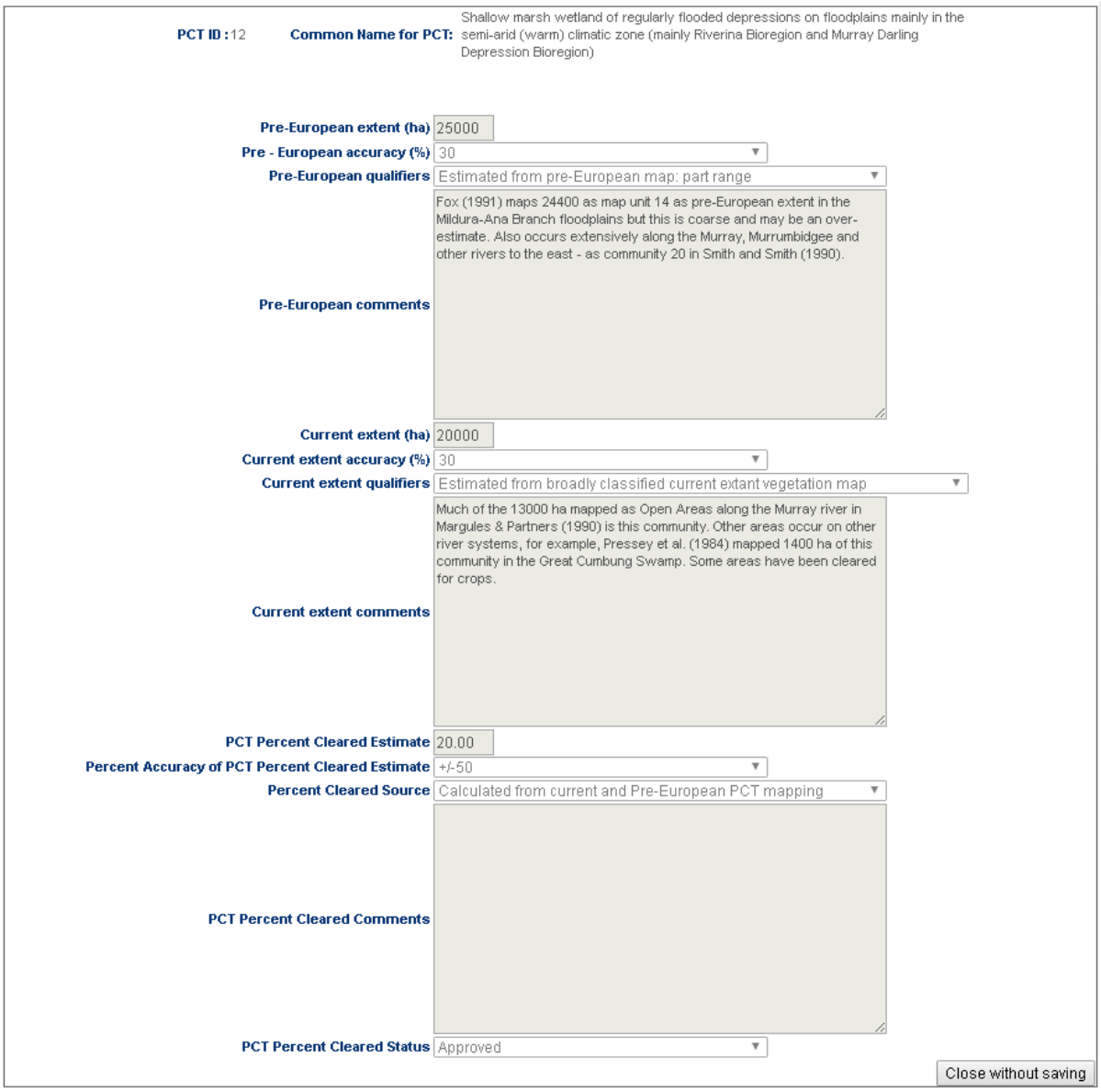


Figure 170 Viewing the PCT % cleared and extent data

To edit the PCT % cleared and extent data:

1. Enter the PCT ID to be viewed and/or edited and click on ‘Search’, as above (see Figure 169).
2. Click the ‘Edit’ hyperlink in the left-most field for the PCT extent data visible on screen (see Figure 169).
3. The data will be displayed in a single pane below (Figure 171). All fields except ‘PCT ID’ and ‘Common Name for PCT’ will be active indicating that they can be edited.
4. Edit fields where necessary, according to the correct format as per the PCT Percent Cleared Upload Import’ Excel template (summarised in Appendix A5.6).
5. Update the ‘PCT Percent Cleared Comments’ field (and other comments fields if relevant) regarding the source of any data changes.

6. Update the ‘PCT Percent Cleared Status’ as appropriate (e.g. from ‘Approved’ to ‘Revised’) according to the ‘PCT Percent Cleared Data Workflow’ (see Appendix A6.7).

> Note that ‘PCT Percent Cleared Status’ cannot be altered to ‘Decommissioned’. This change only occurs as a system change when the ‘PCT Definition Status’ is changed to ‘Decommissioned’.

7. To close, click ‘Save’ or ‘Close without saving’, as appropriate (see Figure 171).

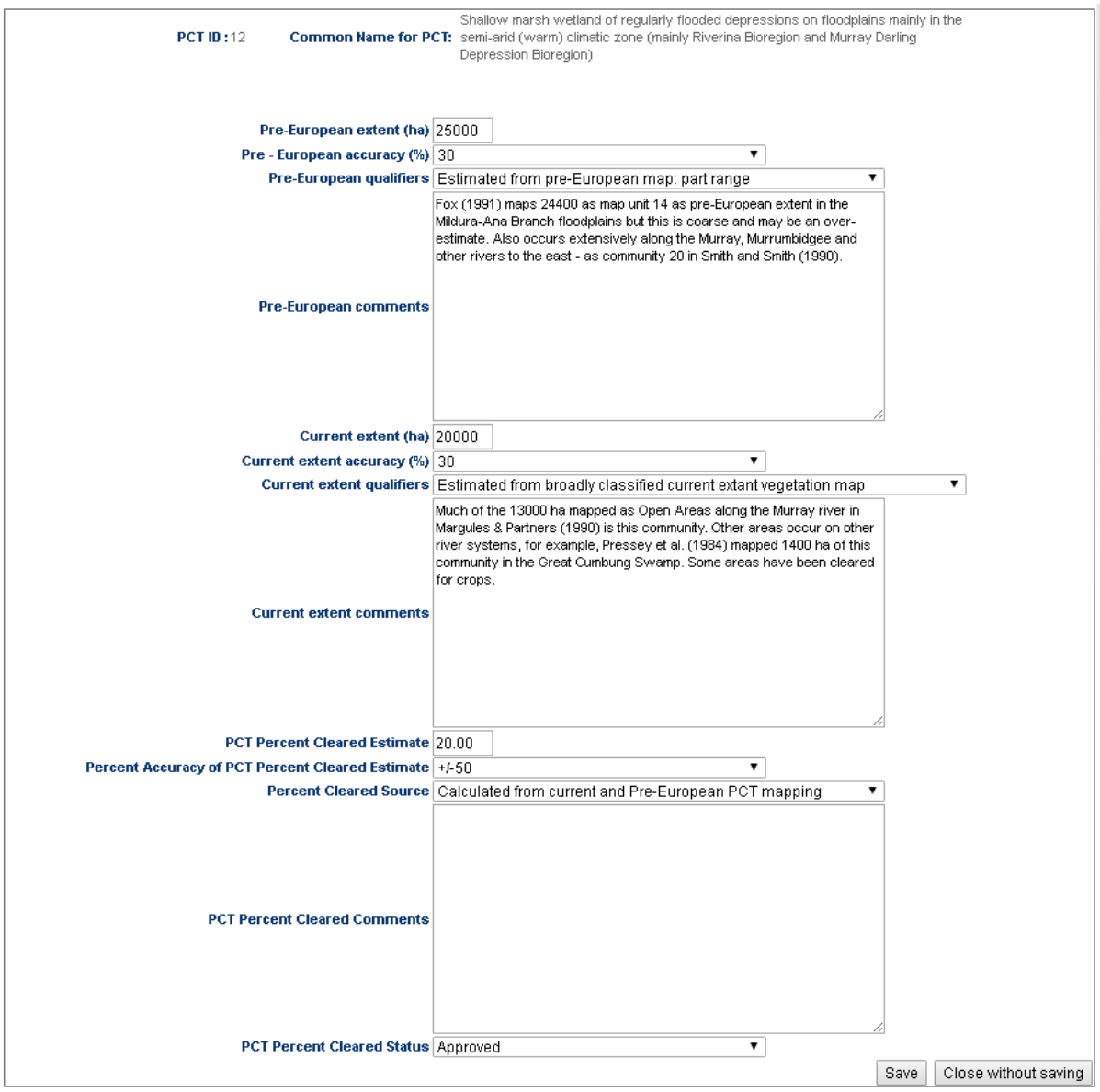


Figure 171 Full edit access to the PCT % cleared and extent data

8. Re-search on this PCT in the ‘Administration – PCT Clearing’ section and/or export the data (see Section 10.2.3) to check all changes have been updated correctly.
9. Open this PCT in the PCT UI and check the data have been updated in the ‘Extent’ section of the ‘Extent’ tab.

Refer to Appendix A6.8 for the process flow diagram relating to PCT Clearing Status management.

10.2.3 Exporting PCT % cleared and extent data

To export PCT % cleared and extent data:

1. Enter the PCT ID for which data are required and click on ‘Search’ (see Figure 172).

Figure 172 Exporting percent cleared and extent data for a PCT

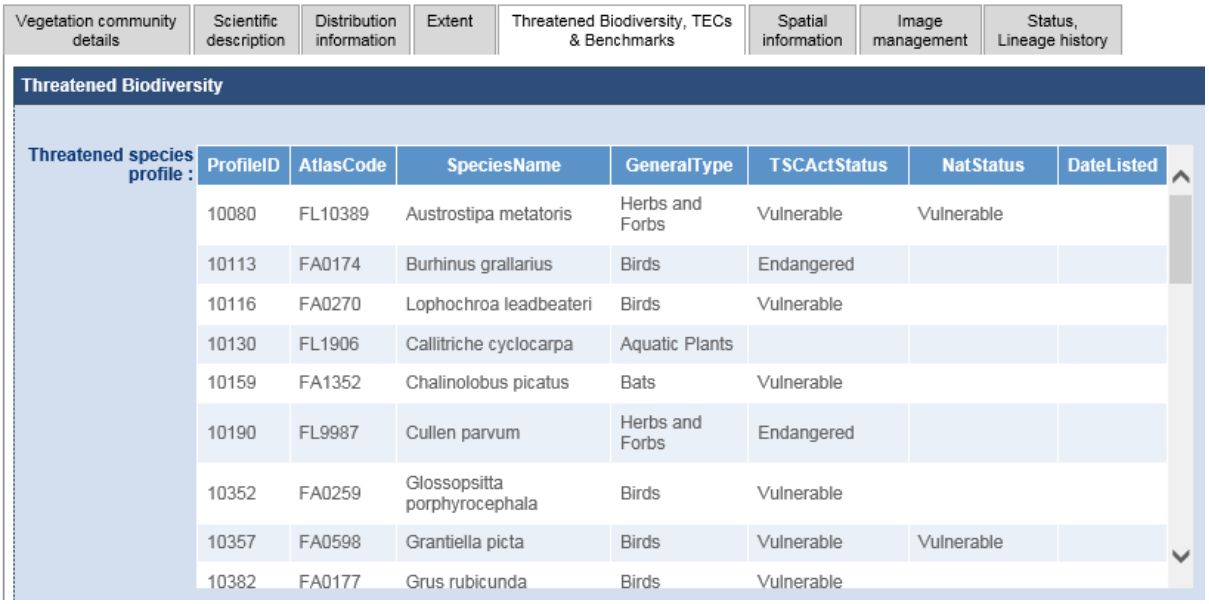
2. Click on the ‘Export data’ button.
3. Click ‘Download CSV File’ to save the export file. Clicking ‘Close’ will cancel the operation.
4. A second pop-up will appear. Click ‘View downloads’.
5. A third pop-up will appear. Click ‘Open’ or ‘Save’ the file as relevant. ‘Close’ will cancel the operation but the ‘Download CSV’ dialogue box will remain.
6. Open to access the information in an Excel spreadsheet.

11. ‘Threatened Biodiversity, TECs and Benchmarks’ tab

When you click the ‘Threatened Biodiversity, TECs and Benchmarks’ tab the ‘Threatened Biodiversity’ section will open by default.

11.1 ‘Threatened Biodiversity’ section

This section lists threatened biodiversity that are known to occur in or utilise the PCT – these data are read-only, as indicated by their greyed-out appearance (see Figure 173). These data are populated directly from BioNet Threatened Biodiversity Profiles data collection and automatically updated nightly.



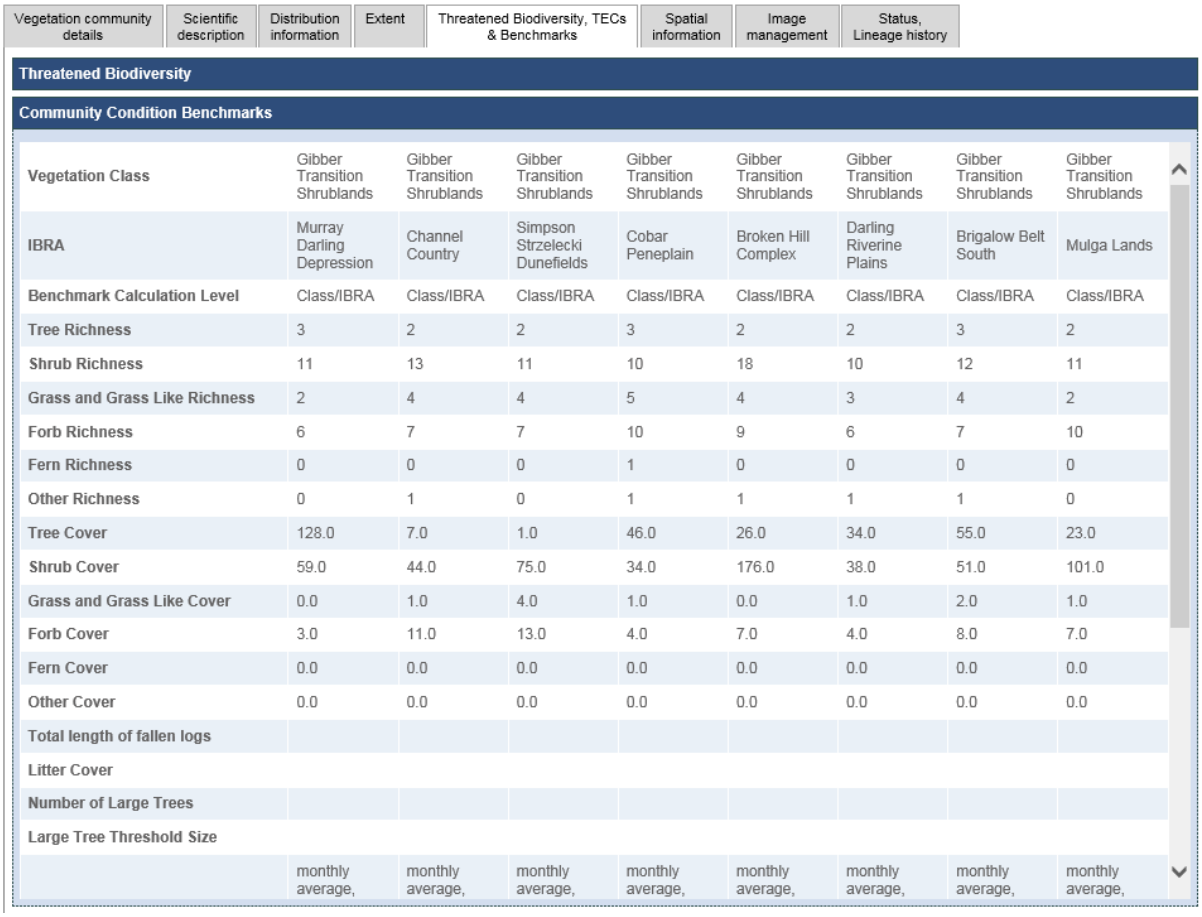
ProfileID	AtlasCode	SpeciesName	GeneralType	TSCActStatus	NatStatus	DateListed
10080	FL10389	Austrostipa metatoris	Herbs and Forbs	Vulnerable	Vulnerable	
10113	FA0174	Burhinus grallarius	Birds	Endangered		
10116	FA0270	Lophochroa leadbeateri	Birds	Vulnerable		
10130	FL1906	Callitriche cyclocarpa	Aquatic Plants			
10159	FA1352	Chalinolobus picatus	Bats	Vulnerable		
10190	FL9987	Cullen parvum	Herbs and Forbs	Endangered		
10352	FA0259	Glossopsitta porphyrocephala	Birds	Vulnerable		
10357	FA0598	Grantiella picta	Birds	Vulnerable	Vulnerable	
10382	FA0177	Grus rubicunda	Birds	Vulnerable		

Figure 173 Threatened biodiversity associated with the PCT are viewed using the scroll bar on the right (if the list is long)

11.2 ‘Community condition benchmarks’ section

The data in this section are read-only, as indicated by their greyed-out appearance (see Figure 174).

Scroll down to view all the benchmark variable data and other fields. Depending on the number of benchmark sets, the horizontal scroll bar across the bottom may also be active.



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

Threatened Biodiversity

Community Condition Benchmarks

Vegetation Class	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands	Gibber Transition Shrublands
IBRA	Murray Darling Depression	Channel Country	Simpson Strzelecki Dunefields	Cobar Peneplain	Broken Hill Complex	Darling Riverine Plains	Brigalow Belt South	Mulga Lands
Benchmark Calculation Level	Class/IBRA	Class/IBRA	Class/IBRA	Class/IBRA	Class/IBRA	Class/IBRA	Class/IBRA	Class/IBRA
Tree Richness	3	2	2	3	2	2	3	2
Shrub Richness	11	13	11	10	18	10	12	11
Grass and Grass Like Richness	2	4	4	5	4	3	4	2
Forb Richness	6	7	7	10	9	6	7	10
Fern Richness	0	0	0	1	0	0	0	0
Other Richness	0	1	0	1	1	1	1	0
Tree Cover	128.0	7.0	1.0	46.0	26.0	34.0	55.0	23.0
Shrub Cover	59.0	44.0	75.0	34.0	176.0	38.0	51.0	101.0
Grass and Grass Like Cover	0.0	1.0	4.0	1.0	0.0	1.0	2.0	1.0
Forb Cover	3.0	11.0	13.0	4.0	7.0	4.0	8.0	7.0
Fern Cover	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Cover	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total length of fallen logs								
Litter Cover								
Number of Large Trees								
Large Tree Threshold Size								
	monthly average,	monthly average,	monthly average,	monthly average,	monthly average,	monthly average,	monthly average,	monthly average,

Figure 174 Vegetation community condition benchmarks for the PCT are viewed using the scroll bar on the right

Functionality to upload, import, edit and manage benchmark data is accessible via the ‘Administration – Benchmarks’ drop-down menu item (see Section 11.3).

11.3 ‘Administration – Benchmarks’ menu

Benchmark data are maintained by Statutory Data Edit users and Administrators. The ‘Benchmarks’ drop-down menu item can only be seen by these users (see Figure 175).

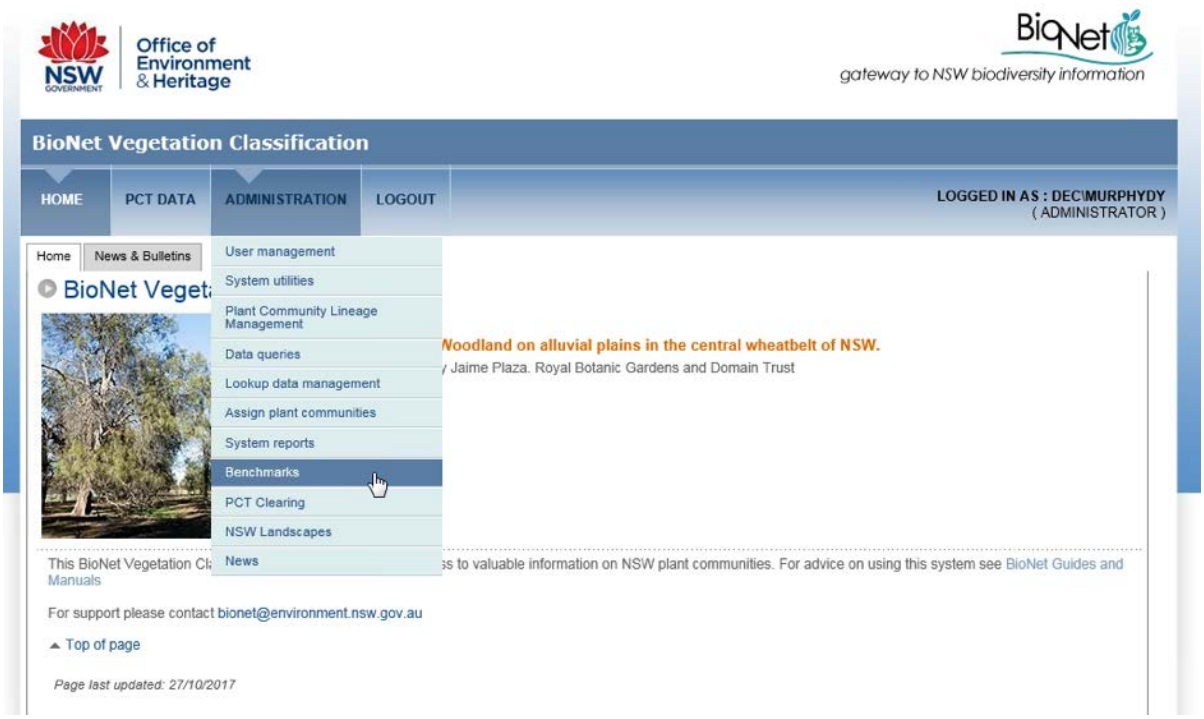


Figure 175 Accessing the 'Administration – Benchmarks' menu and functionality

Click on the 'Benchmarks' drop-down menu item to open the 'Benchmarks management' page (see Figure 176).

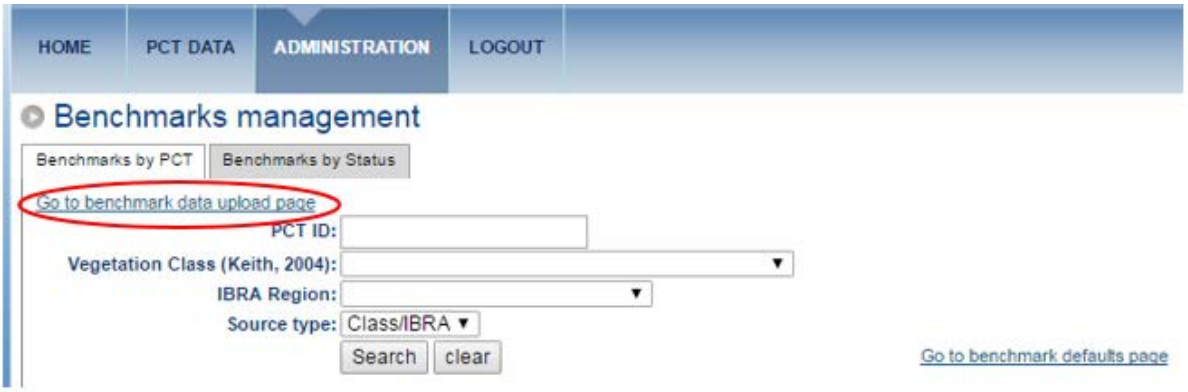


Figure 176 The 'Benchmarks management' page

11.3.1 Uploading benchmark data

To upload and import bulk benchmark data into the Vegetation Classification application:

1. Click on the 'Go to benchmark data upload page' hyperlink (see Figure 176).
2. Click on the 'Choose File'/'Browse' button to locate the csv or txt file to be uploaded (see Figure 177). The data must be in the correct format as per the 'Benchmarks Upload Import' Excel template (summarised in Appendix A5.7).

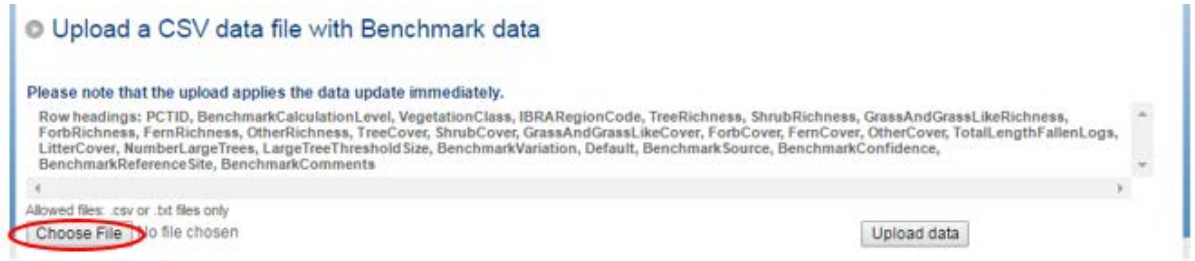


Figure 177 Browse to find the correctly formatted csv/txt file for upload

3. Select the csv/txt file and click on ‘Open’ to upload the file (see Figure 178).

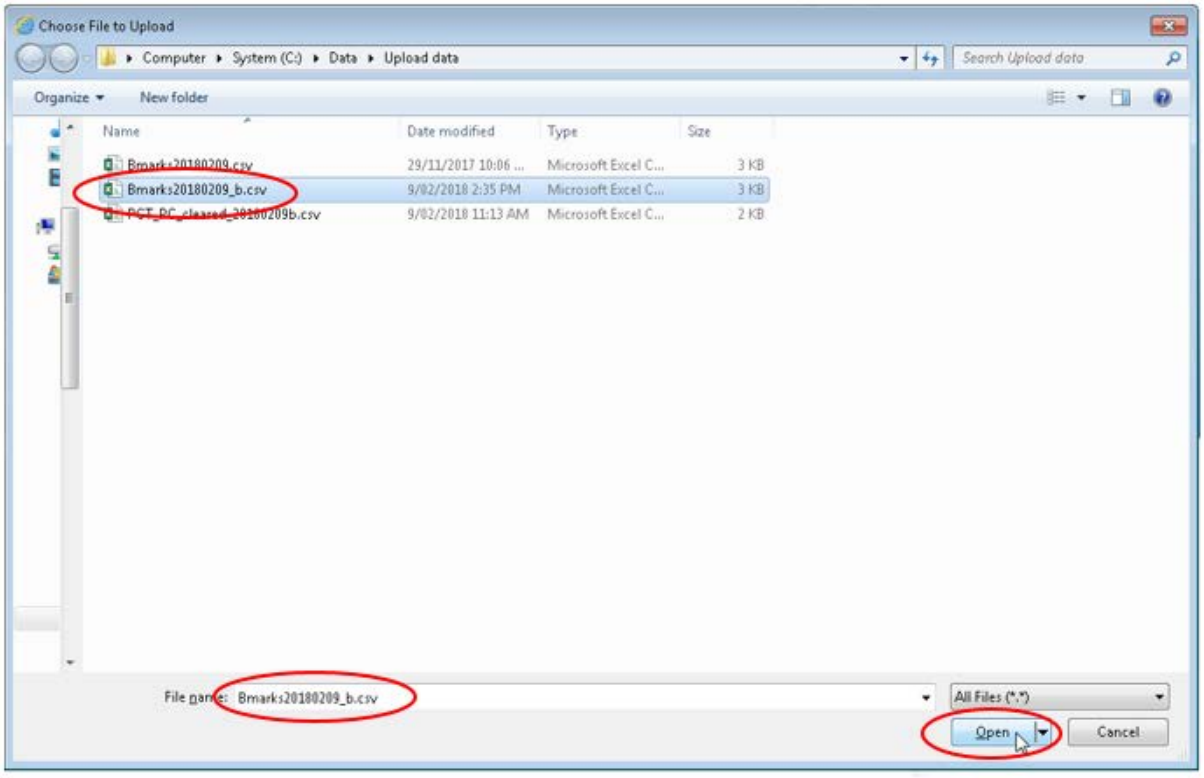


Figure 178 Select and upload the correctly formatted csv/txt file

4. The csv/txt file name will be listed. Click on the ‘Upload data’ button (see Figure 179).

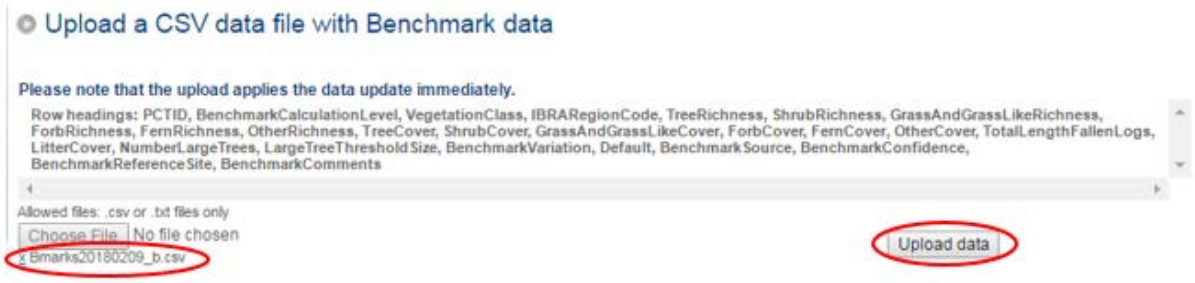


Figure 179 Click to upload the Benchmark data

5. The upload will be processed, and results given (see Figure 180). Note that **full processing is an overnight process**, despite the comment ‘Please note that the upload applies that data update immediately’.

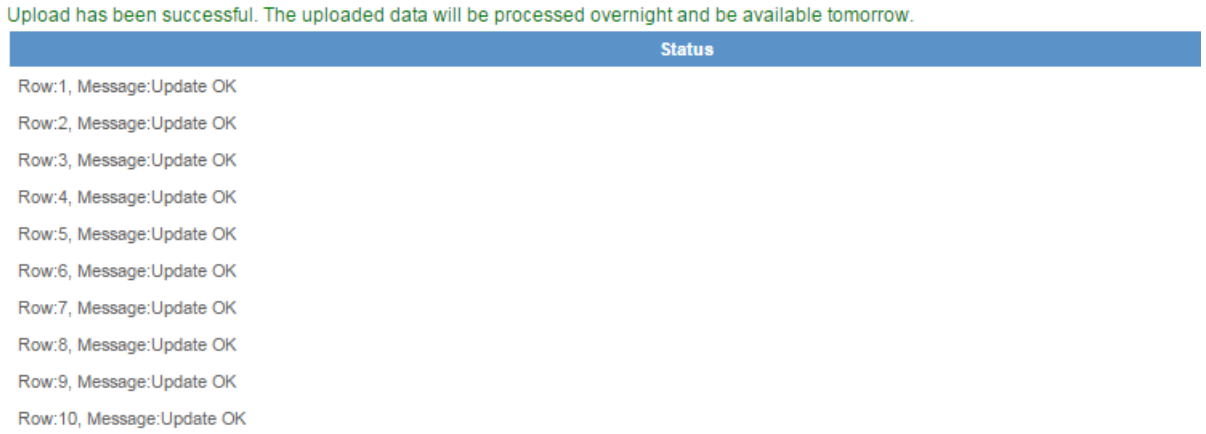


Figure 180 Result for correctly uploaded data (one message per row of data)

6. Any errors will need to be corrected, saved in the upload/import spreadsheet and re-uploaded (see Figure 181).

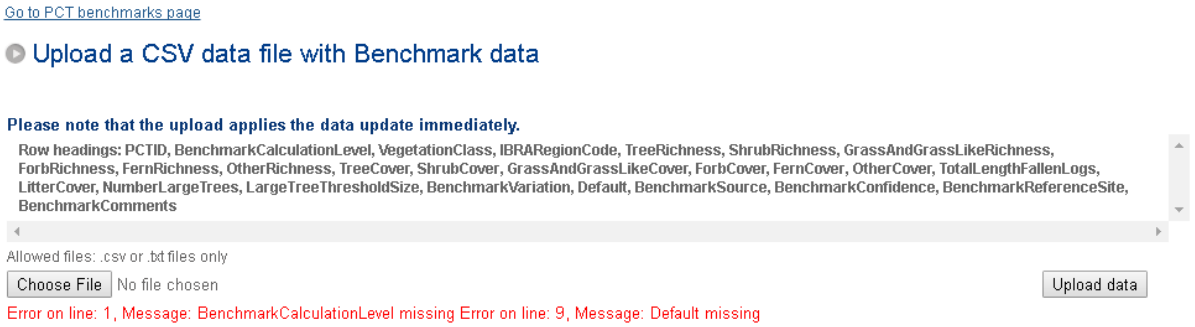


Figure 181 Upload error messages

7. Click on the ‘Go to PCT benchmarks page’ hyperlink (see Figure 182) to search on, check and/or edit results, as per Section 11.3.2.
8. Ensure you update the ‘Benchmark comments’ fields for affected PCTs regarding the source of your changes, as per Section 11.3.3.

Figure 182 Return to the PCT benchmarks page to review and edit the imported data

Refer to Appendices 6.5, A6.6 and A6.7 for process flow diagrams relating to Benchmark data and status management.

11.3.2 Managing default benchmark data

Default benchmarks are defined/calculated at the Vegetation Class/IBRA region level (usually abbreviated to 'Class/IBRA'). This is sometimes referred to as the Regional Vegetation Class level.

To view/edit these data, click on the 'Go to benchmark defaults page' hyperlink (see Figure 183).

Figure 183 Click to open the default benchmark data management section

All the default benchmark data will be displayed, organised into 10 rows per page (see Figure 184). Click on the page numbers at the bottom of the screen to move between pages. Use the scroll bar to view all the data fields.

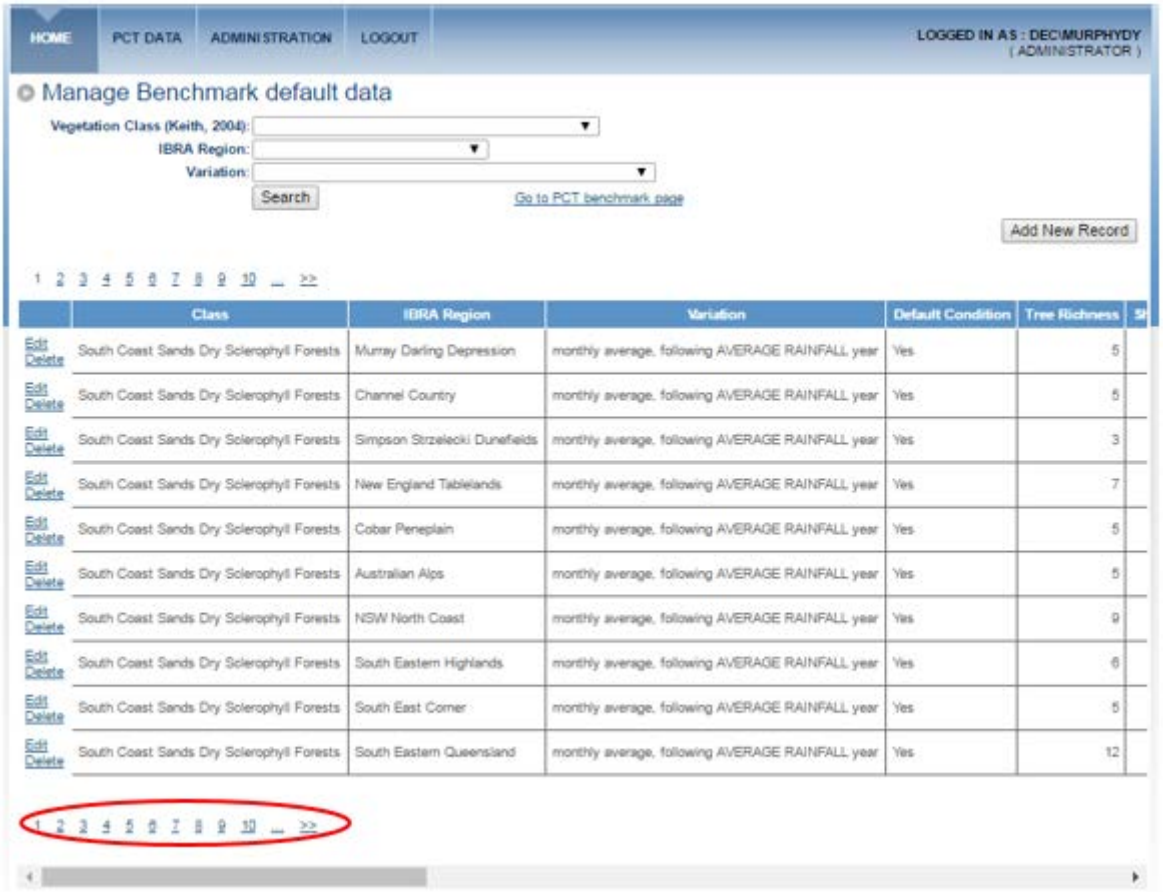


Figure 184 Click on the page numbers and user the scroll bar to view the default benchmark data

To search for and view a subset of default benchmark data:

1. Enter the Class, IBRA region or benchmark variation, or a combination of these variables and click on ‘Search’ (see Figure 185).

Figure 185 Search for a subset or specific default benchmark data

2. The data will be displayed below. Use the scroll bar to view all the data fields. Note the final field lists all PCT IDs to which the default Class/IBRA data have been assigned as an automated system process (see Figure 186).

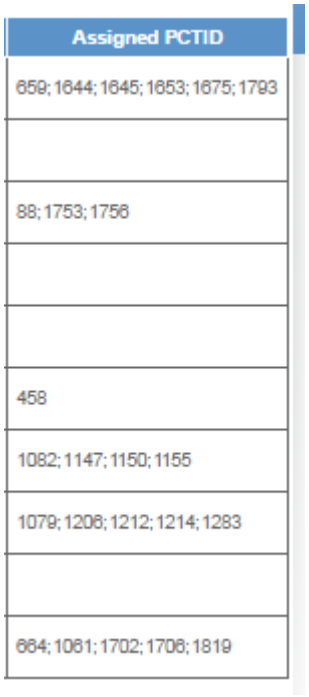


Figure 186 List of PCTIDs assigned to each default benchmark data combination

To add a new Class/IBRA/benchmark variation default benchmark dataset:

1. Click on the ‘Add New Record’ button (see Figure 187).

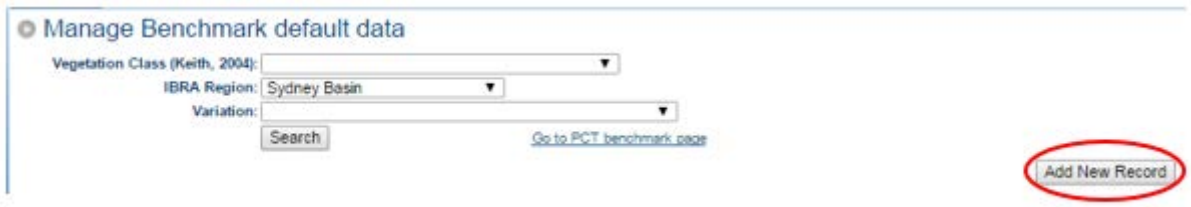


Figure 187 Click to add a new default benchmark data combination

2. A data entry screen will open below. Scroll down to view it (see Figure 188).

Figure 188 The default benchmark data entry window

3. Enter data according to individual field data formats (as per the 'Benchmarks Upload Import' Excel template, summarised in Appendix A5.7). If the Class/IBRA/Variation selected already exists, an error message will be returned when the 'Save' button is clicked (see Figure 189).

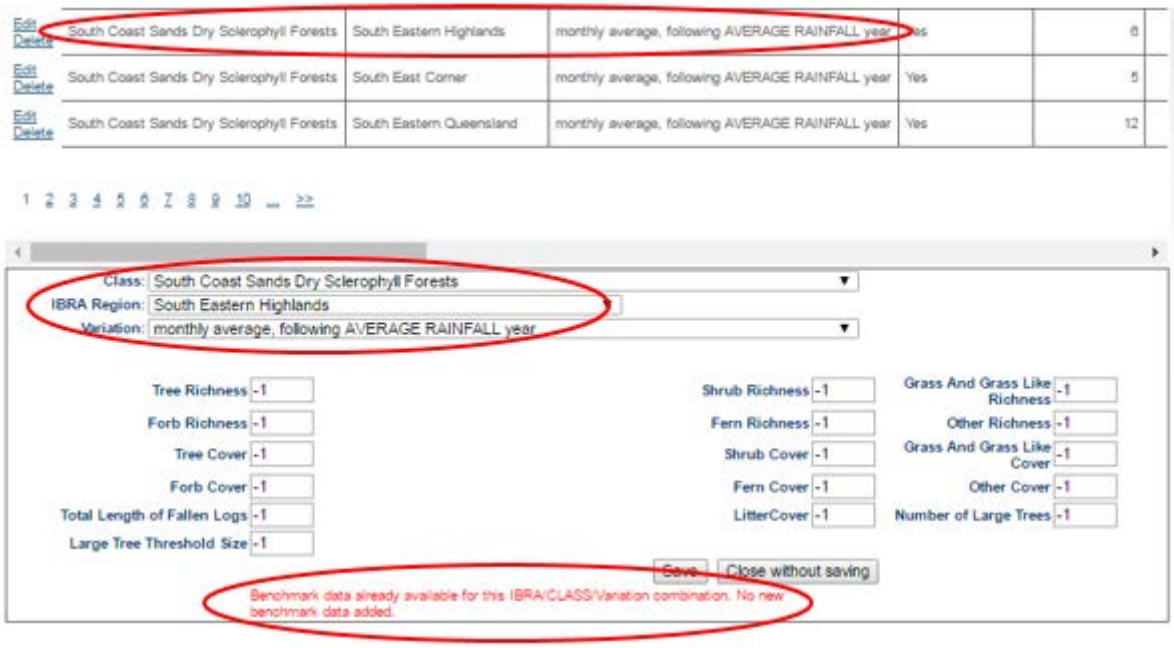


Figure 189 Error obtained when default data are being entered for an existing Class/IBRA/Variation combination

To edit a Class/IBRA/benchmark variation default benchmark dataset:

1. Click on the 'Edit' link for the default benchmark set of interest (see Figure 190).

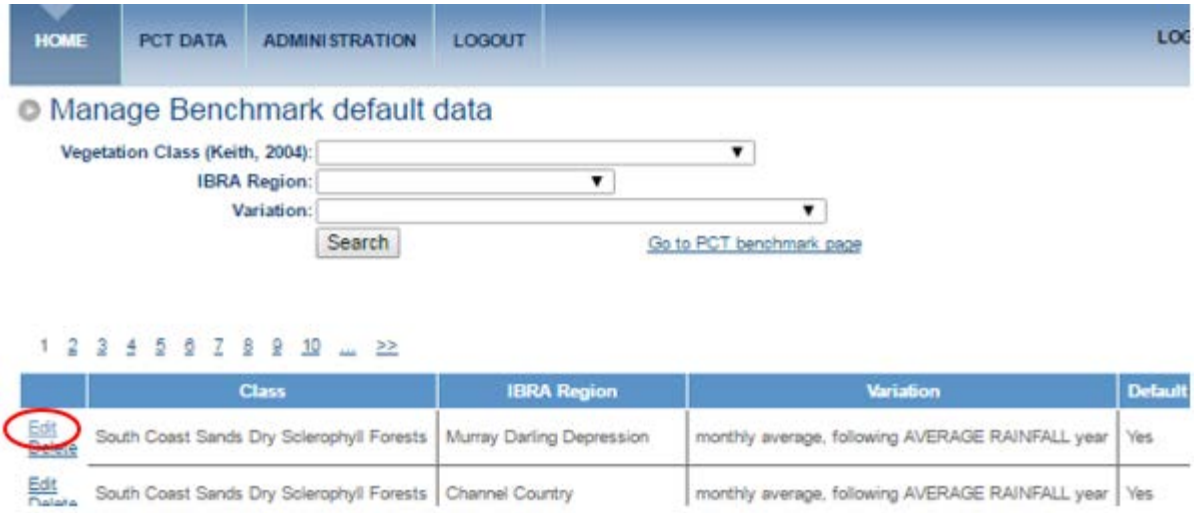


Figure 190 Click on 'Edit' to open and edit the selected row of data

2. All fields (except 'Assigned PCTID') will become active (editable), as denoted by the data entry boxes and formatted data (see Figure 191).

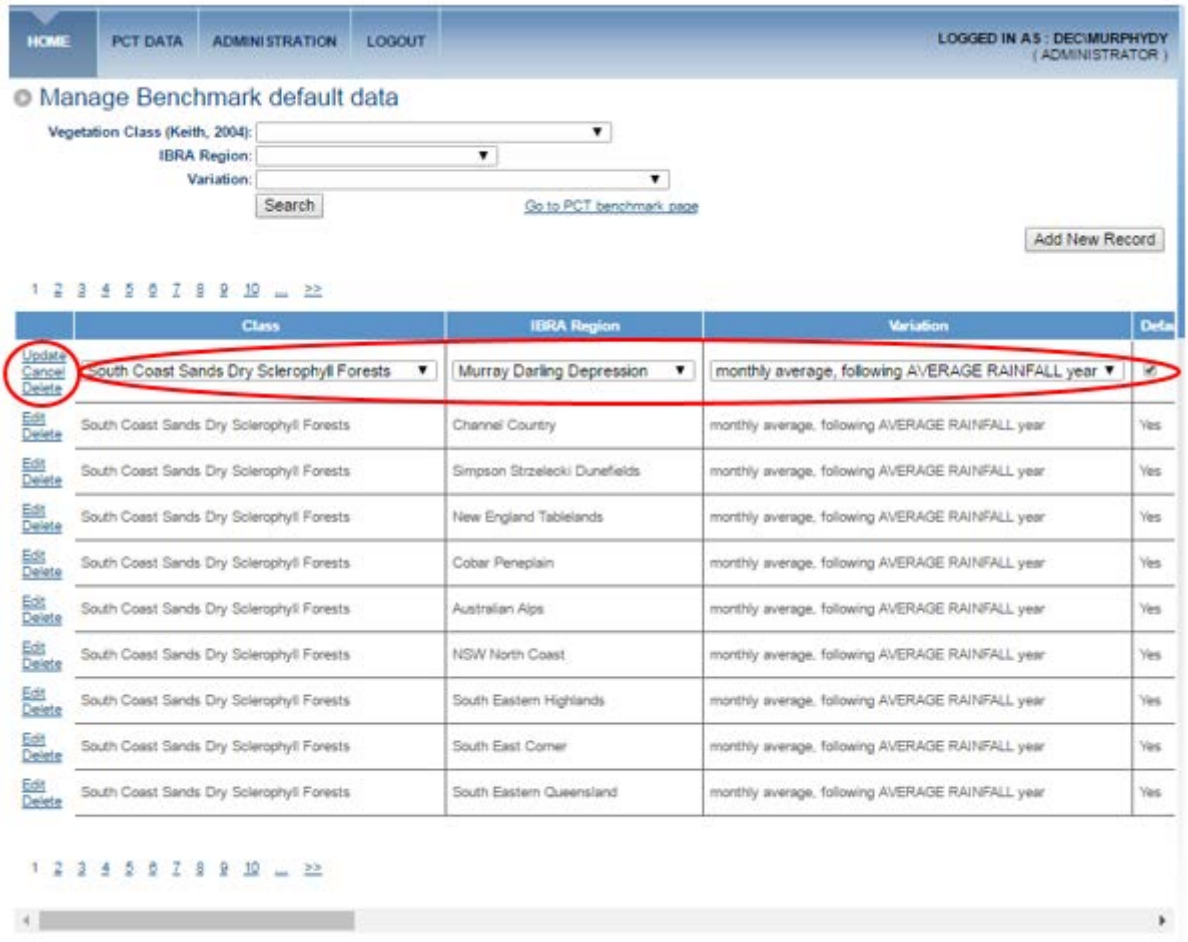


Figure 191 Clicking 'Edit' makes most fields active and editable for the selected default benchmark dataset

3. Make changes as required according to individual field data formats (as per the 'Benchmarks Upload Import' Excel template, summarised in Appendix A5.7). Note: there are no validation checks on the data entered apart from fields with drop-down lists.

4. Click on ‘Update’ to save changes, or ‘Cancel’ to close without saving. A pop-up message will appear (see Figure 192). Note that clicking on ‘Update’ will cause all benchmark records for PCTs assigned to this Class/IBRA/Variation combination to be automatically updated and the ‘Benchmark Status’ will be changed to ‘Revised’.

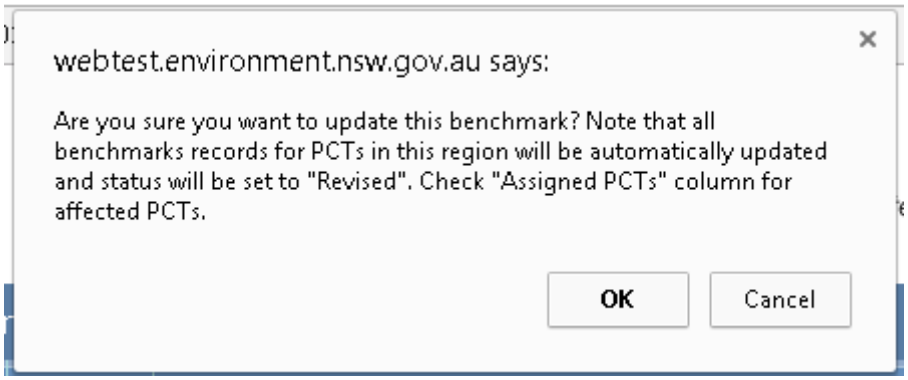


Figure 192 Warning pop-up message

5. Clicking on ‘Delete’ will remove the benchmarks for that Class/IBRA/Variation default benchmark set.

11.3.3 ‘Benchmarks by PCT’ tab

Benchmark data assigned to individual PCTs may be either:

- Default Class/IBRA benchmarks (auto-assigned based on Vegetation Class and IBRA regions assigned to the PCT)
- PCT-level benchmarks specific to the PCT.

> Note that although the BioNet Vegetation Classification application has been developed so as to allow upload/import, management, display and exporting of PCT-level benchmark data. No PCT-level benchmarks exist at the time of publication of this user manual (November 2018).

To search on and view benchmark data as assigned to individual PCTs:

1. Open the ‘Benchmarks management’ screen. The ‘Benchmarks by PCT’ tab will open by default (see Figure 193).
2. Search using one or more of the criteria available:
   a. ‘PCT ID’ – free text
   b. ‘Vegetation Class’ and/or ‘IBRA Region’ and/or benchmark ‘Source type’ – all drop-down menu items.
3. Click on ‘Search’, or ‘Clear’ to clear the search criteria entered.
4. The data matching the search criteria will be displayed in a table below (see Figure 193). Use the scroll bar to view all the data fields.

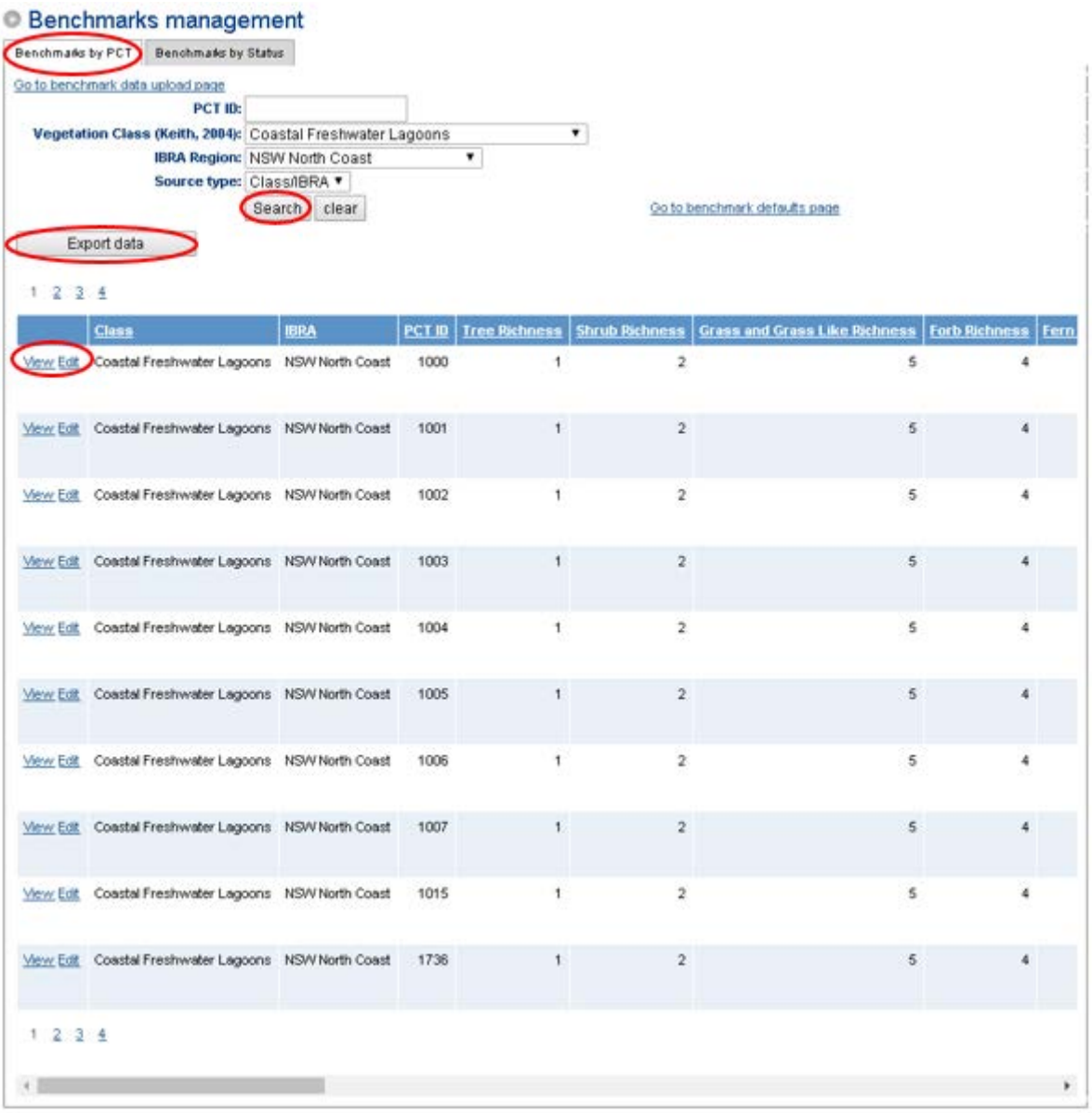


Figure 193 PCT Benchmarks search options and results table

5. Click on ‘Export data’ to save data in a .csv format (see Figure 193).
6. To view a set of benchmark data in a single screen without the need for scrolling, click on the ‘View’ hyperlinked text in the left-most field for the PCT benchmark data of interest (see Figure 193).
7. The data will be displayed in a single pane below (see Figure 194). All fields are greyed and inactive (not editable).
8. To close, click ‘Close without saving’ (see Figure 194).

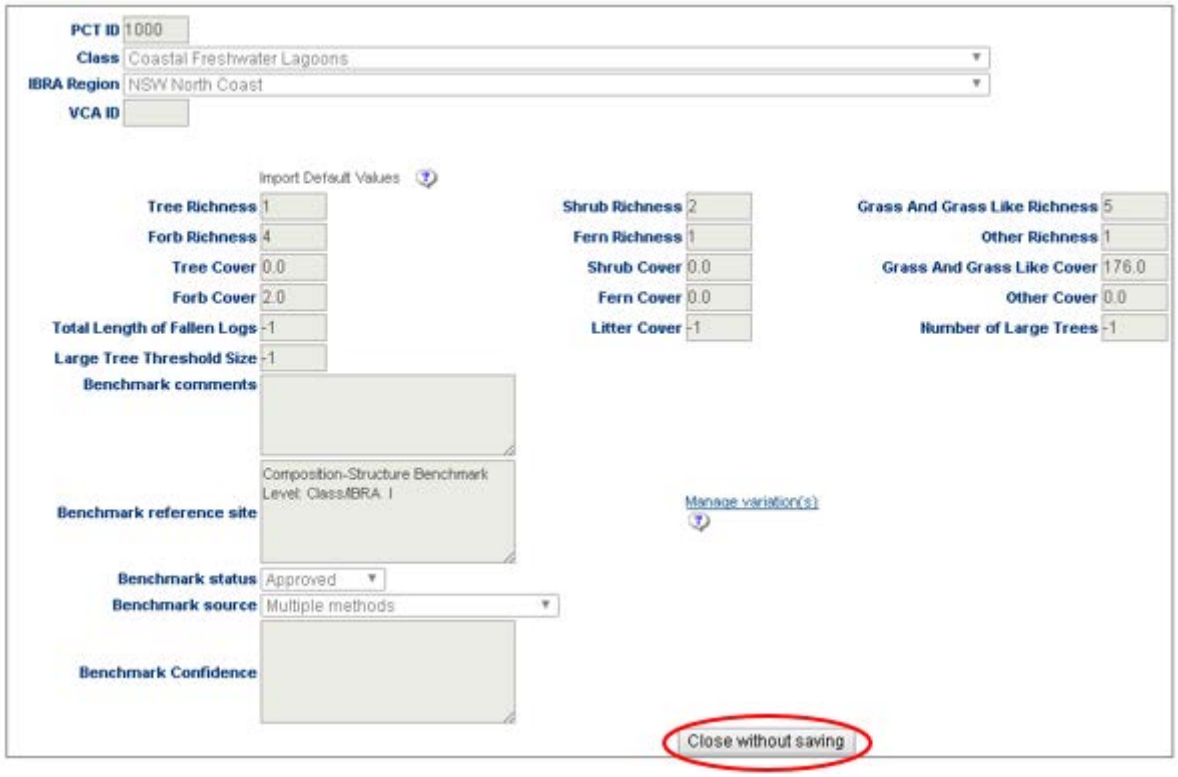


Figure 194 Viewing a set of PCT benchmark data

To edit benchmark data as assigned to individual PCTs:

1. Enter one or more search criteria, as described above (see Figure 193).
2. Click on the 'Edit' hyperlinked text in the left-most field for the PCT benchmark data of interest (see Figure 193).
3. The data will be displayed in the edit screen below (see Figure 195). All fields except 'PCT ID', 'Class', 'IBRA Region' and 'VCA ID' will be active indicating that they can be edited.
4. Edit the data directly by entering data into the relevant field/s, according to the correct format as per the 'Benchmarks Upload Import' Excel template (summarised in Appendix A5.7).
5. NOTE: Update the 'Benchmark comments' field (and other fields such as 'Benchmark source' and 'Benchmark Confidence', if relevant) regarding the source of any data changes. **Do this for all affected PCTs.**
6. Update the 'Benchmark Status' as appropriate (e.g. from 'Approved' to 'Revised') according to the 'PCT Benchmark Data Workflow' (see Appendix 6.6).

   Note that 'Benchmark Status' cannot be altered to 'Decommissioned'. This change only occurs as a system change when the 'PCT Definition Status' is changed to 'Decommissioned'.

7. When you have finished editing, click 'Save'. Your edits should now appear in the columns you edited for the relevant benchmarks.
8. If you don't wish to save your edits, click 'Close without saving'. Your edits since last save should not appear.

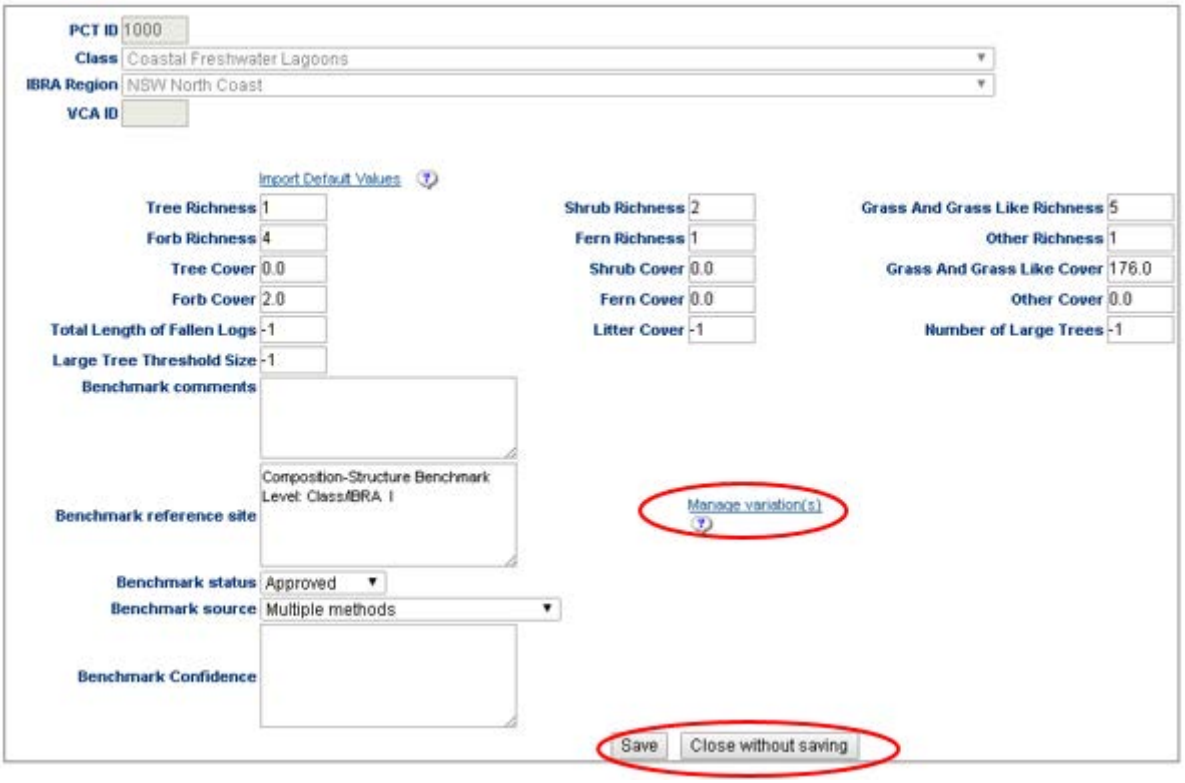


Figure 195 Full edit access to the PCT benchmark data

To manage the benchmark variations for a PCT:

1. Click the ‘Edit’ hyperlink in the left-most field for the PCT benchmark data of interest, as above (see Figure 193).
2. Click on the ‘Manage variation(s)’ hyperlink (see Figure 195).
3. Click ‘OK’ in the pop-up message (see Figure 196).

Figure 196 Click ‘OK’ to open the ‘Manage Benchmark variation data’ window

4. The ‘Manage Benchmark variation data’ window will open either for:
   a. the PCT in the selected IBRA region of interest (see Figure 197)
   b. the PCT (if PCT-level benchmarks apply) [currently not functional].

Figure 197 Edit, delete or add new benchmark variation data

5. Click on ‘Edit’ to modify these data, or ‘Delete’ to remove them completely.
6. Click on ‘Add benchmark variation data’ to enter data for a new benchmark variation (see Figure 197).

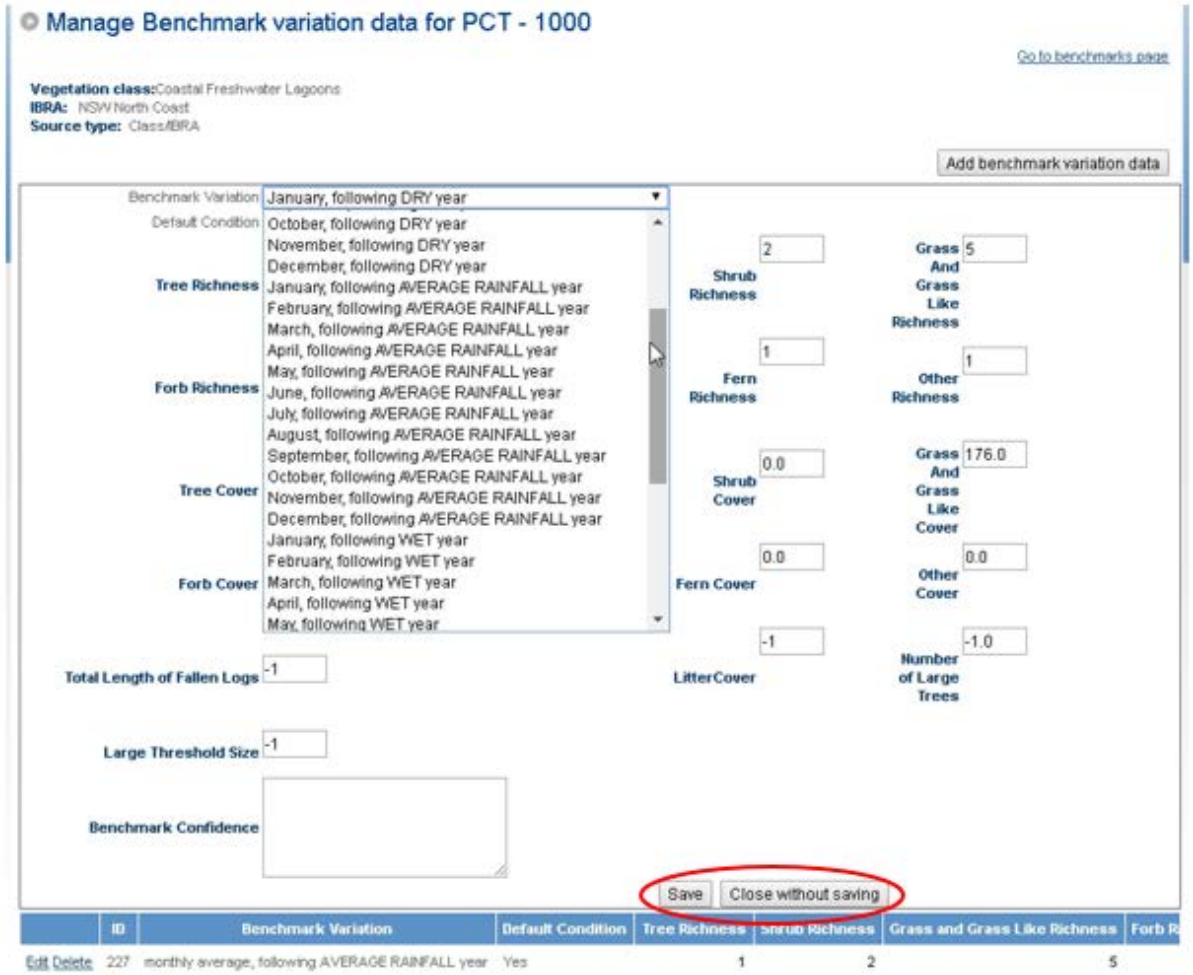


Figure 198 Adding benchmark data for a new variation

7. To close, click ‘Save’ or ‘Close without saving’, as appropriate (see Figure 198). If the new data were saved successfully a message will appear indicating as such, however note that the new data will not yet be visible (see Figure 199).

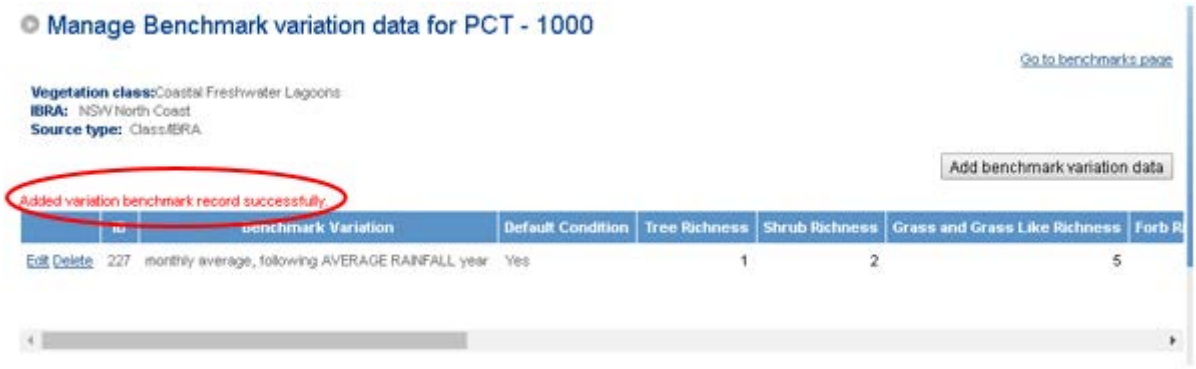


Figure 199 Message indicating successful addition of new benchmark variation data

8. Click on ‘Go to benchmarks page’ hyperlink and re-search on the same Class/IBRA combination (or PCT ID) to locate the newly added data.
9. Click ‘Edit’ and update the ‘Benchmark comments’, ‘Benchmark source’, ‘Benchmark Confidence’, ‘Benchmark status’ and possible ‘Benchmark reference site’ fields (see Figure 200) for the new variation data. Note that the ‘Benchmark status’ is automatically set to the same as the existing variation data, thus may be ‘Approved’ by default.

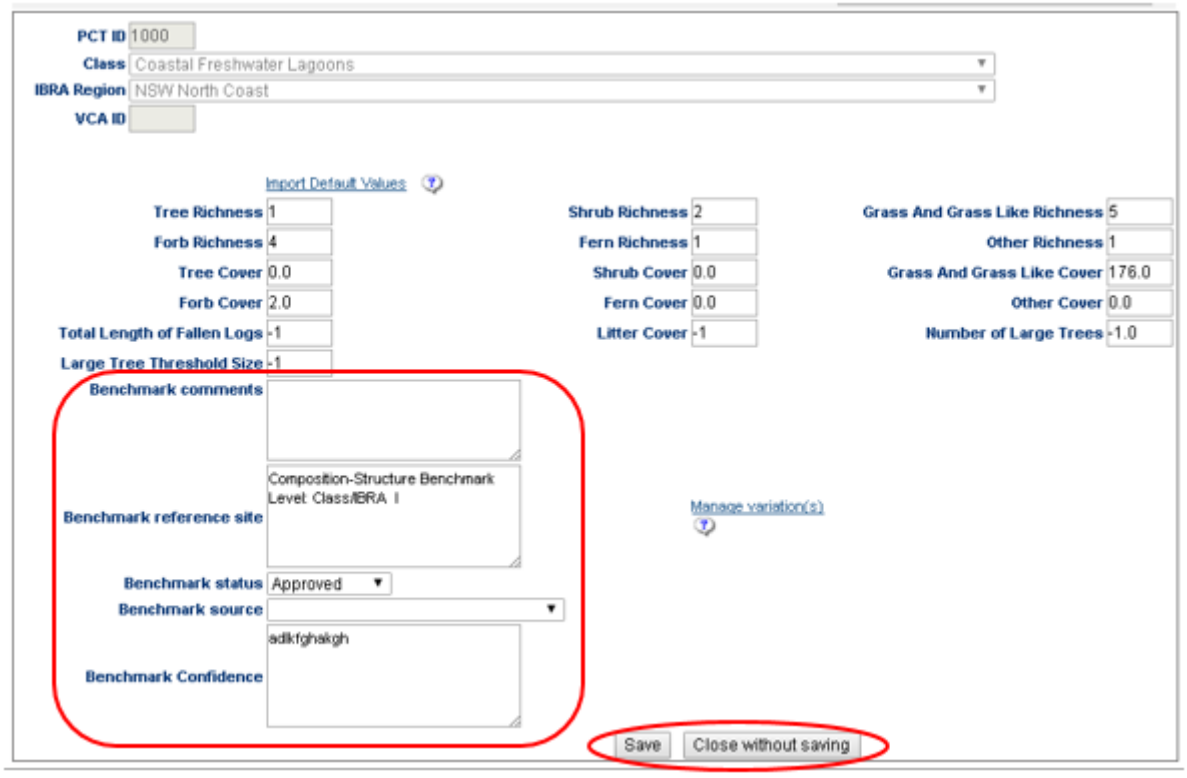


Figure 200 Newly added benchmark variation data, for which the text and drop-down fields must also be populated

10. To close, click ‘Save’ or ‘Close without saving’, as appropriate (see Figure 200).
11. Open this PCT in the PCT UI and check that all new and revised data have been updated in the ‘Community Condition Benchmarks’ section of the ‘Threatened Biodiversity, TECs & Benchmarks’ tab.

11.3.4 'Benchmarks by status' tab

Benchmark status changes will mostly be done in bulk, predominantly as project-related processes. The 'Benchmarks by Status' functionality allows for groups of PCTs that meet particular criteria (especially with respect to Authority and/or Status) to be bulk updated with regard to Benchmark Status.

To search for and view PCT Benchmark Status data:

1. Open the 'Benchmarks management' screen and click on the 'Benchmarks by Status' tab (see Figure 201).

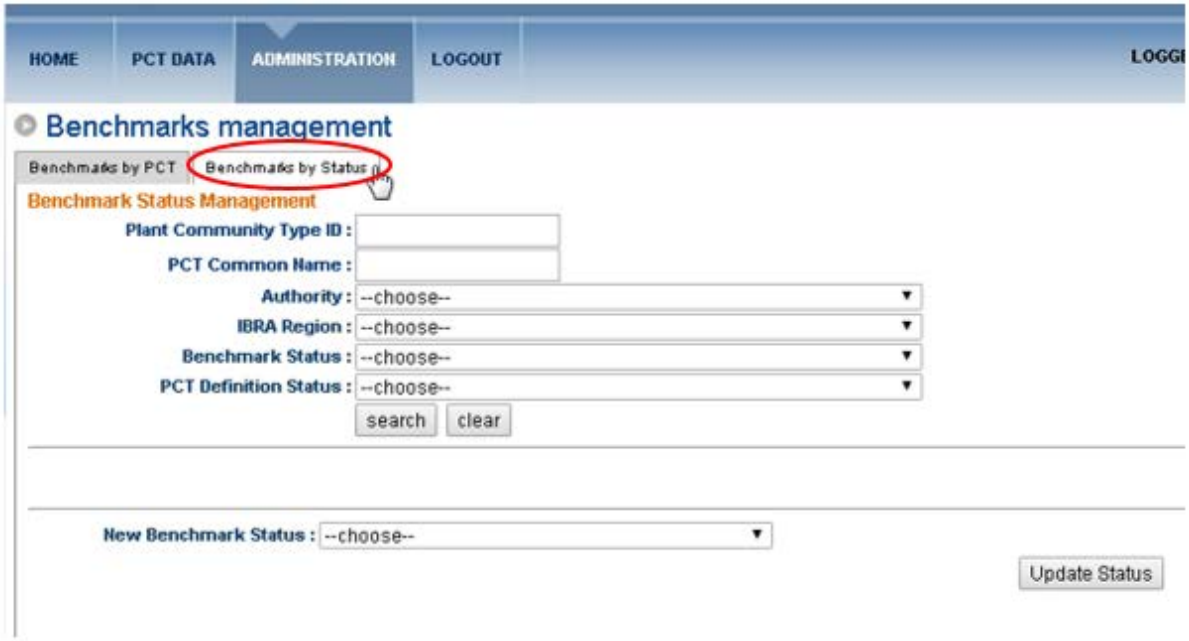


Figure 201 Searching using the 'Benchmarks by Status' functionality

2. Search using one or more of the criteria available:
   a. 'PCT ID' – free text
   b. 'PCT Common Name' – free text
   c. 'Authority', 'IBRA Region', 'Benchmark Status' or 'PCT Definition Status' – drop-down menu items
3. Once you've selected your criteria, click on 'Search', or 'Clear' to clear the search criteria entered.
4. The PCT benchmark sets (including both PCT-level benchmarks and default benchmarks as applied to individual PCTs) will appear below (see Figure 202).

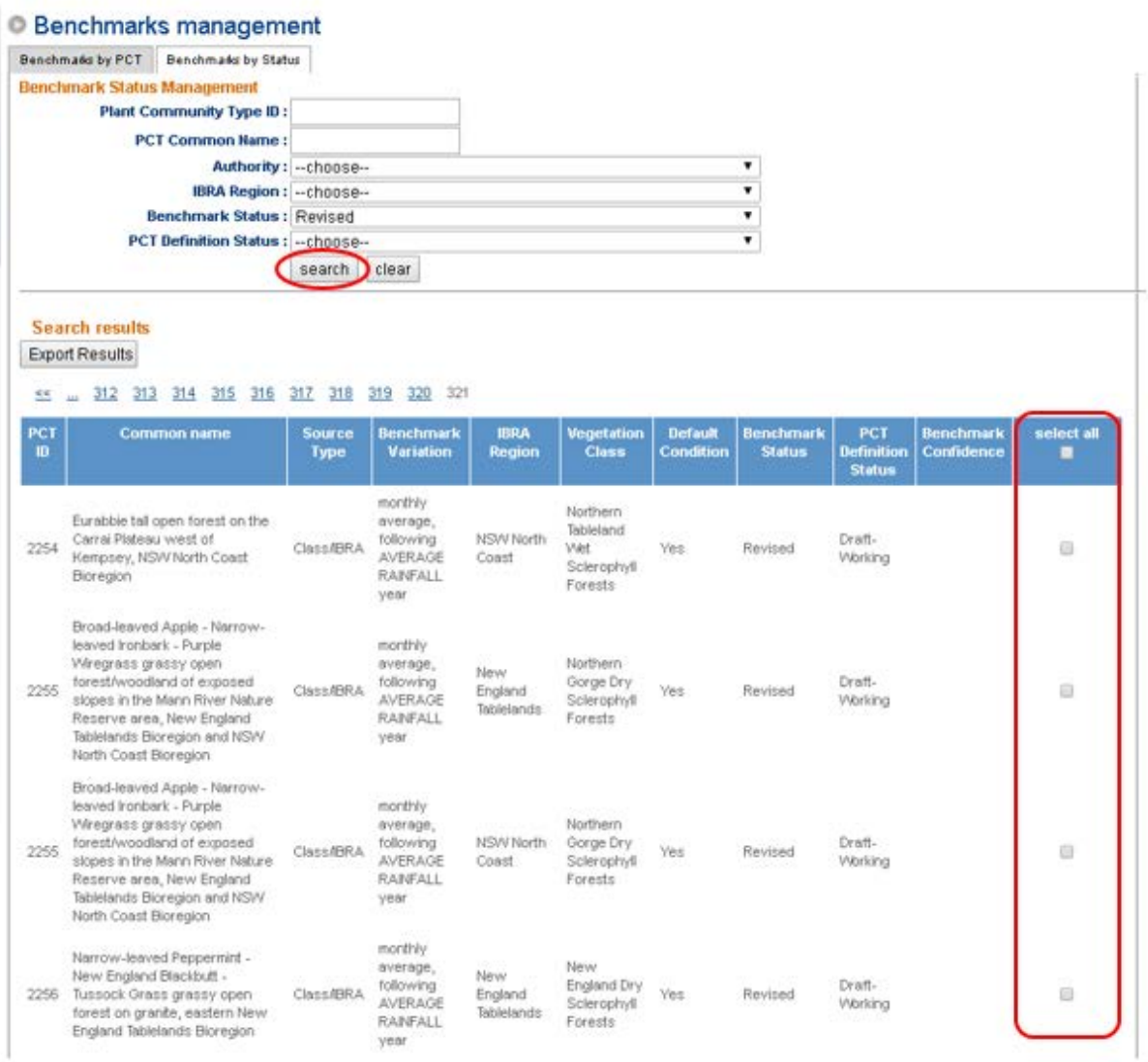


Figure 202 Results of PCT benchmarks that match the search criteria

5. Click on ‘Export Results’ to export data in a .csv format.

To update PCT Benchmark Status data:

1. Click on the ‘Select all’ checkbox or select individual PCT benchmarks in the field on the far right of the search results (see Figure 202).
2. Update the ‘Benchmark Status’ as appropriate (e.g. from ‘Approved’ to ‘Revised’) according to the ‘PCT Benchmark Data Workflow’ (see Appendix 6.6). Select the revised status from the ‘New Benchmark Status’ drop-down menu, then click on ‘Update Status’ (see Figure 203). Each checked PCT benchmark will be updated.

> Note that ‘Benchmark Status’ cannot be altered to ‘Decommissioned’. This change only occurs as a system change when the ‘PCT Definition Status’ is changed to ‘Decommissioned’.

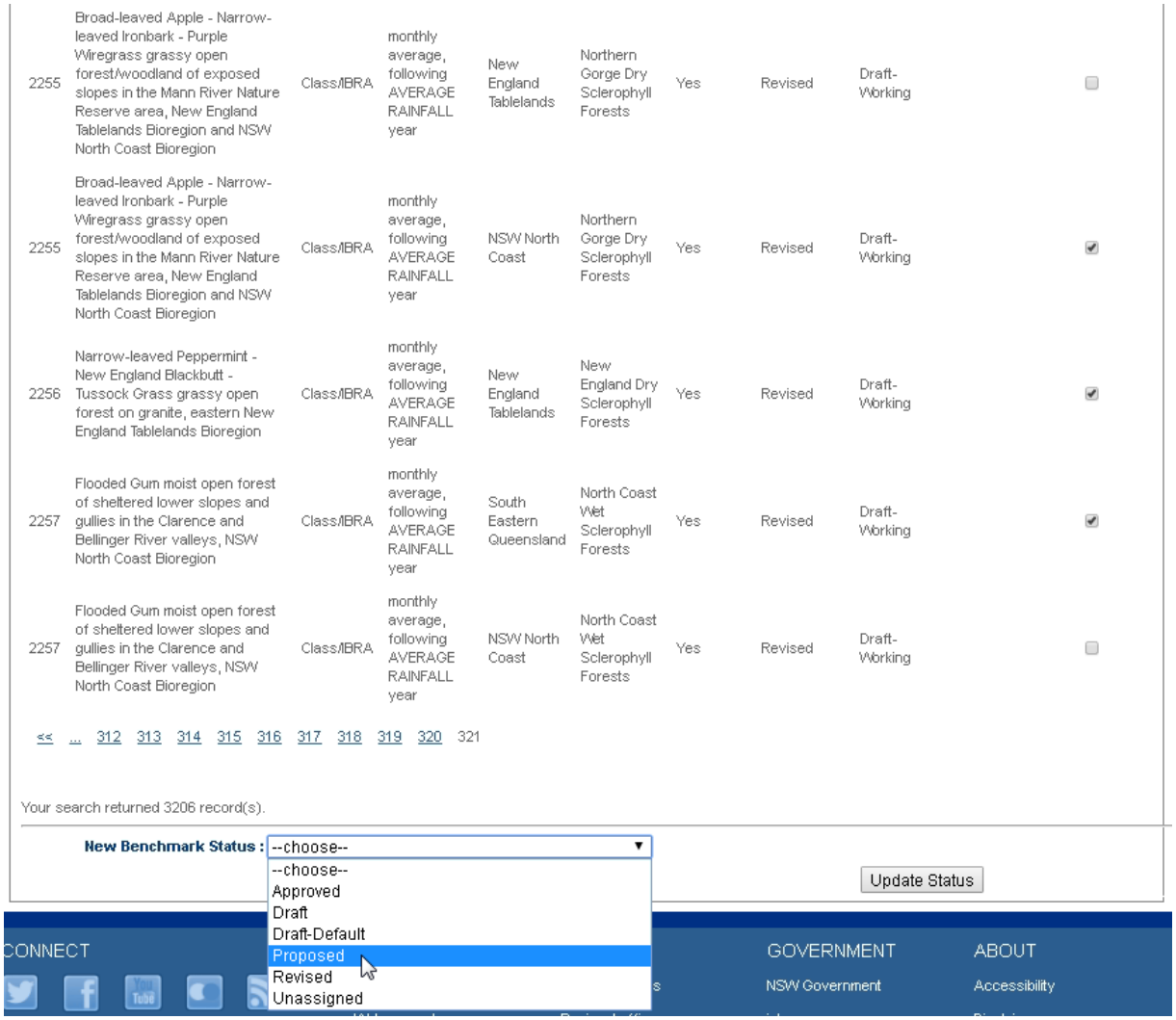


Figure 203 Updating a selection of PCT Benchmark Statuses, in bulk

Refer to Appendices 6.5, A6.6 and A6.7 for process flow diagrams relating to Benchmark data and status management.

11.4 'Threatened Ecological Communities (TEC) Listings' section

The data in this section are editable by Classification Edit users, TEC Relationship Edit users (Accountable Officers) and Administrators.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the 'My work' tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the 'Save' button will be active (not greyed-out). Field-by-field edit rights are determined by a user's role and their PCT assignments.

Note, the Veg Classification database is PCT-centric, thus you will need to make the TEC associations separately for each PCT.

Instructions for Accountable Officers to undertake PCT-TEC associations:

1. Click the link to the Veg Classification Edit application.
2. Log in according to these directions:
   username: dec\ASMS username (e.g. dec\citizenj)
   password: your normal network password
3. Once you're logged in, you will see the BioNet Vegetation Classification homepage. Click on the 'My work' tab. All Approved, Approved-Under Edit and Decommissioned PCTs assigned to you will be listed there.
4. Use the filter or scroll to the PCT you wish to work on, then click on the 'Edit' link.
5. If you do not know which PCT/s to target when seeking to associate a particular TEC, there are several options available to undertake searches and identify candidate PCTs:
   a. Use the Community Identification tool – this is the recommended option as PCTs can be opened from the search results in separate windows and closed again without requiring the search to be re-created (see Section 4)
   b. Use 'Search and Display PCT' by specifying selection criteria (see Section 3)
   c. Create an export or report by specifying search criteria (see Section 5).

Having identified and opened a PCT that is deemed to be wholly or partially equivalent to one or more listed TECs, follow these steps to associate the TEC(s) to the PCT:

1. Click on the 'Threatened Ecological Communities (TEC) Listings' section name to open this section.
2. Check the 'TEC listed' tick-box (see Figure 204). Click on the 'Edit' button beside the 'TEC list' field to open the 'Threatened Ecological Communities (TEC)' window.

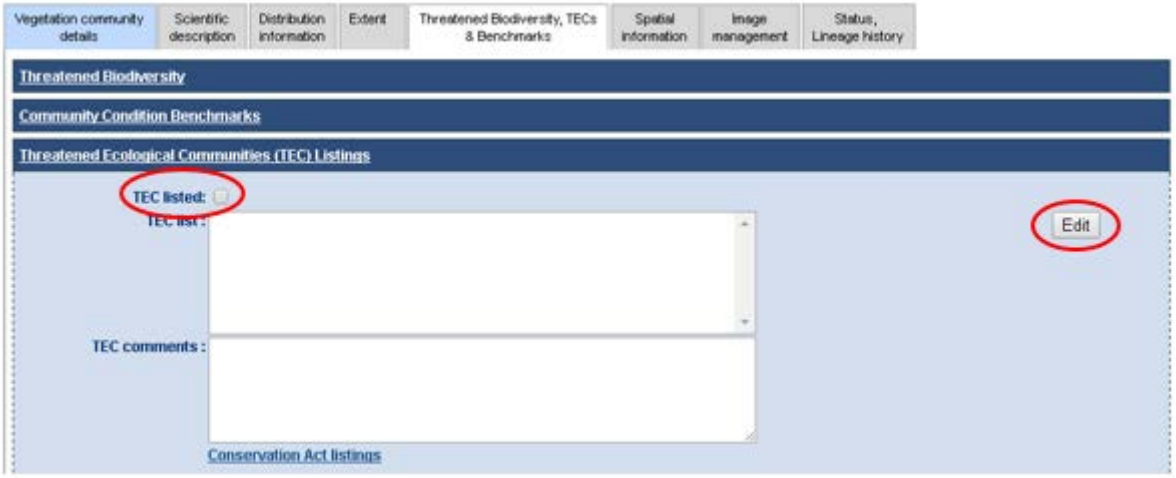


Figure 204 Check the 'TEC listed' box and click on 'Edit' to open the TEC edit window

3. Select the 'TEC Act' - options are 'TSC Act' and 'EPBC Act' (see Figure 205).
4. The 'Conservation Act listings' hyperlink provides additional information about threatened biodiversity. Close the window when you have finished using the page.

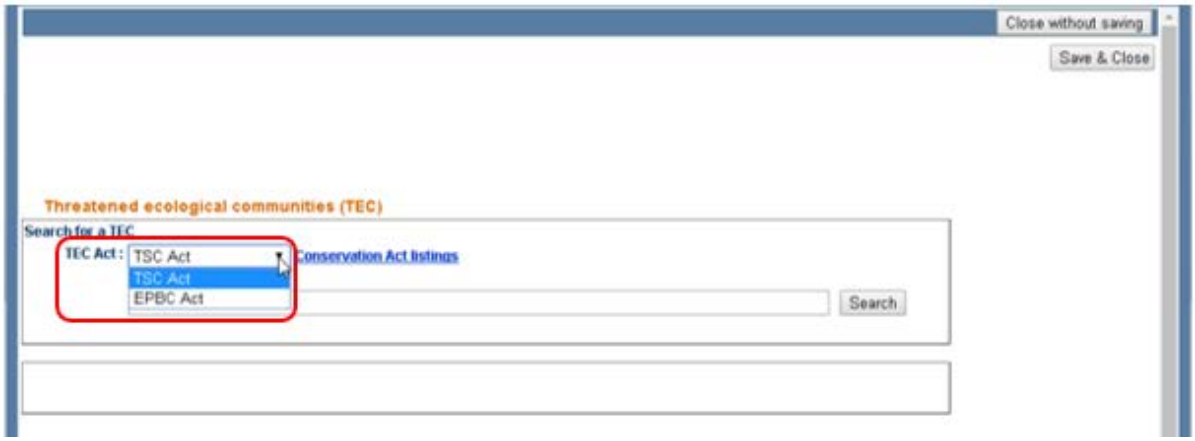


Figure 205 Choosing the appropriate TEC Act

EPBC Act TEC names in BioNet applications

BioNet is a NSW-orientated system. Thus, any EPBC TECs that are similar to a TSC TEC are actually listed under the NSW TSC TEC name.

For example:

The EPBC TEC '*The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin'* is actually listed in the BioNet applications and data collections under the equivalent NSW TSC Act TEC, i.e.:

'Artesian Springs Ecological Community in the Great Artesian Basin' (EPBC Act, E)' (see Figure 206).

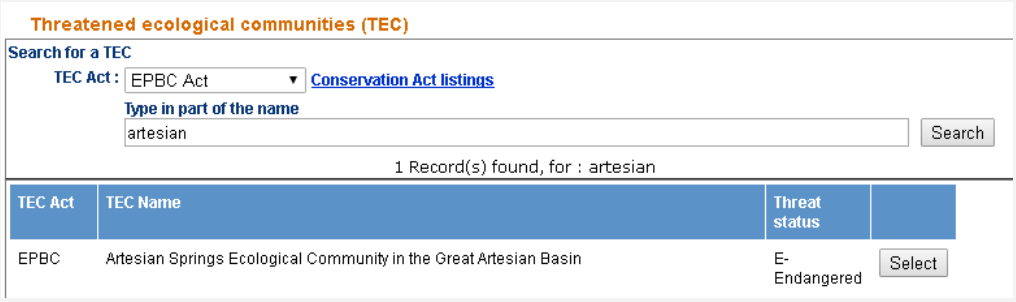


Figure 206 EPBC Act TECs are listed under the corresponding TSC Act TEC name in the BioNet applications

If no corresponding TSC Act TEC exists, the EPBC Act TEC is listed under its correct EPBC Act TEC name. For example, 'Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory' (see Figure 207).

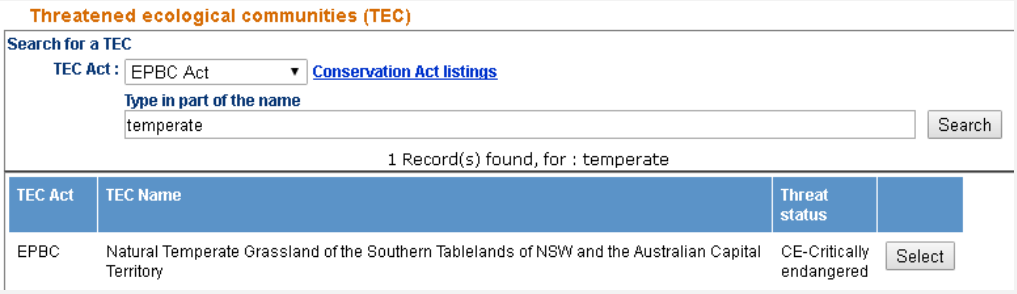


Figure 207 EPBC Act TECs with no equivalent TSC Act TEC are listed under their correct EPBC Act TEC name

5. Type in part of the TEC name and click on the 'Search' button to bring up a list of TECs containing this term (see Figure 208).

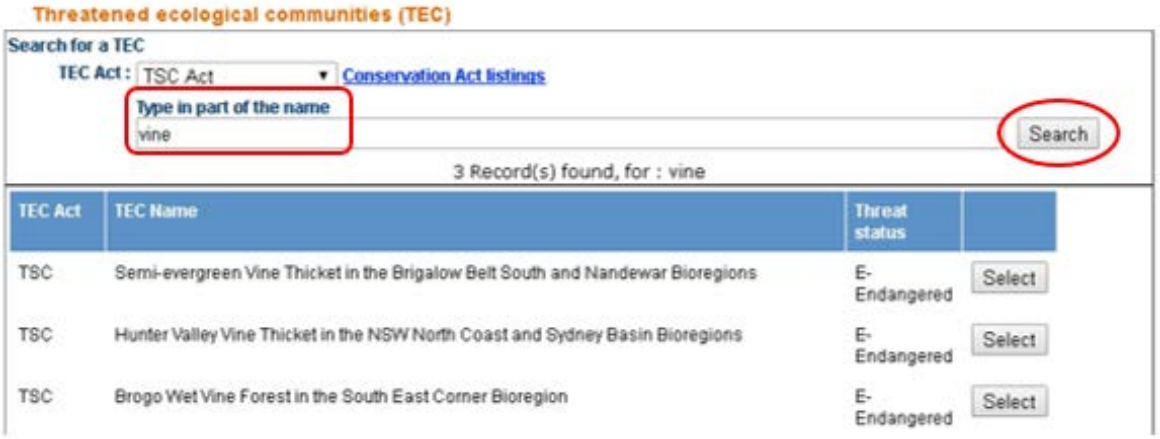


Figure 208 Searching for the required TEC

6. Choose the appropriate 'TEC Fit status' (options are 'Equivalent' or 'Part') and 'Degree of TEC fit' (7 options to choose from) from the drop-down menu items (see Figure 209). Refer to the definitions and diagrams in the box below.

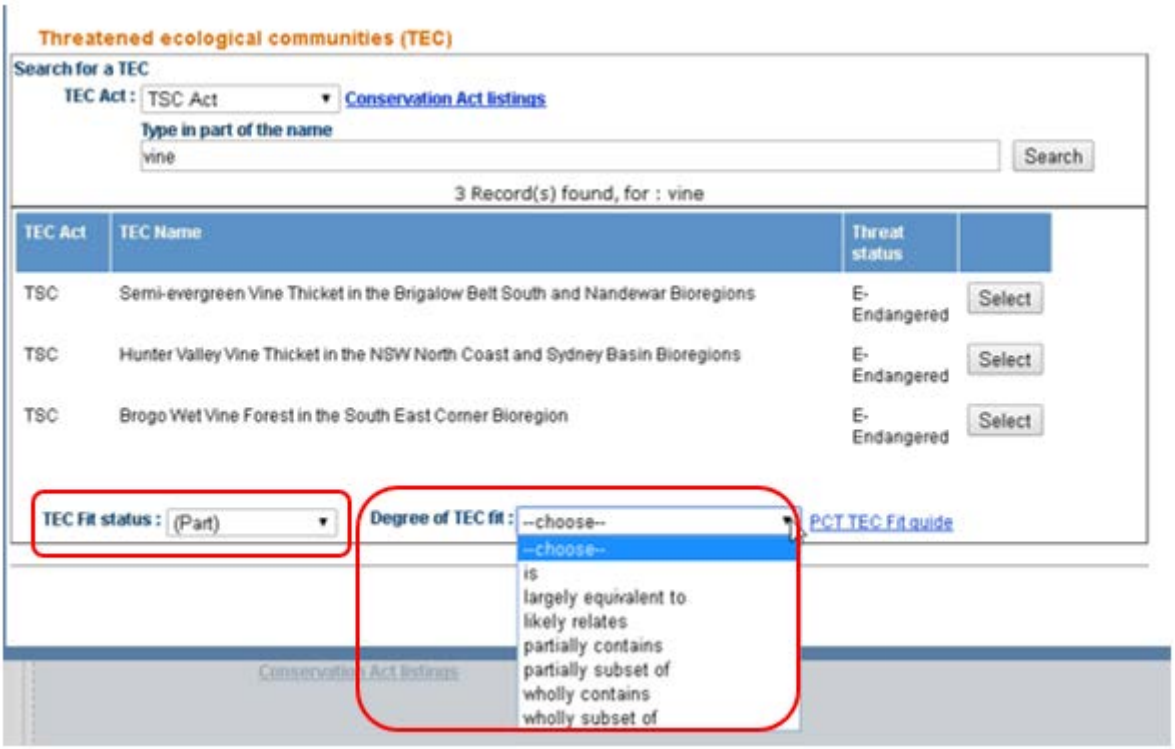


Figure 209 Selecting the 'TEC Fit status' and 'Degree of TEC fit'

Degree of TEC Fit

The following terms are used to describe the relationship between the Threatened Ecological Community (TEC) as defined in the relevant legislation compared to the plant community type definition. They are depicted visually below (see Figure 210).

Term definitions

is: the PCT is the listed community by definition. The term 'is' should only be used where the TEC is based on the plant community type definition. This should generally be the case where the plant community type as listed in the Vegetation Classification application was nominated and accepted as a TEC with no significant alteration to the definition of the PCT.

largely equivalent to: the PCT is represented by the TEC to a large degree

wholly subset of: the PCT is part of the TEC and is defined as a finer scale community. The PCT does not occur other than within the TEC. The TEC may occur in some areas where the community does not represent the PCT.

wholly contains: the PCT completely includes the TEC and is defined as a broader community than the TEC. The TEC never occurs except as part of this community but the PCT may occur in some areas that does not represent the TEC.

partially subset of: the PCT is to some greater or lesser degree a part of the TEC and is defined as a finer scale community. The PCT and the TEC may occur in some areas independent of each other.

partially contains: the PCT to some greater or lesser degree includes the TEC and is defined as a broader community than the TEC. The PCT and the TEC may occur in some areas independent of each other.

likely relates: the PCT and the TEC are likely to be related in some way, but the exact relationship is unknown.

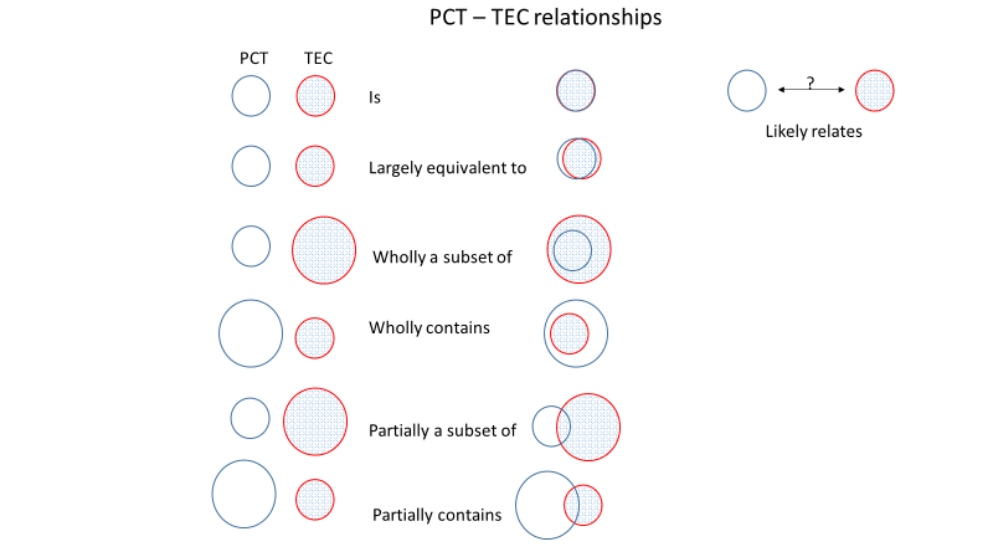


Figure 210 Depiction of PCT-TEC 'Degree of Fit' categories

7. Only after the appropriate 'TEC Fit status' and 'Degree of TEC fit' fields are populated should you click on the 'Select' button for the required TEC (see Figure 211). The selected TEC will be added to the 'Assigned TEC's' table that appears below.

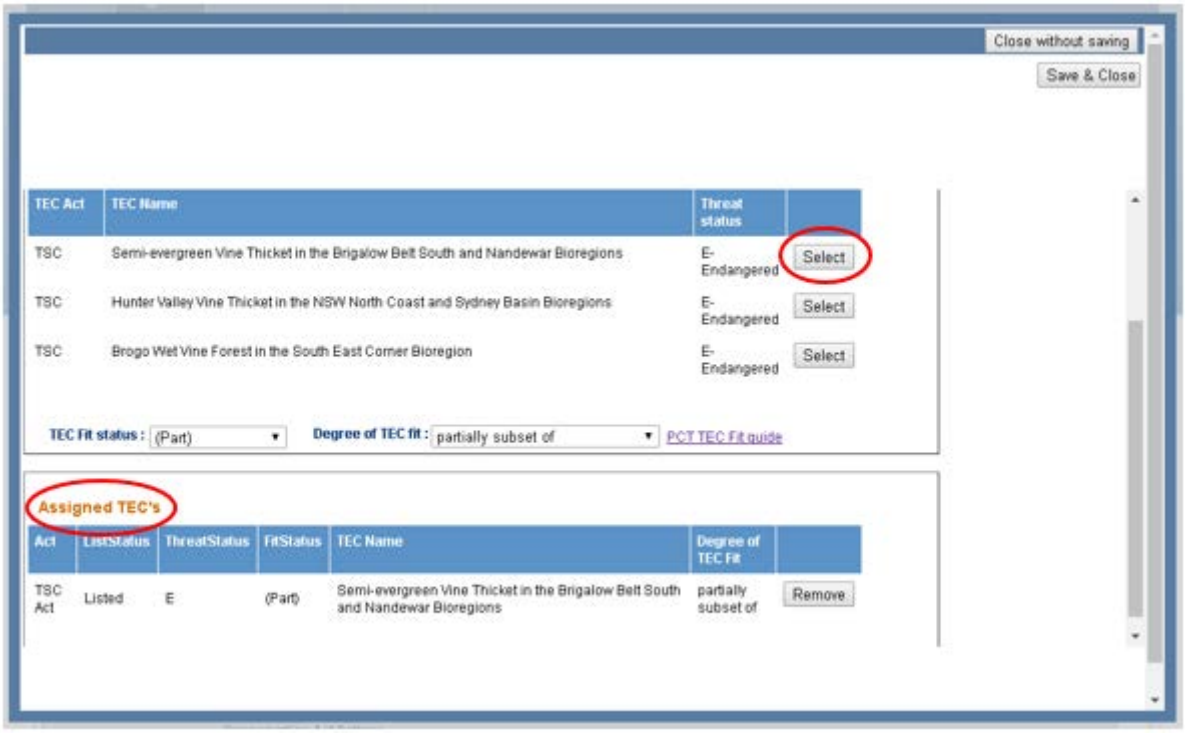


Figure 211 Click 'Select' to add the TEC to the 'Assigned TEC's' list below

8. Repeat for each TEC under each Act as relevant.
9. To remove a TEC from the list of 'Assigned TEC's, click 'Remove' against the TEC to be removed (see Figure 212).

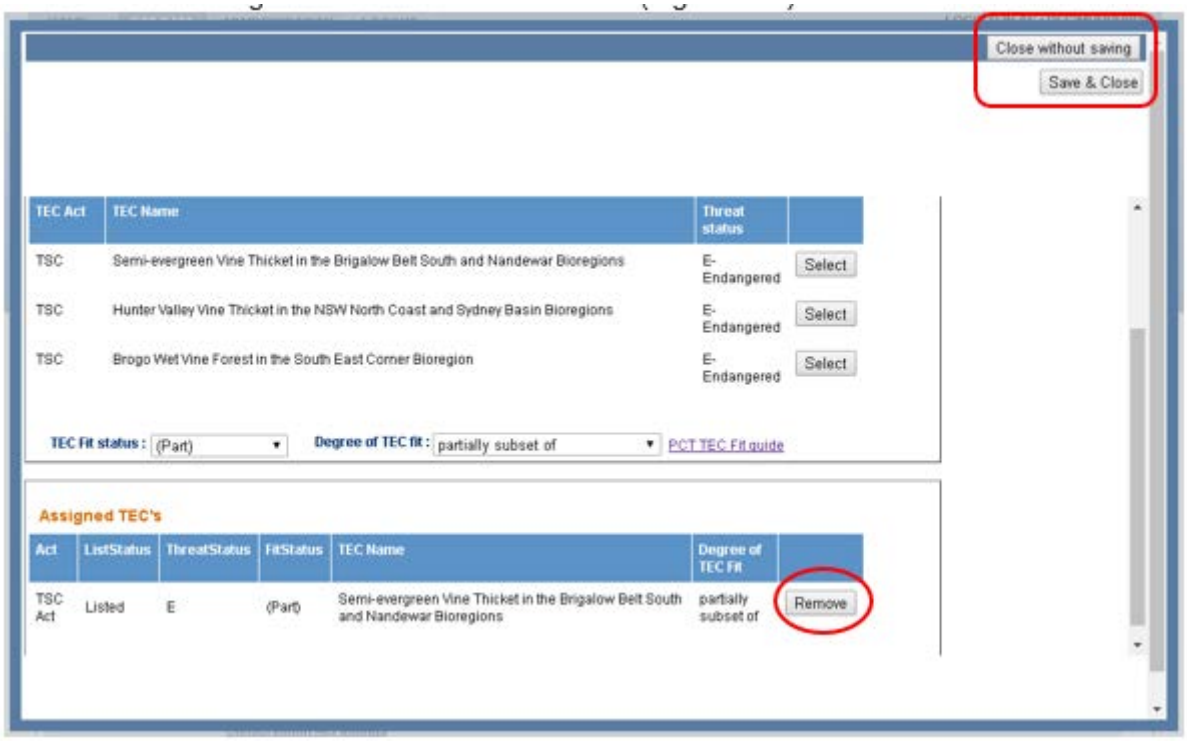


Figure 212 Removing an Assigned TEC

10. To edit the ‘TEC Fit status’ or ‘Degree of TEC fit’ for an EEC that has already been associated with a PCT, a new association will have to be made with the updated information and the existing association removed. To ensure you select the same EEC, it is advisable to add the updated association prior to removing the out-of-date association.
11. Click ‘Save & Close’ to save changes (see Figure 212). Click ‘Close without saving’ to close the pop-up window without saving any changes if you have made a mistake – in which case start the association process again!
12. Use the ‘TEC comments’ text box field to record any details regarding the association between the PCT and any TECs, including specific areas of known equivalence, equivalence to nominated TECs, or to record a correct EPBC Act TEC name (for example in Figure 213). PCT-TEC source information can also be recorded.

Figure 213 Using the ‘TEC comments’ text box to record important notes, including correct EPBC Act TEC names

Note: It is important to record when the PCT was last reviewed with respect to possible TEC associations. This is particularly important when the review has concluded that there are no PCT-TEC associations. This is because the timing of the review will not be captured by the application unless a comment is added. Record this outcome using the following dated statement format (for an example see Figure 214):

yyyymmdd: There are currently no TECs associated with this PCT.

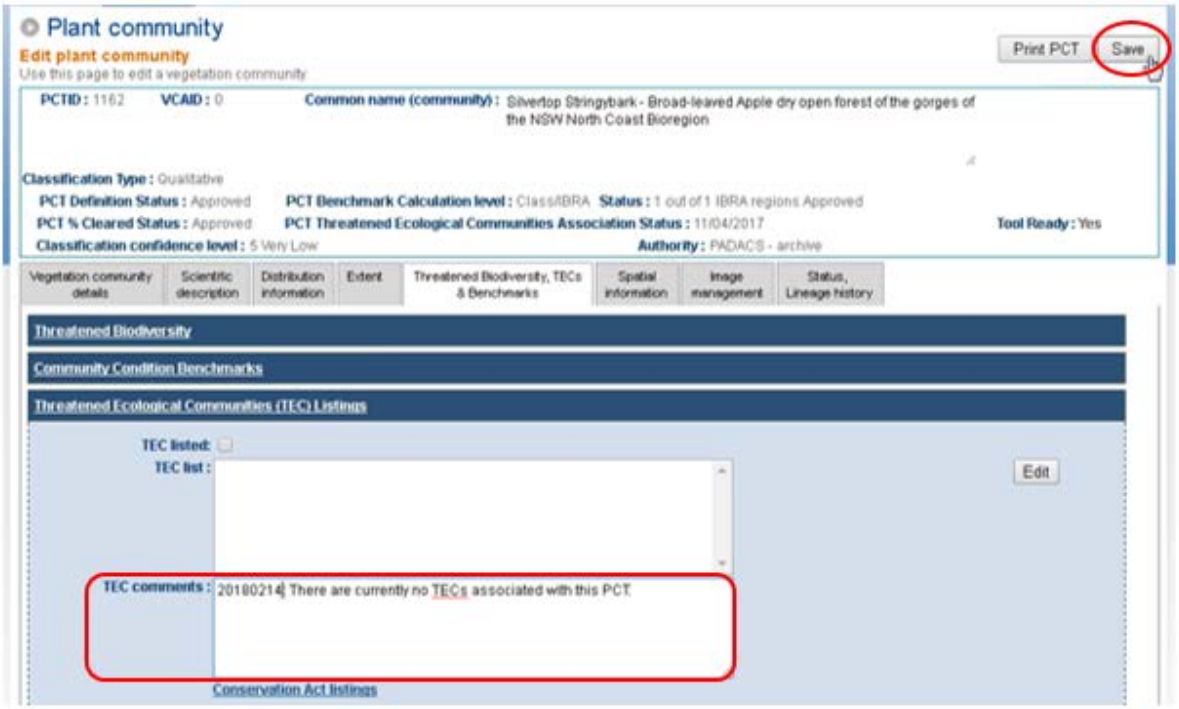


Figure 214 Record any comments regarding PCT-TEC associations, including when there are no associated TECs

> **Note,** as a TEC Relationship Edit user you are also able to contribute to two additional fields in the Vegetation Classification application. These are:
>
> 1. 'Variation and natural disturbance' ('Scientific description' tab > 'Descriptive attributes' section; see Section 8.6)
>
> 2. 'Fire regime' (same location).
>
> Please review the data in these fields and contribute verified information where possible (include reference to primary source).

13. Click on 'Save' to ensure all PCT edits are saved (see Figure 214).
14. Move on to the next PCT.

12. ‘Spatial information’ tab

The data in this tab are editable by Classification Edit Users and Administrators.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Functionality to upload and import PCT Replicate data is accessible via the ‘Administration - System utilities – Upload/Import PCT Data Management Routines’ drop-down menu item.

When you click the ‘Spatial information’ tab the ‘Mapping’ section will open by default.

12.1 ‘Mapping’ section

The ‘Pre-European mapped or modelled’ and ‘Current extent mapped or modelled’ fields are selected from drop-down menus. Edit the data by selecting the applicable options from the drop-down lists (see Figure 215).

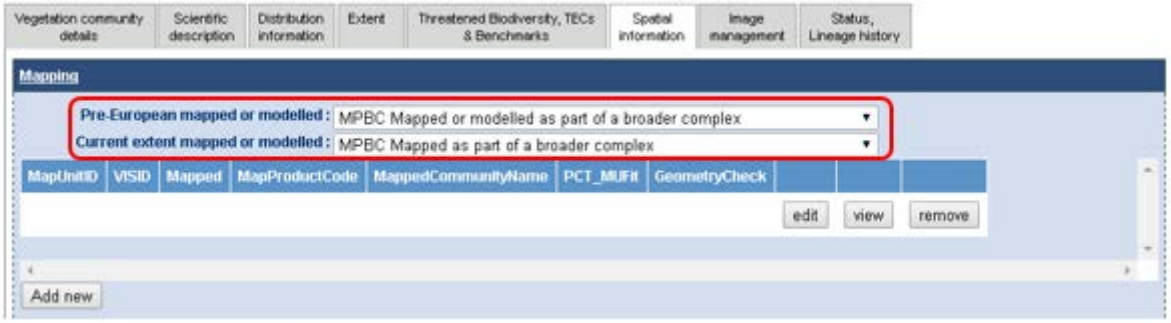


Figure 215 Choose from the options in the drop-down lists

To add data about a new map product:

1. Click on ‘Add new’ or ‘edit’ (see Figure 216).

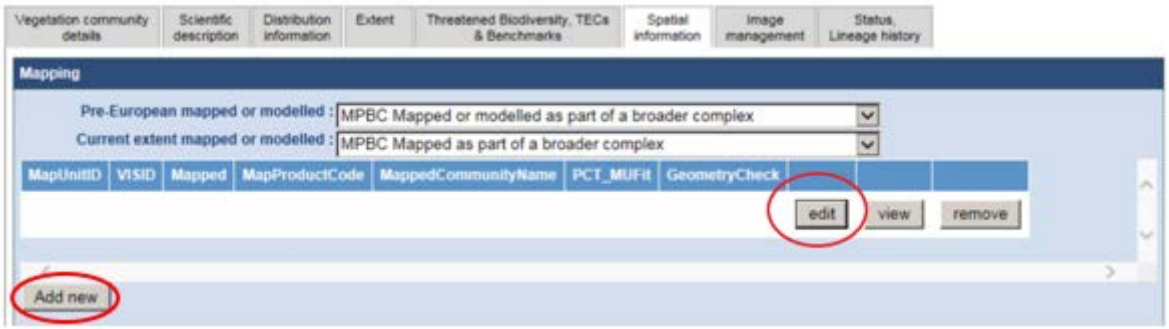


Figure 216 Click on ‘Add new’ or ‘edit’ to open the data entry fields

2. The ‘Mapping details’ data entry fields will open below (see Figure 217).

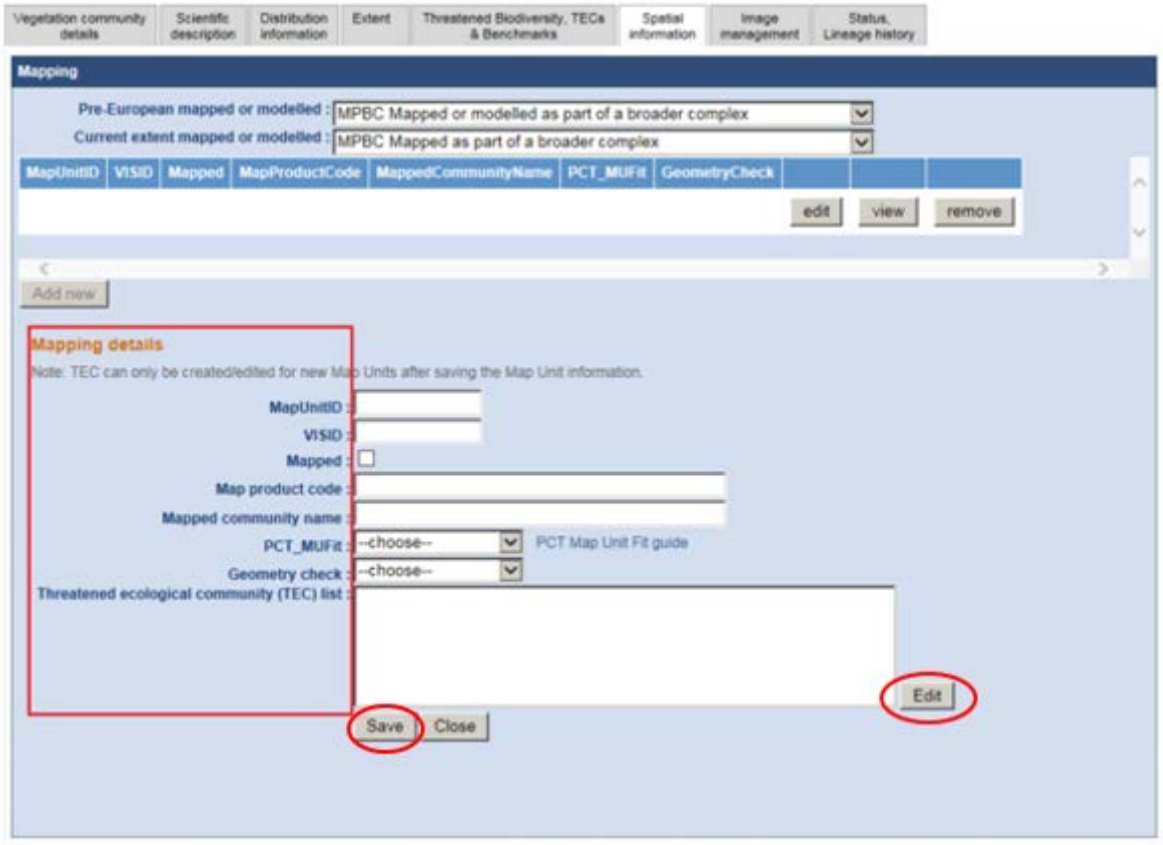


Figure 217 'Mapping details' data entry fields

3. The 'MapUnitID', 'VISID', 'Map product code' and 'Mapped community name' fields are all free entry text fields.
4. The 'Mapped field' is a check box and is edited by checking and unchecking.
5. The 'PCT_MUFit 'and 'Geometry check' fields are drop-down menu selections. Edit by selecting from the relevant lists. Click on the 'PCT Map Unit Fit guide' hyperlink for definitions of relevant terms.
6. The 'Threatened ecological community (TEC) list' field is modified via the TECs edit window (see Figure 218). However, the map unit to which the TEC relates must have been created and saved for this edit function to work. Otherwise, the 'Edit' button for the 'TEC list' will be greyed-out. To edit this field, click the 'Save' button at the bottom to save the map unit data. The 'Edit' button next to the 'TEC list' field should then become active. Click on the 'Edit button.

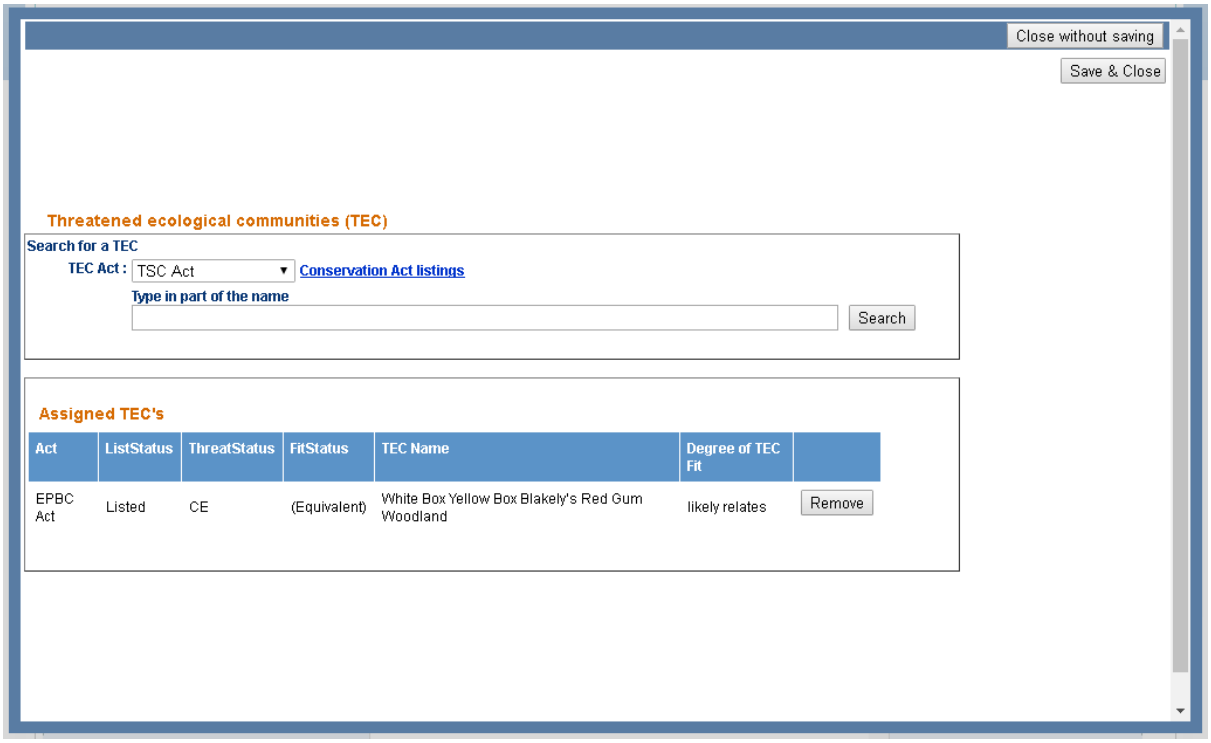


Figure 218 The TECs edit window

7. Select the ‘TEC Act’ - options are ‘TSC Act’ and ‘EPBC Act’ (see Figure 219).
8. The ‘Conservation Act listings’ hyperlink leads to the OEH threatened species page, which will open in a separate window. Close the window when you have finished using the page.

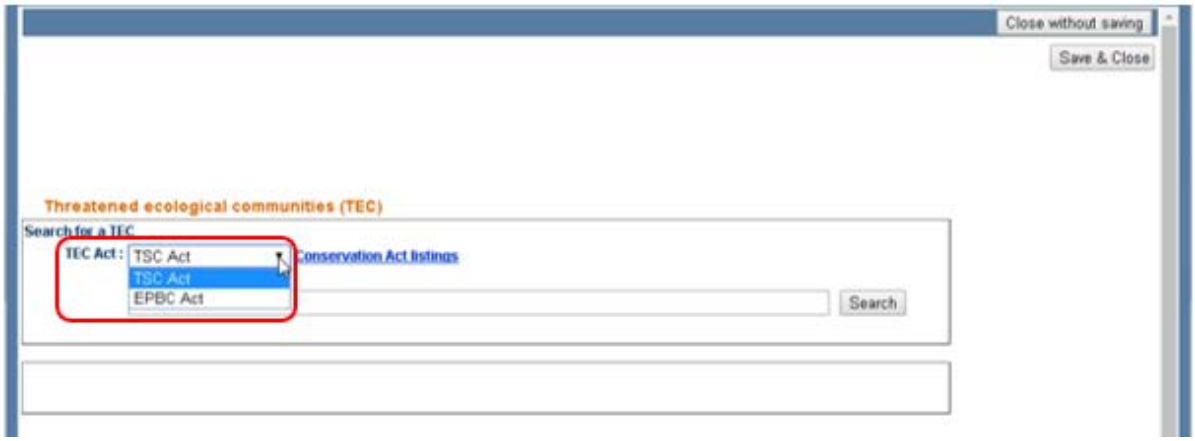


Figure 219 Choosing the appropriate TEC Act

> **Note:** BioNet is a NSW-orientated system. Refer to the ‘EPBC Act TEC names in BioNet applications’ box in Section 11.4.

9. Type at least three letters of the TEC you want to assign into the ‘Type in part of the name’ field and click on the ‘Search’ button to bring up a list of TECs containing this string of characters (see Figure 220).

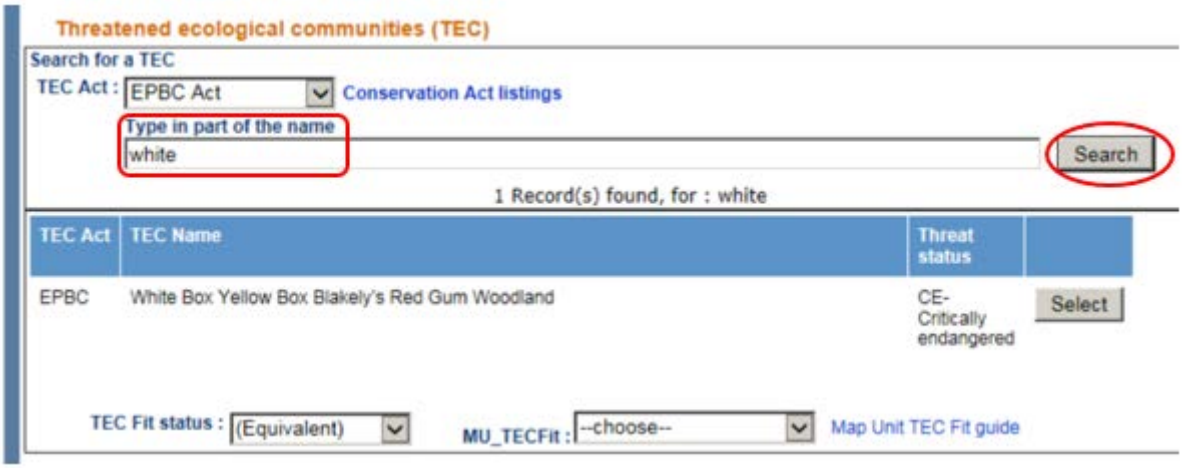


Figure 220 Searching for the required TEC

10. Choose the appropriate 'TEC Fit status' (options are 'Equivalent' or 'Part') and 'MU_TEC fit' (7 options to choose from) from the drop-down menu items (see Figure 221).

> **Note:** Refer to the 'Degree of TEC Fit' box in Section 11.4 for definitions and diagrams depicting the seven TEC Fit terms. These terms are used to describe the relationship between the Threatened Ecological Community (TEC) as defined in the relevant legislation compared to the plant community type definition.

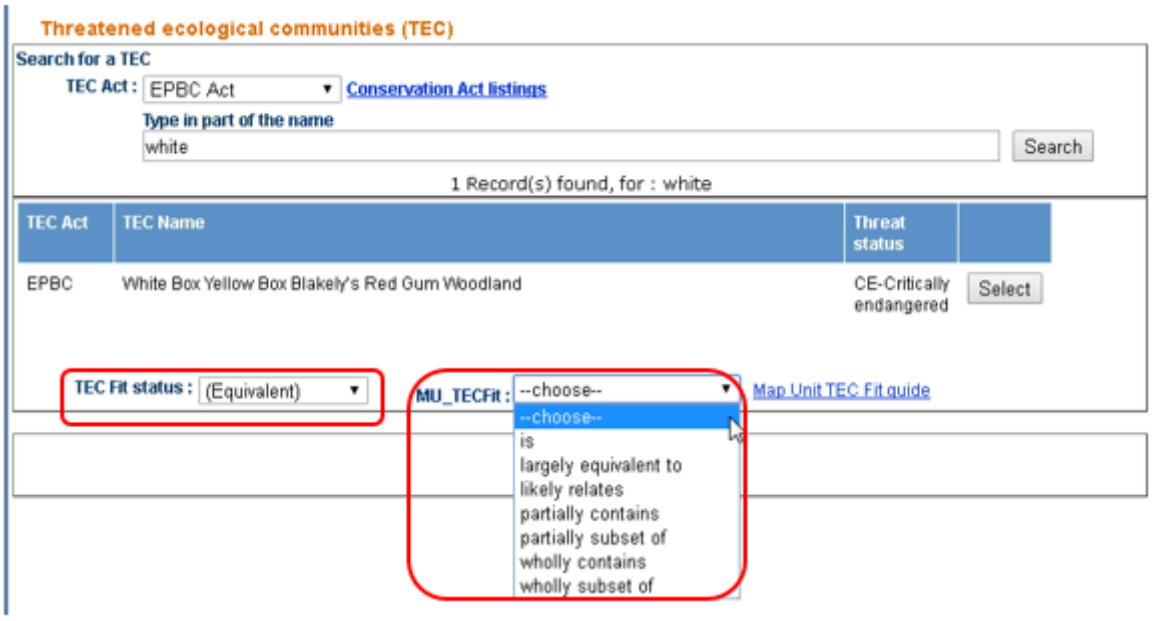


Figure 221 Selecting the 'TEC Fit status' and 'MU_TEC fit'

11. Only after the appropriate 'TEC Fit status' and 'MU_TEC fit' fields are populated should you click on the 'Select' button for the required TEC (see Figure 222). The selected TEC will be added to the 'Assigned TEC's' table that appears below. Note, you may need to scroll down the TEC list area to see the 'Assigned TECs'.

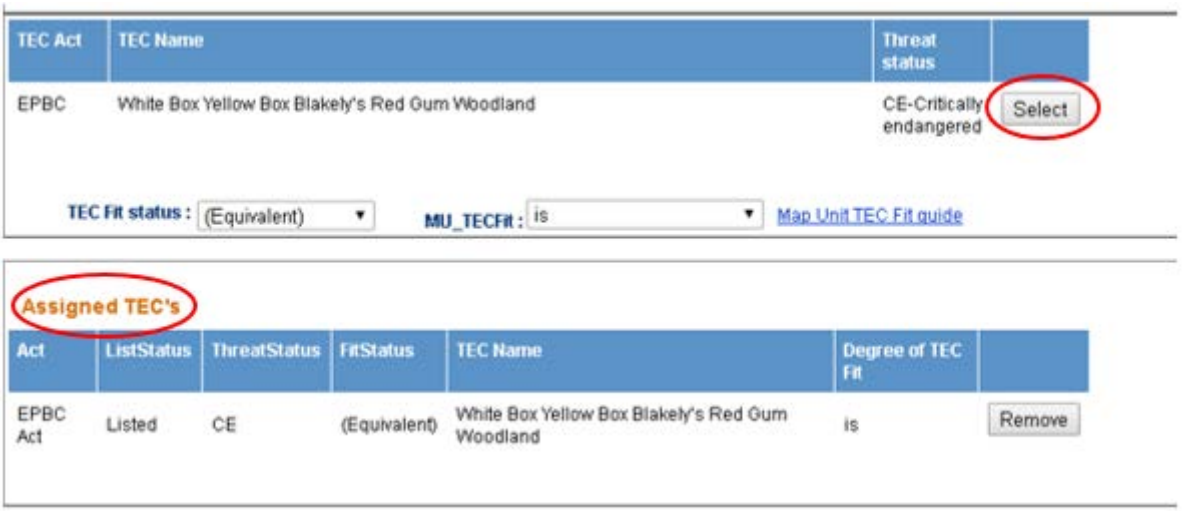


Figure 222 Click 'Select' to add the TEC to the 'Assigned TEC's' list below

12. To remove a TEC from the list of 'Assigned TEC's', click 'Remove' against the TEC to be removed (see Figure 223).

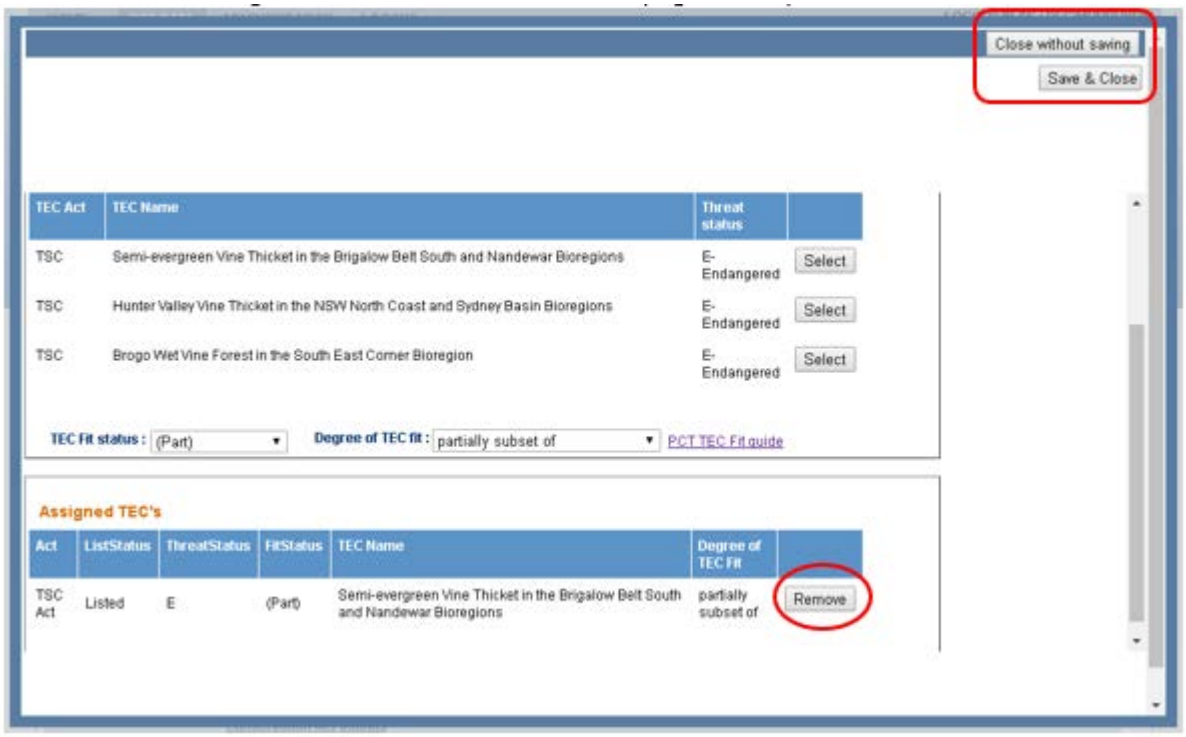


Figure 223 Removing an Assigned TEC

13. When you have finished making your changes, click 'Save & Close' to save and return to the 'Mapping' section; or click 'Close without saving' to close the edit window without saving (see Figure 223).
14. When you have finished making all your changes in the 'Mapping' section, click 'Save' to save your changes (see Figure 224). The 'Close' button will then close the 'Mapping details' edit area.

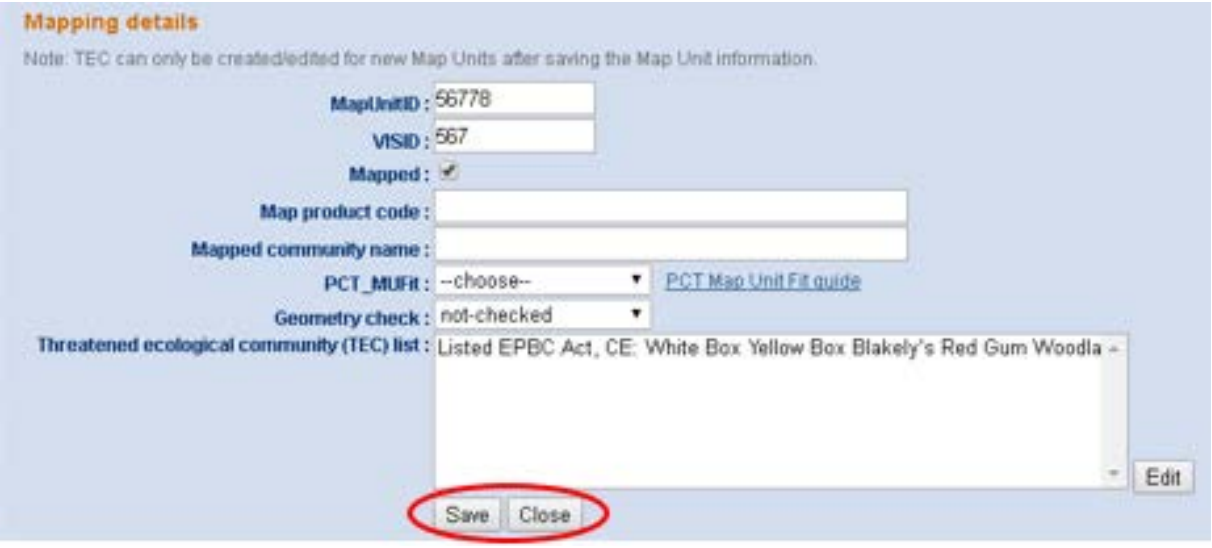


Figure 224 Click 'Save' and then 'Close'

12.2 'Plot data' section

The data in this section are editable by Classification Edit Users and Administrators.

Functionality to upload and import PCT Replicate data is accessible via the 'Administration – System utilities – Upload/Import PCT Data Management Routines' drop-down menu item.

Click the 'Plot data' section heading to open the edit page (see Figure 225).

Figure 225 'Plot data' section

> **Note:** the 'Plot data' section is currently not populated with any data for any PCT because of the recent change from plot-level to replicate-level data. Data population will commence for the East Coast Classification currently under development in 2018-2019.

1. 'Adequacy of plot sampling' is a drop-down menu selection. Edit by selecting from the options. Click on the 'Adequacy of plot sampling guide' hyperlink for definitions of relevant terms (see Figure 225).
2. 'Number of replicates' is greyed-out as it is a read-only field populated from the plot data table below.

The remaining three fields ('SurveyName', 'SiteNo' and 'ReplicateNo') field can be populated with data directly from the BioNet Systematic Flora Surveys data collection via the

'Upload/Import PCT Replicate data for PCT project' functionality (see Section 12.3). For Quantitative PCTs, these data will (in due course) cease to be editable in the BioNet Vegetation Classification application.

To manually enter new or edit existing data in these fields:

1. For new data - click on 'Add new' or 'edit' beside the blank row (see Figure 226).
2. For existing data – click on the 'edit' button beside the data to be edited (Figure 226).

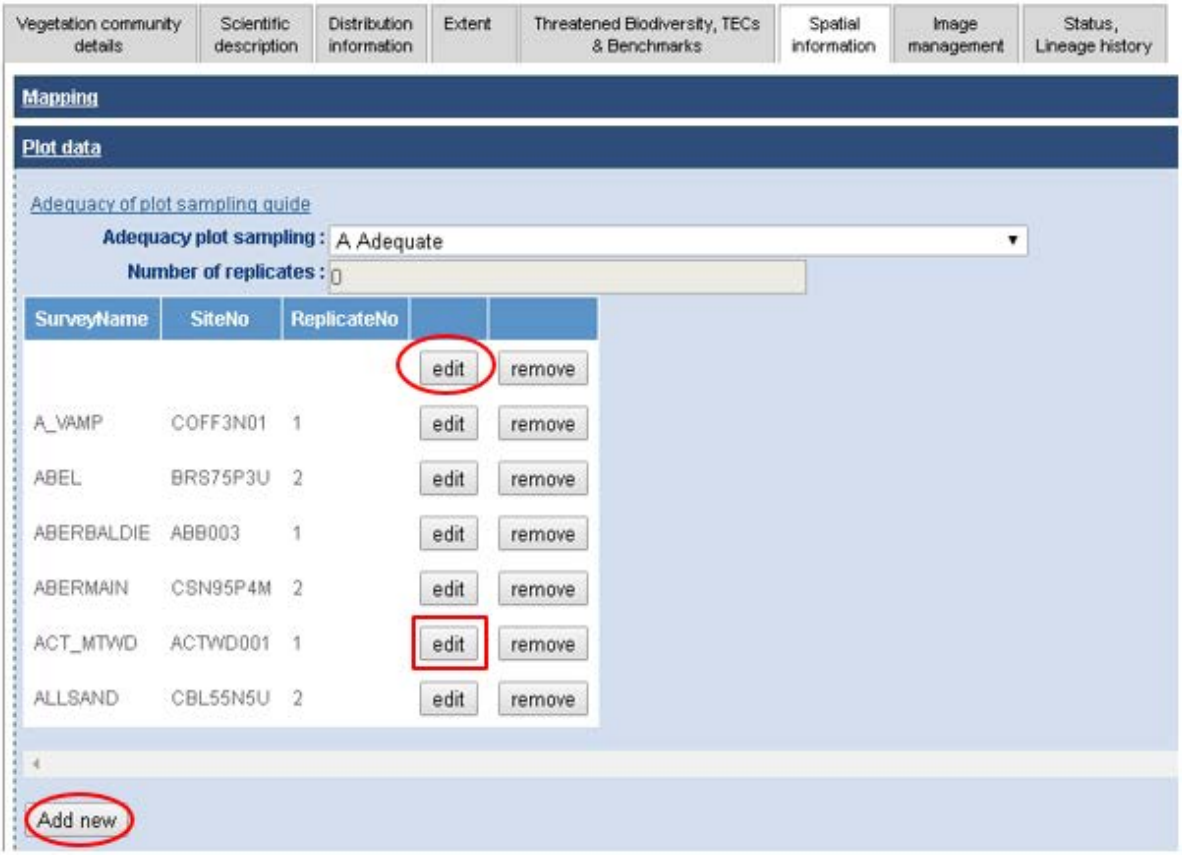


Figure 226 Click on 'Add new' or 'edit' to open the data entry fields

3. The 'Plot data details' data entry fields will open below (Figure 227). They will be blank for new entries and populated for existing entries.

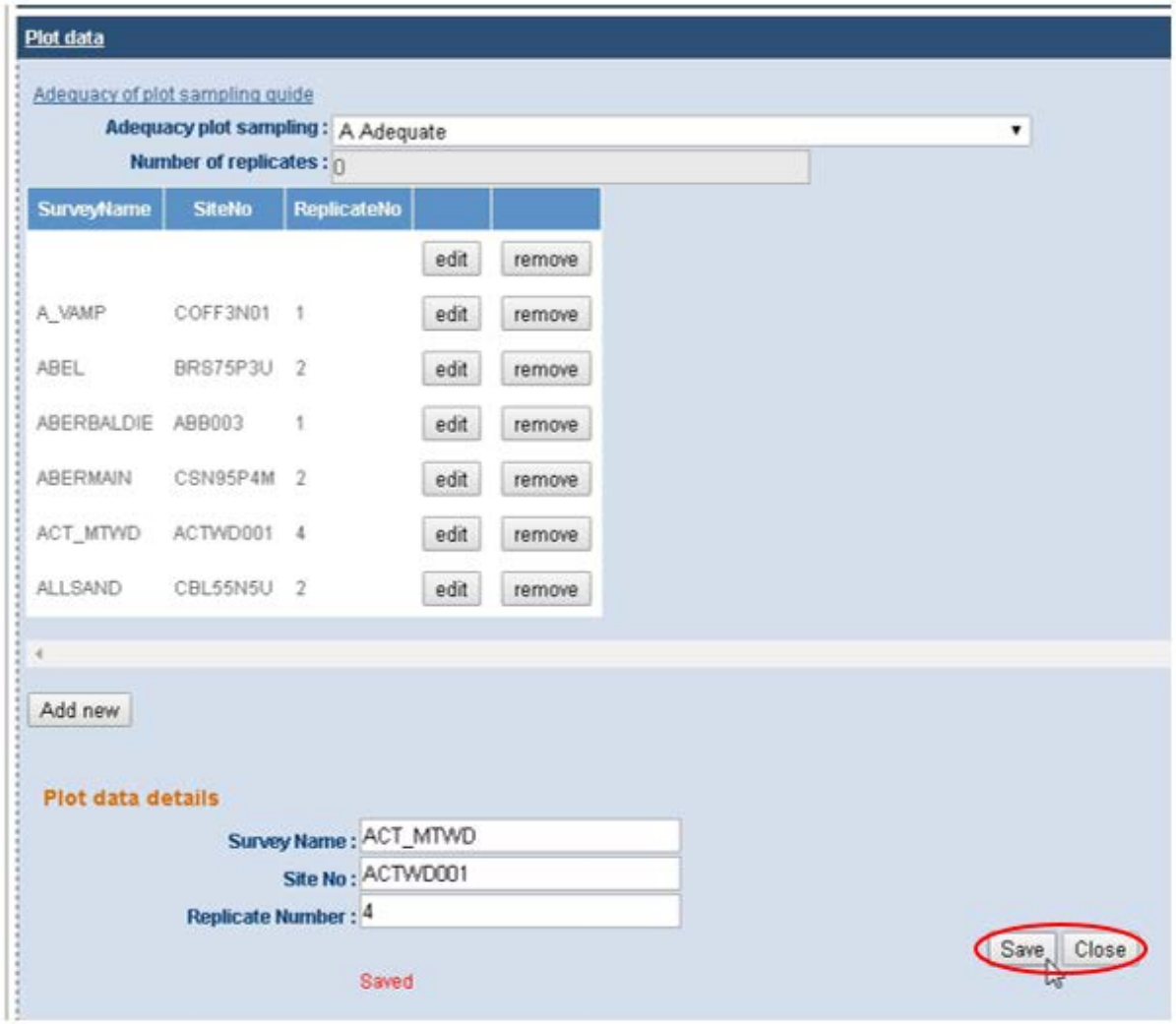


Figure 227 'Plot data details' data entry fields

4. The 'Survey Name' and 'Site No' fields are text fields.
5. 'Replicate Number' requires integer data.
6. When you have finished adding or editing data in the 'Plot data details' edit area, click 'Save' to save your changes.
7. A 'Saved' message will appear, the data will populate into the table above and the 'Number of replicates' count will increase by 1 if a new replicate has been added (Note, the 'Number of replicates' tally is currently not working).
8. The 'Close' button will then close the 'Plot data details' edit area.

To remove an existing replicate from the table:

1. Click on the 'remove' button beside that replicate (Figure 227).
2. It will populate into the 'Plot data details' fields below.
3. Manually delete the data from the three edit fields and click on 'Save'.

12.3 'Administration' – 'Upload/Import PCT Replicate data for PCT project' menu

PCT Replicate data are maintained by Classification Edit Users and Administrators.

Functionality to bulk upload and import replicate data is accessed via the following pathway:

1. Under the ‘Administration drop-down menu item on the top navigation bar, click on ‘System utilities’ (see Figure 228).

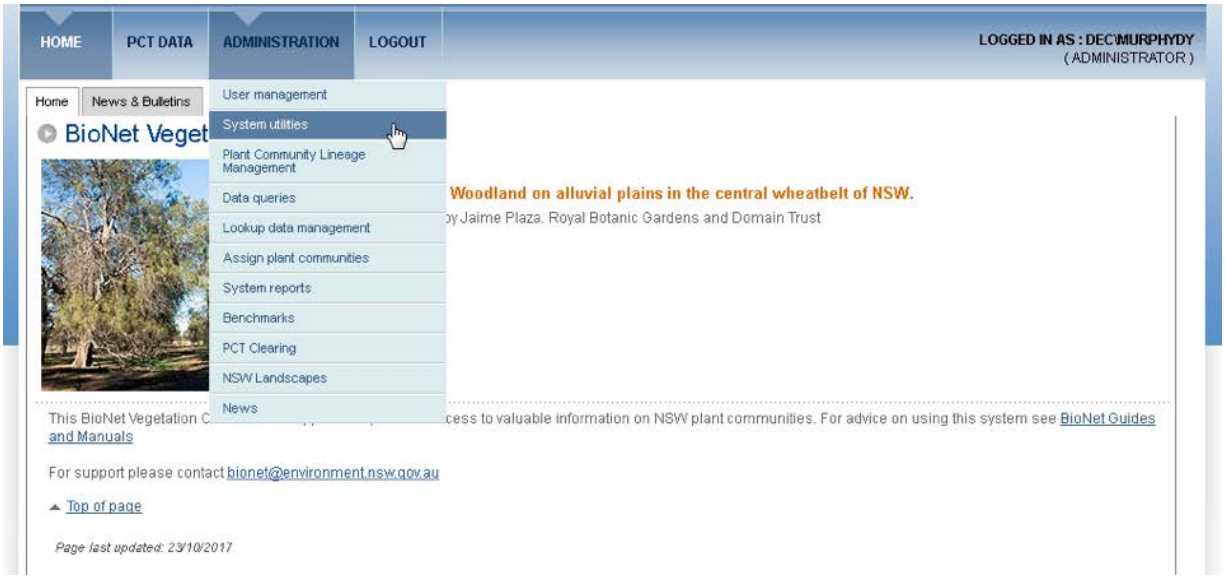


Figure 228 Use the ‘Administration – System utilities’ menu to access data upload/import functionality

2. This opens the ‘Data Administration Tools’ menu (see Figure 229).
3. Click on the ‘+’ symbol beside the ‘Upload/Import PCT Data Management Routines’ item
4. Click on the ‘+’ symbol beside the ‘4. Upload/Import PCT Replicate data for PCT project’ item.
5. Click on ‘4a. Upload data’.

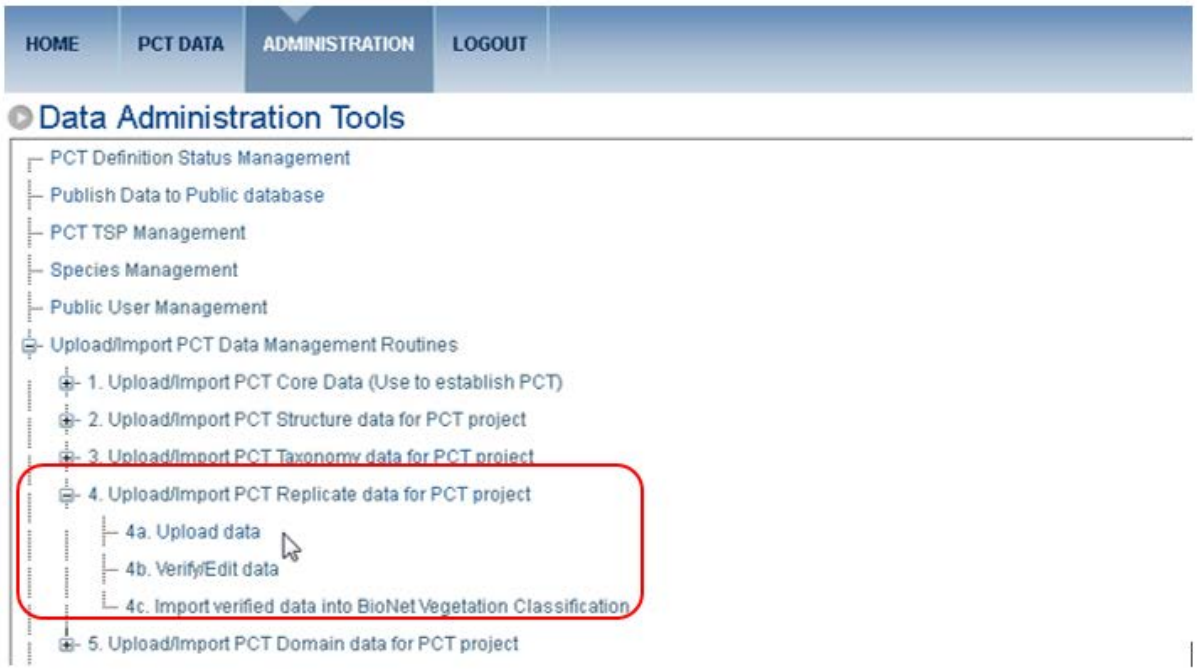


Figure 229 Accessing the replicate data upload/import functionality

6. The ‘PCT Replicate data’ upload page will open (see Figure 230).

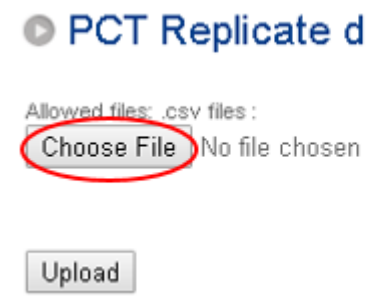


Figure 230 Browse to find the correctly formatted csv file for upload

7. Click on the 'Choose File'/'Browse' button to locate the csv file to be uploaded (see Figure 230). The csv file must be in the correct format as per the 'PCT Replicate Data Upload Import' Excel template (summarised in Appendix A5.4).
8. Select the csv file and click on 'Open' to upload the file (see Figure 231).

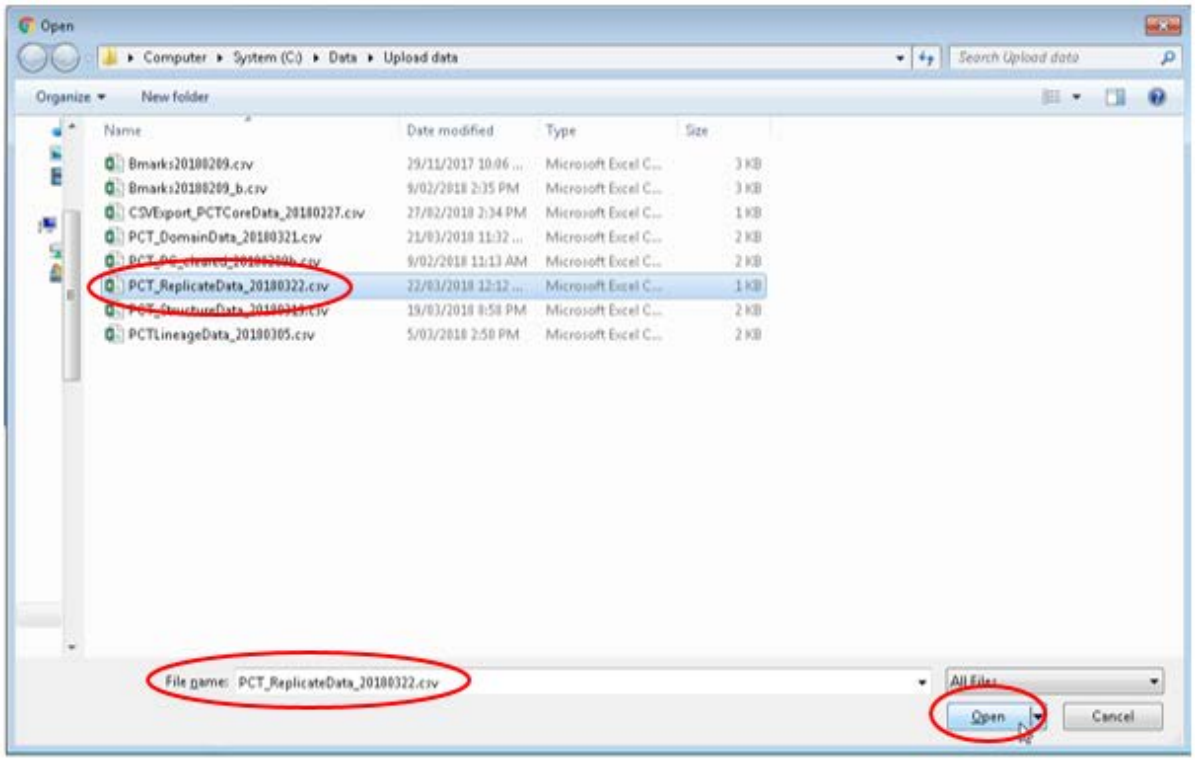


Figure 231 Select and upload the correctly formatted csv file

9. The csv file name will be listed. Click on the 'Upload data'/'Upload' button (see Figure 232).

Figure 232 Click to upload the PCT replicate data

10. The upload will be processed, and results given (see Figure 233).

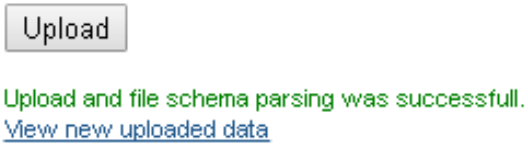


Figure 233 Result for correctly uploaded data

11. Any errors will need to be corrected, saved and re-uploaded.
12. Click on the 'View new uploaded data' hyperlink (see Figure 233) to select the correct uploaded data for checking.
13. Alternatively, click on 'Administration' tab on the top navigation bar > 'System utilities' > 'Upload/Import PCT Data Management Routines' > '4. Upload/Import PCT Replicate data for PCT project' > '4b. Verify/Edit data' (Figure 229) and navigate to the last page to select the uploaded data for checking.
14. The most recently uploaded file will be the last file on the last page.
15. Click on the 'View data' link (see Figure 234). Alternatively, click on 'Delete' to remove the uploaded data.

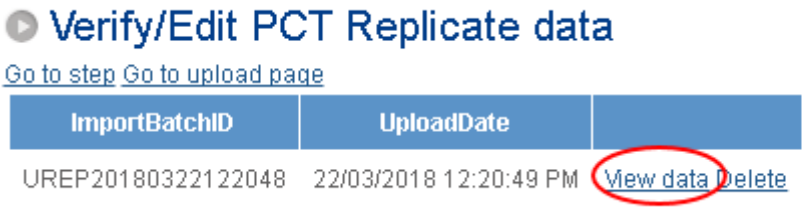


Figure 234 Select the relevant uploaded data for checking

16. Review the data to be uploaded, using the scroll bars to view all rows and fields (see Figure 235). Records can be filtered by status.
17. If errors are encountered, the individual record can be edited (click 'Edit' for that data row) or deleted (click 'Delete' for the data row). However, ideally the entire uploaded data file should be deleted by clicking 'Delete' against the corresponding 'ImportBatchID' (see Figure 235). Correct the source data (which should be the BioNet Atlas Systematic Flora Surveys module), create a new csv file and upload following previous steps.
18. If the reviewed data are correct, click the 'Verify data' button (see Figure 235).

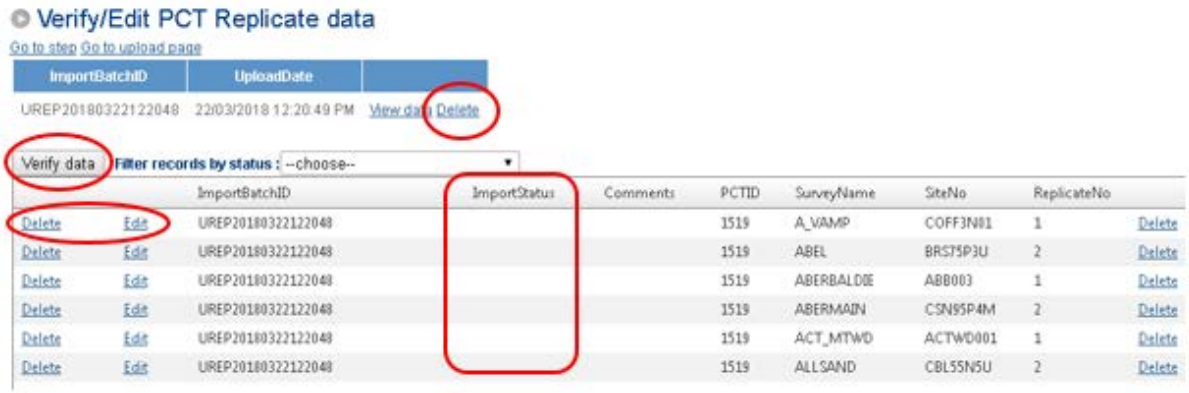


Figure 235 Review and verify the uploaded data prior to importing

19. Check that the verification succeeded (see Figure 236). If successful, click on the ‘Go to step’ link.

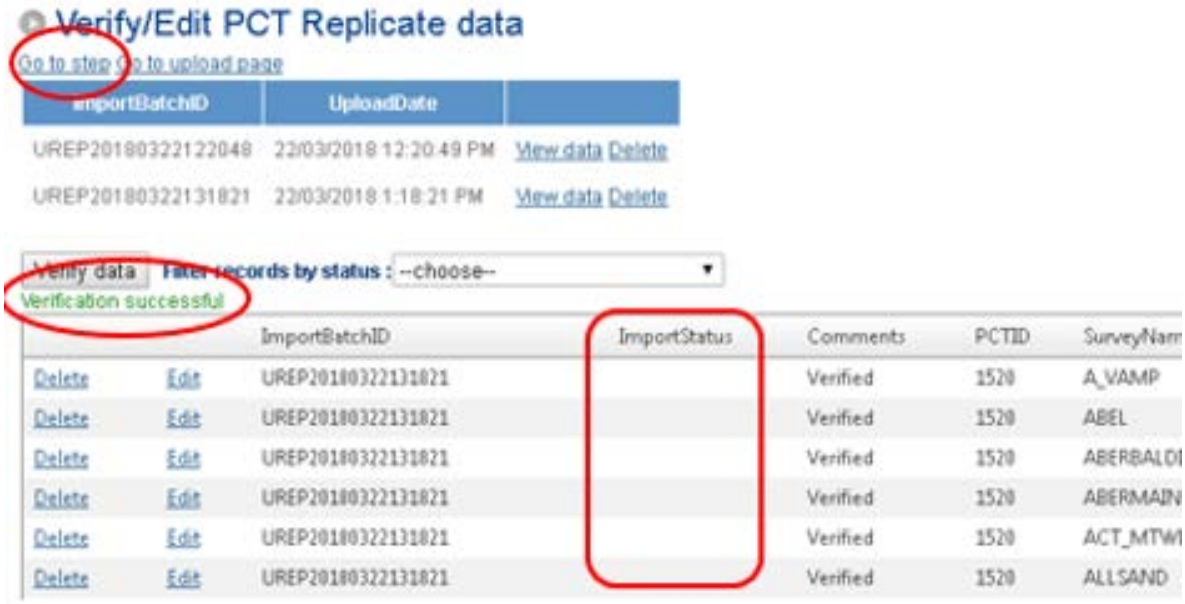


Figure 236 Review the verification outcome message

20. Alternatively, click on ‘Administration’ tab on the top navigation bar > ‘System utilities’ > ‘Upload/Import PCT Data Management Routines’ > ‘4. Upload/Import PCT Replicate data for PCT project’ > ‘4c. Import verified data into BioNet Vegetation Classification’ (Figure 229) and navigate to the last page to select the verified data for importing.
21. On the ‘Import verified PCT Replicate data into BioNet Vegetation Classification’ page, select the correct ImportBatchID. Click on ‘View data’ to visually confirm that you have the correct data (see Figure 237).
22. Having checked the data, populate the ‘Select a primary user for the import records’ by selecting from the drop-down list and click on the ‘Import’ button (see Figure 237).

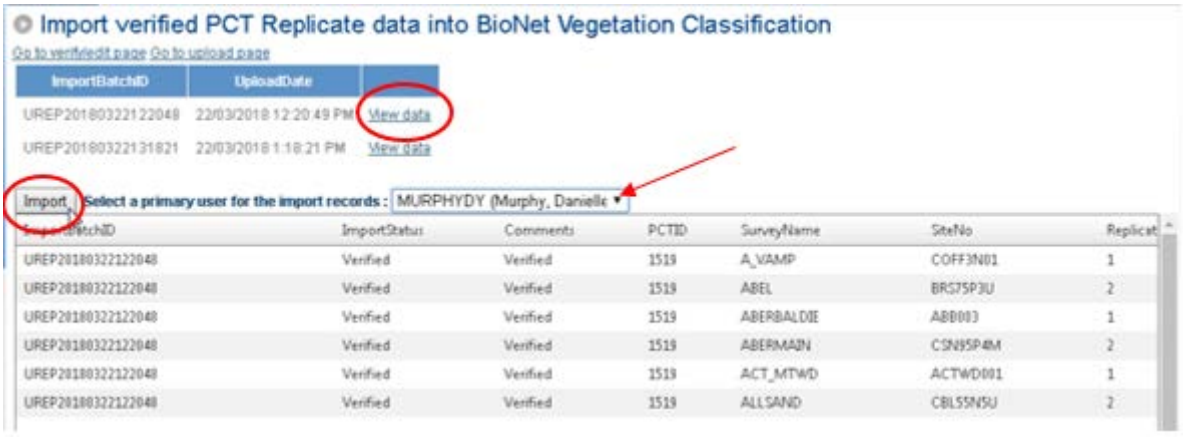


Figure 237 Select a primary user and then import the data

23. Click ‘OK’ to confirm (see Figure 238).

Figure 238 Confirm the import command

24. Check the import results (see Figure 239).

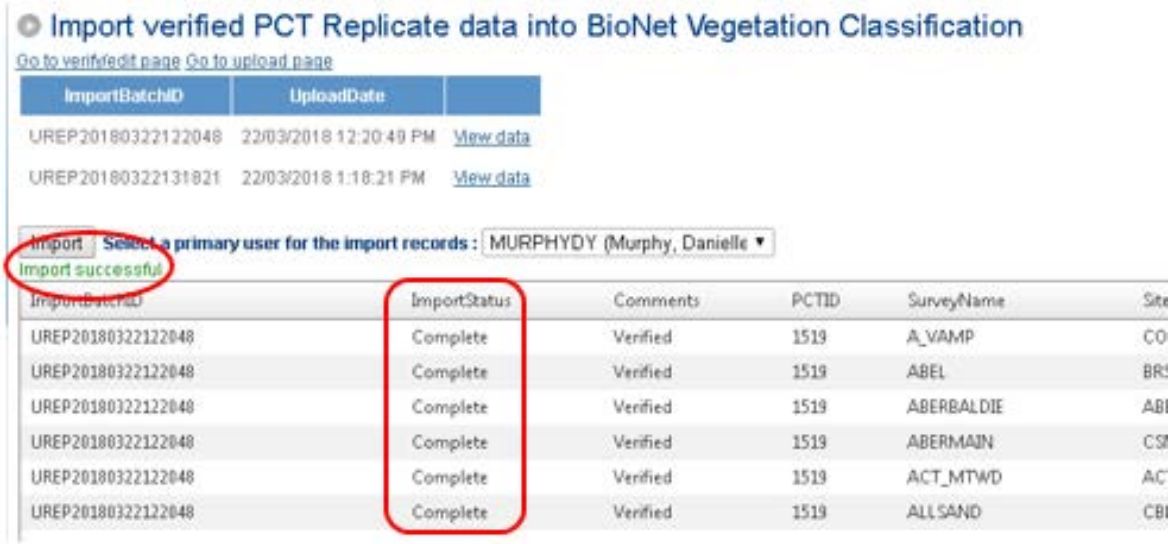


Figure 239 Confirm that the import was successful

25. Finally, open each of the relevant PCTs in the User Interface to check that the uploaded data are visible and correct (see Figure 240). Note, any errors will need to be corrected by editing the csv file and re-importing. Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The fields populated from the PCT Replicate data template are not core fields, hence editing these fields will not trigger a status change from Approved to Approved - Under Edit.

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

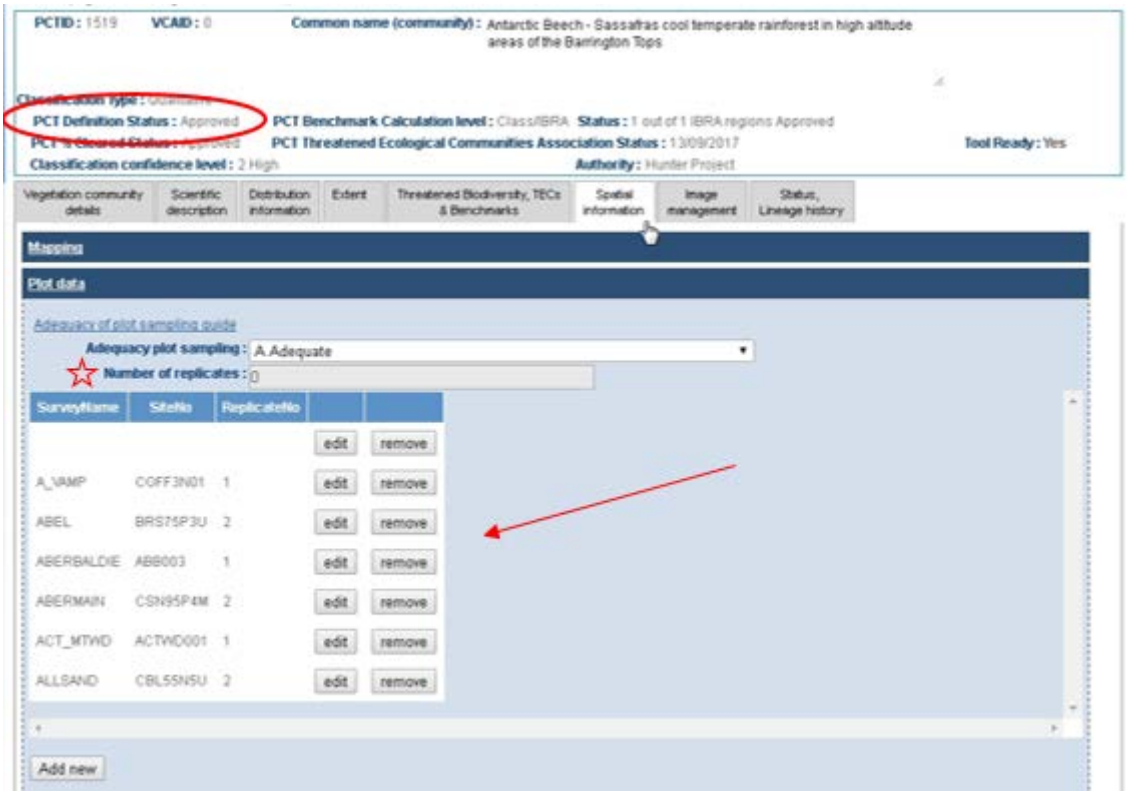


Figure 240 Open the PCT User Interface to check for newly imported data and PCT Definition Status. (Note, the Number of replicates tally is currently not working – marked with a red star)

13. ‘Image management’ tab

The data in this section are editable by Classification Edit Users and Administrators.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

Click on the ‘Image management’ tab to open the edit page (see Figure 241).

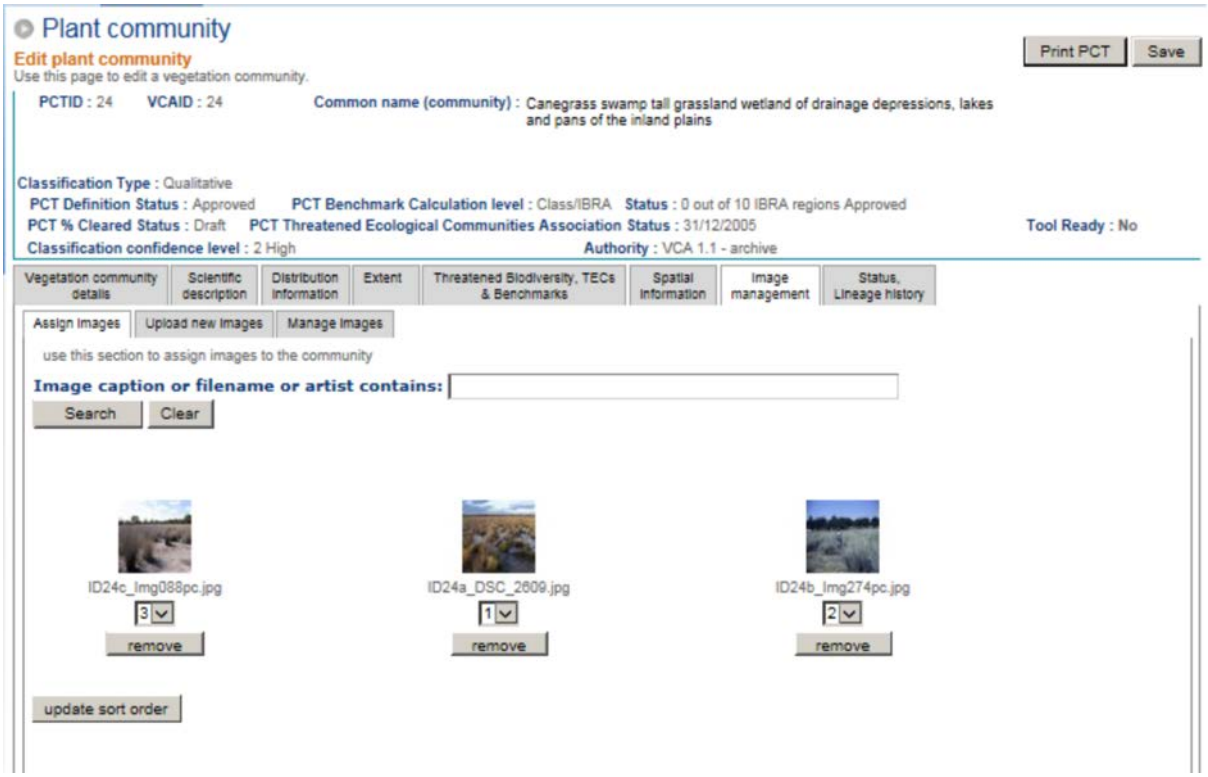


Figure 241 Opening the ‘Image management’ tab automatically opens the ‘Assign images’ section

13.1 ‘Assign images’ section

Images already assigned to the PCT you are working on appear on this page.

To alter the order in which the images are sorted:

1. Click on the drop-down menu under the image you want to reorder and select the order number required (see Figure 242).
2. The order number under the other images will automatically adjust to reflect the change you have made. This adjustment is logical in that it bumps images up or down depending on their current order. When you make changes, ensure that they are reflected correctly in the order number under the images.
3. When you are happy with the image order, click the ‘update sort order’ button below to save the new order into the database.

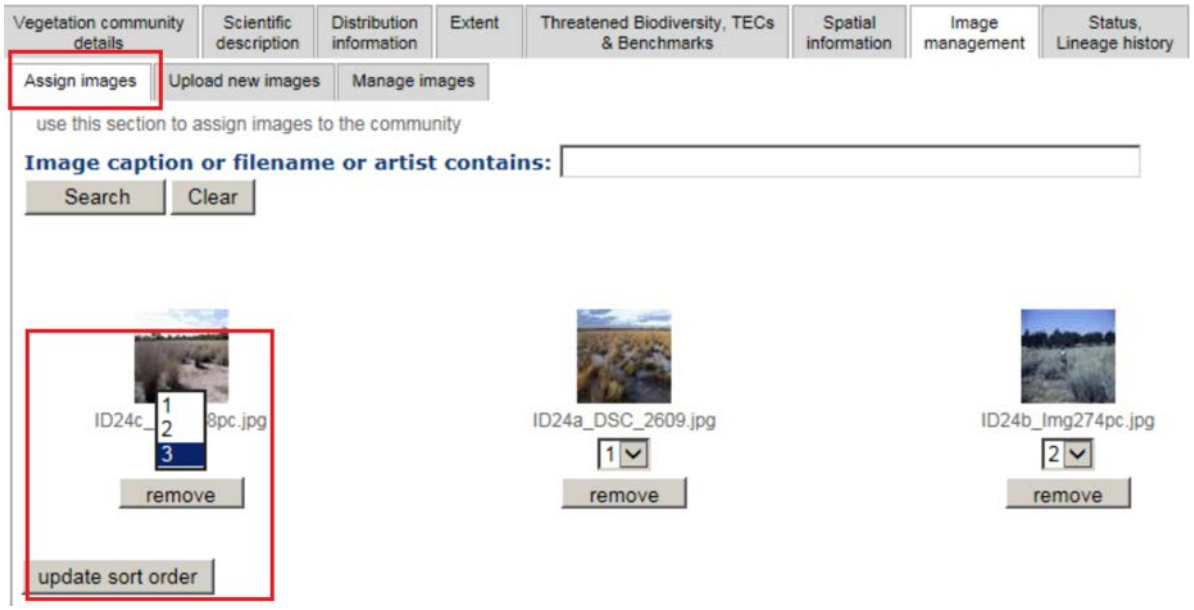


Figure 242 Updating the image sort order

To search for and assign an uploaded image to a PCT:

1. Note: only images for which the 'active' field check box has been ticked in the 'Manage images 'section (see Section 13.3) are available to be assigned in the 'Assign Images' section (and thus displays in reports).
2. To search for an image, use the 'Image caption or filename or artist contains' field.
3. Type any part of the relevant term into the field, then click on the 'Search' button. The system will retrieve successful matches of images that contain the character string you have entered in the caption, filename or artist fields (see Figure 243). If there are no images currently assigned, an error message to appear (may take 10 seconds).

Figure 243 Type any part of relevant term into 'Image caption or filename or artist contains' field and click on 'Search' button

4. Use the scroll bar to find the image you are looking for.

5. Select the image you want to review by clicking the radio button to the left of the relevant image in the list. The details for that image and the image itself, will be displayed under the list (see Figure 244).

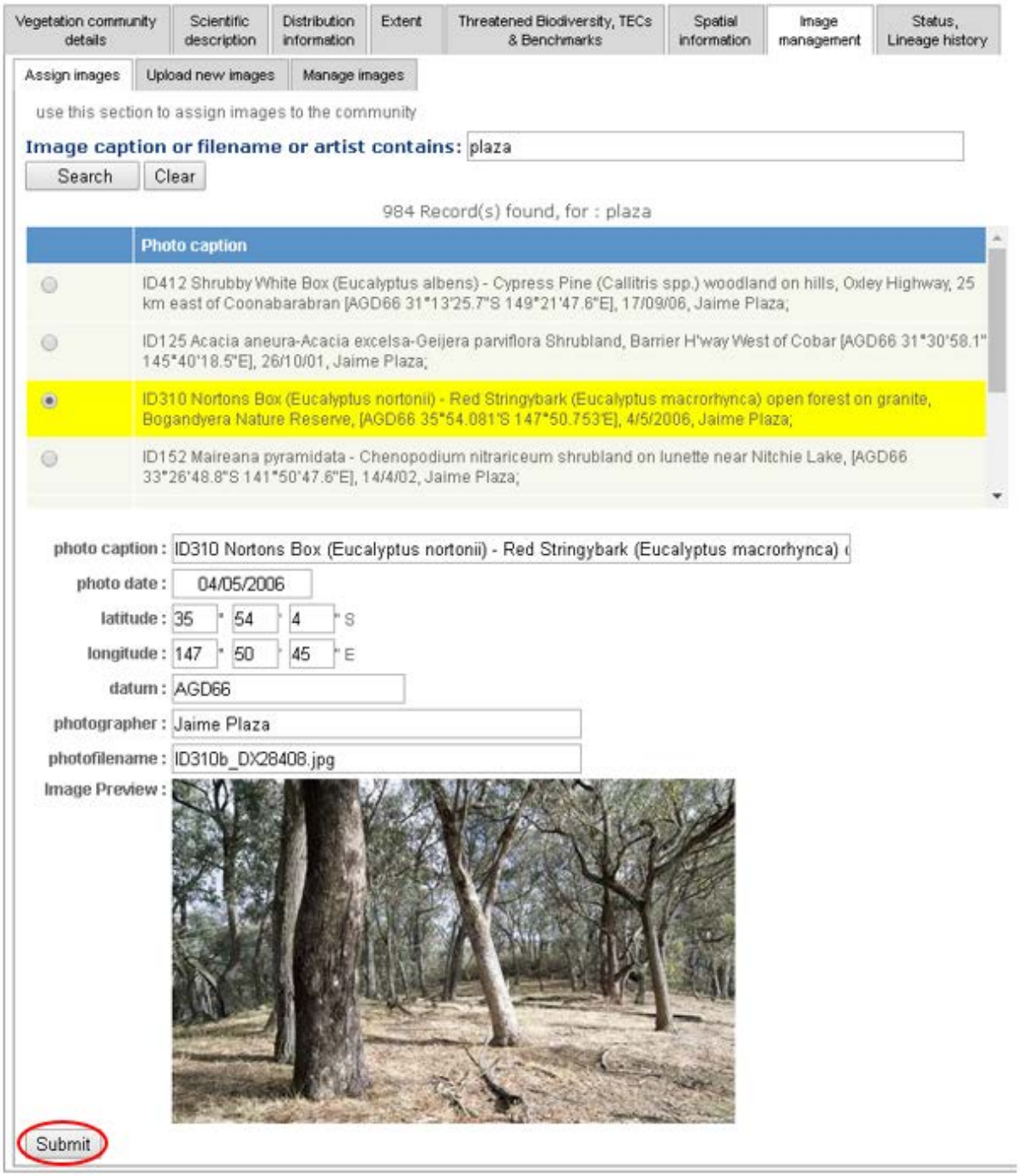


Figure 244 Details and image of the selected image are displayed

6. Make any desired edits directly in each of the fields displayed. These edits will only affect the data displayed with the image for this PCT; they won't affect the data stored with this image and accessed via the 'Manage image' tab. This is because the 'Assign images' section only saves the link to the .img file.
7. When you have finished your changes, click 'Submit' to assign this image and associated data to this PCT. The image will be assigned to the PCT and a sort order assigned (see Figure 245).

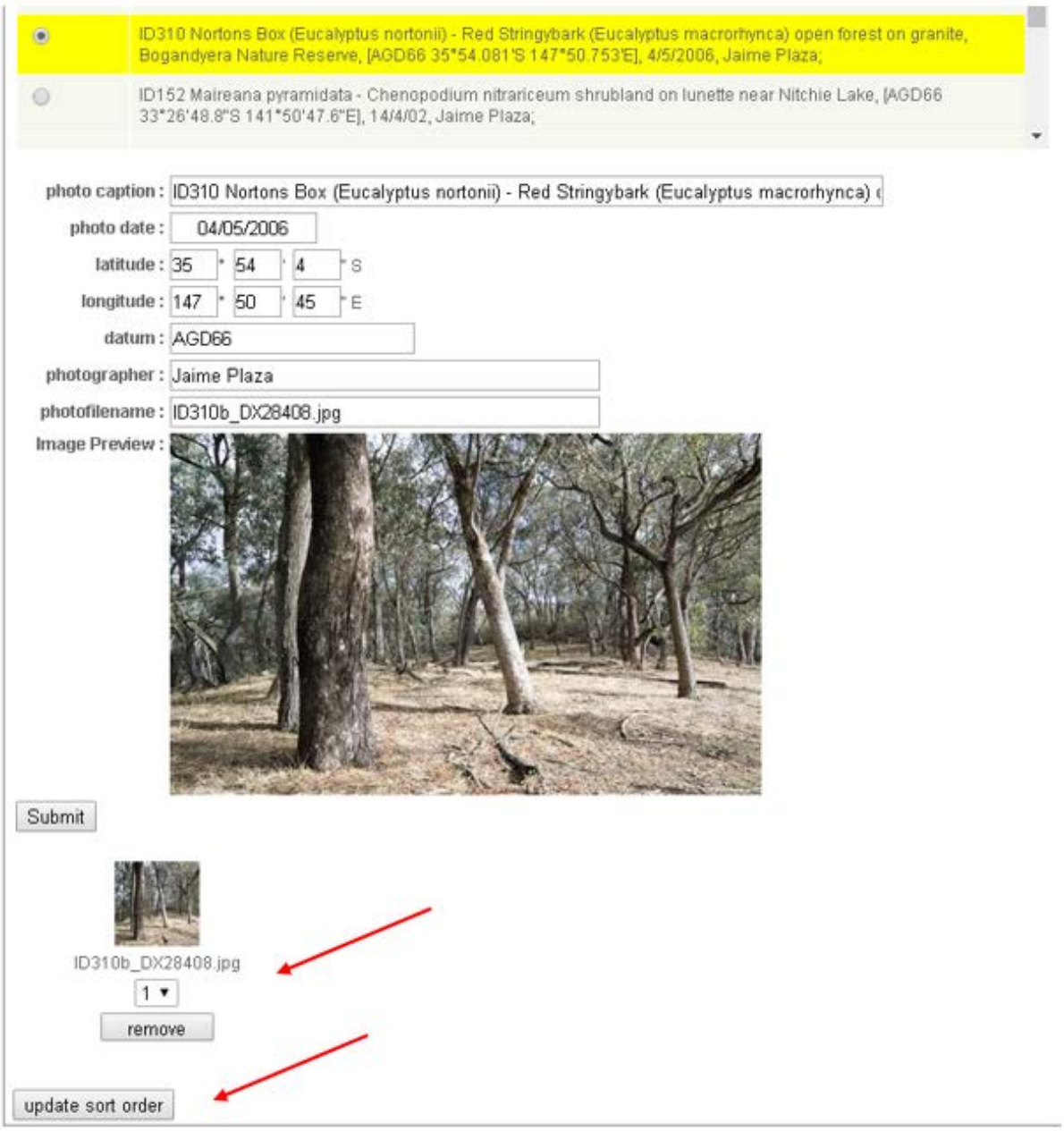


Figure 245 The image is assigned to the PCT and given a sort order

8. The sort order can be updated by clicking on the drop-down arrow beside the assigned number, clicking a new number, then clicking on the 'update sort order'; button (see Figure 245). If it is the only image assigned to that image the only sort order option will be '1'.
9. Alternatively, the image can be removed (unassigned) from the PCT by clicking on the 'remove' button.
10. To save all changes, click on the 'Save' button in the top right-hand corner of the PCT User Interface screen.

> **Note:** care needs to be taken to ensure that images already assigned to another PCT are not erroneously assigned to a different PCT.

13.2 'Upload new images' section

1. Click on 'Upload new images' tab to open this section (see Figure 246).

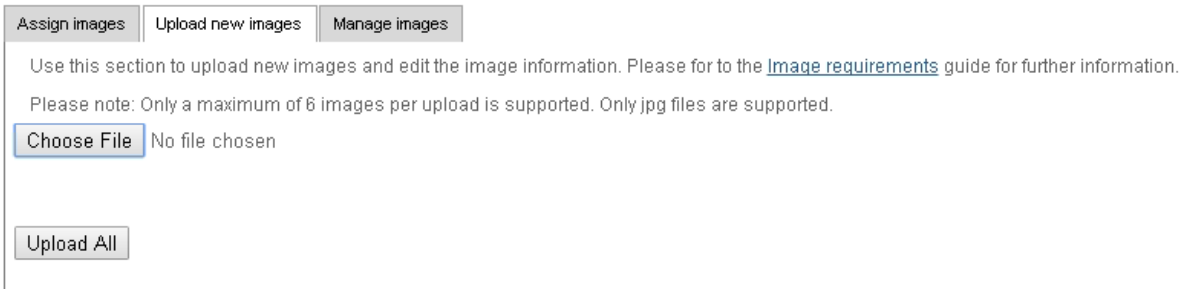


Figure 246 Open the 'Upload new images' section

2. To select an image to upload, either type the full path and file name (including the file suffix, i.e. '.jpg') and hit 'Enter' on your keyboard or click on the 'Choose File' button. This opens a Windows search box (see Figure 247).

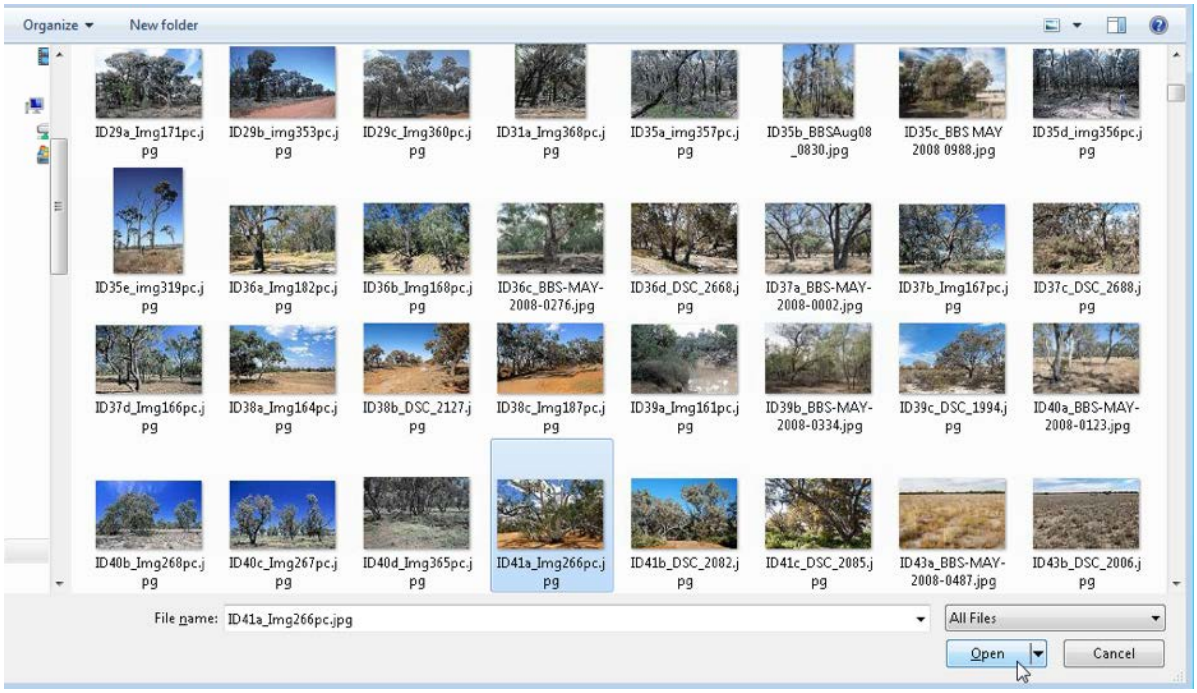


Figure 247 Select the image for upload and 'Open'

3. Select the image you want to upload by clicking on the file in the browser window and then clicking on 'Open'. The name of the image will be displayed under the 'Choose File' button.
4. Repeat these steps to add up to six images per upload. The database will only accept jpeg images and images must be less than 2 MB. If you attempt to load an image that is not of the correct type, an error message will appear.
5. To remove an image before you upload it, click the blue cross (x) next to the image you want to remove (see Figure 248).

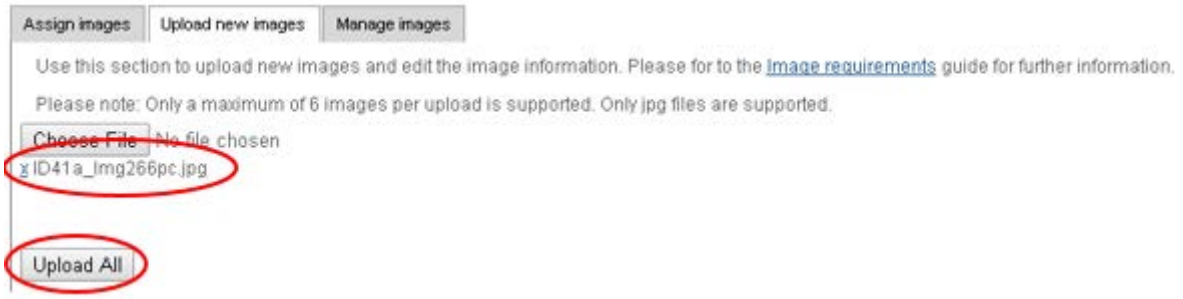


Figure 248 Click 'x' to remove an image prior to upload. Click on 'Upload All' to upload up to six images

6. Click the 'Upload All' button to upload your images. If the upload is successful, the image will be displayed in the 'Image management' page (see Figure 249).

Figure 249 Edit information regarding the uploaded image file

7. If the upload is not successful, you will receive an error message.
8. If you try to upload an image that is bigger than the 2 MB per image restriction, you will also receive an error message.
9. Click on the 'edit' button (see Figure 249), add or modify information and click on the 'update' button to save (or 'cancel' if required). Click on 'Done' when complete (see Figure 250).

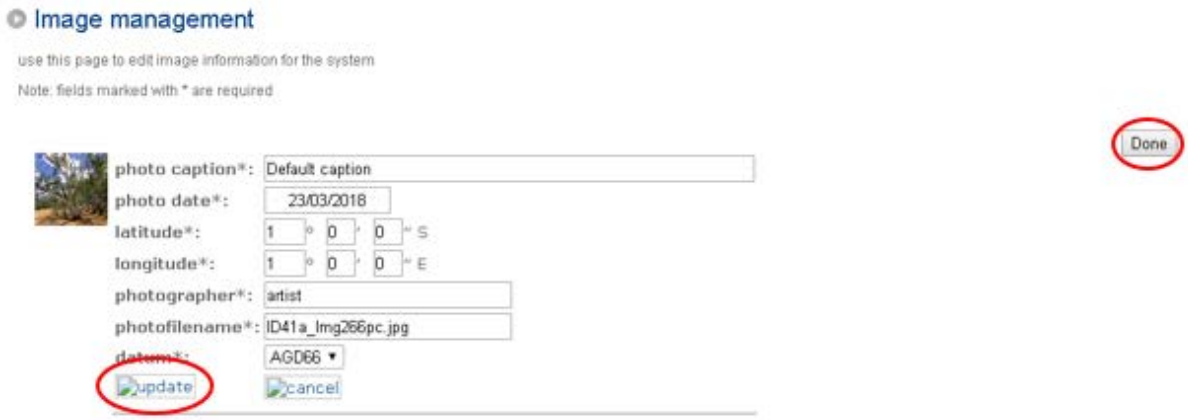


Figure 250 Edit the image information and 'update' to save

To assign an uploaded image to a PCT use the 'Assign images' functionality (see Section 13.1).

13.3 ‘Manage images’ section

1. Click on the ‘Manage images’ tab to open this section (see Figure 251).
2. To search for an image, use the ‘Image caption or filename or artist contains’ field.
3. Type any part of the relevant term into the field, then click on the ‘Search’ button. The system will retrieve successful matches of images that contain the character string you have entered in the caption, filename or artist fields (see Figure 252). If there are no images currently assigned, an error message to appear (may take 10 seconds).

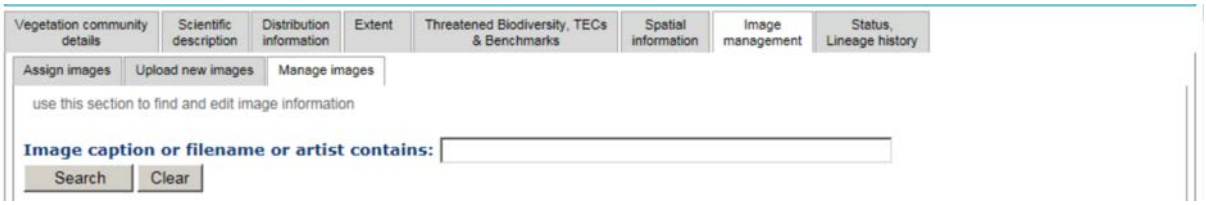


Figure 251 Open the ‘Manage images’ section

4. Use the scroll bar to find the image you are looking for.

Figure 252 Use the scroll bar to search for an image using filename, caption or artist

5. Select the image you want to review by clicking the radio button to the left of the relevant image in the list. The details for that image and the image itself, will be displayed under the list (see Figure 253).

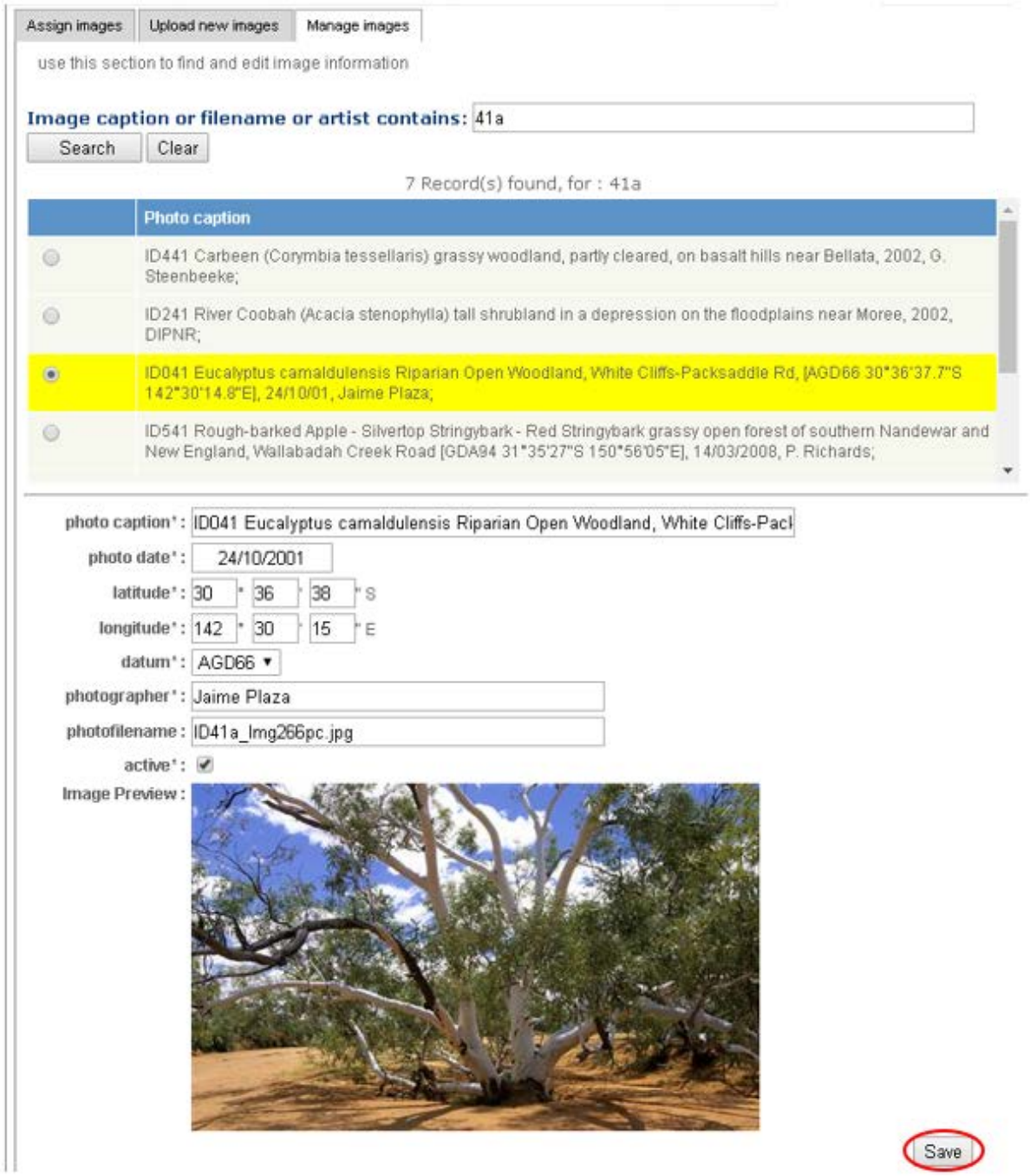


Figure 253 Edit fields as desired, make the image available for reports by ticking the 'active' checkbox, then save

6. Make any desired edits directly in each of the fields. Clicking in the 'photo date' field opens the selection calendar. Select by clicking in the calendar itself (scroll left or right to change months).
7. The 'latitude' and 'longitude' information must be in the expected format for degrees, minutes and seconds – that is, whole numbers, with both minutes and seconds in the range of 0–59. Note: Latitude is in degrees South, hence there is no need to precede the degrees figure with a minus sign.
8. The 'datum' field must be one of the formal datum systems – that is, AGD66 or GDA94.
9. The 'active' field is a check box to control the availability of the image in the 'Assign Images' section (and thus the display of the image in reports). If you want the image to

be available to assign to the PCT on the ‘Assign images’ page, ensure this check box is ticked. If ‘active’ is not checked, the image will not be available for assignment. If an image is not assigned, it cannot be displayed in reports.

10. When you have finished your changes, click ‘Save’ to save your changes.
11. To edit information on another image, click the radio button against the relevant image in the list and repeat the edit process.

14. ‘Status and lineage’ tab

The data in this section are editable by Classification Edit Users and Administrators only.

> Ensure that you have appropriate edit access to the PCT(s) for which you are responsible. The easiest way to check is to click on the ‘My work’ tab on the Veg Classification homepage (refer to Section 6.1). If you require additional access rights, contact the Administrator via bionet@environment.nsw.gov.au.
>
> When you open a PCT for which you have edit rights the ‘Save’ button will be active (not greyed-out). Field-by-field edit rights are determined by a user’s role and their PCT assignments.

14.1 ‘Lineage’ section

The data in this section are read-only (see Figure 254). They are editable via the Administration > Plant Community Lineage Management menu by Classification Edit Users and Administrators only.

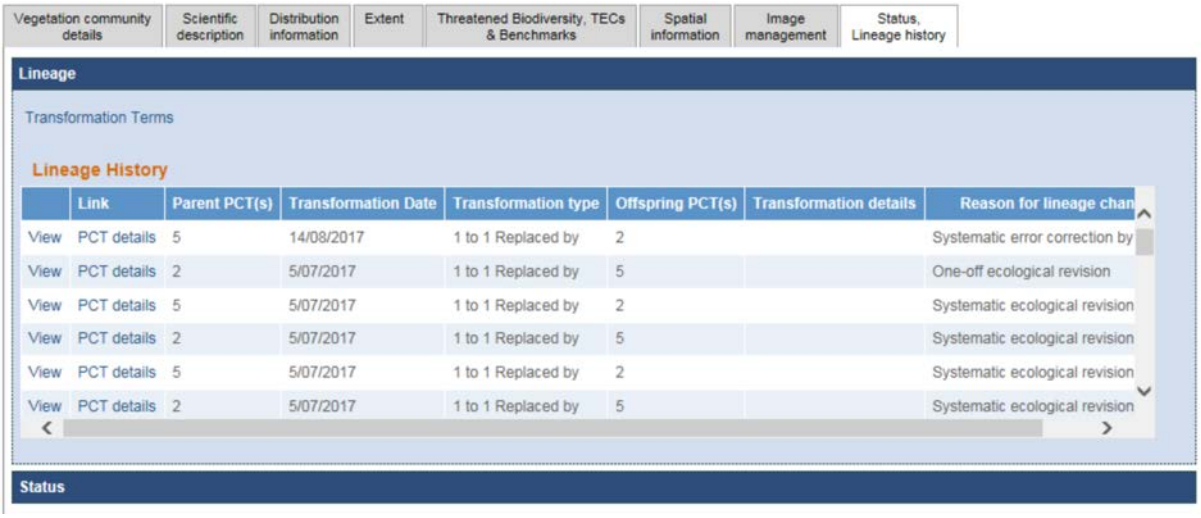


Figure 254 The table displaying PCT lineage history data is read-only for all users

14.2 ‘Administration – Plant Community Lineage Management’ menu

This functionality is used to upload and edit all PCT Lineage data. Lineage data are maintained by Classification Edit Users and Administrators. The ‘Plant Community Lineage Management’ drop-down menu item can only be seen by these users (see Figure 255).

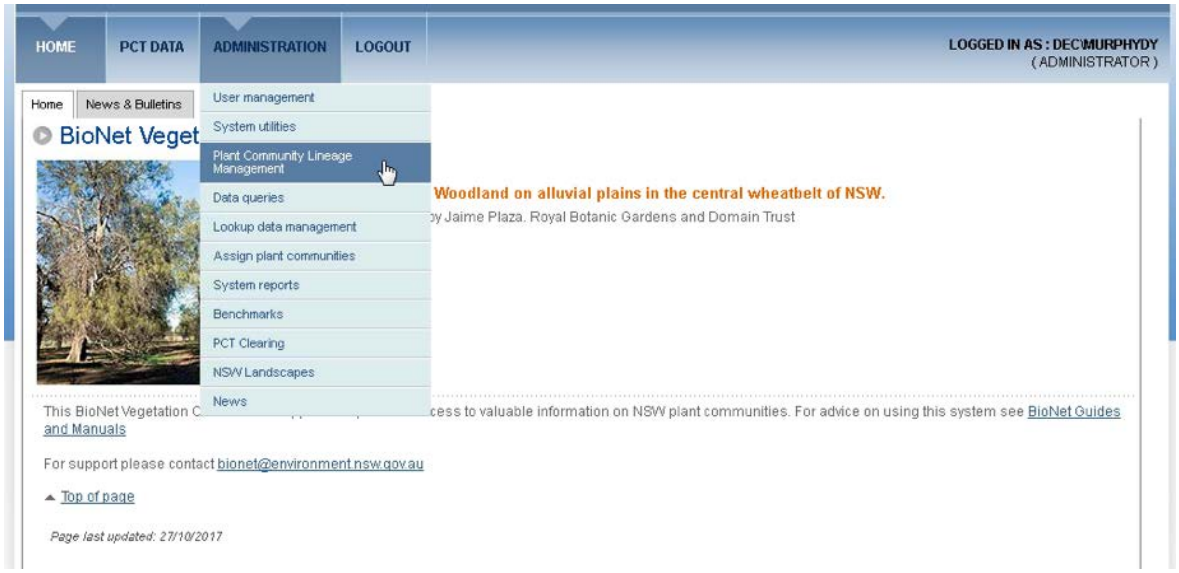


Figure 255 Accessing the 'Administration – Plant Community Lineage Management' menu and functionality

Click on the 'Plant Community Lineage Management' drop-down menu item to open the 'Plant Community Lineage Management' page (see Figure 256).

Figure 256 Plant Community Lineage Management page

14.2.1 'Search and Edit Lineage records' section

To search for, review and edit existing lineage data in the Vegetation Classification application:

1. Click on the 'Search and Edit Lineage records' hyperlink (see Figure 256).
2. Use the search fields to locate the lineage data of interest (see Figure 257). Multiple search criteria can be used. Search field formats are:
   a. PCTID is integer format
   b. PCT Common Name searches on a text string (e.g. white box)
   c. Authority, IBRA Region, IBRA Subregion and LGA are all drop-down menus
   d. Start date and End date bring up calendars from which a date can be selected

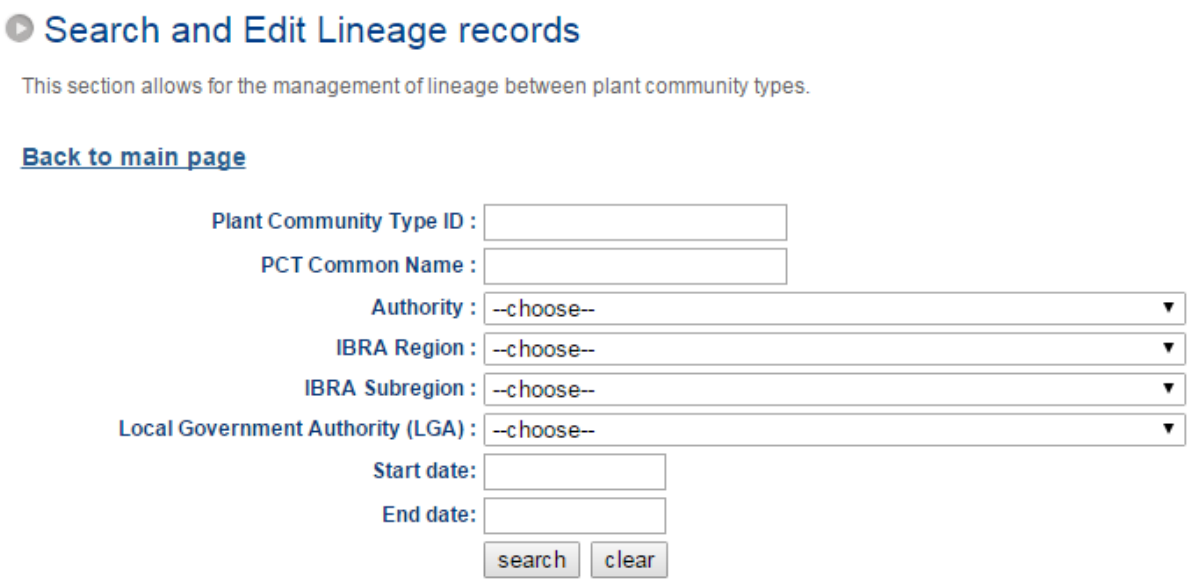


Figure 257 Search and Edit Lineage records page

3. Click on the 'search' button to run the search, (or 'clear' to remove all search terms and previous search results).
4. A table of search results will be listed underneath (see Figure 258). Note that to check on the PCT Common Name details, the PCT links will need to be accessed ('PCT details' for Parent PCT(s) and 'Offspring PCT(s)', respectively).

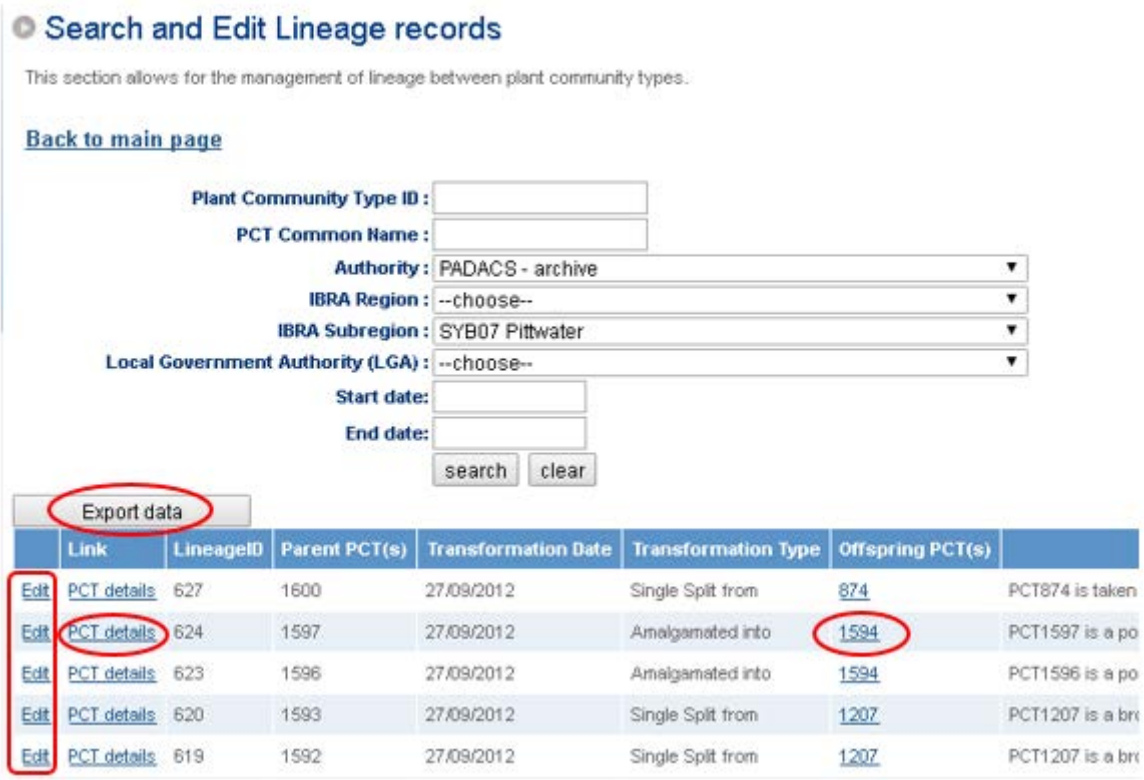


Figure 258 Links to open Parent and Offspring PCT summaries and to edit lineage transformation details

5. Click on the 'Edit' link to review and / or edit a lineage transformation (see Figure 258). The details will be visible and editable, below (see Figure 259).

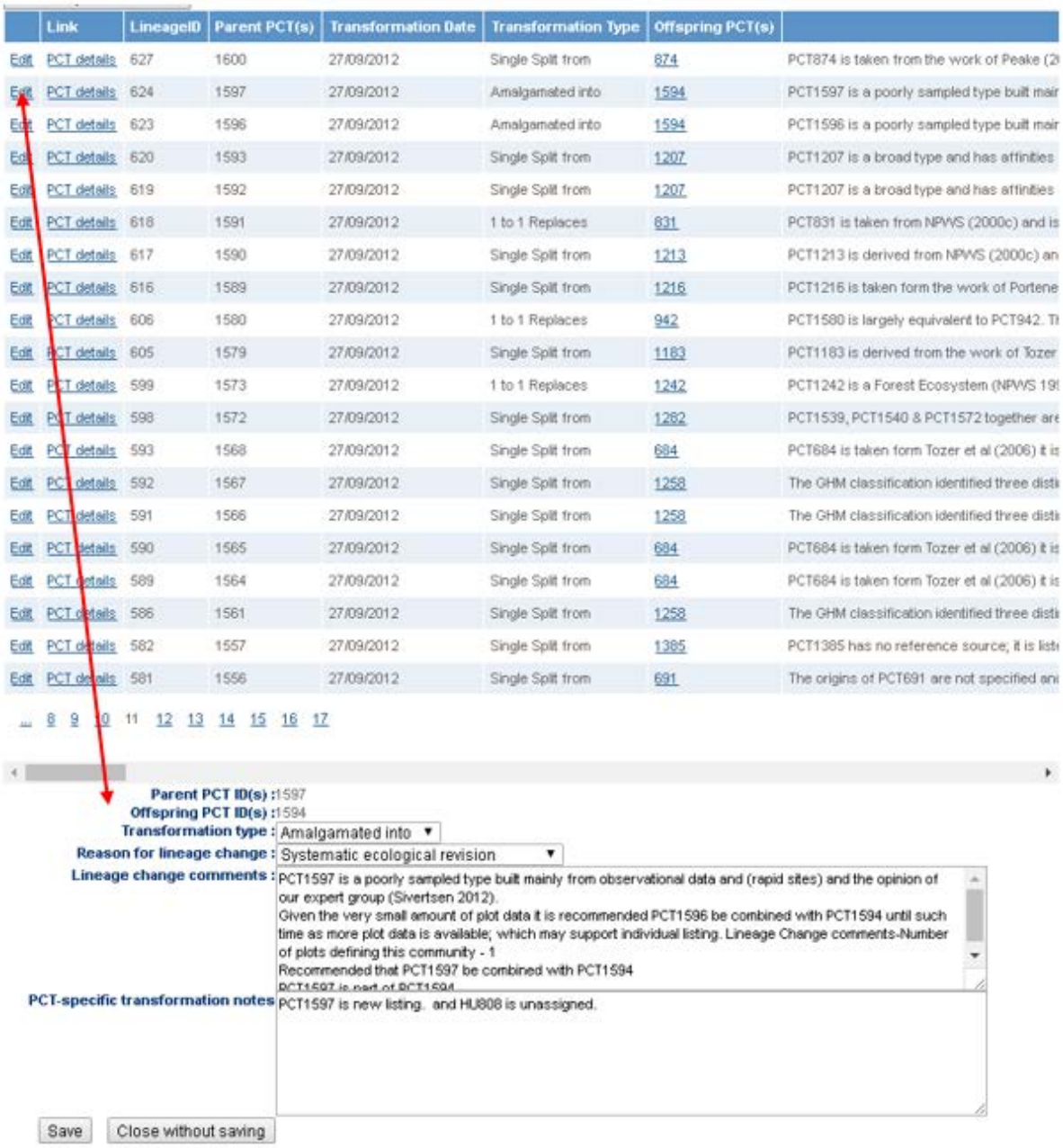


Figure 259 Editing an existing lineage transformation record

6. Check the details to ensure you are editing the correct lineage transformation. Ensure adequate comments and notes are recorded to support all changes (refer to Section 14.2.2 #11 for guidance re the 'Lineage change comments' field).
7. Click 'Save' to record all edits, or 'Close without saving' to discard changes.
8. Click 'OK' to confirm (see Figure 260).

Figure 260 Confirm the import command

9. Finally, review the PCT replicate data for each PCT involved in the transformation in the 'Lineage' section of the PCT User Interface (see Figure 261). Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The Lineage data fields are not core fields, hence editing these fields will not trigger a status change from Approved to Approved – Under Edit.

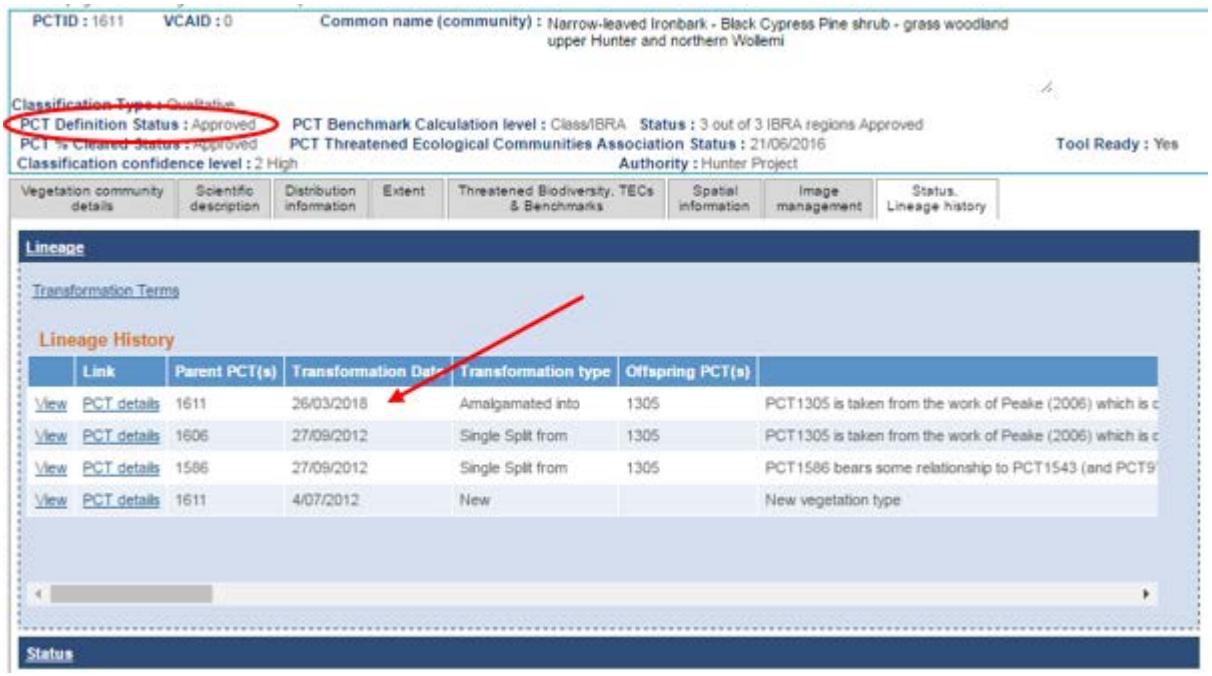


Figure 261 Open the PCT User Interface to check data edits and PCT Definition Status

14.2.2 'Create PCT Lineages' section

To enter single lineage transformation data into the Vegetation Classification application:

1. Click on the 'Create PCT Lineages' link (see Figure 256).
2. Use the search fields to locate the Parent and Offspring PCTs required for the transformation being recorded (see Figure 262). Multiple search criteria can be used. Search field formats are:
   a. PCTID is integer format
   b. PCT Common Name searches on a text string (e.g. white box)
   c. Authority, IBRA Region, IBRA Subregion and LGA are all drop-down menus.

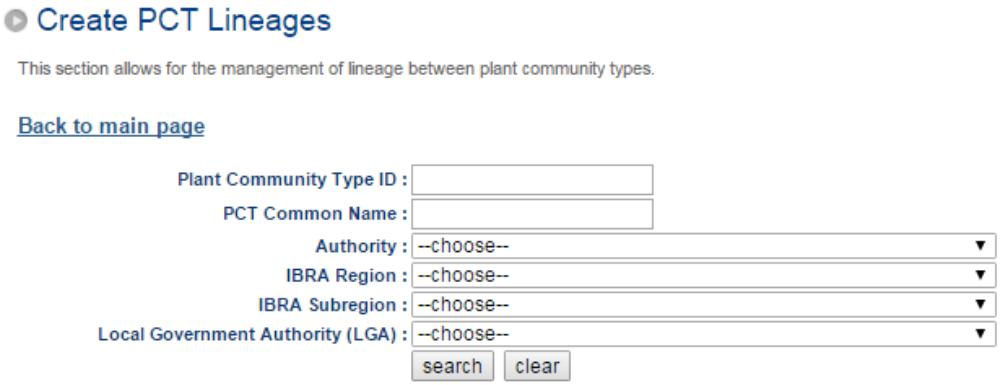


Figure 262 Create PCT Lineages page

3. Click on the ‘search’ button to run the search, (or ‘clear’ to remove all search terms and previous search results).
4. A table of PCTs matching the search criteria will be listed below (see Figure 263).
5. Click on the checkboxes for all parent PCTs in the lineage transformation and click on the ‘Add to Parent PCT list’ button (see Figure 263).

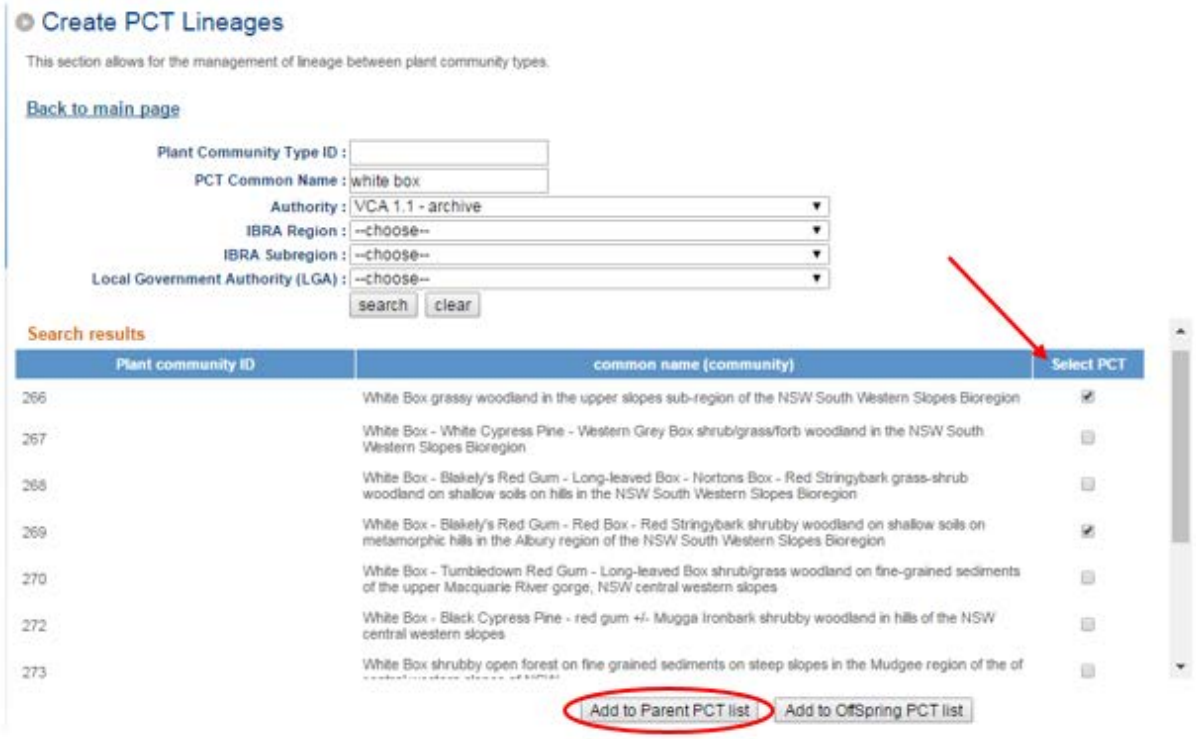


Figure 263 Select PCT/s then click on ‘Add to Parent PCT list’ button

6. The selected PCT/s will be added as Parent PCT(s). These can be deleted if incorrect (see Figure 264).

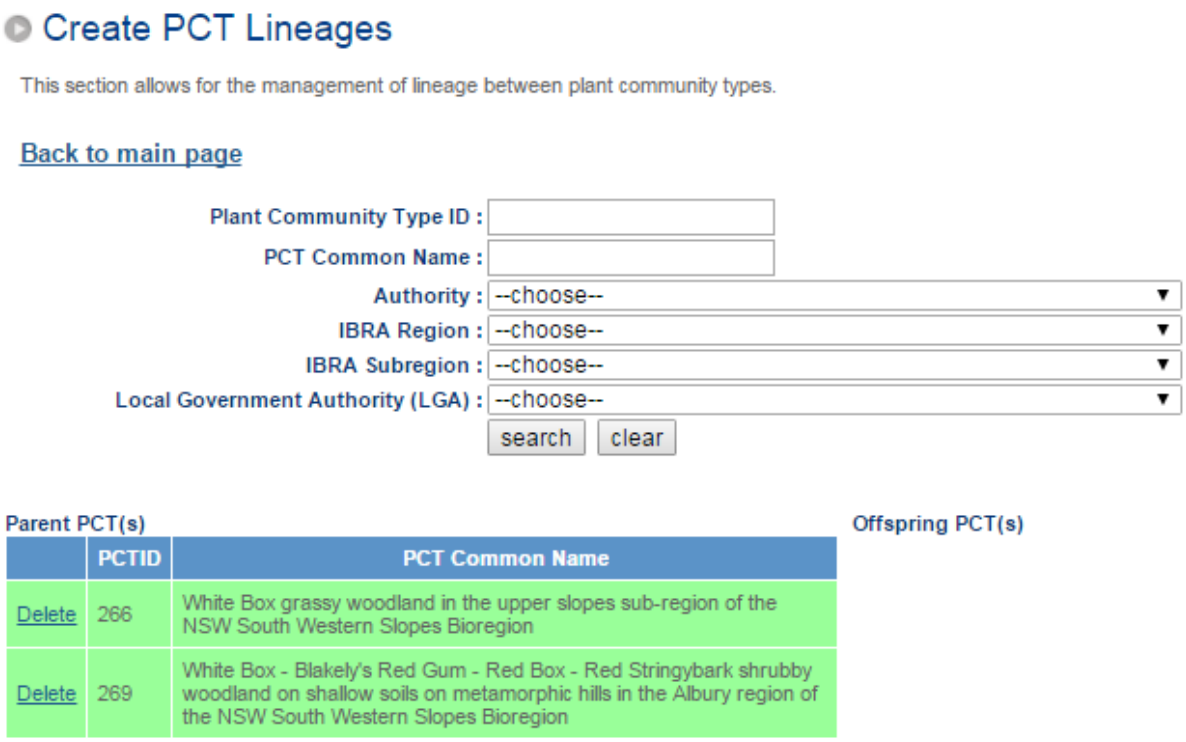


Figure 264 The selected Parent PCT(s)

7. Enter search terms to find Offspring PCT/s and click on ‘search’ button, then click ‘Add to Offspring PCT list’ button (see Figure 265).

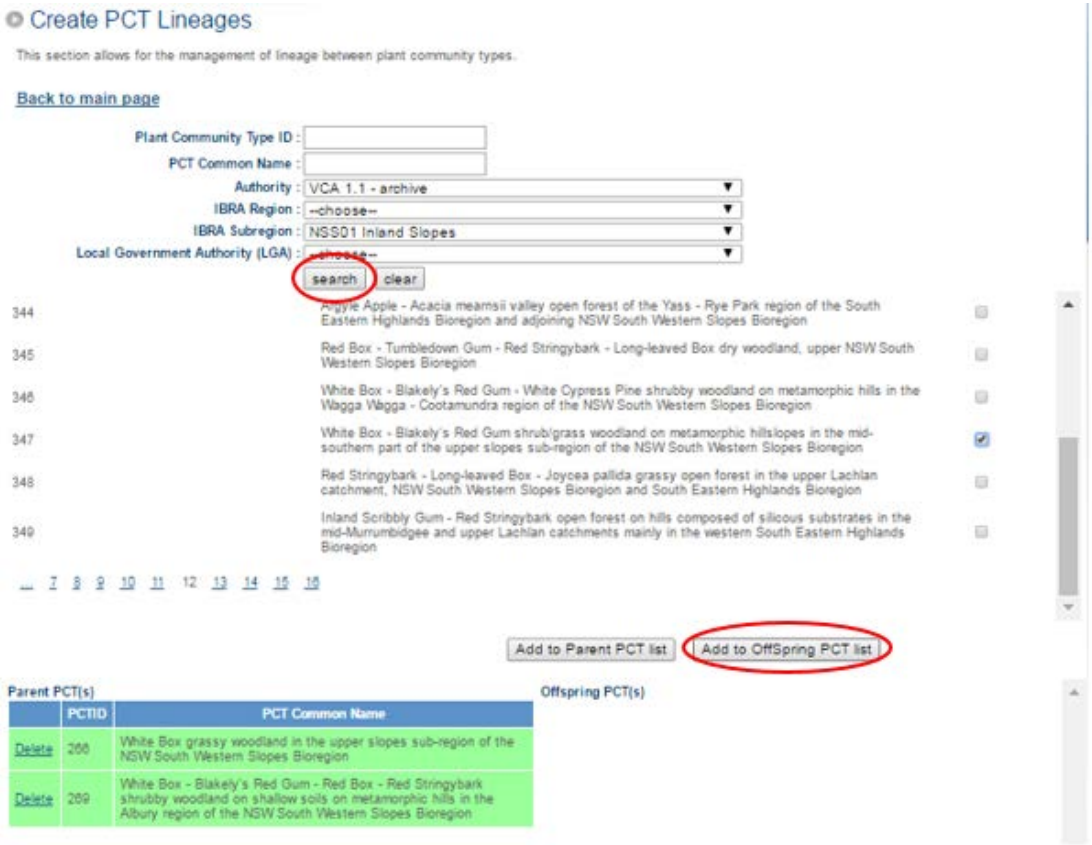


Figure 265 Search for and select the Offspring PCT(s)

8. Any of the selected Parent or Offspring PCTs can be removed by clicking on the corresponding 'Delete' link (see Figure 266).

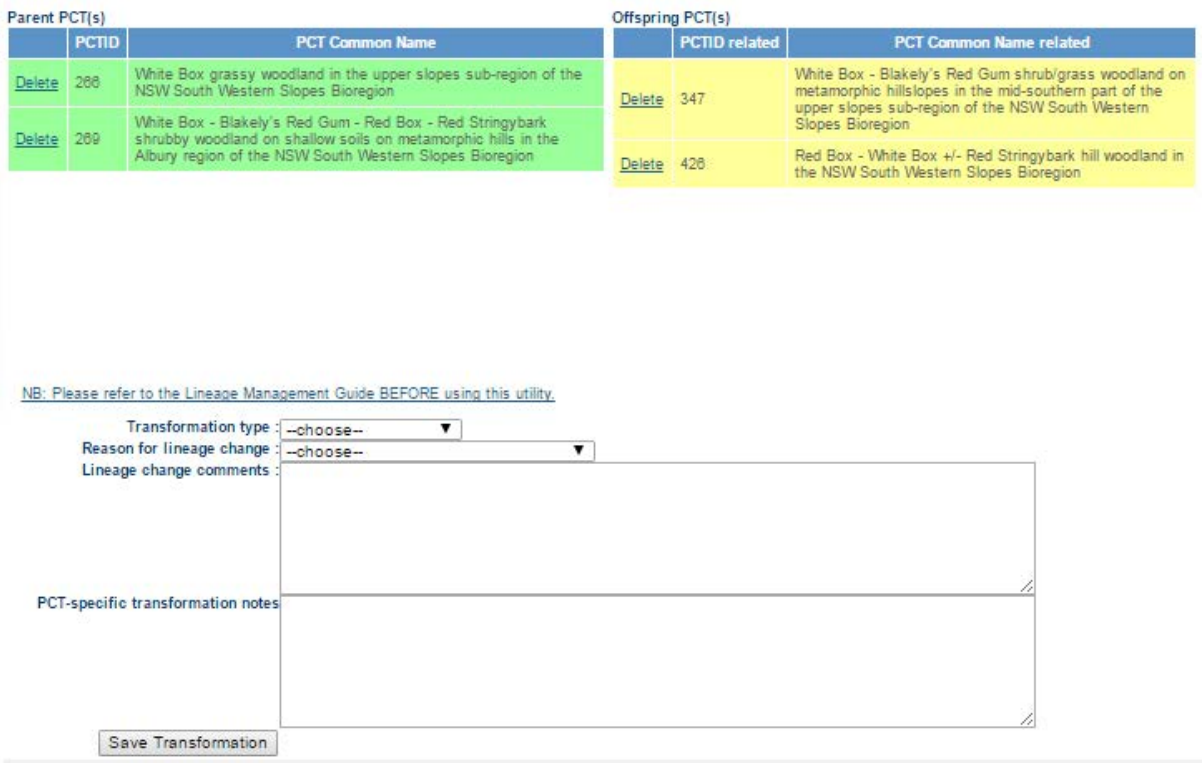


Figure 266 After selecting the Parent and Offspring PCTs, populate the remaining Lineage transformation fields

9. Select the 'Transformation type' from the drop-down list (Figure 266). The four options are:
   a. 1 to 1 Replaced by
   b. Single split to
   c. Amalgamated into
   d. Complex split to
10. Select the 'Reason for lineage change' from the drop-down list. The six options are:
   a. Systematic ecological revision
   b. Systematic revision of key attributes
   c. Systematic error correction by Admin
   d. One-off ecological revision
   e. One-off attribute revision
   f. One-off error correction
11. Record comprehensive 'Lineage change comments'. This is a free text field that needs to adequately record to lineage transformation for all PCTs involved. The recommended format is:
   a. Authority (i.e. classification project) making the transformation
   b. brief but clear statement of transformation including all affected parent and offspring PCTs and including area/regions that this transformation applies to if not to the whole distribution of existing PCT/s
   c. supporting details
   d. see Figure 267 for an example.

Greater Hunter Mapping Project: PCTID 1268 SPLIT TO PCTID 1549 (H/CR CMA area only) and PCTID 1268 (NR CMA area).

PCT 1268 is a Forest Type (NPWS 1999). It is broadly defined, is listed for both Northern Rivers and HCR and is currently rated very low for classification confidence. PCT 1549 is largely equivalent to PCT 1268. The mid and ground strata are almost identical; the upper stratum has some discrepancies, principally the absence of Corymbia intermedia and Eucalyptus carnea from PCT 1268. Most of the site localities for this community are south of the optimal range for C. intermedia, according to PlantNet; this species will be more commonly encountered in Northern Rivers. PCT 1549 is supported by an acceptable body of quantitative data. PC T1549 conforms to a rigorously applied set of rules regarding Within Group and Between Group variation (Somerville 2009). This together with feedback from our expert group (Sivertsen 2012) indicates a robust community with a high classification confidence. Number of plots defining this community - 29. Recommended that PCT 1268 be unassigned for HCR and replaced by PCT 1549. PCT 1268 is listed for Northern Rivers & HCR; the recommended transformations will need to be reconciled with these regions. The TSP for PCT 1549 should be largely equivalent to that of PCT 1268.

Figure 267 Example of 'Transformation details' information involving multiple offspring PCTs in differing geographic areas within the PCT distribution

12. The 'PCT-specific transformation notes' field is a free text field designed for comments pertinent to individual PCTs within the lineage transformation and can either be populated at this stage (in which case it will be applied to all PCTs in the transformation), or it can be edited in afterwards for the specific PCT via the 'Search and Edit Lineage records' functionality (see Section 14.2.1).
13. Click the 'Save Transformation' button.
14. Click 'OK' to confirm (see Figure 268).

Figure 268 Confirm the import command

15. Finally, review the PCT replicate data for each PCT involved in the transformation in the 'Lineage' section of the PCT User Interface. Also, check that the PCT Definition Status is correct (unchanged) for each PCT (Draft-Working for new PCTs; Approved for existing Approved PCTs being edited). The Lineage data fields are not core fields, hence editing these fields will not trigger a status change from Approved to Approved – Under Edit.

14.2.3 'Import PCT Lineage data' section

To upload and import bulk lineage data into the Vegetation Classification application:

1. Click on the 'Import PCT Lineage data' hyperlink (see Figure 256).
2. The 'Import PCT Lineage data' page will open (see Figure 269).

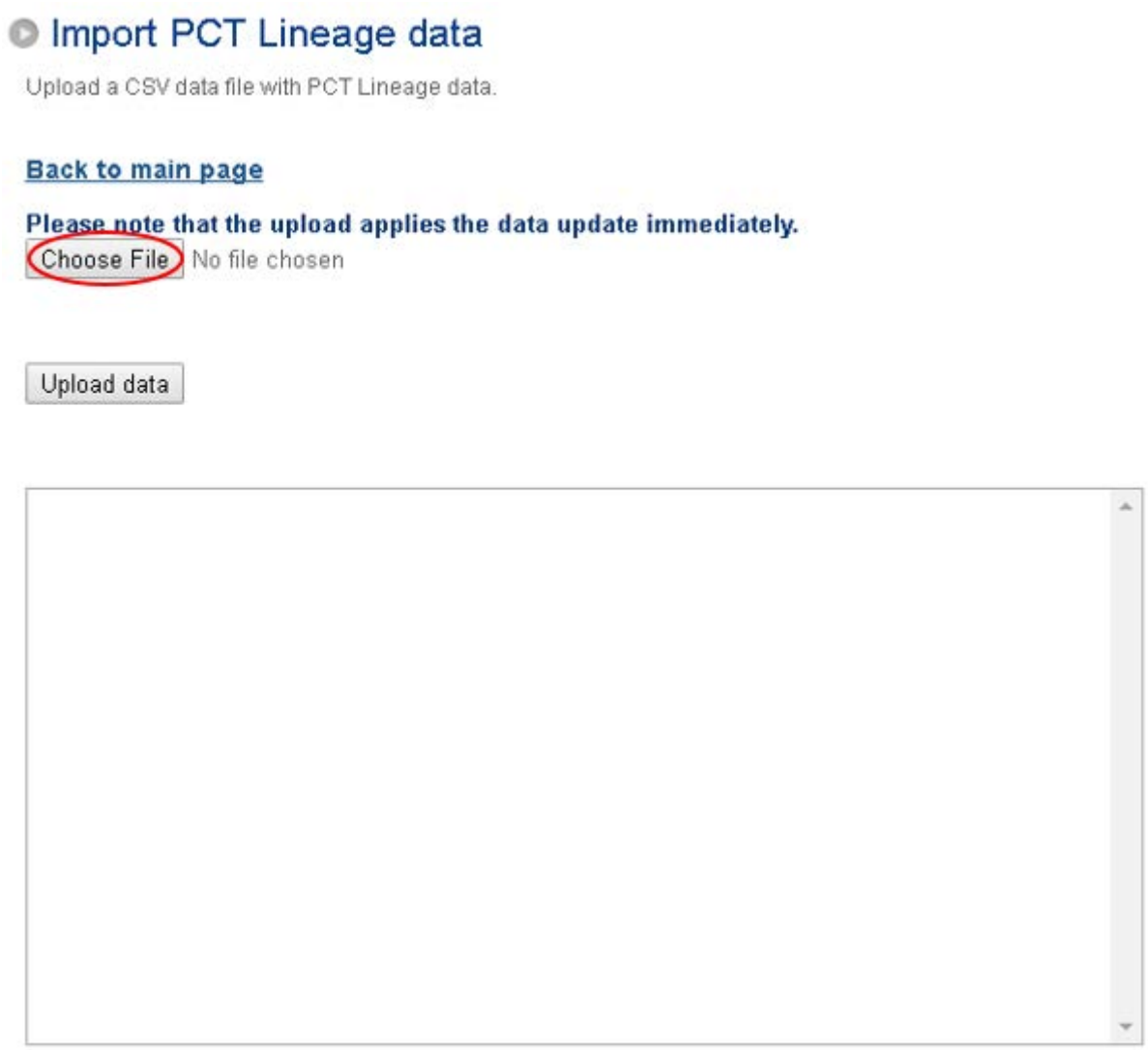


Figure 269 Open the Import PCT Lineage data page and browse to find the correctly formatted csv file for upload

3. Click on the 'Choose File'/'Browse' button to locate the csv file to be uploaded (see Figure 269). The csv file must be in the correct format as per the 'PCT Lineage data upload import' Excel template (summarised in Appendix A5.8).
4. Select the csv file and click on 'Open' to upload the file (see Figure 270).

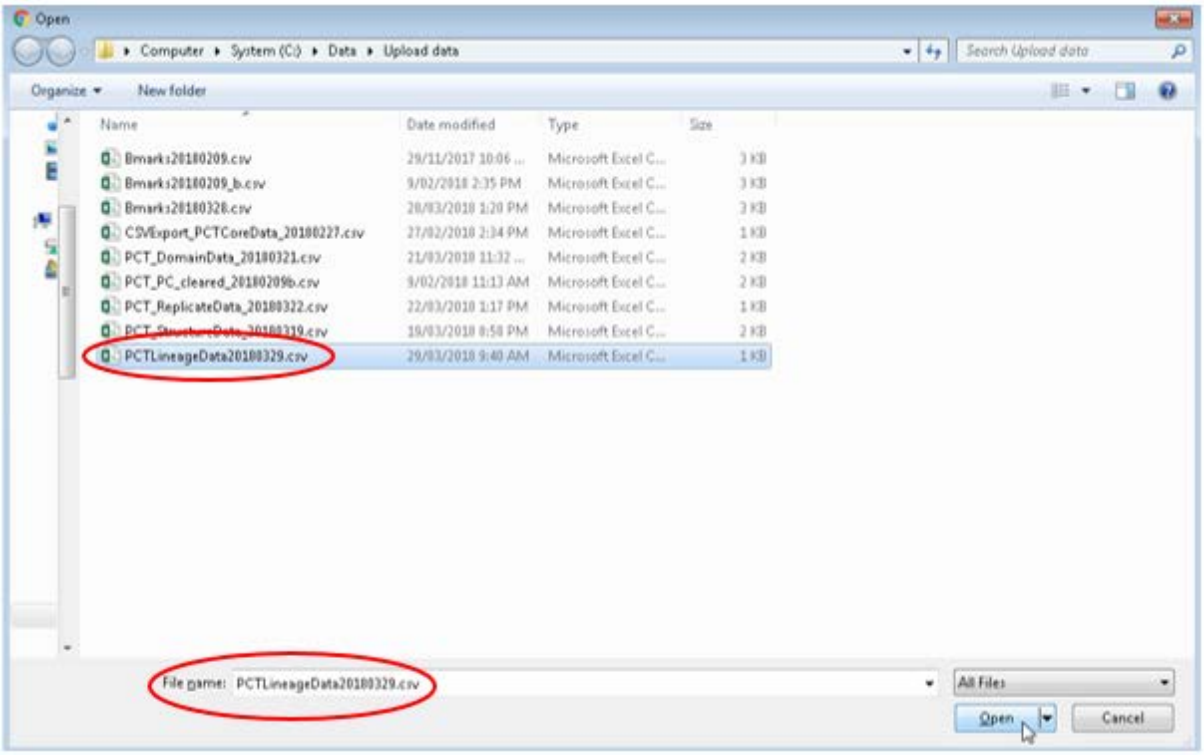


Figure 270 Select and upload the correctly formatted csv file

5. The csv file name will be listed. Click on the ‘Upload data’ button (see Figure 271).

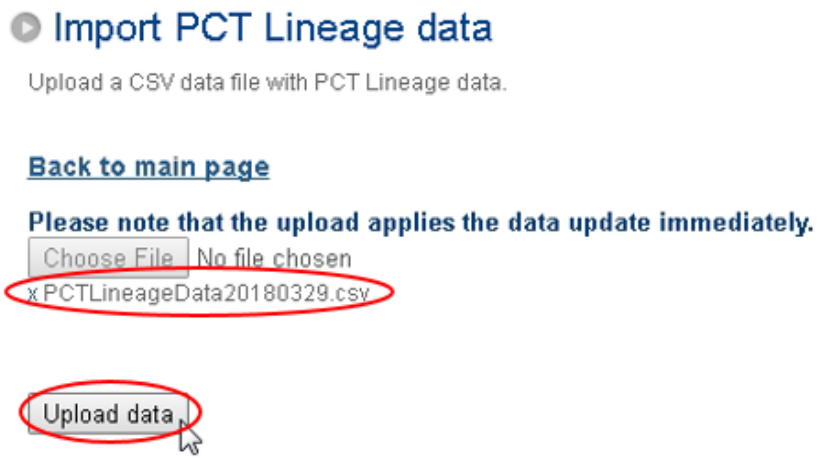


Figure 271 Click to upload the PCT lineage data

> Unfortunately, this functionality is not working. These instructions will be completed following completion of a development fix. When complete, functionality will be similar to other upload/import processes described elsewhere in this manual.

Refer to Appendix A6.4 for the user process flow diagram relating to PCT Lineage management.

14.3 ‘Status’ section

Click on the ‘Status’ section heading to open the Status edit page (see Figure 272). Data in this section are editable by Classification Edit Users and Administrators only.

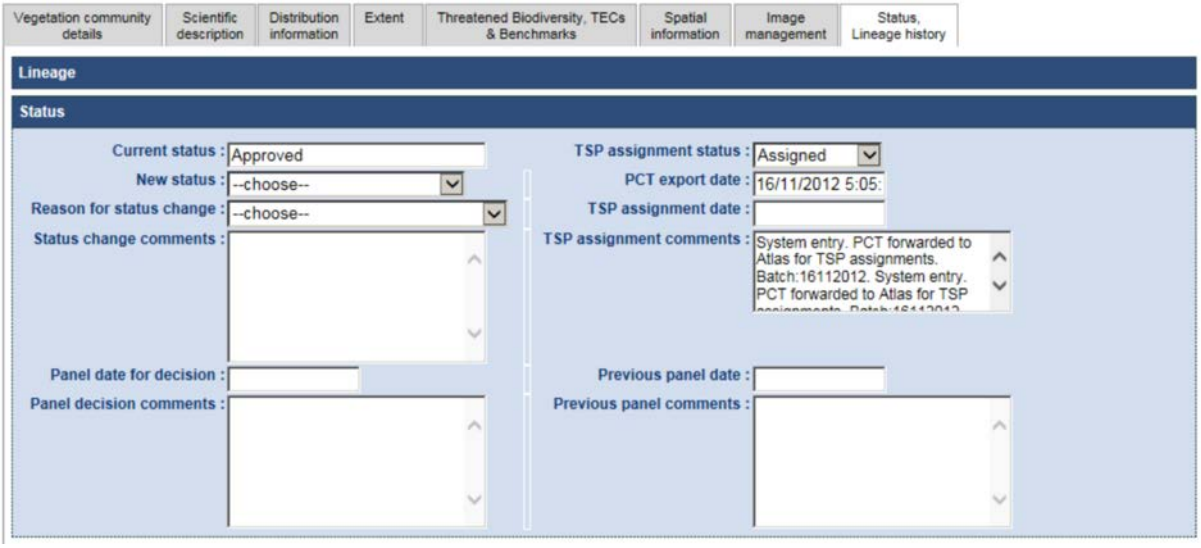


Figure 272 Open the 'Status' section

PCT Definition Status fields:

1. The 'Current status' field is pre-populated and not editable.
2. The 'New status' and 'Reason for status change' fields are all editable via drop-down menus. Data are edited by selecting from each drop-down menu to enter or change data in these fields.
3. Proceed to populate the following fields by entering data as text: 'Status change comments', 'Panel decision comments' and 'Previous panel comments'.
4. The 'Panel date for decision' and 'Previous panel date' fields are edited via the pop-up calendars (similar to that in Figure 273). Click in the relevant field to open the selection calendar. Navigate using the arrows at the top and select a date by clicking once in the calendar itself.

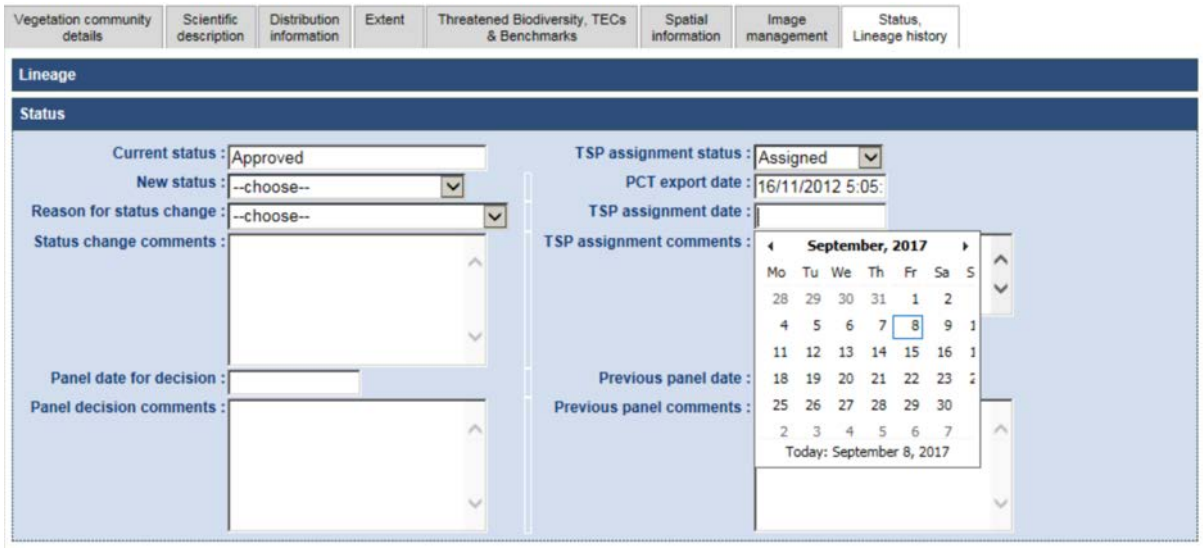


Figure 273 Pop-up calendars are used to select the correct date

TSP Assignment Status fields:

The 'PCT TSP Management' functionality has been de-activated and will be removed in a future release (see Section 15.2.3). These corresponding field in the 'Status' section will also be removed.

Refer to Appendices 6.1, A6.2 and A6.3 for business and process flow diagrams relating to PCT management.

Part D Using the additional Administration functions in the Vegetation Classification edit application

Part D of this manual deals with the administrative functionality and processes within the Vegetation Classification edit application. The Administration menu is visible and accessible by Administrators and some Edit User roles only. The five distinct user roles for the BioNet Vegetation Classification Edit (Secure) application are described broadly in Part C and detailed in Appendix 3. Functionality for editing and data management are described in Part C.

15. Additional Administration functions

The Administration tools can be accessed from the top navigation bar (see Figure 274). The suite of functions visible will vary with user role.

Figure 274 Access the admin functions via the top navigation bar

15.1 'User management'

This functionality allows Administrators and Classification Edit users to create and maintain user roles for all users with access to the Vegetation Classification edit application. Edit (and Admin) rights need to be managed as roles alter, e.g. through projects.

New Edit user nominees need to be endorsed, added in the system, assigned the appropriate edit user role and assigned to selected projects as listed.

1. Click on the 'User management' drop-down menu item on the 'Administration' top navigation bar (see Figure 274).
2. For new and existing users, use the 'User name' search field to search for users (see Figure 275). Note, all users must first be registered in ASMS. The 'User name' search will try to match on part of the Login name, First name or Surname. If a user is not listed when your conduct the 'User name' search, an ASMS Administrator will need to check that they are registered in ASMS and add them if they are not registered.
3. Users' details can be exported in .csv format.
4. To alter the access rights of a user, click on 'Add' (for new users), or 'Edit' (for existing users), (see Figure 275).

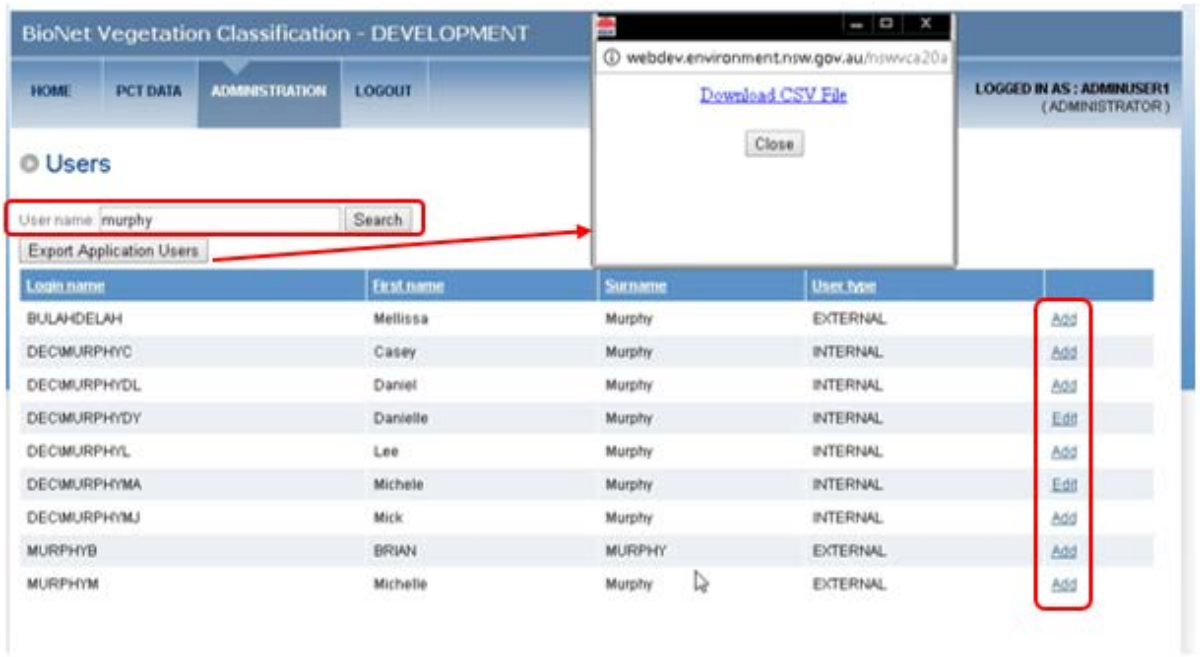


Figure 275 Search for users, edit the user role export details

5. Edit the user access. ‘Role’ has drop-down menu options (see Figure 276).
6. For Statutory Data Edit users and TEC Relationship Edit users, check the Community source/s for which they are to have edit access. Note, Admin users and Classification Edit users automatically have access to all Community sources (see Figure 276).
7. Edit users no longer editing can either be have their access updated to ‘Inactive’ by unchecking the ‘Active’ box, or their role can be updated to ‘Public User’.
8. Click ‘Save’.

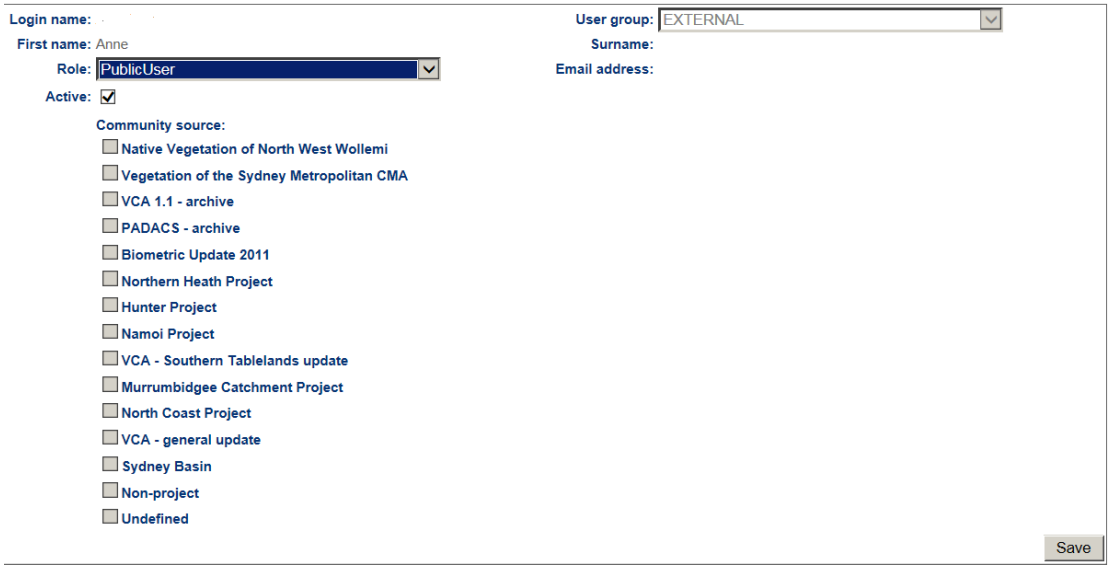


Figure 276 Select the appropriate user role and, if relevant, community source/s. Note, some information has been erased from the image to protect user information

9. To complete the process of providing PCT edit access to users, plant communities need to be specifically assigned to each user via the ‘Administration’ > ‘Assign plant communities’ drop-down menu item (see Section 15.6).

15.2 ‘System utilities’

A suite of Data Administration Tools is available for use primarily by Administrators and, to lesser degrees, Classification Edit users and Statutory Data Edit users.

To access these tools, click on the ‘System utilities’ drop-down menu item on the ‘Administration’ top navigation bar (see Figure 274). The ‘Data Administration Tools’ page will open (see Figure 277). The suite of functions visible will differ between user roles.

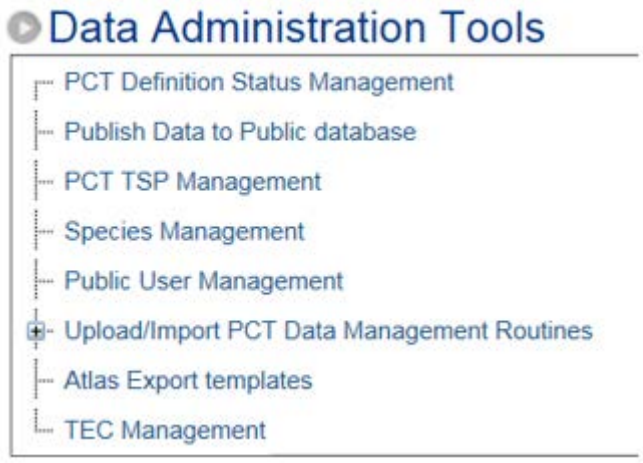


Figure 277 Open the Data Administration Tools page

15.2.1 ‘PCT Definition Status Management’

This functionality allows Administrators and Classification Edit users to search for and edit the PCT Definition Status for individual and multiple PCTs within the Vegetation Classification edit application.

To change a PCT Definition Status:

1. Click on the ‘PCT Definition Status Management’ option (see Figure 278).

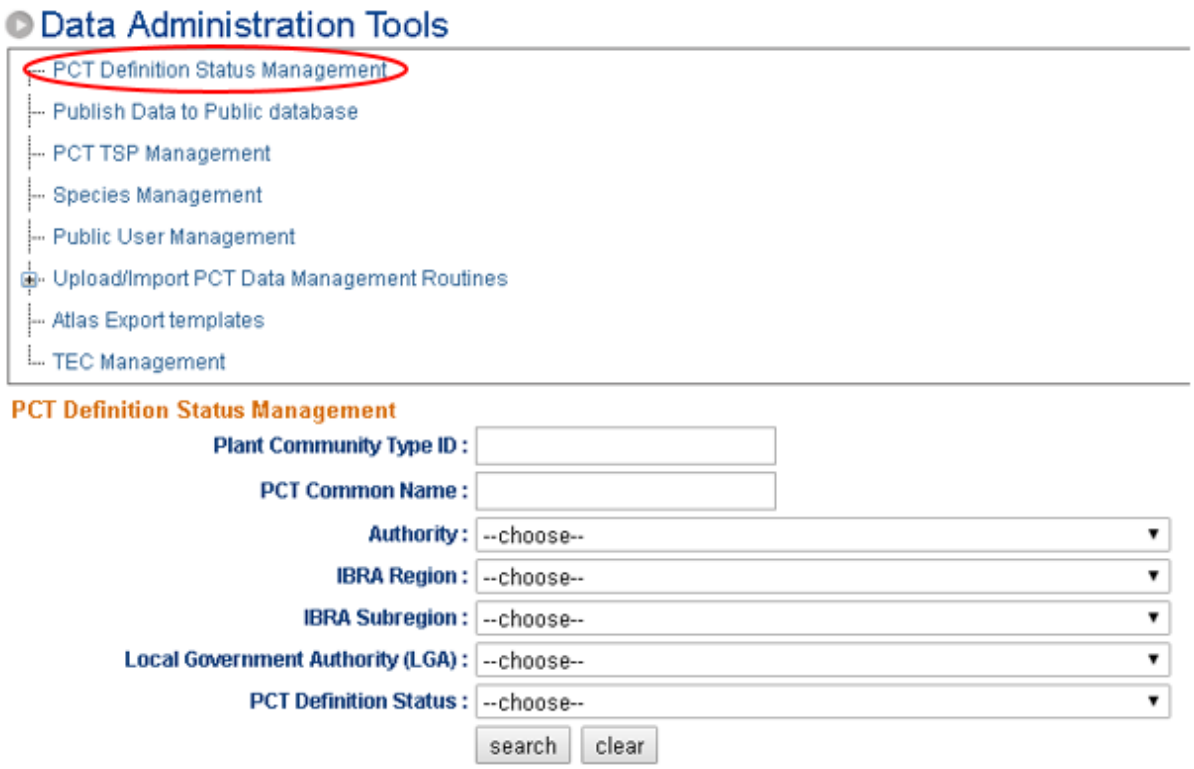


Figure 278 Open the 'PCT Definition Status Management' page and search for the desired PCT/s

2. Search for the desired PCT/s using the search fields. Options are:
   a. Plant Community Type ID – integer
   b. PCT Common Name – text
   c. Authority (= Classification Project) – drop-down list
   d. IBRA Region – drop-down list
   e. IBRA Subregion – drop-down list
   f. Local Government Authority (LGA) – drop-down list
   g. PCT Definition Status – drop-down list
3. Click on the 'Search' button, or 'Clear' to remove all search terms and any previous search results.
4. All PCTs matching the search criteria will be displayed below (see Figure 279).

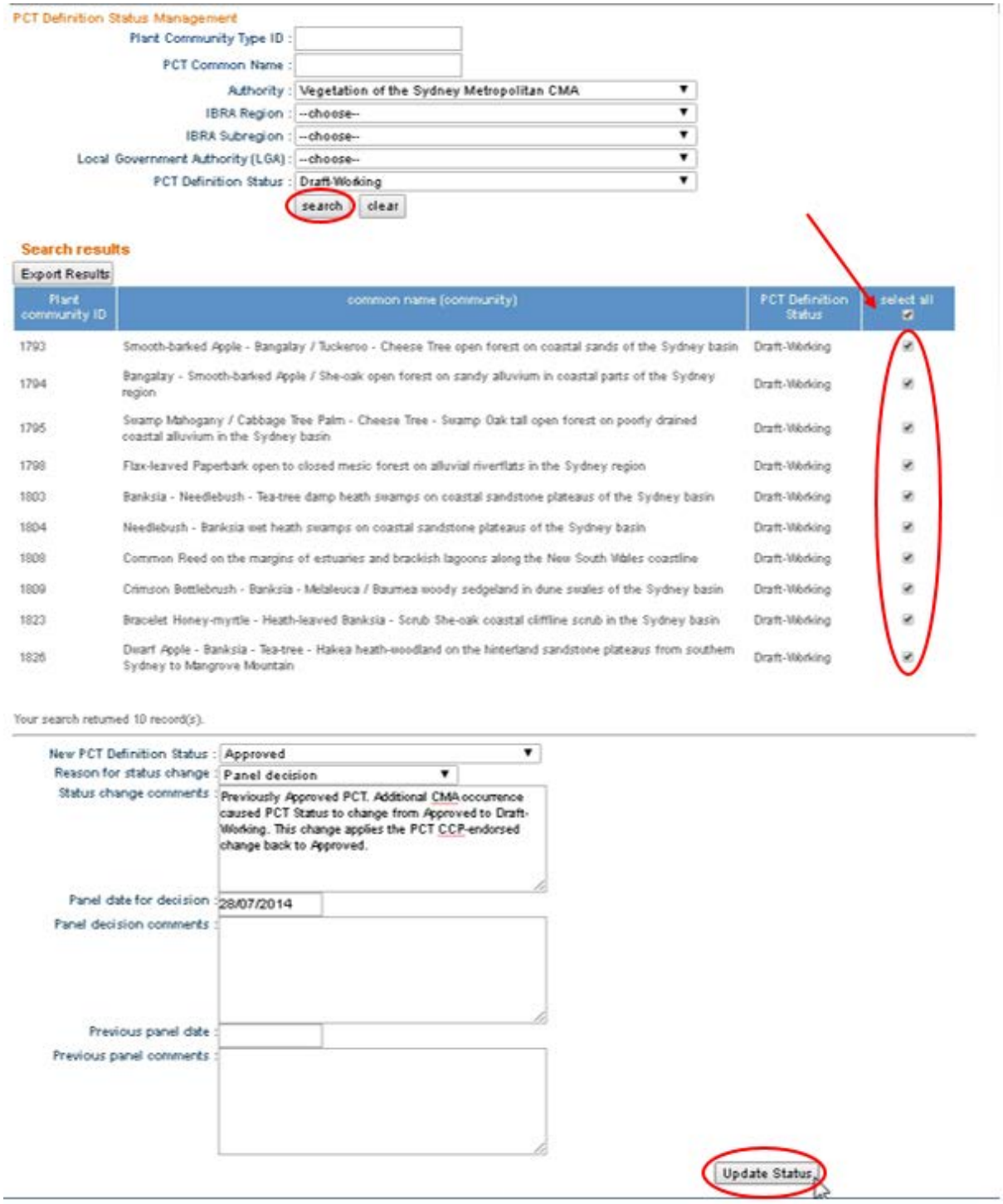


Figure 279 Search for the desired PCT/s, select the new Status and record all relevant information regarding the Status change

5. Select the desired PCT/s using the 'select all', or individual tick-box/es (see Figure 279).
6. Enter the status change details:
   a. Select the 'New PCT Definition Status' and 'Reason for status change' from the drop-down menu options.
   b. Free text is to be added for comments about the Status change, Panel decision and Previous panels.

c. The date options are pop-up calendars. Either click directly in the open month to enter that date or navigate by the two left and right scroll bars either side of the name of the month above to choose another month.

7. Click ‘Update Status’ once complete.

15.2.2 ‘Publish Data to Public database’

This functionality is used by Administrators to migrate changes (according to specified rules) in the Edit version of BioNet Vegetation to the Public version and to update information available to BioNet Atlas database.

Publish to Public is a two-step process, as the automated Publish update occurs overnight.

The first step is to create the publish ‘event’. This is done via the ‘Publish Data to Public database’ function page.

Each newly created publish event will be automatically run at midnight on the day it was created.

The second step is to check the status of the publish event the following day. Publish events can have one of three status states: ‘Completed’; ‘To be processed’; and ‘Failed’. A publish event that has been implemented without error will automatically have its status assigned as ‘Completed’. Any publishing events that have been created but are yet to run will be assigned as ‘To be processed’. A publishing event that has been created and run but has encountered errors will be assigned ‘Failed’. In this last case the publishing event has not been implemented. A failed event will require de-bugging and fixing.

To access this functionality, click on the ‘Publish Data to Public database’ option under ‘Administration’ > ‘System utilities’ (see Figure 280).

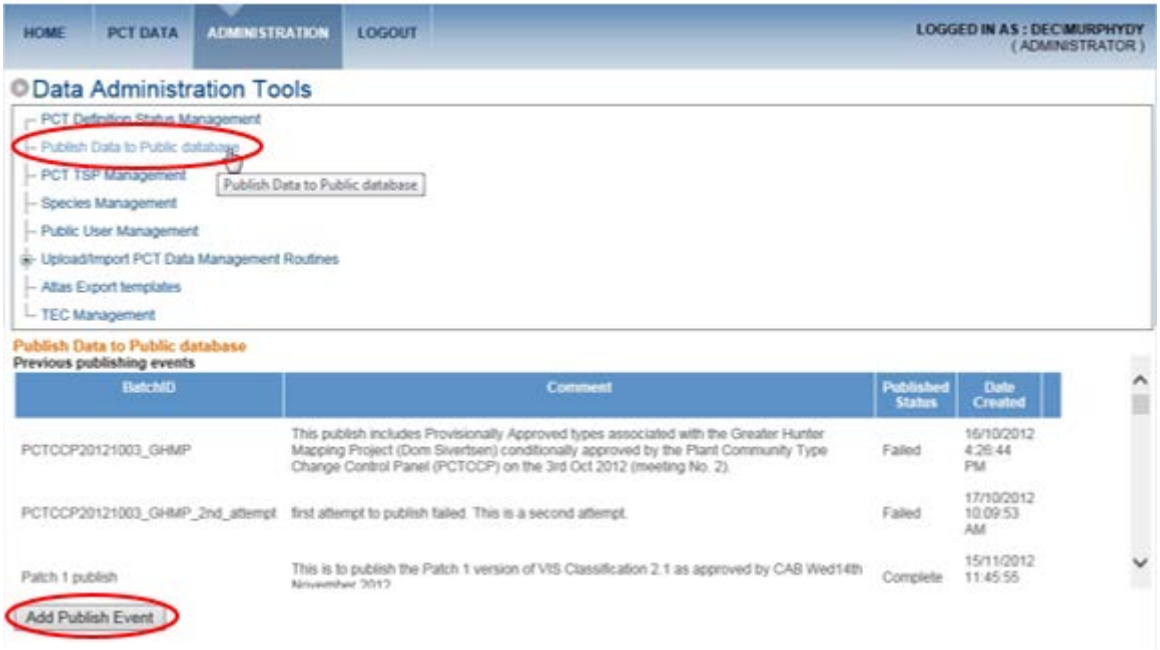


Figure 280 Accessing the ‘Publish Data to Public database’ function

Previous publish events will be displayed in the Previous publishing events list (see Figure 280). Check out this screen shot from before the first ever publish event! (see Figure 281).

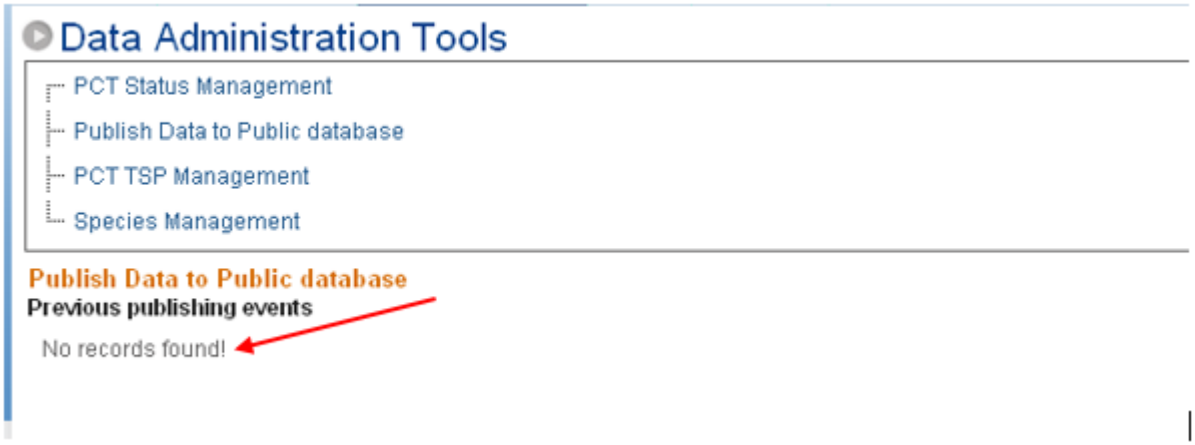


Figure 281 Screen shot from before the first ever publish event!

To create a new publish event:

1. Click the 'Add Publish Event' button. The edit area will open (see Figure 282).

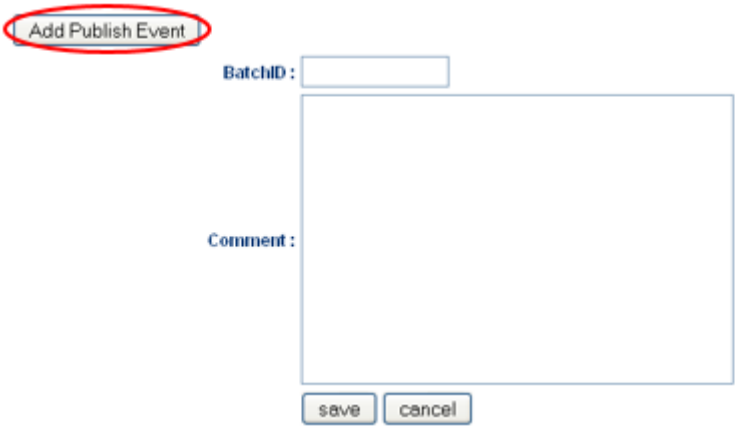


Figure 282 Add a new publish event by creating a meaningful BatchID supported by informative comments

2. Create an ID (name) for the event in the 'BatchID' field. This identifier should be a short summary that identifies the publish event. Ensure that it includes the date the event is created; the name should also reflect the reason for the publish event, e.g. GHMP_02042013 for publish of PCTs from the Greater Hunter mapping project. Terms like 'bug fixes' or 'Patch' would indicate that the publish event is confined to maintenance updates.
3. Enter descriptive text to provide context and details of the publish event in the free text 'Comment' field.
4. When you have completed details, click the 'save' button to create the publish event. To exit the 'Add Publish Event' edit screen without publishing, click 'cancel'.

N.B: Once a Publish event has been scheduled the only way to stop it running is to delete via SQL script. See 'Delete Publish Event' in the SQL Queries Library document (DOC18/197221).

In the event of a failed event, three error log scripts should be run via the Advanced Queries SQL dialogue box (see Section 15.4.2). The error log scripts for failed publish events are available to be cut and paste from the Publish Check SQLs document (DOC18/273316).

15.2.3 'PCT TSP Management'

This functionality was used by Administrators to monitor and track the progression of Threatened Species Profile (TSP) associations to PCTs made by Accountable Officers in the BioNet Threatened Biodiversity Profiles (TBP) data collection within BioNet Atlas.

This tracking functionality was originally developed because vegetation types (BVTs, not PCTs) could not be migrated to the Regulatory Tools until all TSP associations were completed.

This functionality has been de-activated and will be removed in a future release.

Until then existing BVT – TSP association data will continue to be accessible via the 'PCT TSP Management' option under Administration > System utilities (see Figure 283).

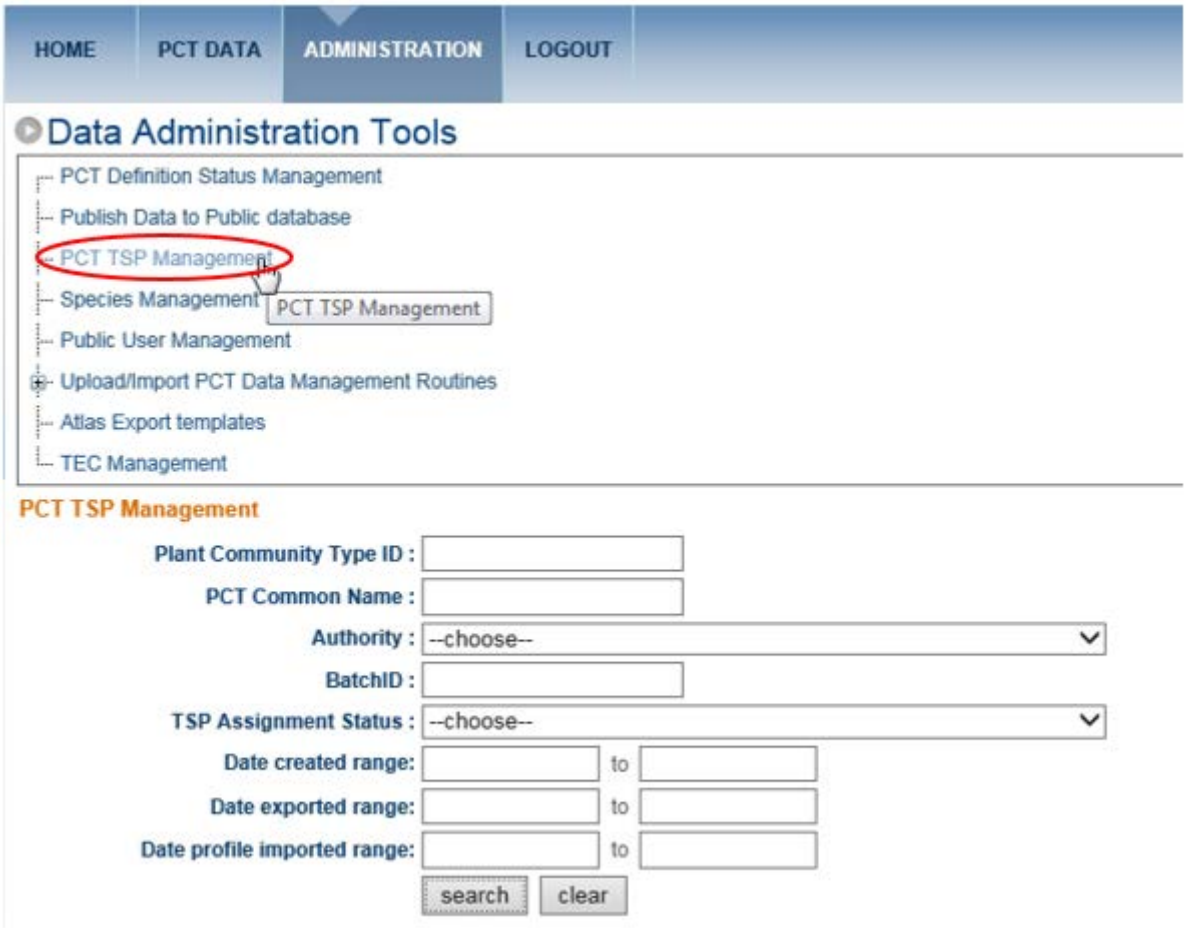


Figure 283 Accessing the 'PCT TSP Management'

15.2.4 'Species Management'

The 'Species Management' functionality allows Administrators and Classification Edit users to update the BioNet Vegetation Classification species table with the latest floristic species taxonomy from the BioNet Species Names data collection. These names are imported into BioNet Atlas as needs from the Census of Australian Plants (CAPS).

To access this functionality, click on the 'Species Management' option under Administration > System utilities (see Figure 284). The update button will be displayed.

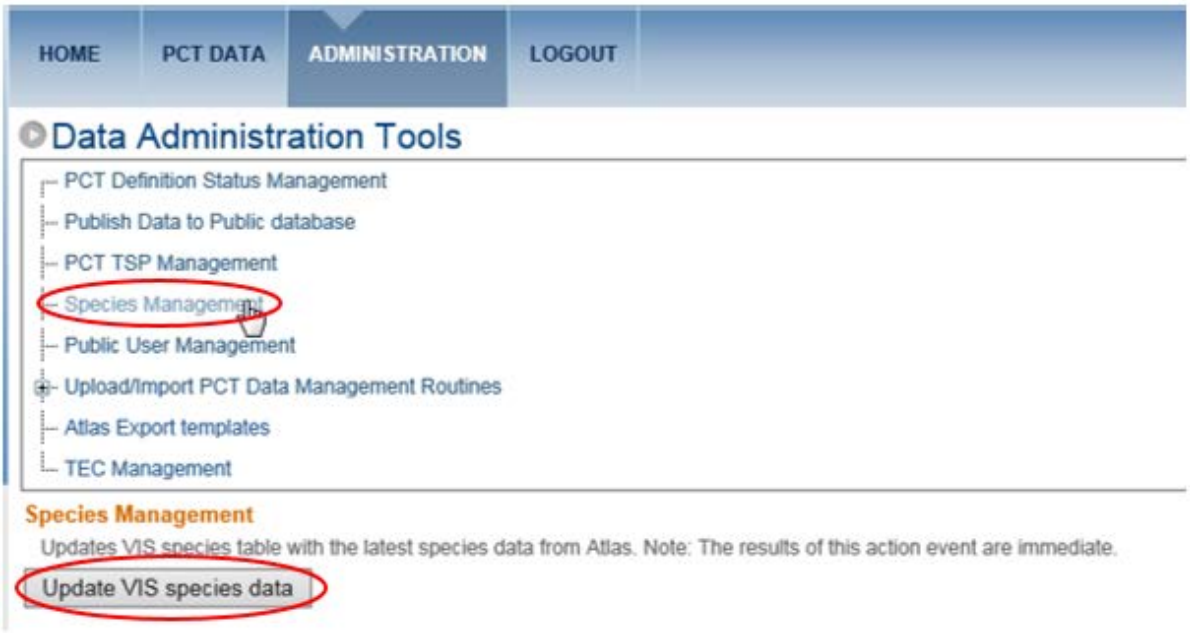


Figure 284 Accessing the 'Species Management' function

To run the update simply click the 'Update VIS species data' button (see Figure 284). Note: The results of this action event are immediate.

Upon successful completion of the update, the system will display confirmation message 'Species update was successful'.

> **Note:** species names already assigned within individual PCTs are not updated by the 'Species Management' update usp.
>
> **Note:** Administrators should ensure this usp is run regularly, e.g. monthly.

15.2.5 'Public User Management'

This functionality allows Administrators to manage registration details for users of the BioNet Vegetation Classification public application. The 'Public User Management' drop-down menu item can only be seen by these users.

To access this functionality, click on the 'Public User Management' option under Administration > System utilities (see Figure 285).

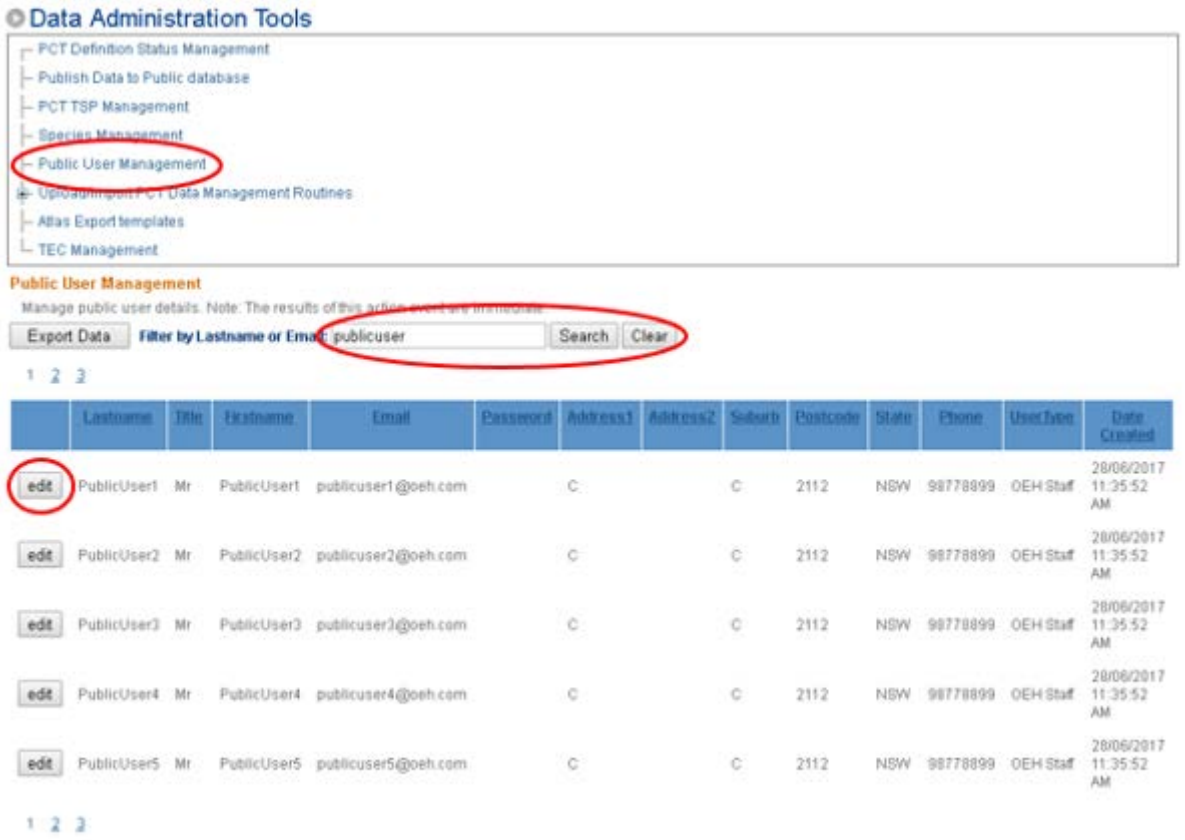


Figure 285 Accessing the 'Public User Management' functions, searching for a user and opening the details to review / edit

To search for, review and edit an existing user's details:

1. Type in the relevant details for the desired user into the 'Filter by Lastname or Email' text box and click on 'Search' (see Figure 285). To remove the entered text, click on 'Clear'.
2. A list of matching users will appear underneath, with five records per page.
3. To review and/or edit a user's registration details, click on the 'edit' button beside that user's details (see Figure 285). Note, 'edit' buttons are located at both the left and right ends of each user's details in the search results table.
4. The user's registration details will be displayed underneath (see Figure 286). All fields displayed can be edited.

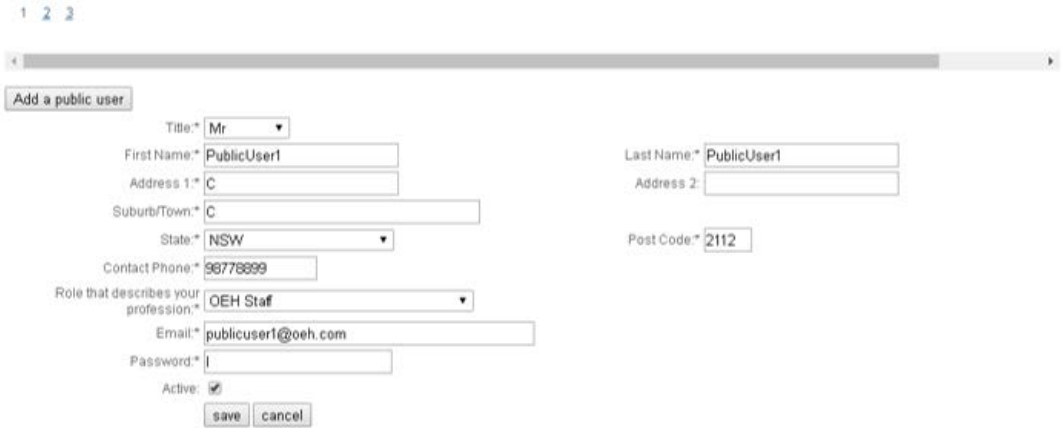


Figure 286 All fields can be edited

5. When the edits are complete, either click ‘save’ to save the changes, or ‘cancel’ to close the display and edit area without saving the changes.

To add a new Public User:

1. Click the ‘Add a public user’ button. This will display the user fields ready for editing (see Figure 287). All fields marked with an asterisk (*) are required fields.

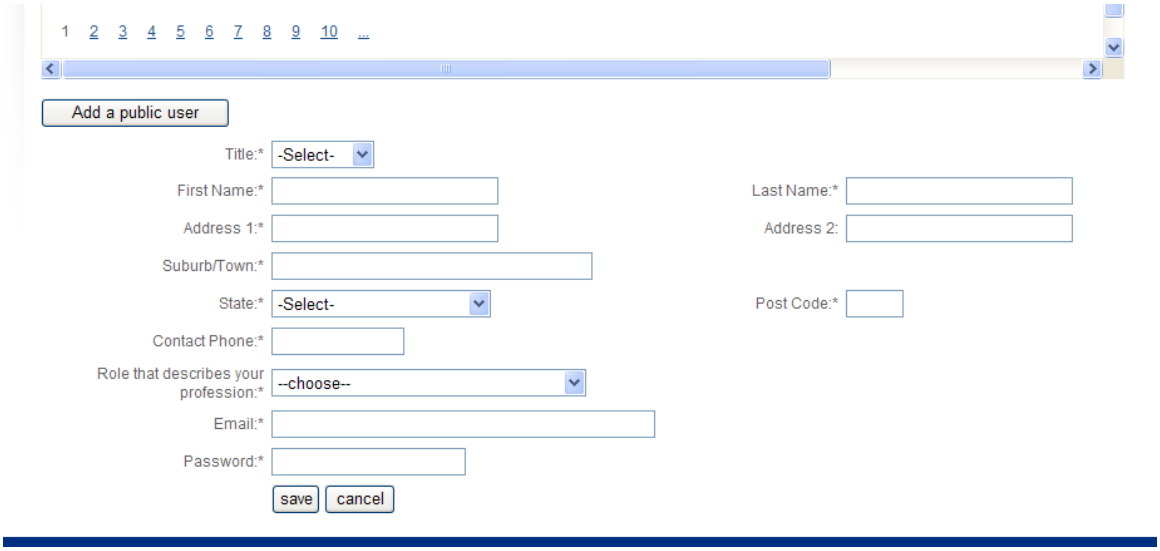


Figure 287 Blank fields ready to be populated for a new user

2. When you have completed changes, either click ‘save’ to save your changes, or ‘cancel’ to close the display and edit area without saving your changes.
3. Note, public users can be added but not deleted. Sometimes a user makes an error registering, then re-registers rather than seek assistance to correct the error. The incorrect registration remains in the system.

To export the current list of Public Users:

1. Click the ‘Export Data’ button at the top left under the ‘Public User Management’ section (see Figure 288). Note: the list will be filtered based on the current ‘Search’ criteria.

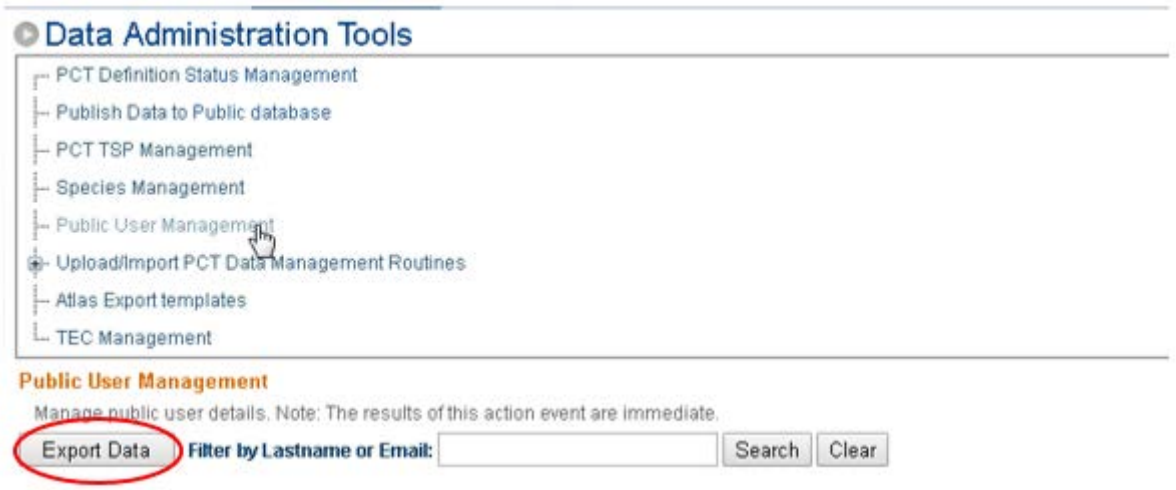


Figure 288 Exporting registration details for all BioNet Vegetation Classification public application users

2. A download dialogue pop-up screen will appear (see Figure 289). Click ‘Download CSV File’ to view and save the export or click ‘Close’ to cancel the export operation.

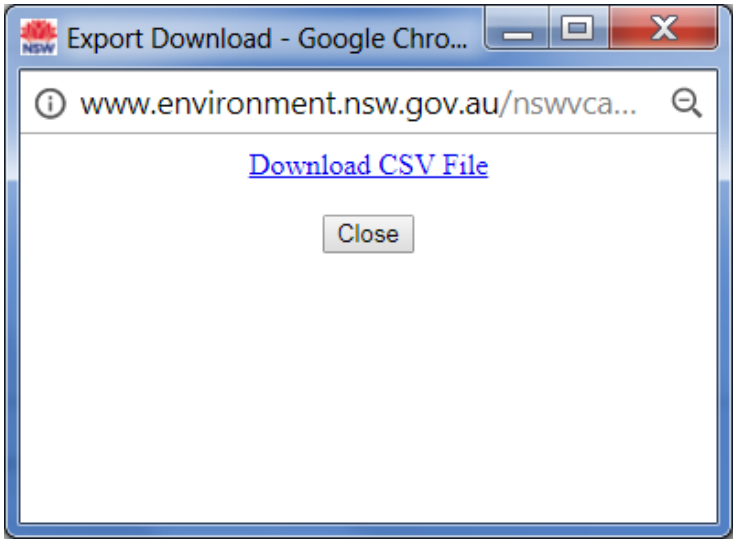


Figure 289 Click ‘Download CSV File’

3. When you click to download, a ‘Show all’ button will appear (see Figure 290).

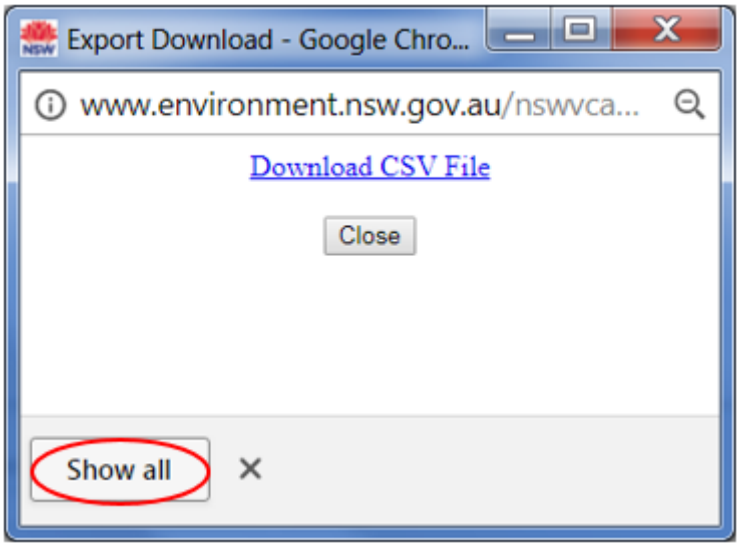


Figure 290 Click on ‘Show all’ to view the file in the download folder

4. Click on the ‘Show all’ button. The csv file will be listed as the most recent download (see Figure 291).

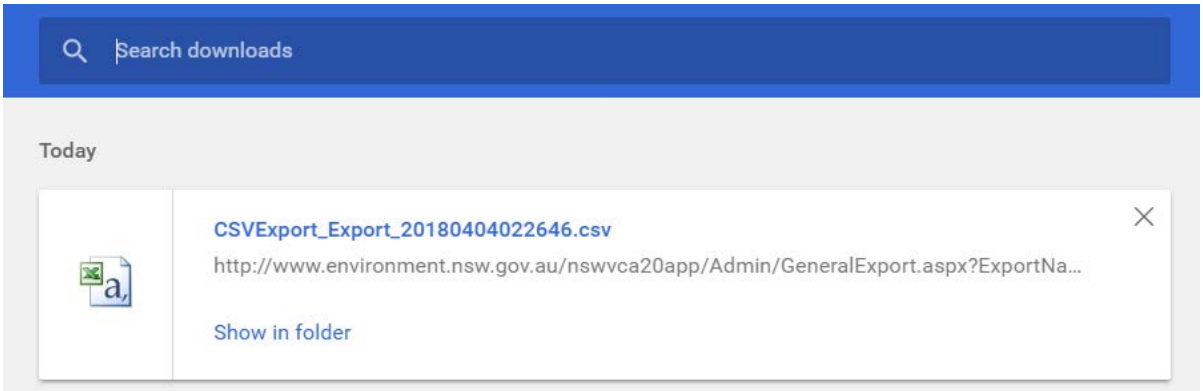


Figure 291 Click on the csv filename in the download folder to open the file

5. Click on the file name. The file will be opened by the default application on your machine (e.g. MS Excel).
6. To save the file, click ‘Save’ and the standard directory selection screen will open (see Figure 292). Select where you want to save the file then click ‘Save’. Alternatively, close the file.

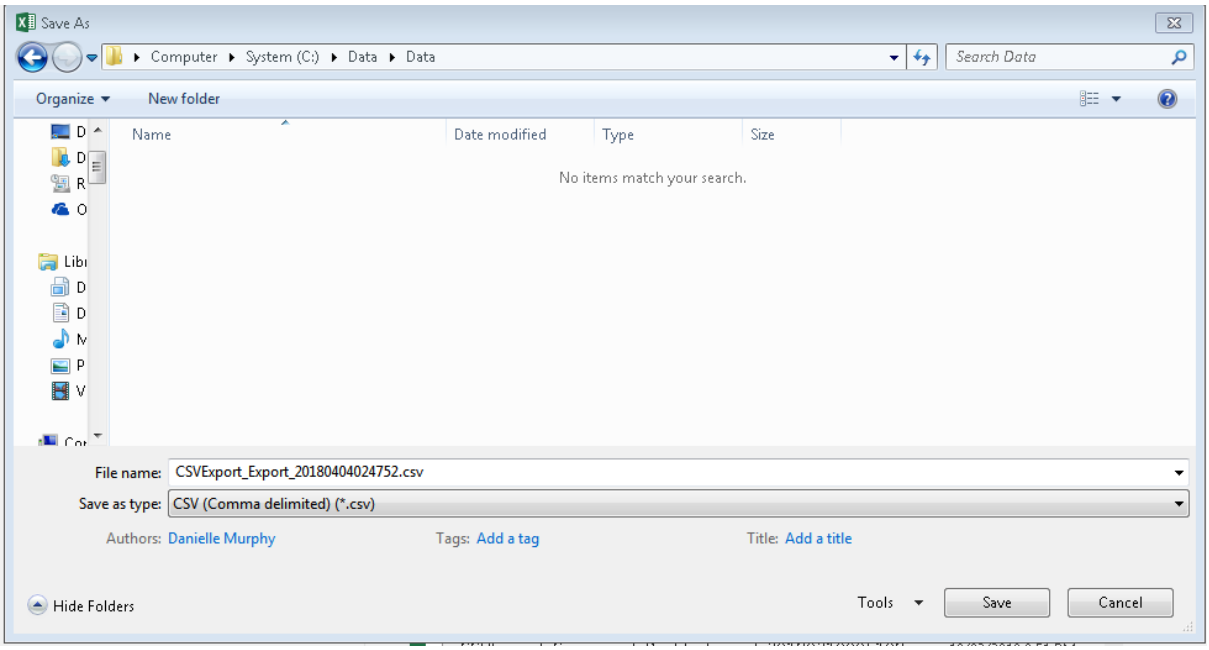


Figure 292 Saving the downloaded file

15.2.6 ‘Upload/Import PCT Data Management Routines’

This functionality allows Classification Edit users, Statutory Data Edit users and Administrators to upload and import PCT Data. The ‘Upload/Import PCT Data Management Routines’ drop-down menu items can only be seen by these users (see Figure 293).

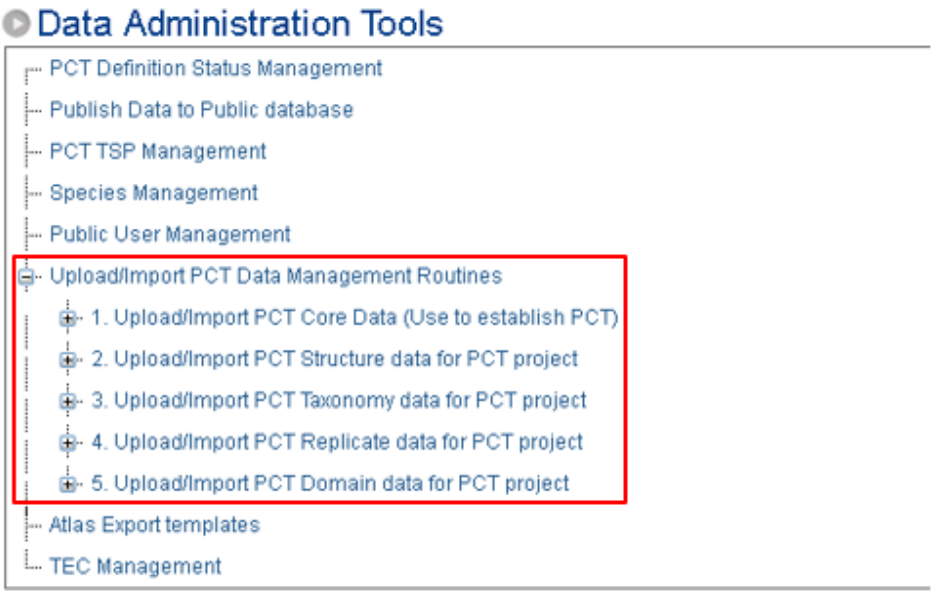


Figure 293 Upload/Import PCT Data Management Routines functionality is located within System utilities under the Administration tab in the top navigation bar

User information for the various 'Administration – System utilities – Upload/Import PCT Data Management Routines' are in Part C of this user manual and the upload/import template formats are provided in Appendix 5 (details in Table 3).

Table 3 Location of user information and templates for upload/import PCT Data management routines

Upload/Import name	User Information location	Template location
PCT Core Data (Use to establish PCT)	Section 7.3	Appendix A5.1
PCT Structure data	Section 8.5	Appendix A5.3
PCT Taxonomy data	Section 8.3	Appendix A5.2
PCT Replicate data	Section 12.3	Appendix A5.4
PCT Domain data	Section 9.4	Appendix A5.5

15.2.7 'Atlas Export templates'

This functionality allows Administrators to verify PCT Data exported to the BioNet Threatened Biodiversity Profiles data collection. The 'Atlas Export templates' drop-down menu item can only be seen by Administrators.

To access this functionality, click on the 'Atlas Export templates' option under 'Administration' > 'System utilities' (see Figure 294).

Figure 294 Accessing the 'Atlas Export templates' export functions

These four exports simply allow Administrators to see the data that are transferred to Atlas, as currently held in BioNet Vegetation Classification. These exports are not used in Atlas directly.

The data sets that can be exported are:

1. Benchmarks
2. NSW Landscapes ("mitchellandscape")
3. Vegetation classes
4. Vegetation formations

Simply select the required template and click on the 'Export' button (see Figure 295).

Figure 295 The four Atlas Export template options

A download pop-up will appear. Click on 'Download File' (see Figure 296).

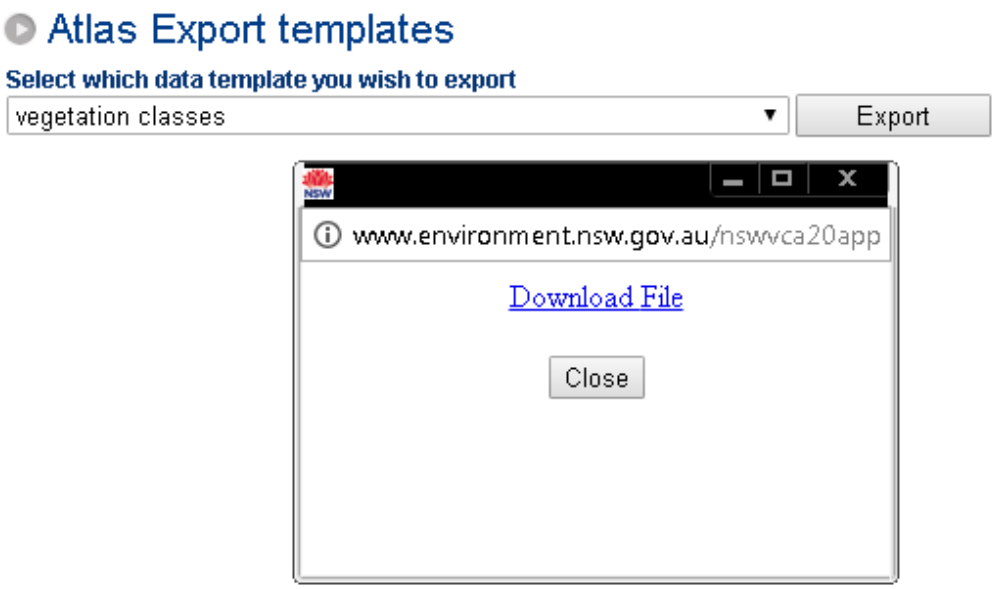


Figure 296 Download pop-up

Click on the csv file name in the Download list (see Figure 297) to open the file (e.g. in MS Excel).

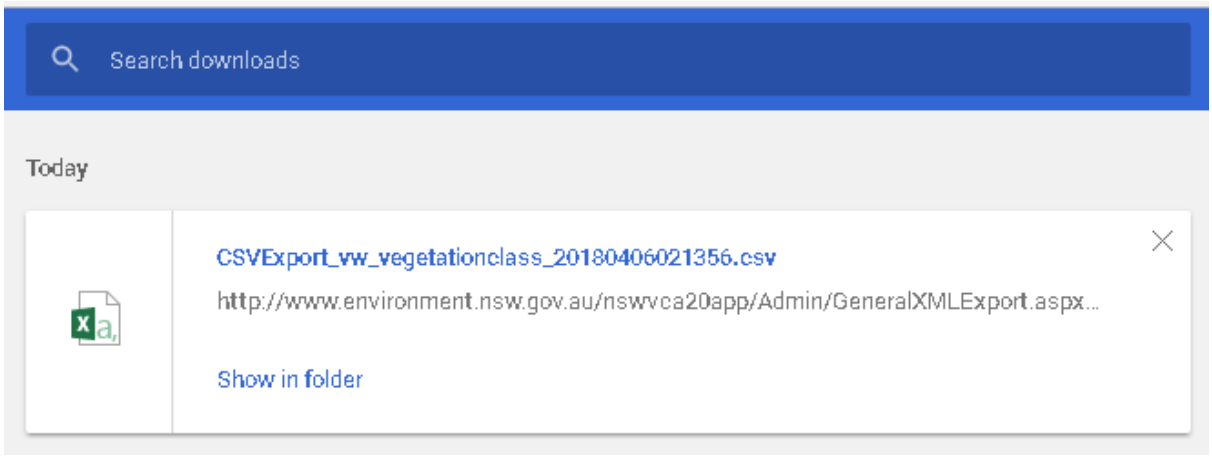


Figure 297 Click on the csv file name to open the file

Review the data and save if desired.

15.2.8 'TEC Management'

This functionality allows Administrators to refresh the TEC Names table with the latest data from the BioNet Threatened Biodiversity Profiles data collection (tblEndangered). Note this update now also occurs automatically each night.

To access this functionality, click on the 'TEC Management' option under Administration > System utilities (see Figure 298). The 'Update TEC data' button will be displayed.

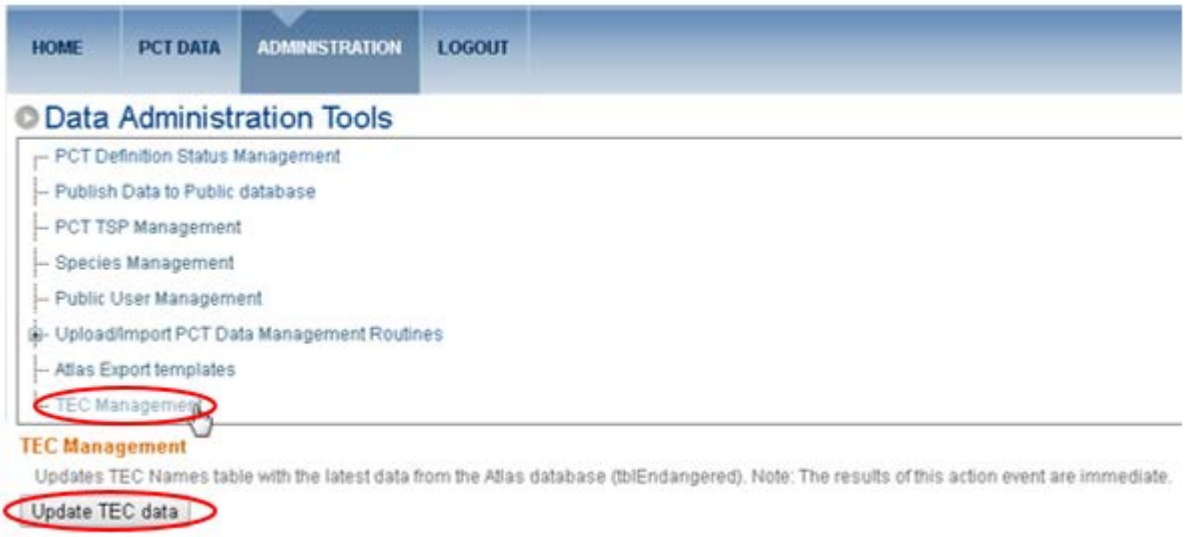


Figure 298 Accessing the 'TEC Management' function

Click on the 'Update TEC data' button to update the TEC Names table with the most recent data from BioNet Atlas. The update is immediate.

Given the nightly automated update, this manual update is likely to be required only after entry of TEC data into Atlas that has yet to be transferred to BioNet Vegetation Classification.

15.3 'Plant Community Lineage Management'

PCT Lineage data are maintained by Classification Edit Users and Administrators. The 'Plant Community Lineage Management' drop-down menu item can only be seen by these users.

User information for the 'Administration – Plant Community Lineage Management' section is detailed in Section 14.2 (Part C) of this user manual and the upload/import template format is provided in Appendix A5.8.

Refer to Appendix A6.4 for the process flow diagram relating to PCT Lineage management.

15.4 'Data queries'

The Data queries functionality is accessible only to Administrators and Classification Edit users. The 'Data queries' drop-down menu item can only be seen by these users, with Classification Edit users only having access to simple queries (Section 15.4.1).

The 'Data queries' function provides a means to design a full range of reports and exports beyond the templates provided in the System Reports and general user Reports / Exports options. As all tables and fields are available, constructing the queries is necessarily complex.

There is no save function to enable constructed queries to be automatically saved and retrieved, however there is provision to display and copy the created SQL queries and to save these as txt files. The SQL text can then be copied and pasted into the SQL Query display screen in the Advanced Data Queries box: details are provided in Section 15.4.2.

To access the Data queries functions:

2. Select 'Data queries' from the drop-down list under the Administration tab in the top navigation bar (see Figure 299).

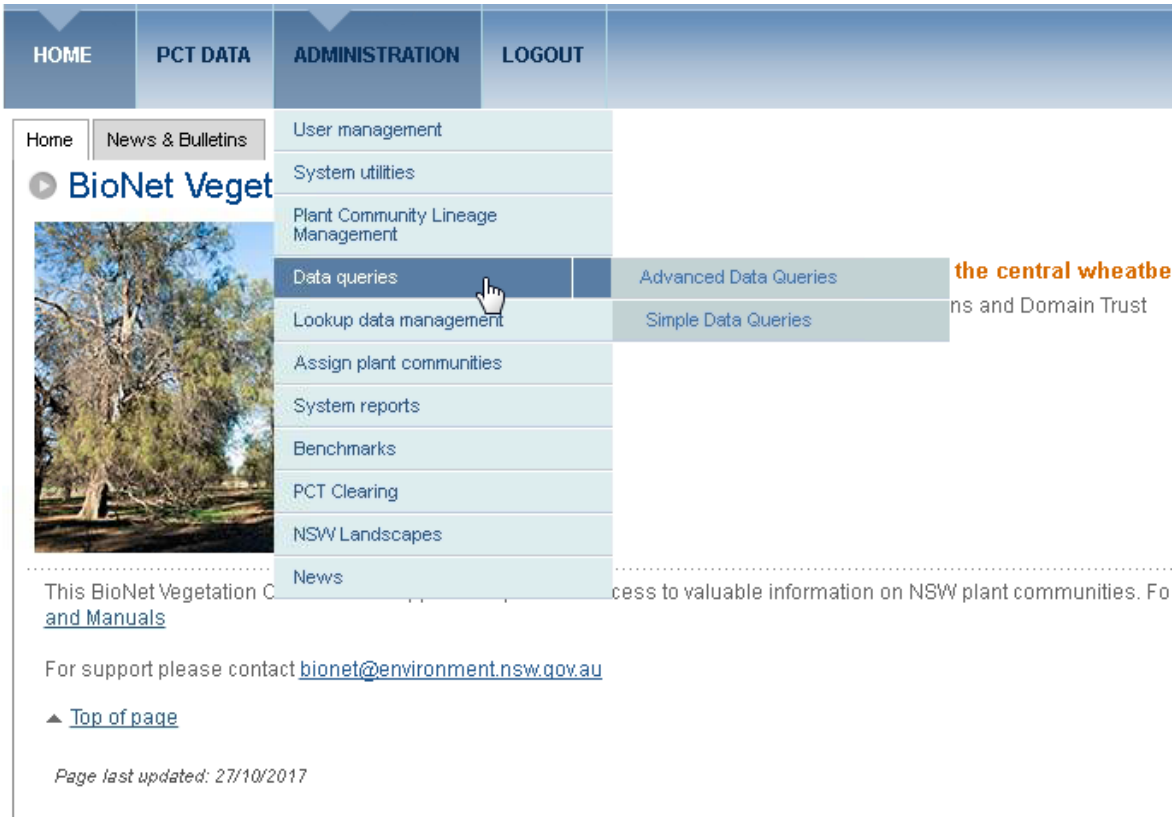


Figure 299 Select 'Data queries' under the 'Administration', then choose either the Simple or Advanced Data Queries option

3. Choose either 'Simple Data Queries' (refer to Section 15.4.1), or 'Advanced Data Queries' (refer to Section 15.4.2).

15.4.1 'Simple Data Queries'

Select 'Simple Data Queries' (as per Section 15.4). This will open the query construction screen (see Figure 300).

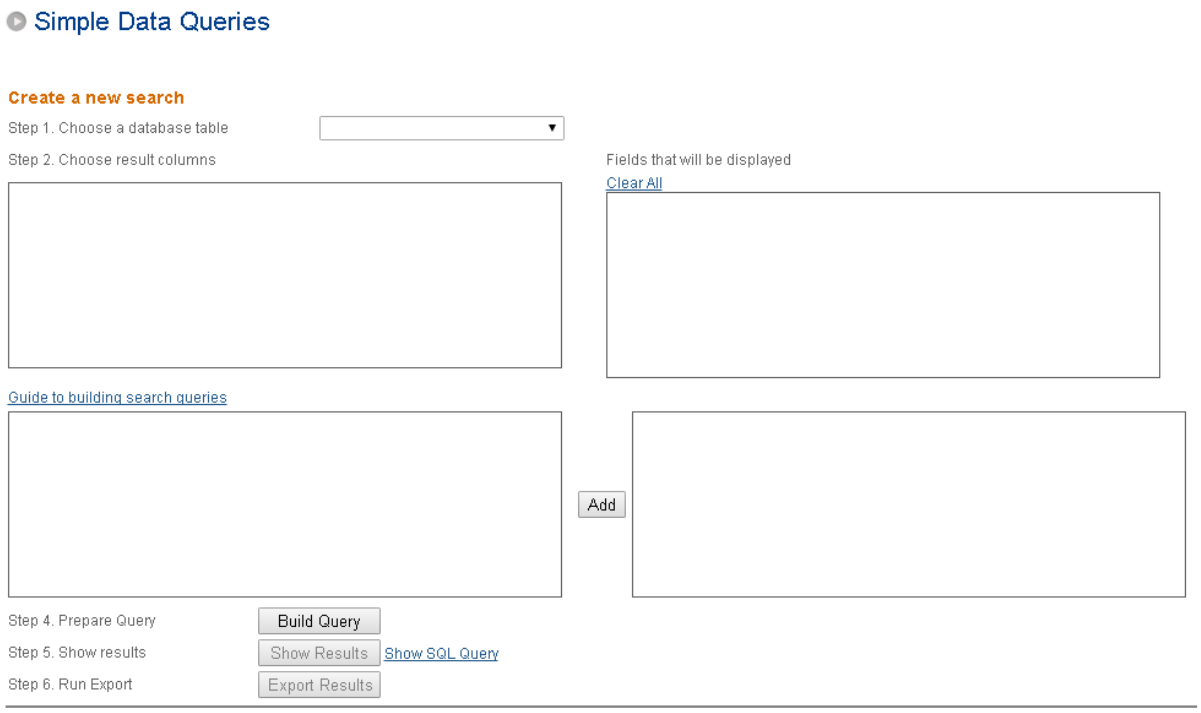


Figure 300 Simple Data queries construction screen

The process for constructing the queries is:

1. Choose the database table.
2. Choose the fields that will display data in the results columns. Only the fields related to the selected table will be displayed. Repeat 1 and 2 for each field and table as required.
3. Build the search query. This will determine which PCTs are retrieved. N.B. the relevant table must be chosen at Step 1 for each desired criterion.
4. Prepare the query. Once constructed, the SQL Query can be displayed and edited, or copied from the display screen and saved elsewhere.
5. Show the results.
6. Run the export.

Step 1: Choose a database table

1. Click the drop-down menu arrow on the right of ‘Step 1. Choose a database table’ to bring up the list of tables to select from (see Figure 301).

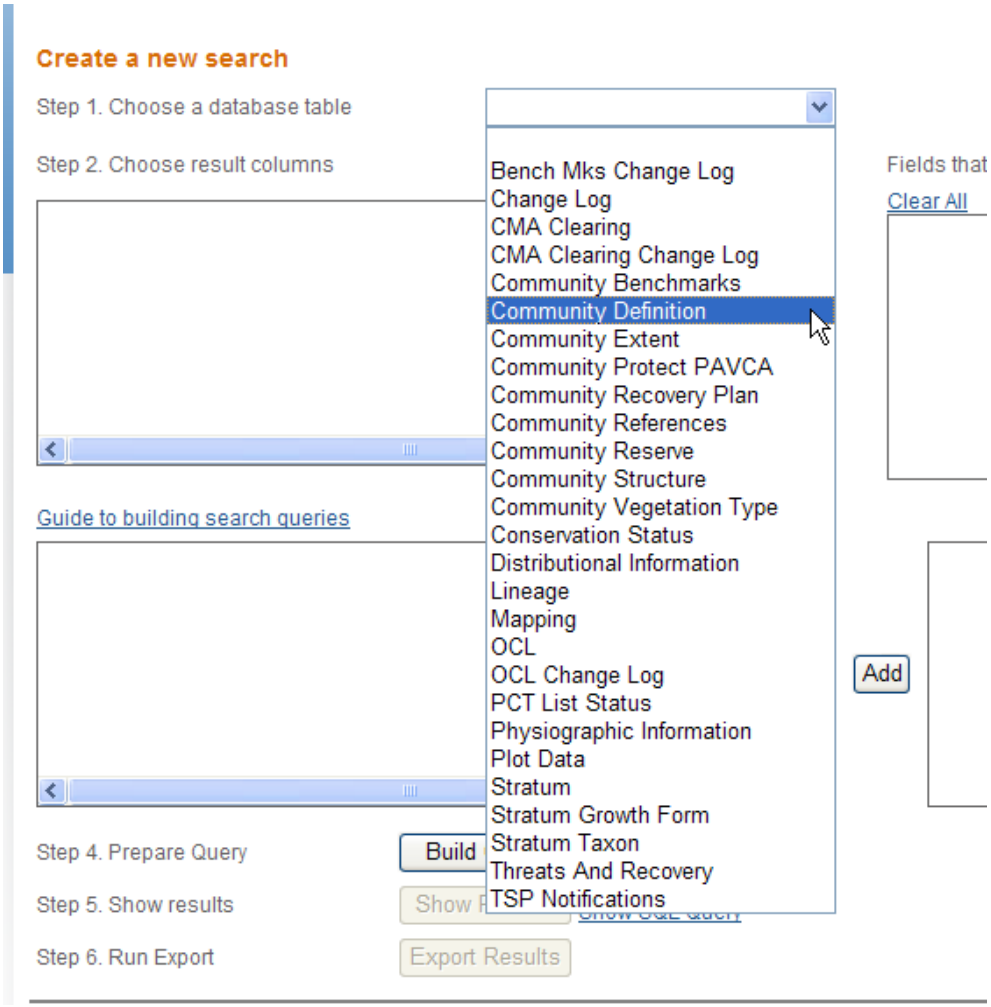


Figure 301 List of database tables to select from in Step 1

2. Click on the desired database table name. The name will appear in the dialogue box and the related fields will be displayed in the ‘Step 2’ and ‘Step 3’ below. Note, those in Step 3 are displayed by clicking in the ‘+’ symbol beside the table name (see Figure 302).

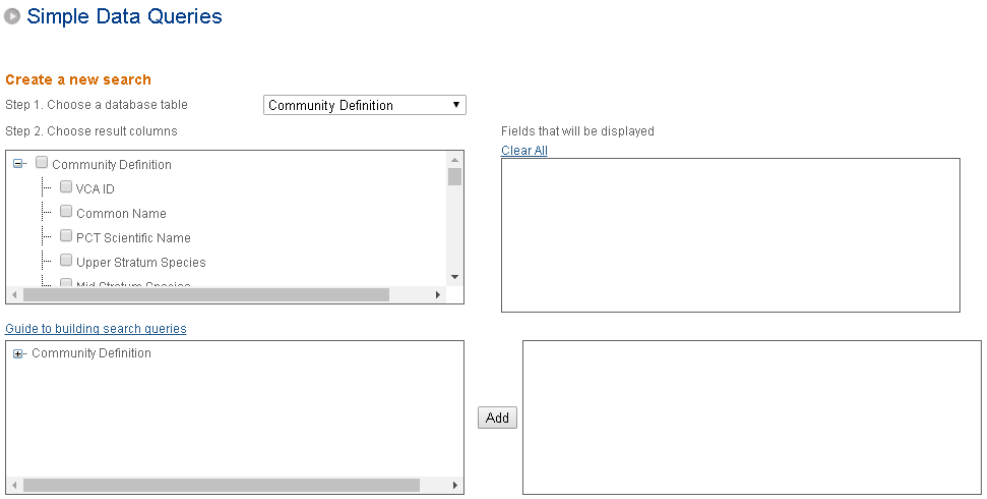


Figure 302 The field names from the chosen database table will populate into the Step 2 and Step 3 boxes

Step 2: Choose result fields

3. You can select all fields or deselect all fields by clicking the check box next to the table name in Step 2. Alternatively, select and deselect individual fields by clicking the check box next to the field (column) name. When the field is checked, it will appear in the 'Fields that will be displayed' box on the right (see Figure 303).

Figure 303 Fields selected in Step 2 will be listed in the box on the right

4. To remove any previously selected fields, click the 'Delete criteria' link next to the relevant criterion on the right in the display box (see Figure 303).
5. When completed, the list of 'Fields that will be displayed' will be the fields exported, i.e. the spreadsheet columns if the exported csv is opened in a spreadsheet application such as MS Excel.
6. Repeat Steps 1 and 2 for additional tables and fields as required (see Figure 304).

> **Note:** many tables do not have the PCTID field (e.g. Upper Stratum Species) and will therefore need to be combined with a table which does (e.g. Community Definition) to enable data to be extracted for a PCT.

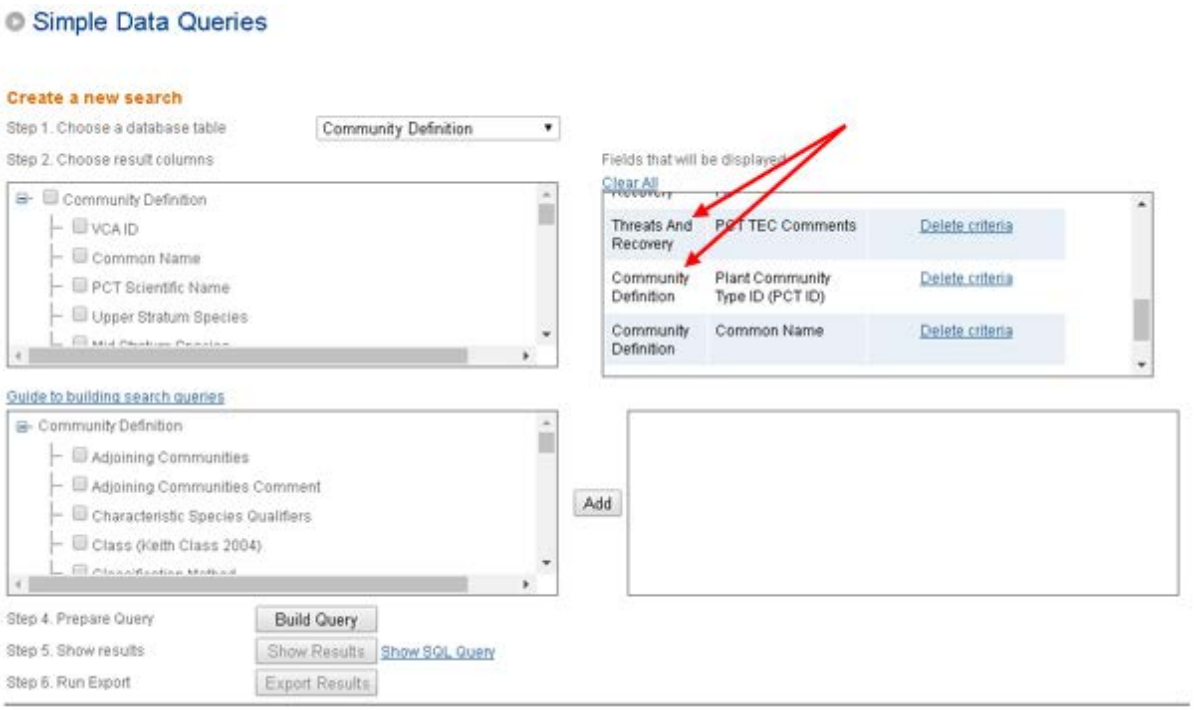


Figure 304 Multiple tables and fields can be selected as required in Steps 1 and 2 to obtain the required suite of export fields

Step 3: Build the search query

7. The search query will determine which PCTs are selected (these will be the data rows in the exported spreadsheet). To construct the selection criteria, a similar process to that undertaken in steps 1 and 2 is undertaken here, this time involving steps 1 and 3. First the database table must be selected (Step 1) and then the relevant field listed for that table that the criterion will be built from (Step 3).
8. Select the relevant table name by selecting from the list provided via the drop-down menu at 'Step 1. Choose a database table'. Note, although this will display the related fields in the 'Step 2. Choose result columns', this will NOT alter the already selected fields in the 'Fields that will be displayed' box to the right of Step 2 (see Figure 305).

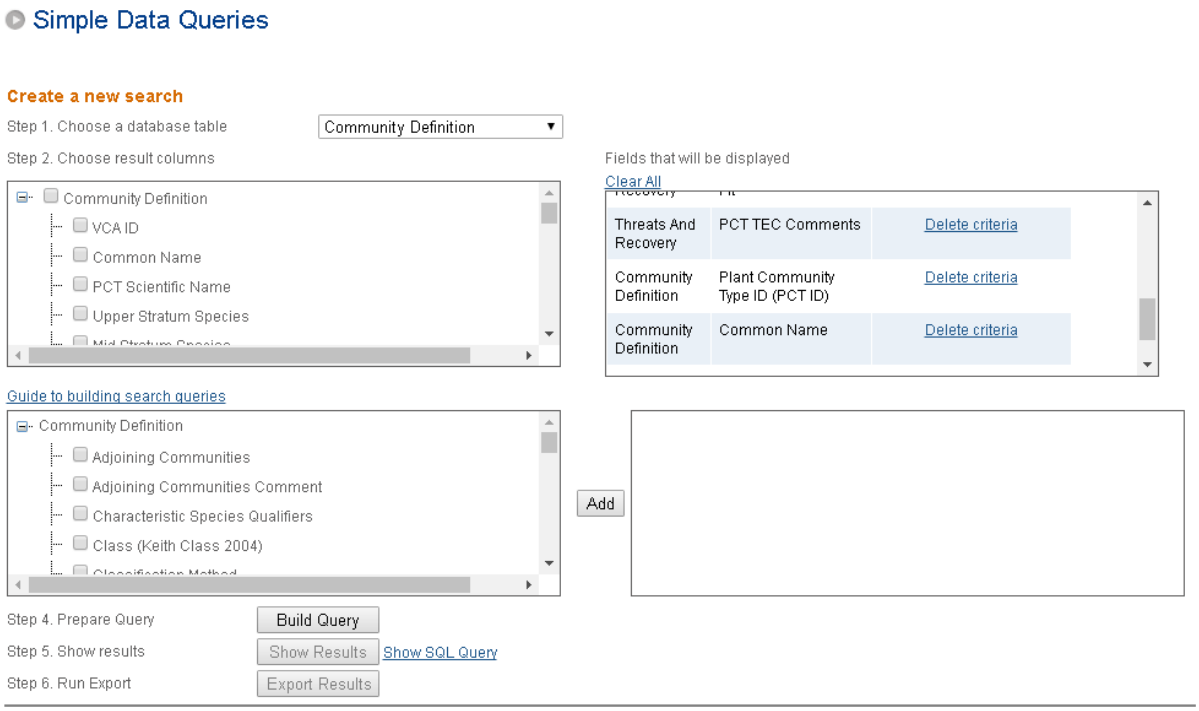


Figure 305 Selecting a database table in Step 1 for building the query will not affect the 'Fields that will be displayed' box

9. In the (un-labelled) 'Step 3. Build the search query' box, click the check box next to the relevant field name in the search criteria box (see Figure 306).

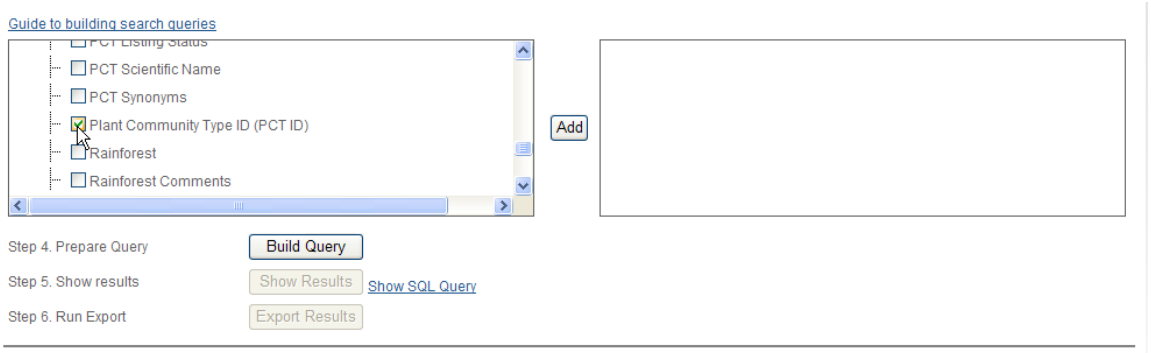


Figure 306 Check the desired selection criterion field name

10. Click 'Add' to bring up the 'Search condition' screen (see Figure 307).

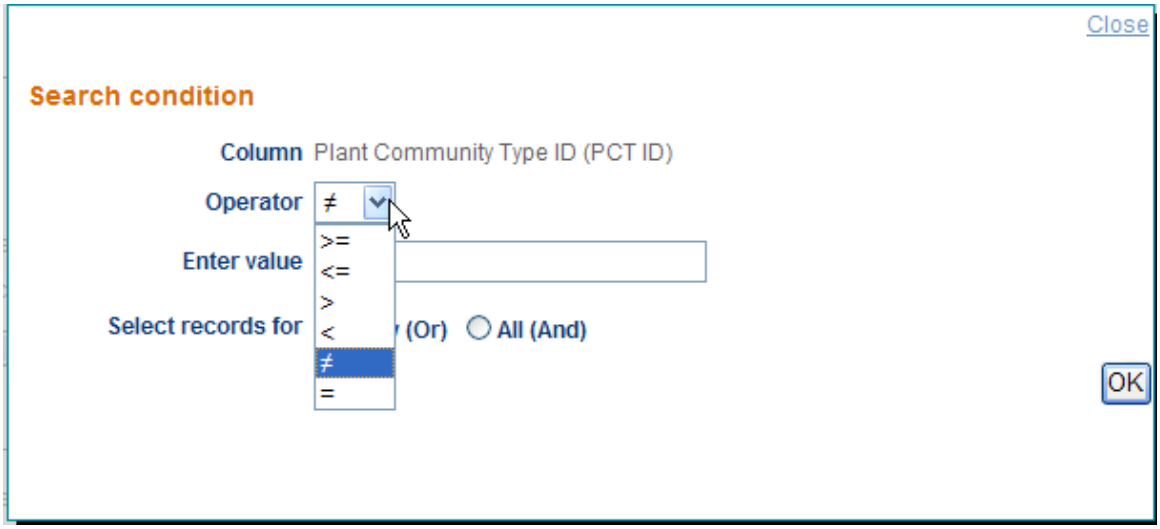


Figure 307 Choose the desired Operator, enter the relevant value and decide between and 'Or' or 'And' search involving multiple criteria

11. Select the desired operator from the 'Operator' drop-down menu, then type the desired term in the 'Enter value' box (or select from the drop-down list, if relevant) to enter a value for the criterion (see Figure 307).
12. Click 'OK' to accept these specifications, or 'Close' to close without saving.
13. Saved criteria will be displayed, including operators and values, in the search criteria box on the right (see Figure 308).

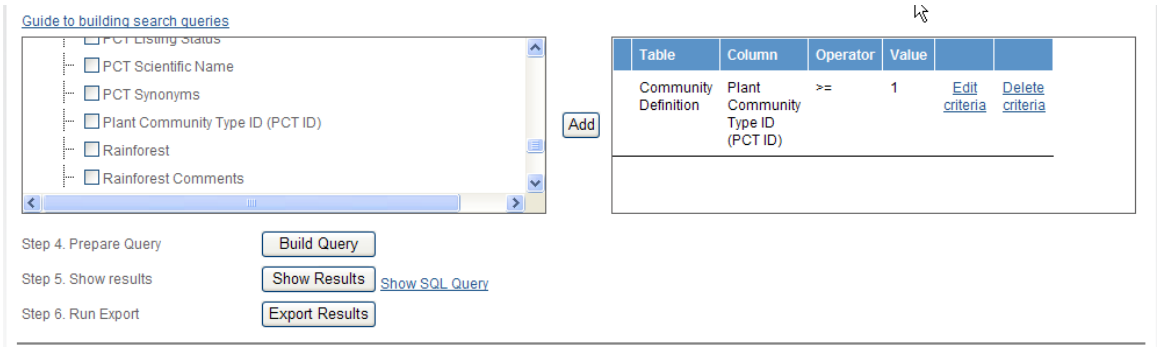


Figure 308 A search criterion requires selection of the desired field name and specification of the 'search condition' parameters

Note: Because of the need to link between tables and the way the SQL queries are constructed, it is necessary to specify the selection function (i.e. between 'Any (Or)' and 'All (And)) for the first criterion correctly *before* adding subsequent criteria,'. If you want to use the 'All (And)' selection function – meaning that all criteria must be met for a PCT to be selected – then you MUST select the 'All (And)' function for the first criterion prior to selecting the second criterion.

Further: note that the selection criteria function somewhat differently for 'Simple Data Queries' than for the 'PCT Search and Display' and 'Reports/Exports' queries. If you want to use the 'All (And)' selection function – meaning that all criteria must be met for a PCT to be selected – then you MUST select 'All (And)' for each criterion. All other combinations (or/or; or/and; and/or) will produce an 'Any (or)' result.

It is recommended that only and/and or or/or selection criteria be used.

Step 4: Prepare the query

14. Once you have created your query, click the 'Build Query' button to create the SQL query. When the system compiles the query, it also checks the results that would match the query and displays the number of matches beside 'Step 6. Run Export' (see Figure 309). If no matches are found, the message will read 'No matches'.

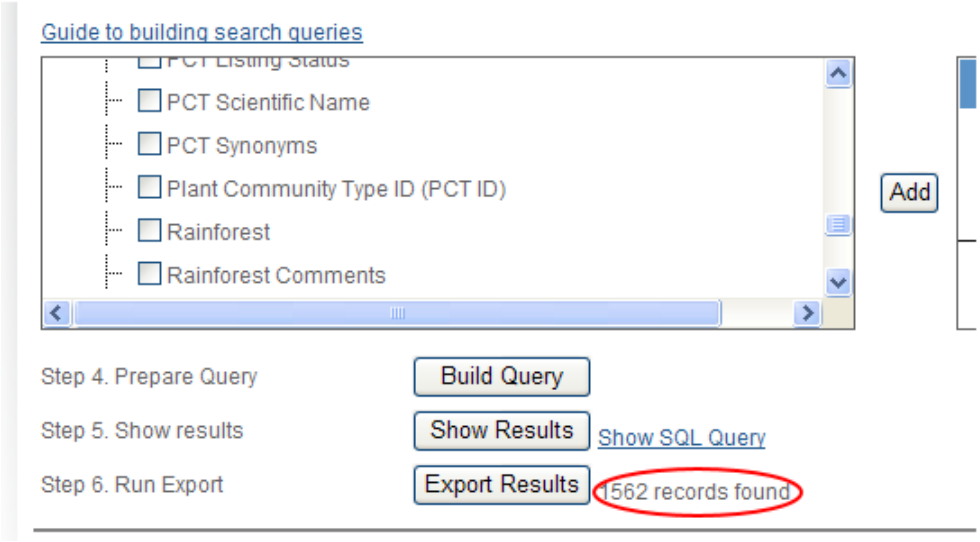


Figure 309 Having compiled the query (Step 4), the system displays the number of entities matching the search criteria

Step 5: Show results

15. To view the results prior to exporting, click the 'Show Results' button and the matches will be displayed as a list underneath (see Figure 310).

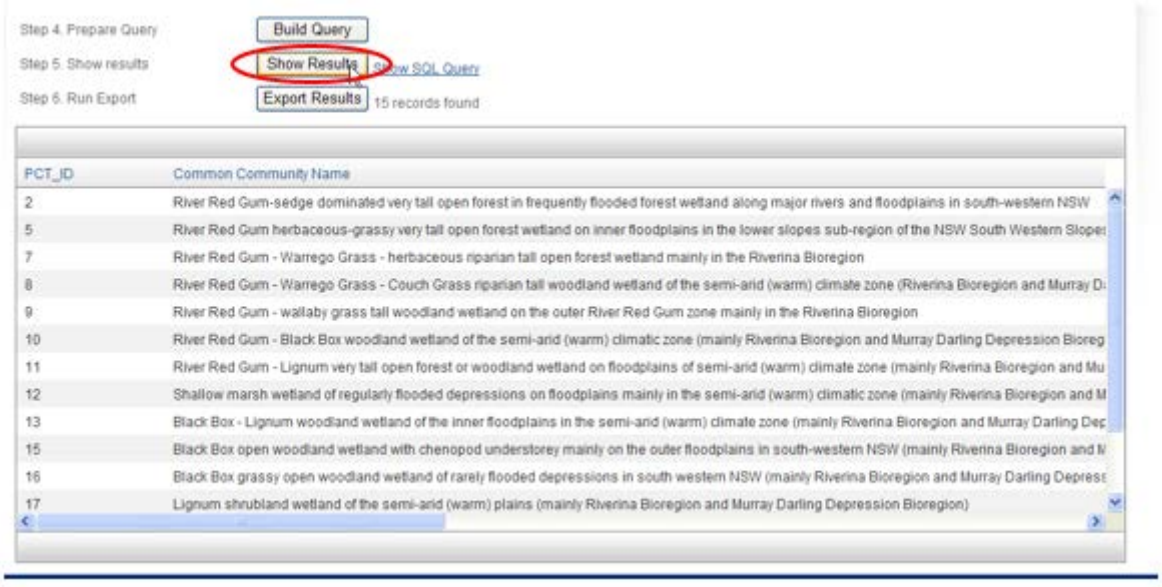


Figure 310 A list of matching entities will display at the bottom of the screen

16. To view the SQL query text, click the 'Show SQL Query' hyperlink next to the 'Show Results' button (Figure 310) and the SQL string will be displayed in a separate window (see Figure 311).

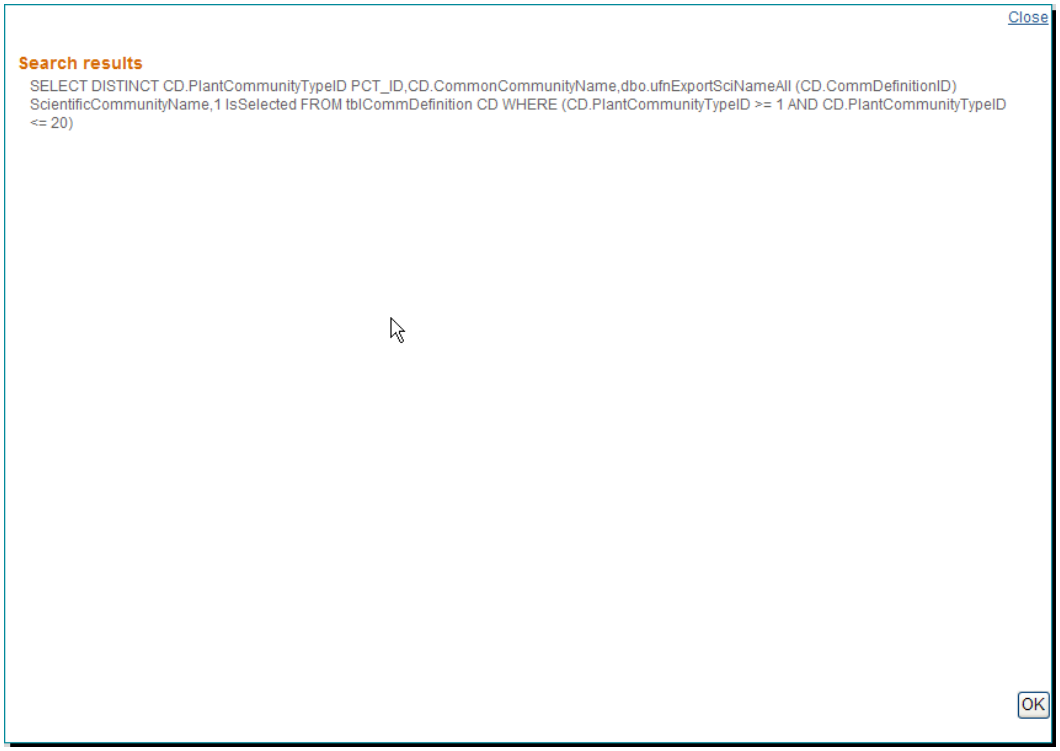


Figure 311 SQL query for the constructed search

17. To save the SQL Query, this text can be highlighted and copied then pasted in any application that accepts text strings, e.g. MS Word, Notepad.
18. Click ‘OK’ or ‘Close’ to exit this page.

Step 6: Export results

19. To export the data from the retrieved list, click the ‘Export Results’ button in Step 6. The system will compile the results as a csv file and a download screen will appear (see Figure 312).

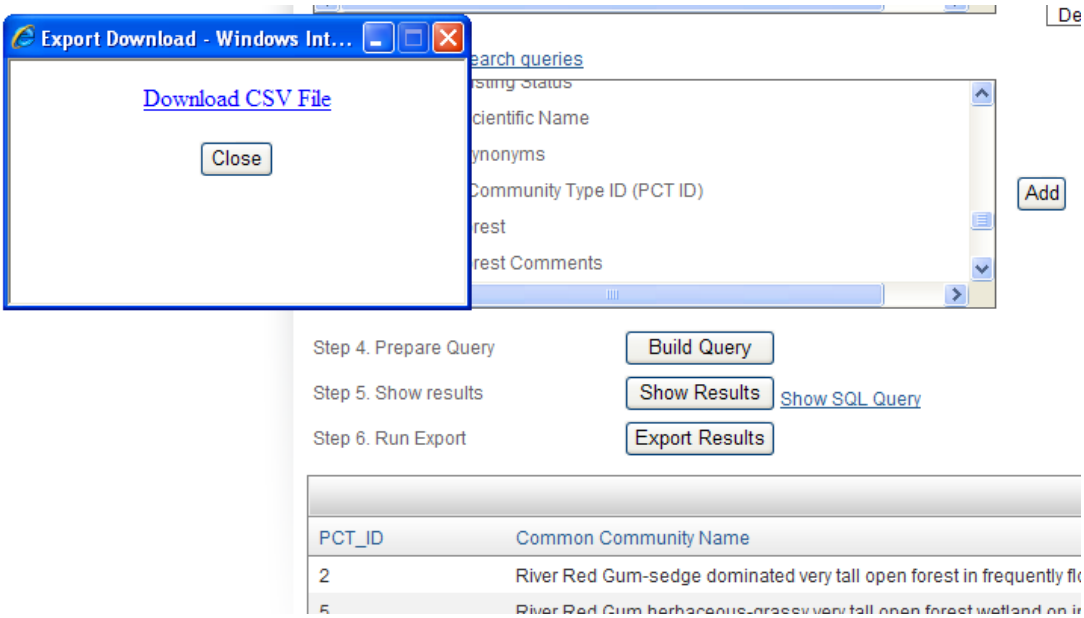


Figure 312 Exported results will be compiled as a csv file that can be downloaded via the pop-up

20. Click to download the file, or ‘Close’ to exit back to the query screen without downloading.

15.4.2 ‘Advanced Data Queries’

The ‘Advanced Data Queries’ functionality is accessible only to Administrators. This functionality enables manual construction and editing of SQL queries. It is recommended NOT to use this function without at least a basic understanding of SQL language protocols and programming.

Select ‘Advanced Data Queries’ from the ‘Data queries’ menu. This will open the query construction screen (see Figure 313).

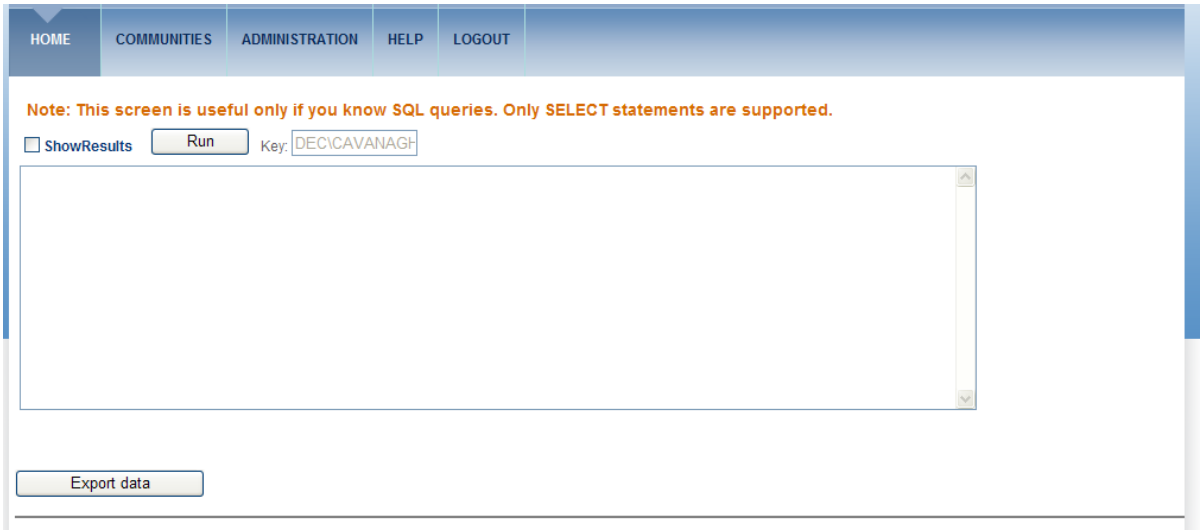


Figure 313 Advanced Data Queries construction screen

To use the Advanced Data Queries functionality:

1. Type directly into the dialogue box to create the SQL query. You can also paste an existing query into the box, e.g. a query created and copied directly (or as a text file) from the ‘Simple Data Queries’ function or from the SQL Library (refer below).
2. When you have created your query, check the box next to ‘Show Results’ to display the matches to the query on screen, then click the ‘Run’ button to display the results (see Figure 314).

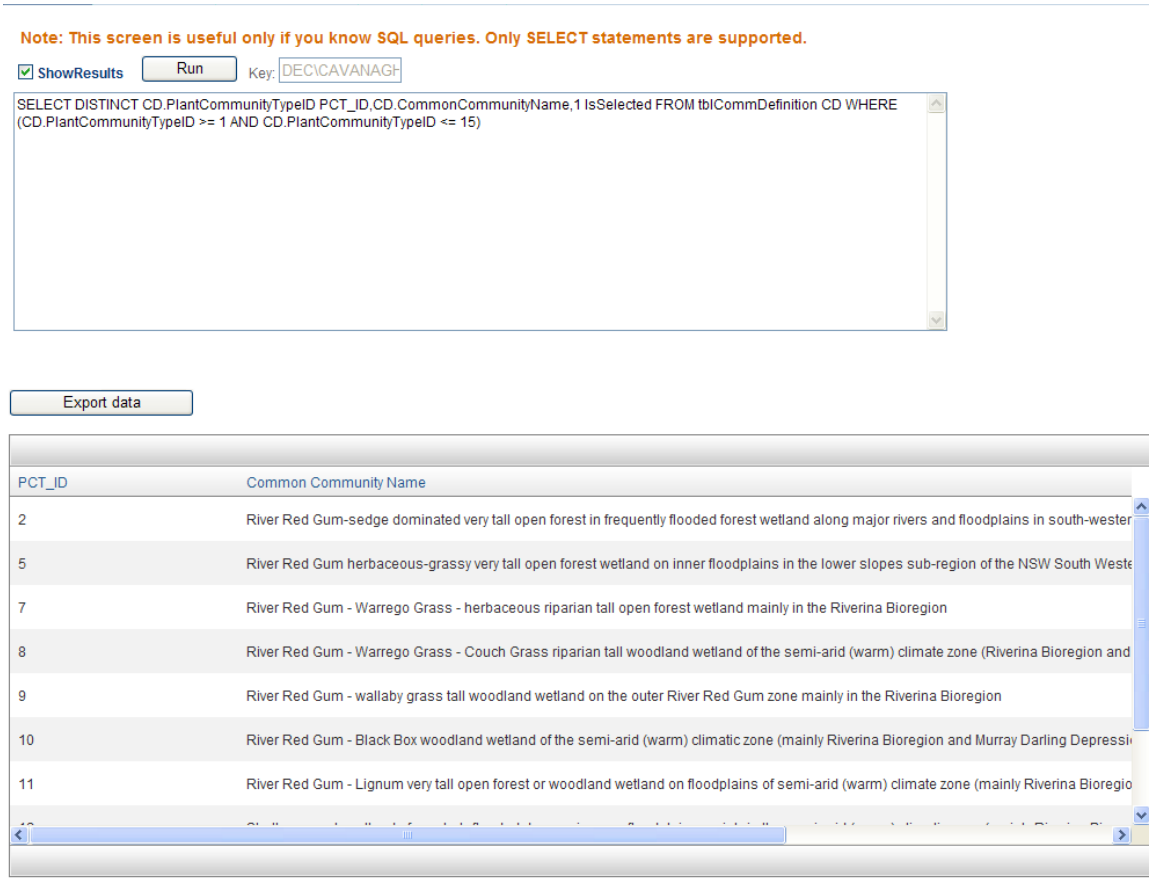


Figure 314 Type or paste an existing SQL query into the query construction dialogue box and click on the 'Run' button

3. To export the data from the retrieved list, click the 'Export data' button. The system will compile the results as a csv file and the download screen will appear (see Figure 315). Note, the 'ShowResults' tick-box has to be selected.

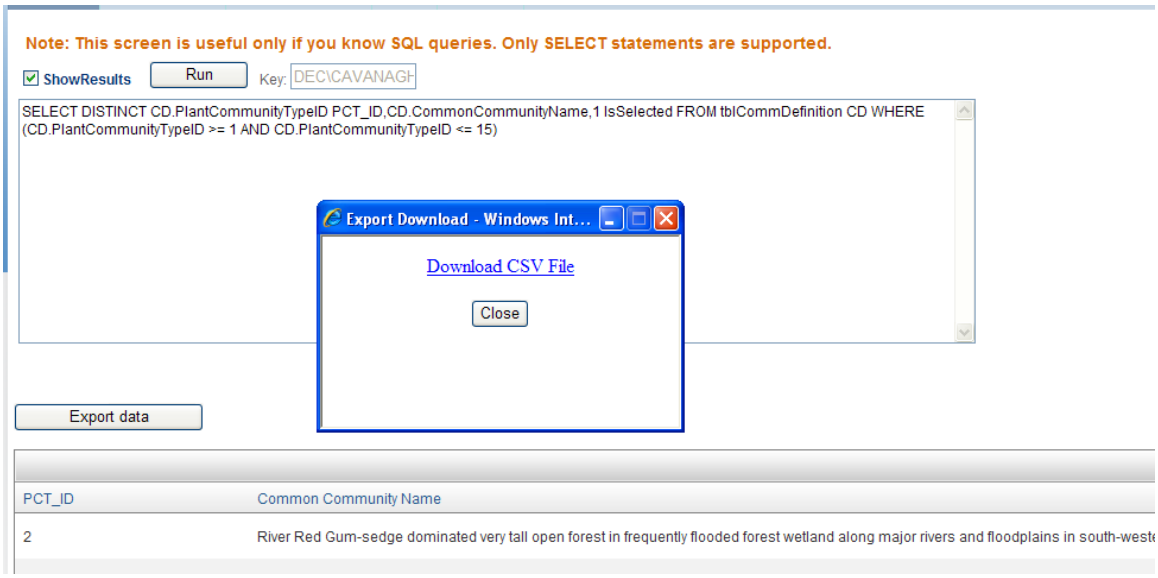


Figure 315 Click on the 'Export data' button and then download the compiled csv file

4. Click 'Download CSV File' to download the file, or 'Close' to exit back to the query screen without downloading.

5. A list of common SQL queries is provided in the ‘SQL Queries Library’ document (DOC18/197221: BioNet Vegetation Classification SQL Queries Library).

15.5 ‘Lookup data management’

Lookup tables are maintained by Administrators and Classification Edit users. The ‘Lookup data management’ drop-down menu item can only be seen by these users.

To access the Lookup data management function:

1. Select ‘Lookup data management’ from the drop-down list under Administration (see Figure 316).

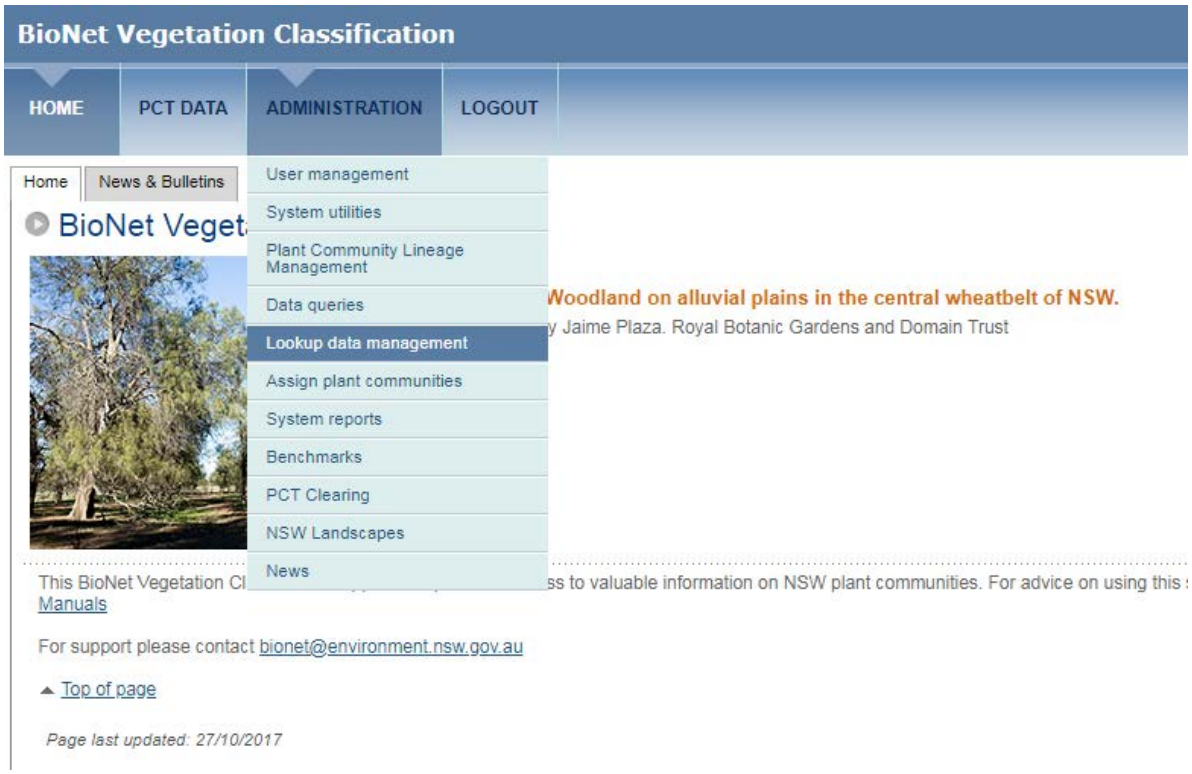


Figure 316 Accessing the lookup data management functions

2. This will open the ‘Lookup Data Management’ area (see Figure 317).

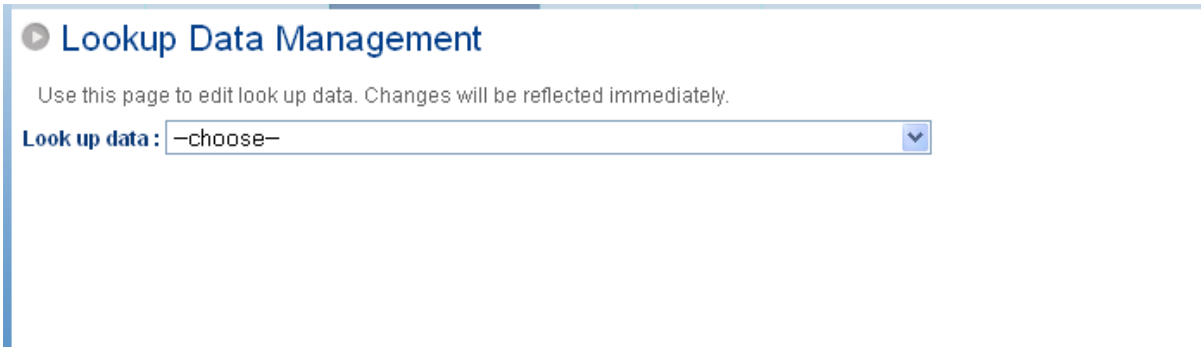


Figure 317 The ‘Lookup Data Management’ window

3. Use the drop-down menu to select the table you want to review or edit (see Figure 318). Note that the tables are in alphabetical order and you may need to scroll down the list to find the table you require.

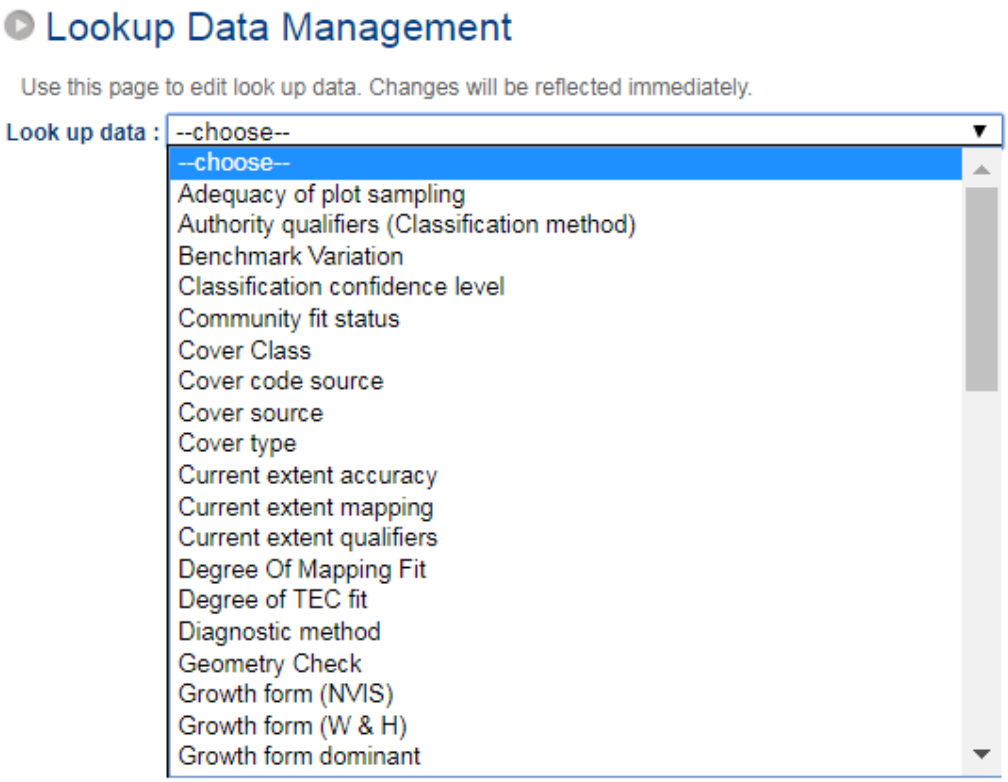


Figure 318 Select the desired lookup data table

4. When you select the desired table, the current lookup options will be displayed underneath (see Figure 319).

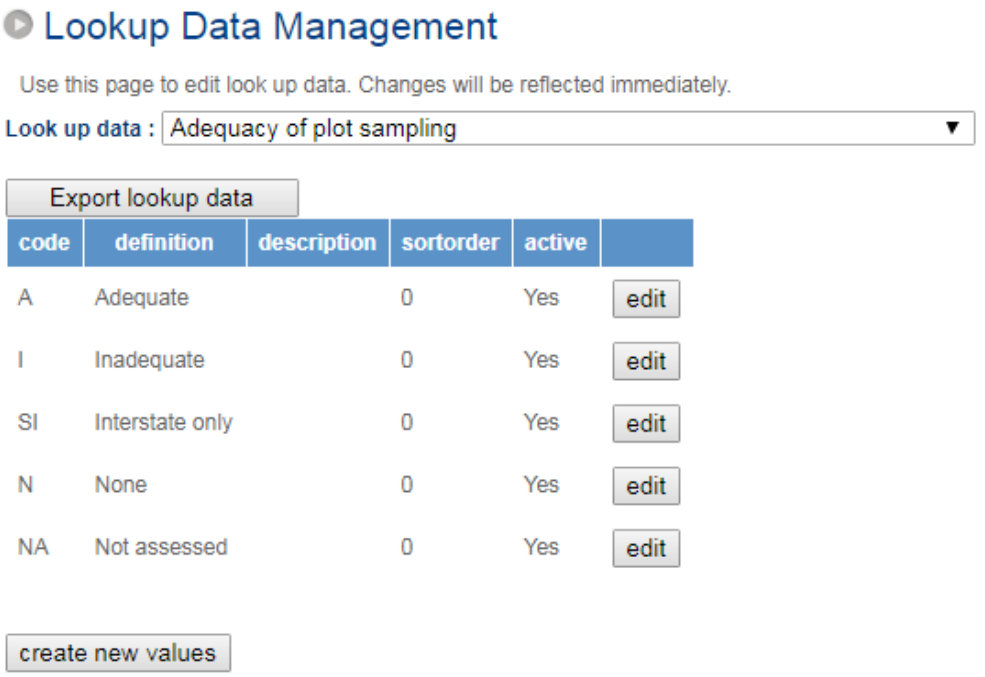


Figure 319 Having selected the desired lookup data table, the current options are displayed below

5. To edit an existing term, click the ‘edit’ button next to the relevant term and the current information will be displayed in the fields below (see Figure 320).

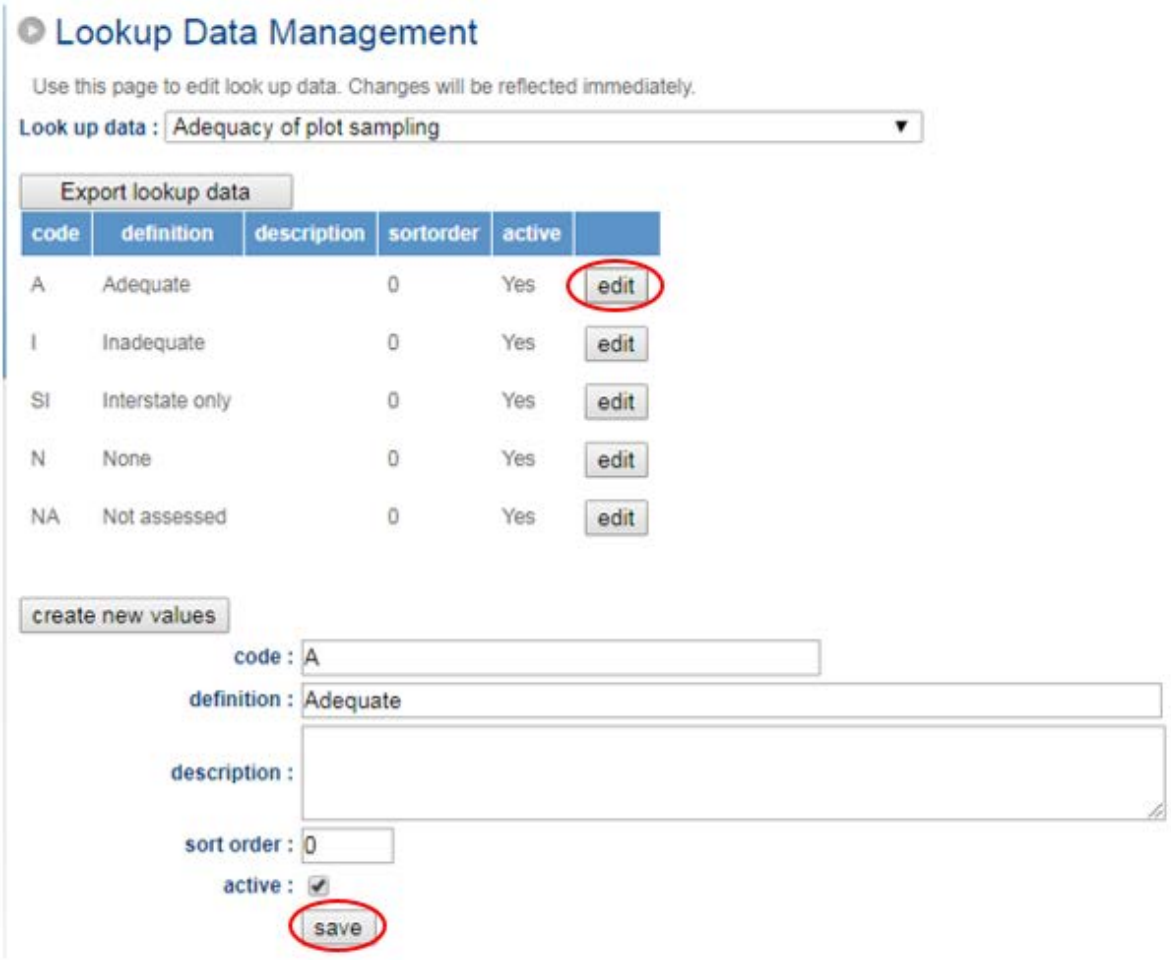


Figure 320 Clicking on the ‘edit’ button beside an existing option brings up its details ready for editing

6. When you have completed your changes, click ‘save’ to keep your changes. If you don’t want to save your changes, just navigate away from the page, or click to edit or create new values.
7. To create a new term, click the ‘create new values’ button. The set of blank fields will be displayed, ready to be populated (see Figure 321).

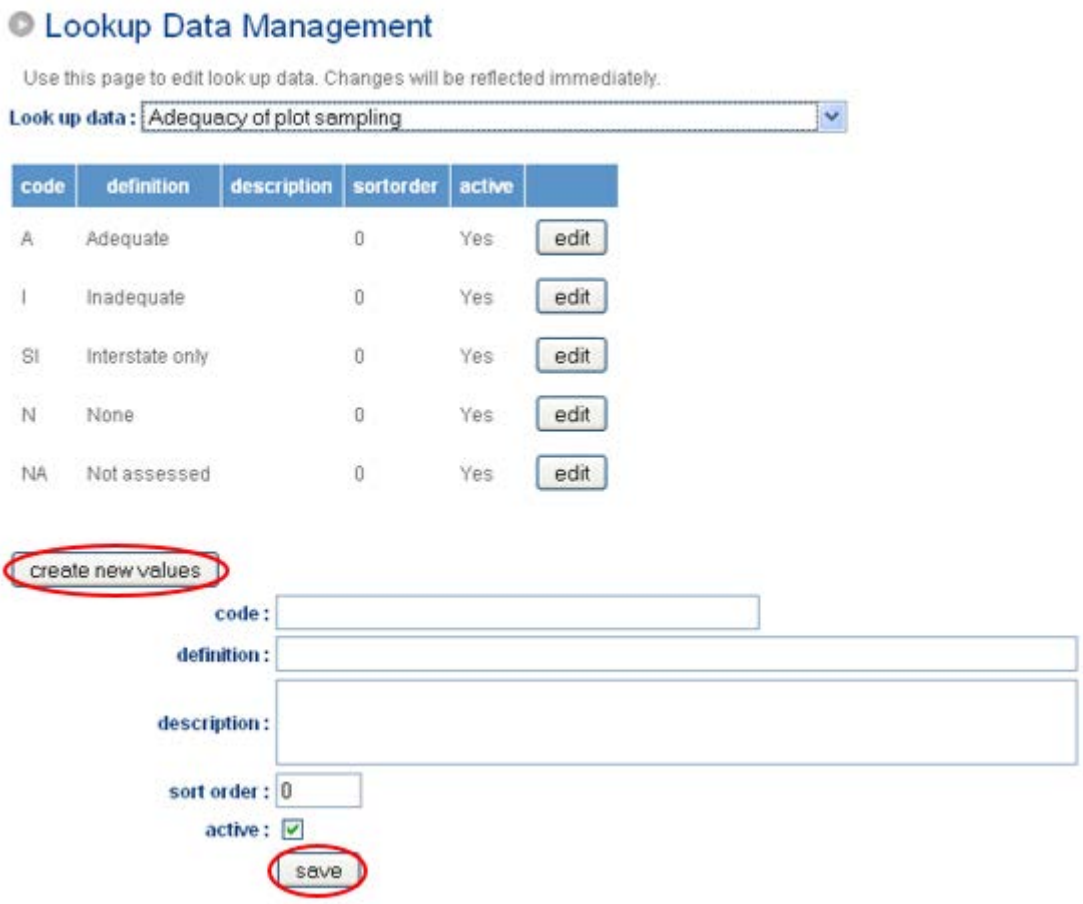


Figure 321 Clicking on the 'create new values' button displays blank fields ready to be populated.

8. Enter the relevant information in the fields. When you have completed your changes, click 'save' to keep your changes. If you don't want to save your changes, just navigate away from the page, or click to edit or create new again.

15.6 'Assign plant communities'

Edit access to plant communities (PCTs) is assigned to individual users by Administrators. The 'Assign plant communities' drop-down menu item can only be seen by these users.

To access the Assign plant communities functions:

1. Select 'Assign plant communities' from the drop-down list under Administration (see Figure 322).

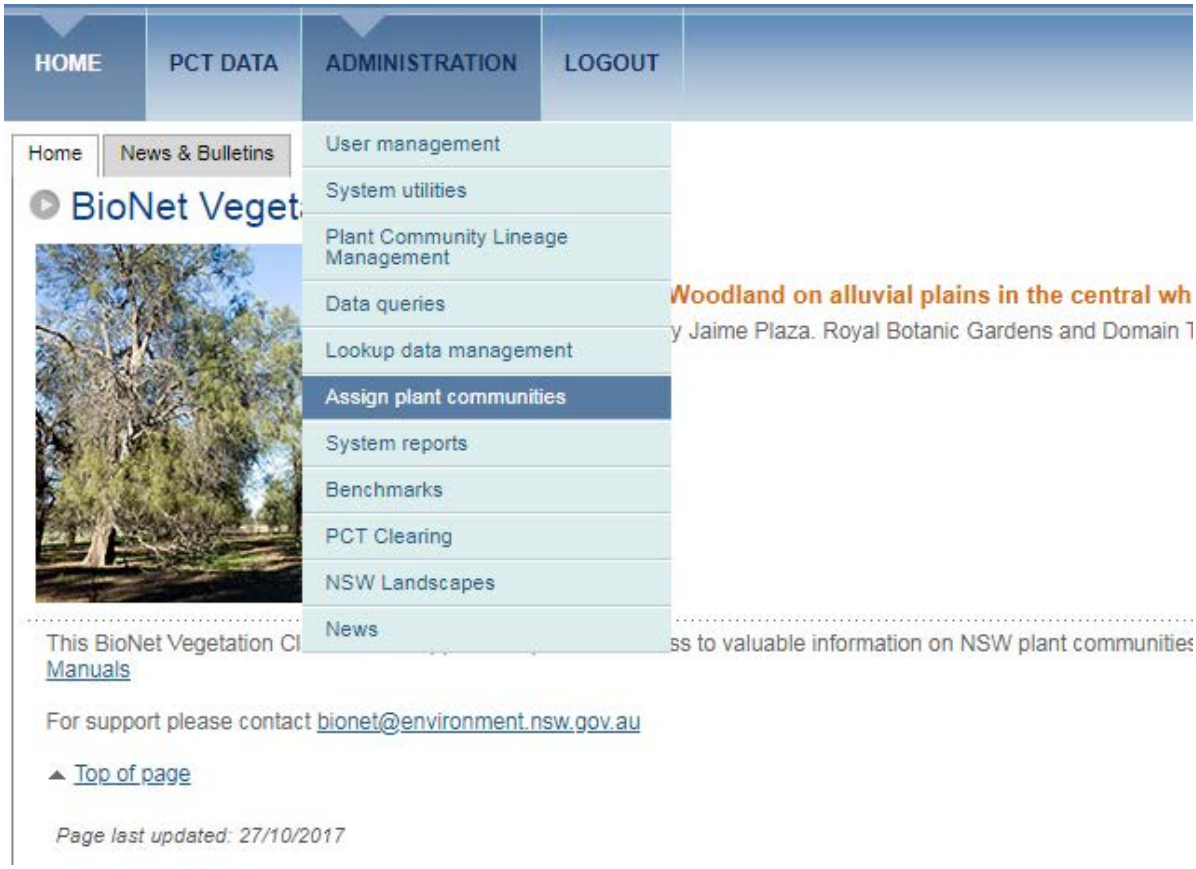


Figure 322 Accessing the 'Assign plant communities' functions

2. This will open the 'Assign plant communities to users' area (see Figure 323).

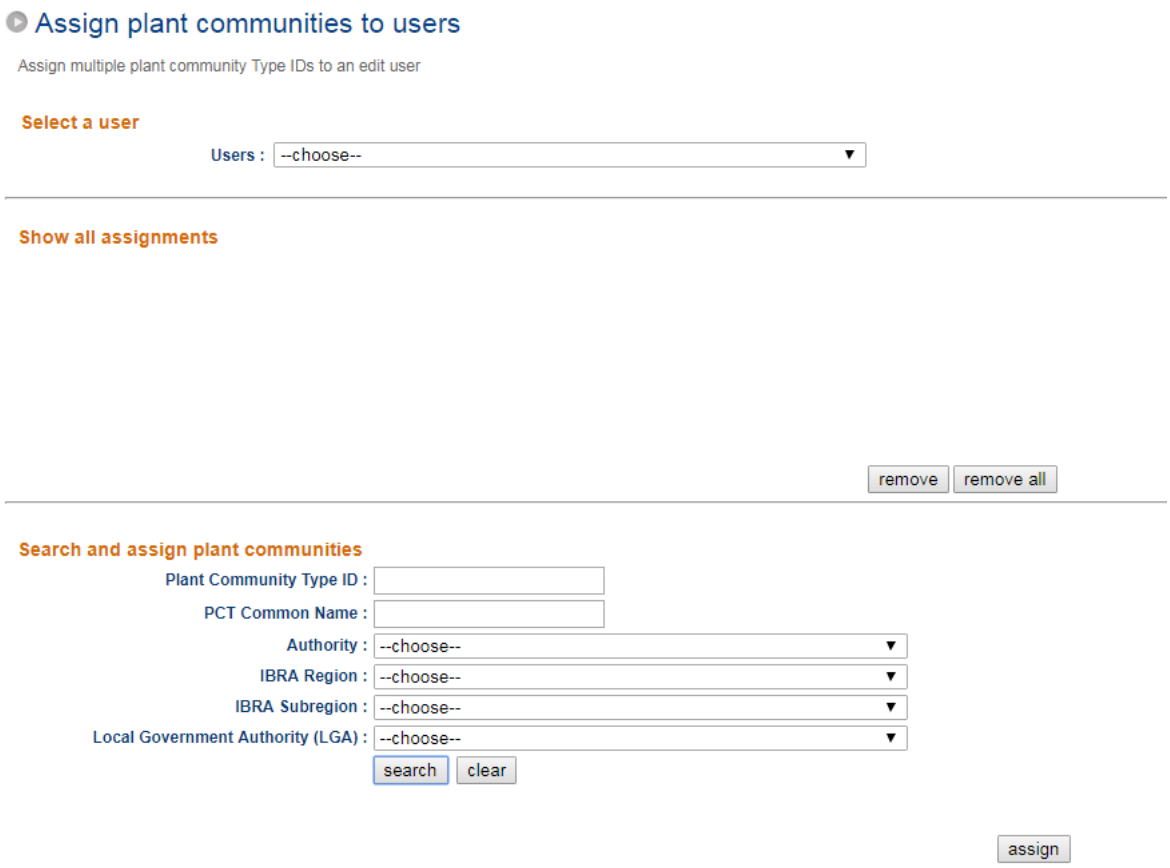


Figure 323 Open the 'Assign plant communities to users' area

3. First, select the user you want to assign or modify assignment for by selecting the relevant user name from the 'Users' field (see Figure 324).

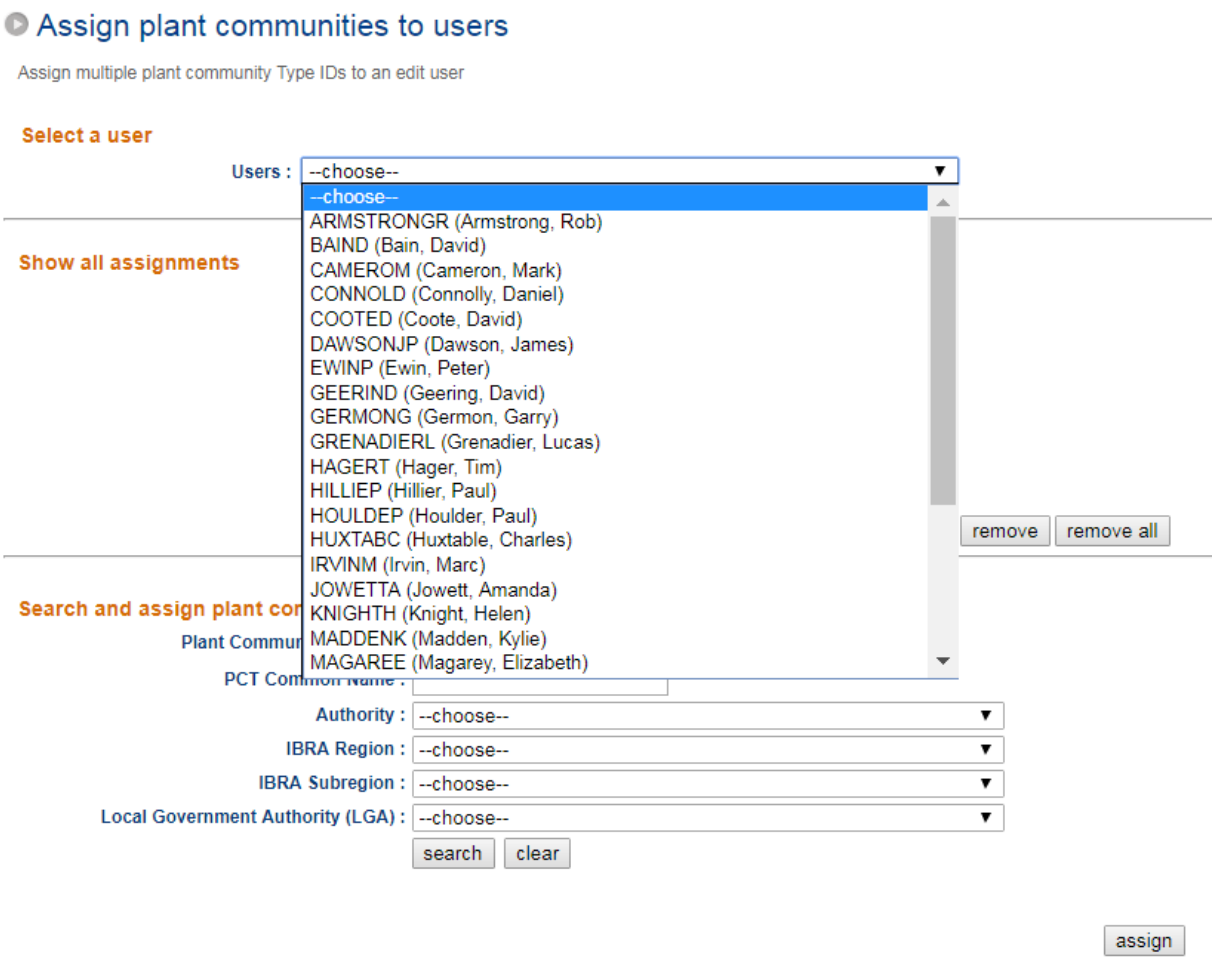


Figure 324 Select the user

4. The current assignments for that user will be displayed in the ‘Show all assignments’ area below (see Figure 325). To remove a single assignment, highlight the relevant assignment in the list and click the ‘remove’ button. To remove all assignments for that user, click the ‘remove all’ button.

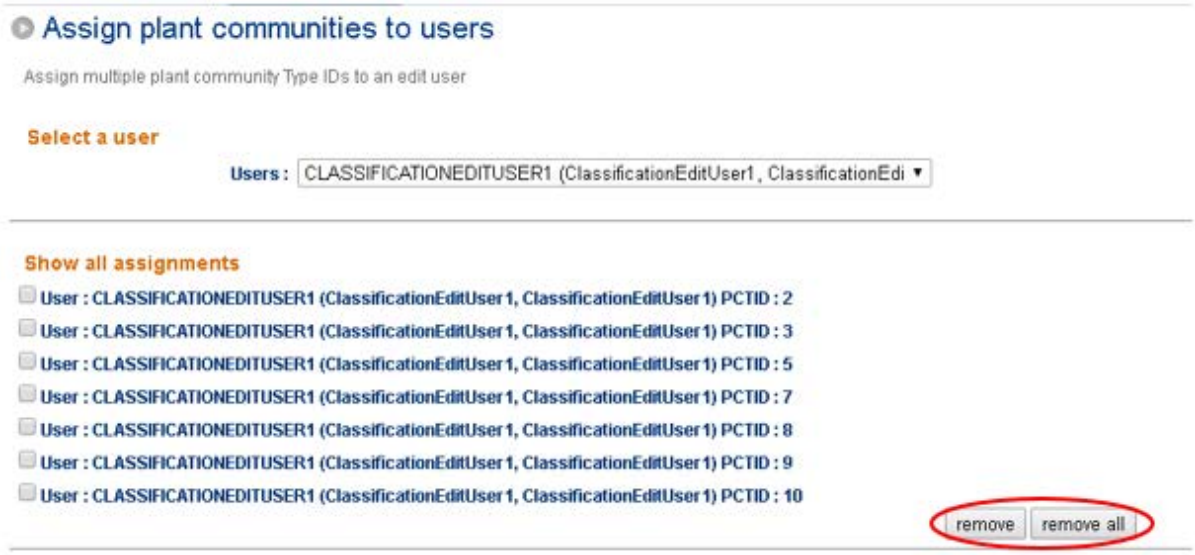


Figure 325 Select the user and view the existing PCT assignments

5. PCTs can be assigned individually or in groups. To assign new PCT/s for the user, use the search fields to select the relevant plant community or communities. Search options are:
   a. PCT ID – integer
   b. PCT Common Name – text
   c. Authority – drop-down list
   d. IBRA Region – drop-down list
   e. IBRA Subregion – drop-down list
   f. LGA – drop-down list
6. When you have completed the relevant selection criteria, click search and the system will retrieve and matches and display in the 'Search results' area (see Figure 326).

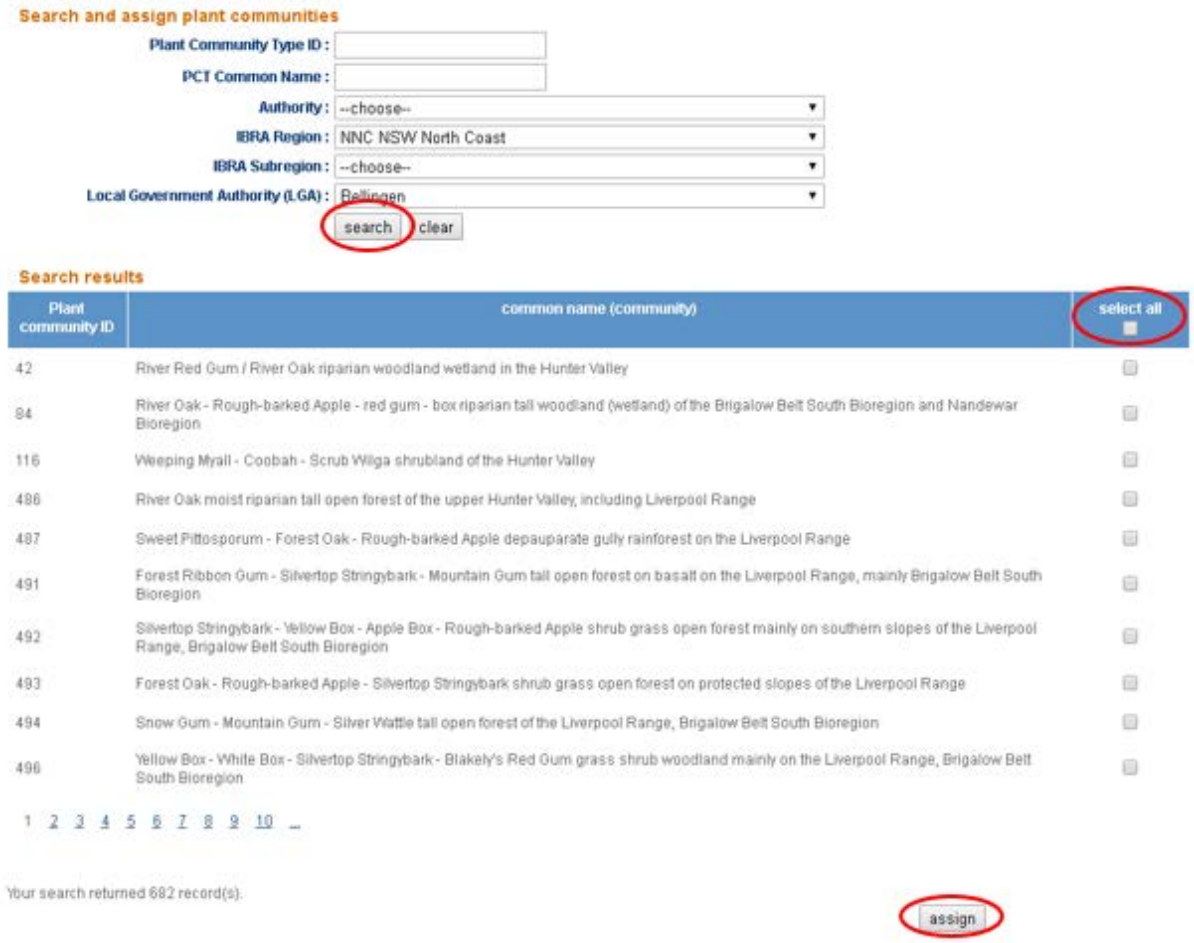


Figure 326 Search for, select and assign the required PCT/s

7. The list will contain up to ten matches on a page. If there are more than 10 matches, use the page numbers at the bottom to navigate between the list pages. You can select all by clicking the 'select all' check box or select individual plant community types in the list by checking the tick-box next to the relevant plant community type. When you have selected the relevant plant community types, click the 'assign' button and the selected (ticked) plant community types will be assigned to that user.
8. PCTs assigned to a user are listed in the 'Show all assignments' section for that user (see Figure 325).
9. Note that the PCTs that an Edit User can edit are displayed in the 'My Work' section for that Edit User.

15.7 ‘System reports’

Systems reports are accessible by Administrators, Classification Edit users and Statutory Data Edit users. The ‘System reports’ drop-down menu item can only be seen by these users.

To access the System reports functionality:

1. Select ‘System reports’ from the drop-down list under Administration (see Figure 327).

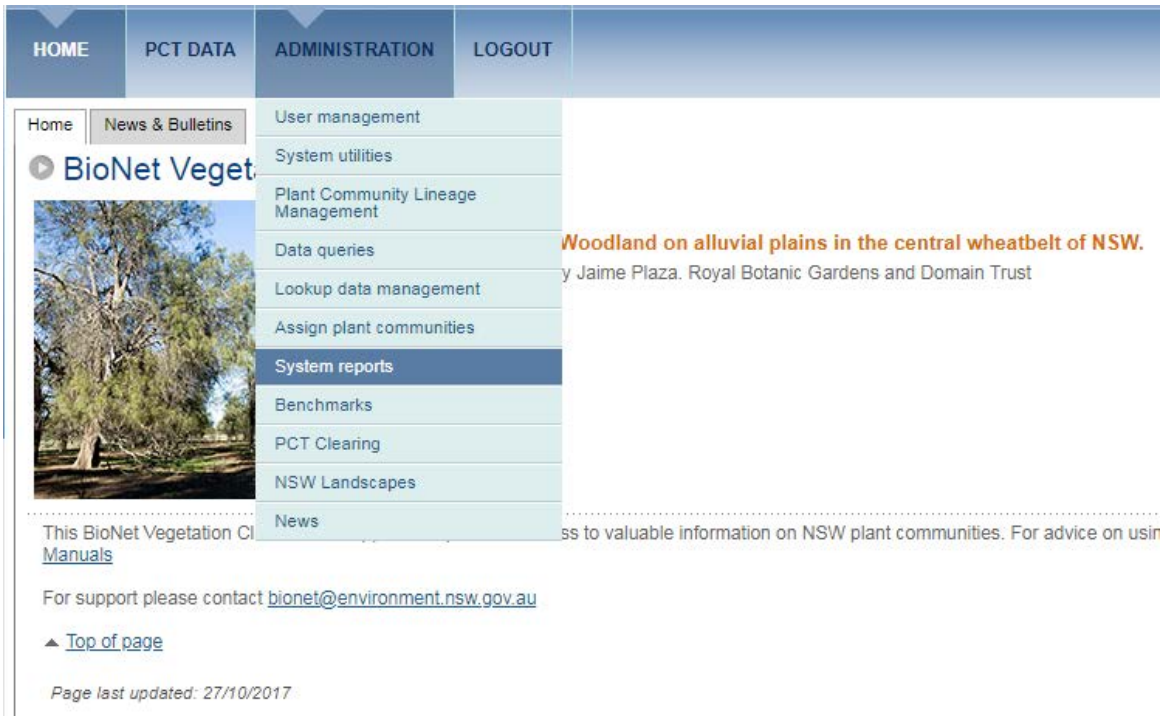


Figure 327 Accessing the System reports section

2. This will open the ‘Reports/Export’ query screen (see Figure 328).

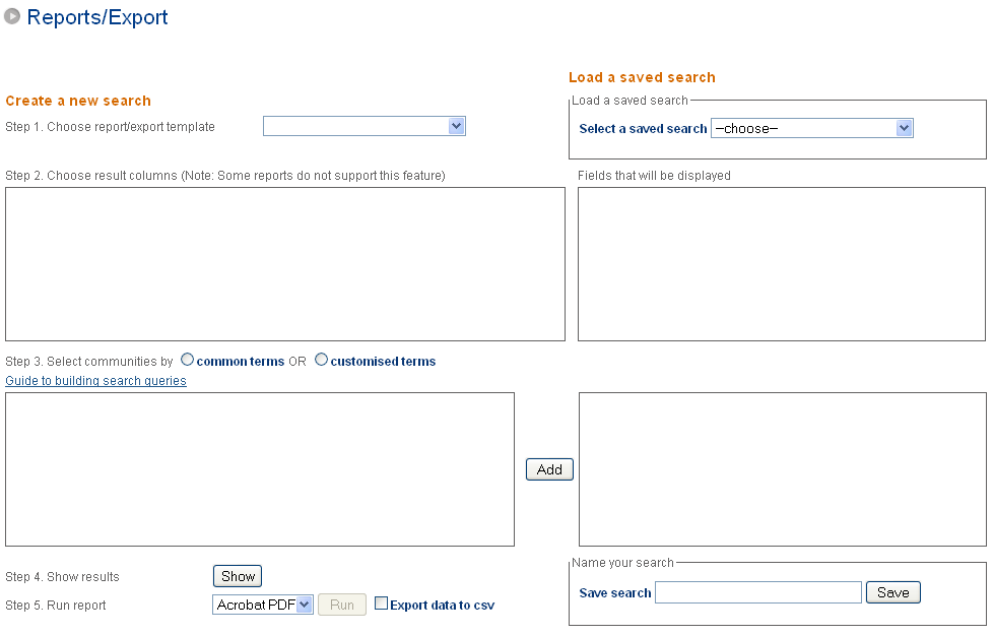


Figure 328 Use the Reports/export page to build the report query

3. First select the template for the report you want at ‘Step 1. Choose report/export template’ (see Figure 329).

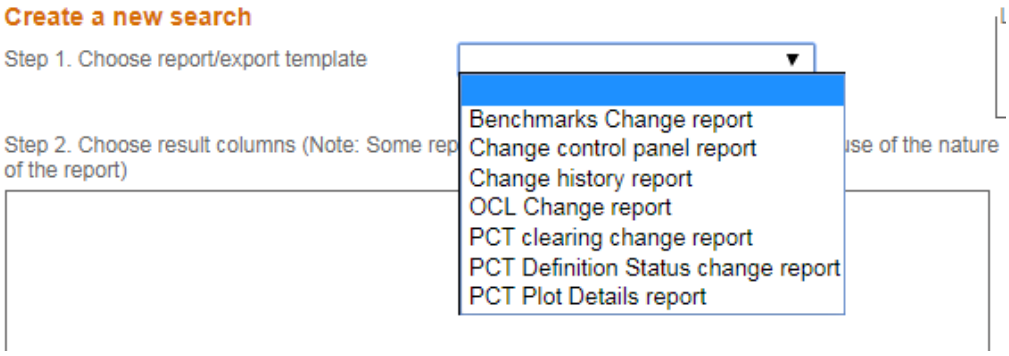


Figure 329 Choose the required template in Step 1

4. Click to highlight and select the template you require; the relevant fields will then be displayed in the ‘Step 2. Choose result columns’ and the ‘Step 3. Select communities by’ boxes underneath (see Figure 330).

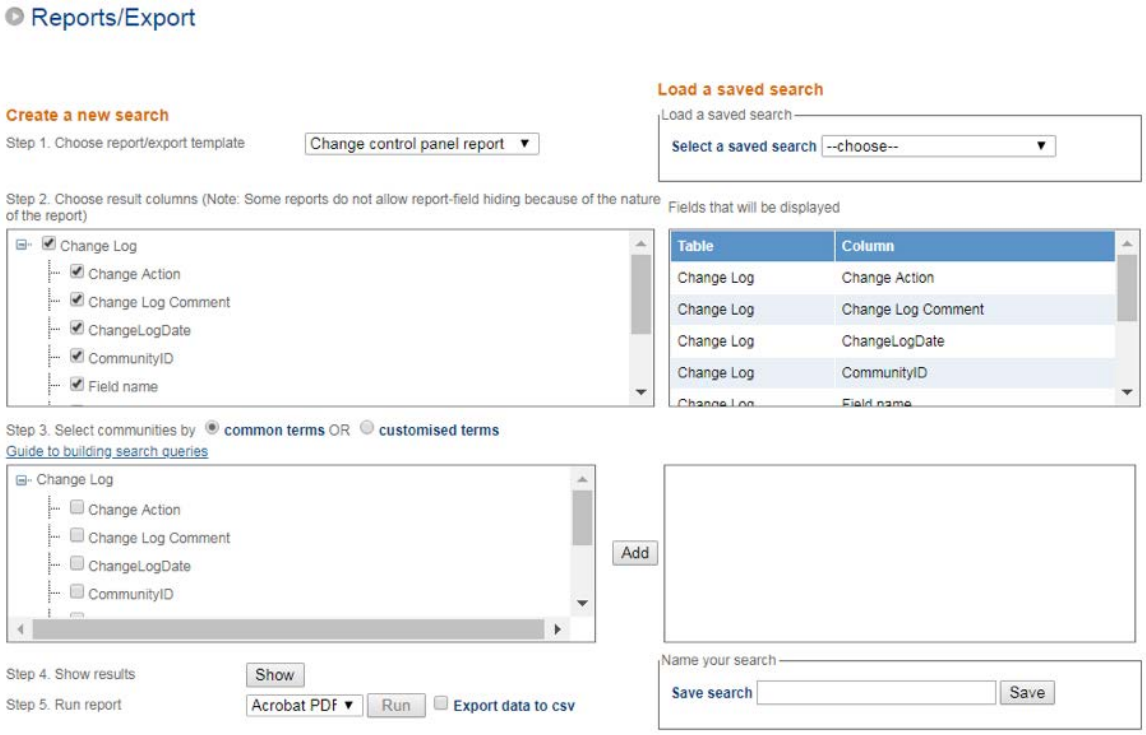


Figure 330 Result column and search term options will auto-populate into Steps 2 and 3 once the report/export template is selected in Step 1

5. Select which fields you want in the report (or export) by checking or unchecking the tick-box next to the relevant field in Step 2. The display box to the right (‘Fields that will be displayed’) will automatically refresh with your changes (see Figure 331).

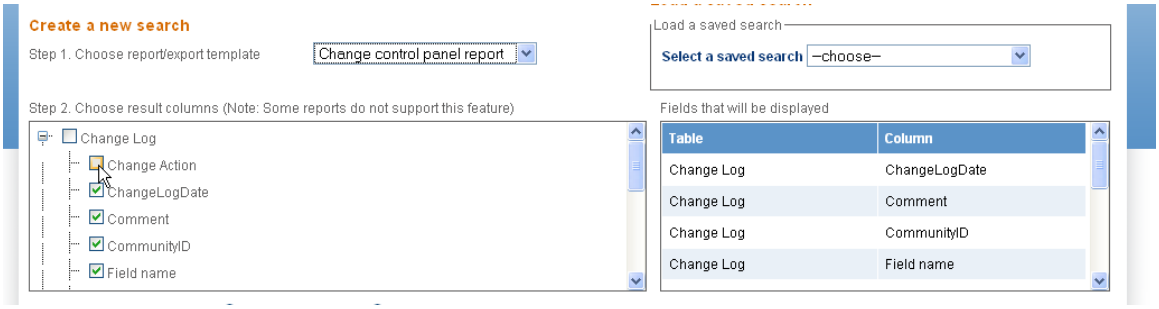


Figure 331 Select fields to be in the report/export in Step 2

6. When you have selected which fields you want, select the plant community types you want to be reported in the ‘Step 3. Select Communities’ area.
7. There are two methods for selecting terms for your search criteria, namely Common Terms or Customised Terms and the field query selection process is the same for both options:
   a. The common terms option provides a short list of the most commonly used fields for creating searches.
   b. The customised terms option provides a much larger list of fields. Due to the number of fields the field trees will be closed by default.
8. Select the field you want to search on by checking the box next to the field name then clicking the ‘Add’ button (see Figure 332).

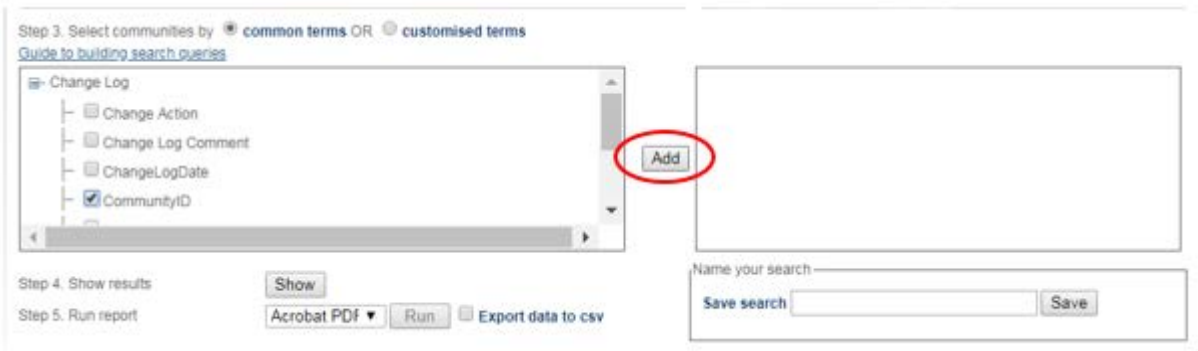


Figure 332 Select ‘common terms’ or ‘customised terms’, then select a search term and ‘Add’ in Step 3 to begin building the query

9. This will open the ‘Search condition’ dialogue box for that field (see Figure 333).

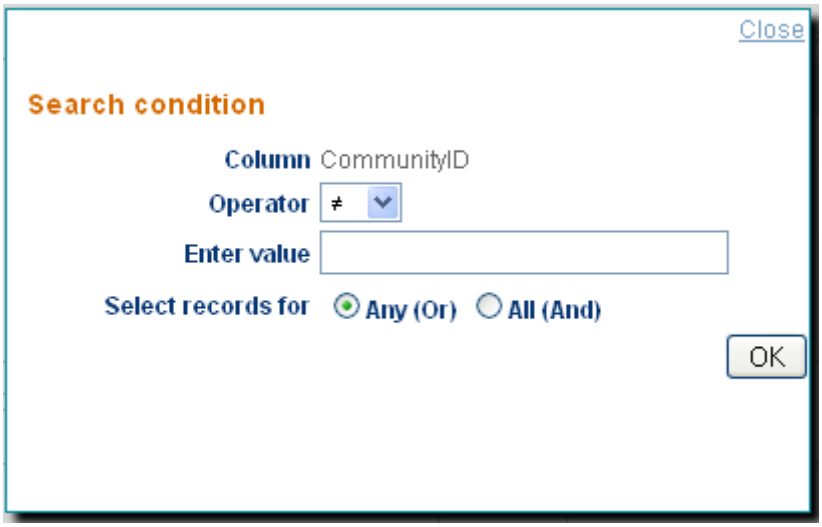


Figure 333 Specify the Search condition for the selected search term in Step 3

10. If the field is not restricted to look up terms, the ‘Enter value’ field will be blank (see Figure 333).
11. Choose the ‘Operator’ (for example, ‘contains’ in Figure 334) and type any string of characters into the field. When you click ‘OK’ the criteria will be added to the list of specified search criteria. In the example (see Figure 334), the criteria of ‘Common name’ ‘contains’ ‘red’ will retrieve all matches where the word ‘red’ is in the common name of the plant community type.

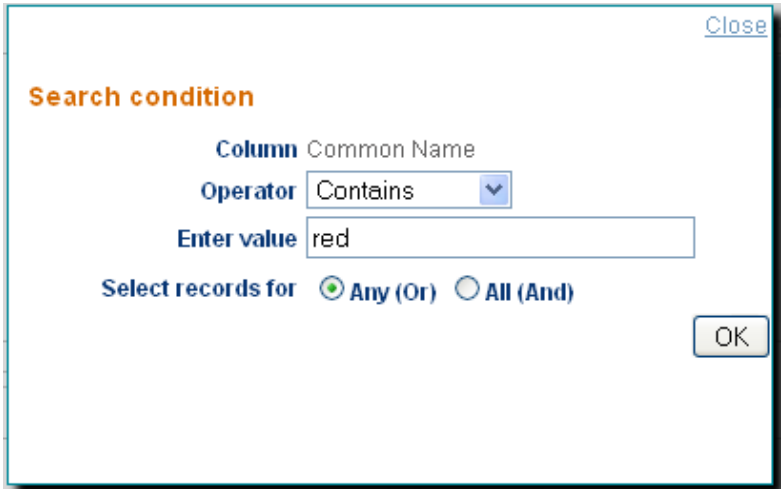


Figure 334 Specify the Search condition for the selected search term in Step 3

12. If the field is restricted to lookup terms, the terms can be selected by using the drop-down menu (see Figure 335).

Figure 335 Selecting an 'Attribute value' from a drop-down list in Step 3

13. Continue to build your criteria by selecting a new field, then 'Add' it to open the Search condition box after specifying search conditions. You may edit or delete criteria at any time by using the 'Edit criteria' or 'Delete criteria' options to the right. Try to keep the number of search terms to a minimum (certainly no more than three).
14. Note that when the 'AND' operator is used, the order of criteria is crucial to getting the result you want, as the first criteria creates a subset that the second criteria are matched to. Using the same criteria and swapping their order can therefore produce different results.

Please note that the 'Select records for' terms operate between the criteria, so that selecting 'Any (or)' will include communities that meet either of the criteria, while 'All (And)' will include only communities that meet both criteria simultaneously. For example, for criteria of Common Name contains gum and Class (Keith Class) = Alpine Heaths, the operator 'Any (Or)' will retrieve all communities where 'gum' occurs in the Common Name field, in addition to all communities where the Class (Keith Class) field is Alpine Heaths. This will retrieve hundreds of communities. Using the 'All (And)' operator however will select only those communities where the Common Name contains 'gum' AND where the 'Class (Keith Class)' is Alpine Heaths. In this case, no communities are retrieved as no communities match BOTH criteria.

15. When you have specified all the search conditions, click 'OK'. The Search condition box will display the specified criteria (see Figure 336).

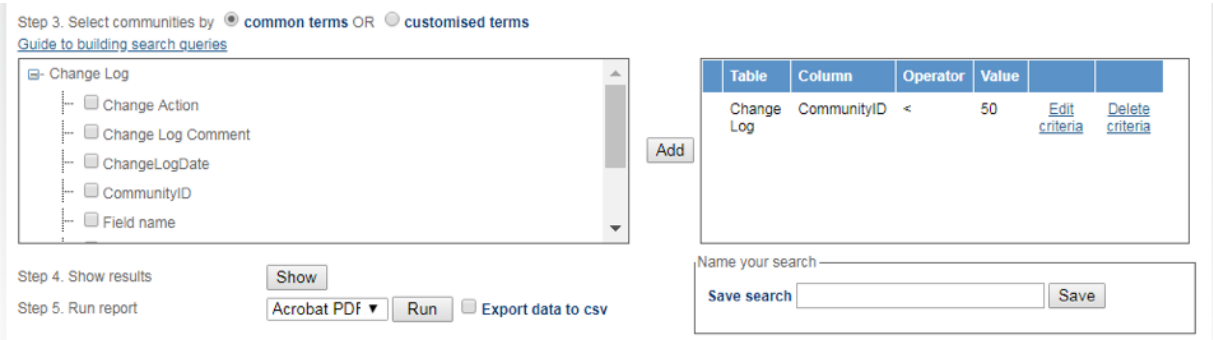


Figure 336 Click 'Show' to view a list of PCTs that match the search criteria

16. When you are happy with your criteria selection, click the ‘Show’ button. This opens a ‘Search results’ page which lists the plant community types that match the search criteria (see Figure 337).

Handy Hint: As you compile criteria, please check the ‘Run’ button in Step 6 at the bottom of the screen. This in effect previews whether the current combination of criteria match at least one plant community type. If the ‘Run’ button is greyed-out, there are no plant community types that meet the current combination of criteria. If this is the case, clicking ‘Show’ will retrieve no matches, so you will need to alter the criteria.

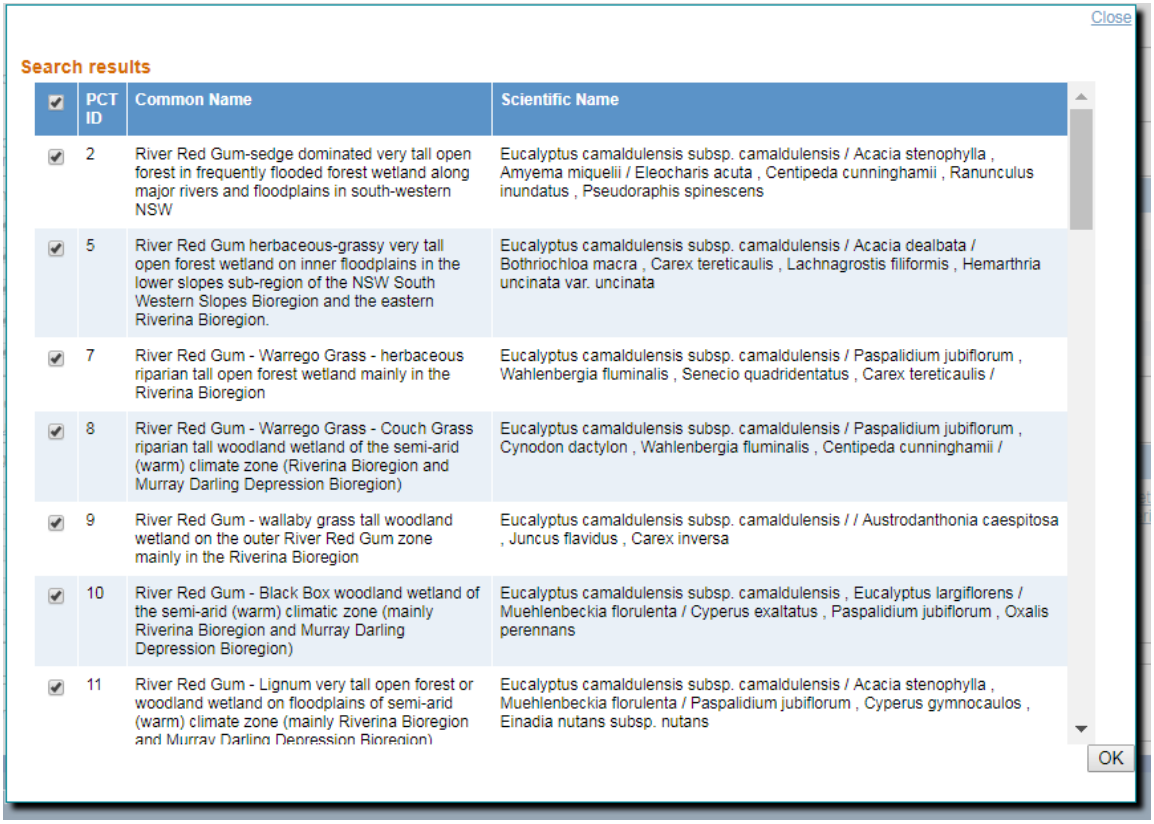


Figure 337 The Search results show the list of PCTs that match the search criteria

17. By default, all the matching PCTs are shown checked (ticked) in the 'Search results' (see Figure 337), meaning that they will be included in the report/export. You may need to scroll down the page to see the full list of communities. To modify the list, either uncheck individual communities in the list, or uncheck the top check box next to the VCA ID column header to deselect all communities. You can then reselect any by clicking individual communities or recheck all. When you are happy with the plant community types selected, click 'OK' to save these as the ones to be run in the report. Click 'Close' if you don't want to save your changes. Please note however that this will revert to the default position, i.e. all communities will appear in the report.
18. When you are ready, select the report/export format (see Figure 338). Choose either 'Acrobat PDF' or 'MS Word (doc)' for a report, or check 'Export data to csv' for an export.
19. Click 'Run' to produce the report (see Figure 338). Please note that depending on the size of the report (i.e. the number of communities selected and number of fields/columns to be displayed) this may take some minutes.

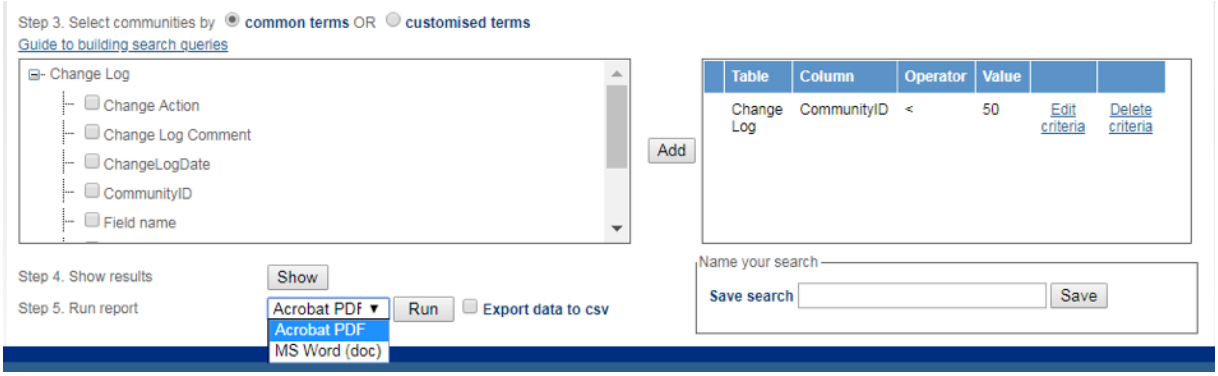


Figure 338 Select the report or export format prior to clicking on 'Run'

20. When the system and server have processed the request, the PDF or MS Word report will be displayed on screen in a separate window. If you are using IE, you may have to go through several security checks (Figure 339) before you can view the report (Figures 340 and 341).
21. If you are exporting a csv file, refer to point 23. (below).

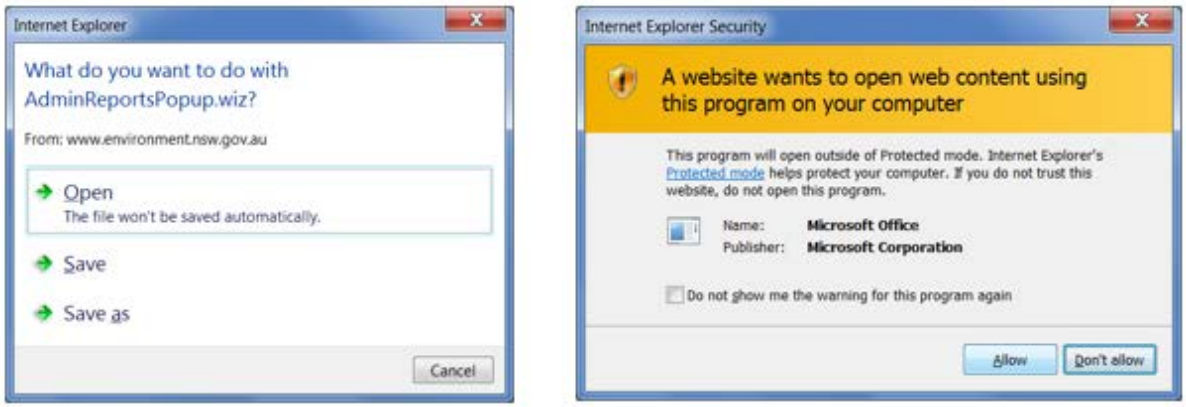
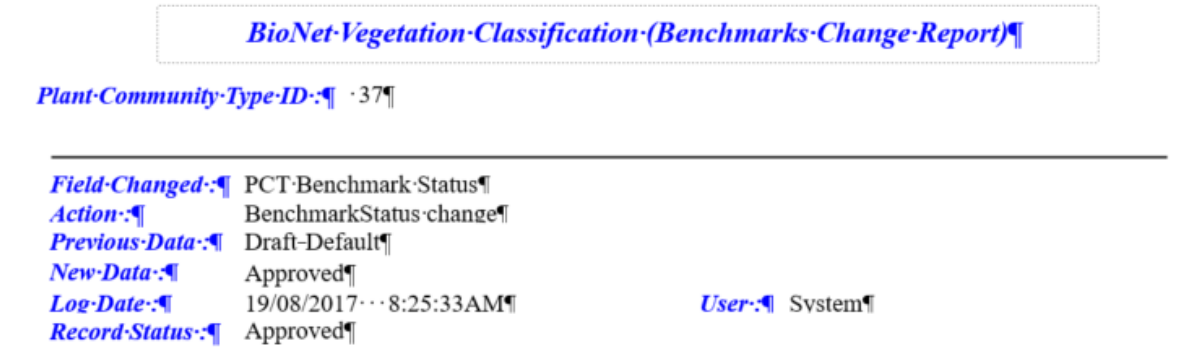


Figure 339 Verification and security checks

N.B.: The reports appear as a new pop-up window. For this to function, ensure that 'block pop-ups' is not turned on; please refer to Appendix A1.1 for instructions how to turn off the pop-ups block.



BioNet·Vegetation·Classification·(Benchmarks·Change·Report)¶

Plant·Community·Type·ID·:¶ ·37¶

Field·Changed·:¶	PCT·Benchmark·Status¶		
Action·:¶	BenchmarkStatus·change¶		
Previous·Data·:¶	Draft-Default¶		
New·Data·:¶	Approved¶		
Log·Date·:¶	19/08/2017···8:25:33AM¶	User·:¶	System¶
Record·Status·:¶	Approved¶		

Figure 340 Pop-up window showing MS Word report, using IE

22. You can review the report in the pop-up screen, then close it if you don't want to save or print the report or elect to save or print via the two icons in the top corner of the report screen (see Figures 340 and 341).

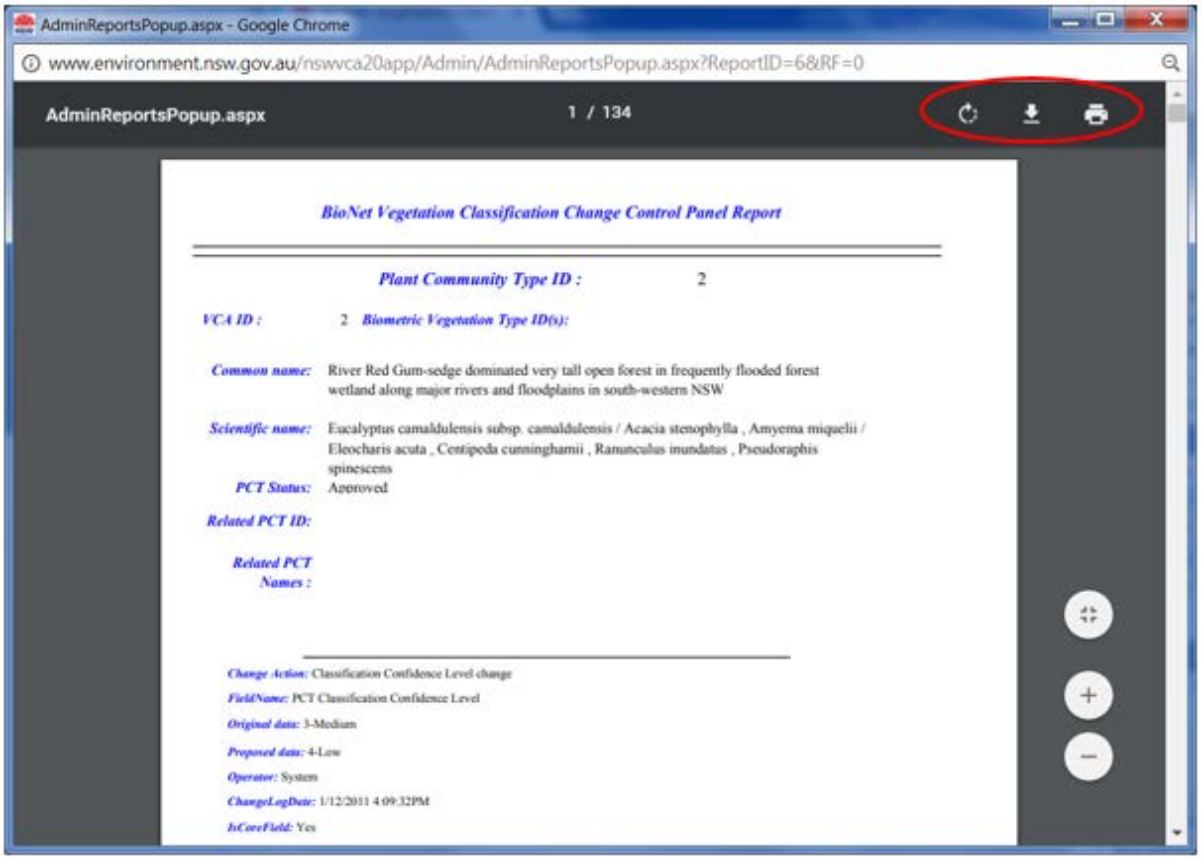


Figure 341 Pop-up preview window showing PDF report, with download and print options

23. If you are exporting a csv file, then when you click 'Run', a 'Download CSV File' pop-up will appear (see Figure 342).

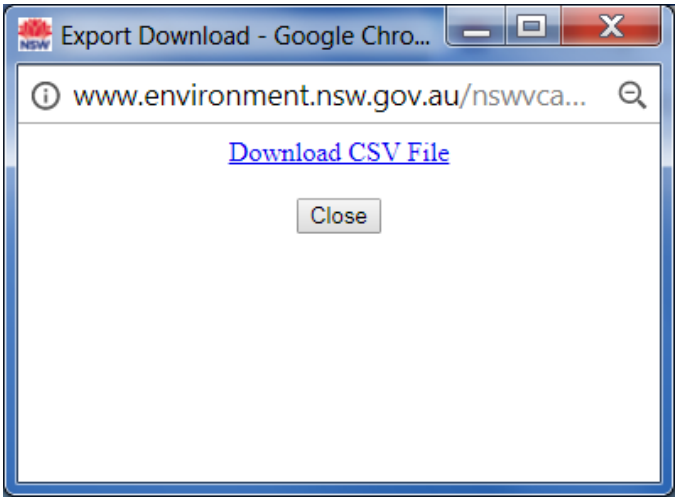


Figure 342 Pop-up to download the csv file

24. When you click ‘Download CSV file’, the file will download and, if you are using Chrome, an option will appear to ‘Show all’. If you are using IE, the option will be to ‘View downloads’. Clicking ‘Close’ will cancel the operation.
25. Click on ‘Show all’ (see Figure 343).

Figure 343 Click on ‘Show all’ to view the downloaded csv file

26. The downloaded file will be listed at the top of the ‘Downloads’ list (see Figure 344). Click on the file name to open in Excel (in Chrome). If using IE, the options will be to ‘Open’ or ‘Save’ the file.

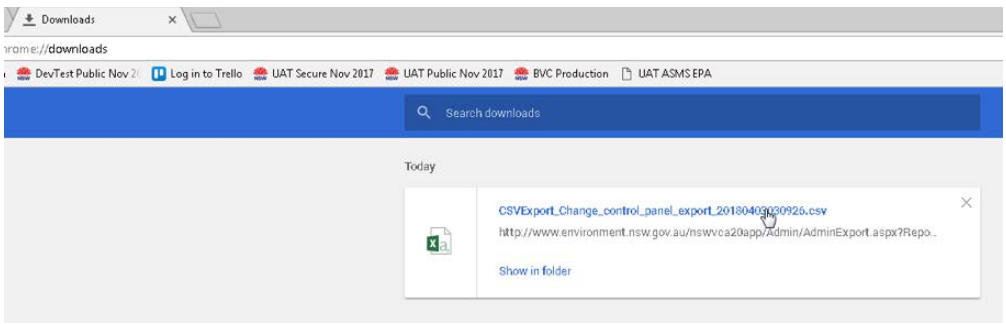


Figure 344 Click on the name of the csv file in the ‘Downloads’ list (this view from Chrome)

27. The csv file will open in Excel. View the data and save if desired (just remember where you saved it!). Alternatively, close the file.
28. Note that the 'Download CSV File' dialogue box will remain until it is closed, and the file will remain listed in the 'Downloads' until cleared.
29. For instructions on how to save and later retrieve your report/export search criteria, refer to Section 5.2. Using this functionality saves times by obviating the need to recreate report/exports that you use repeatedly.

15.8 'Benchmarks'

Benchmark data are maintained by Statutory Data Edit users and Administrators. The 'Benchmarks' drop-down menu item can only be seen by these users.

User information for the 'Administration – Benchmarks' section is detailed in Section 11.3 (Part C) of this user manual and the upload/import template format is provided in Appendix A5.7.

Refer to Appendices 6.5, A6.6 and A6.7 for process flow diagrams relating to Benchmark data and status management.

15.9 'PCT Clearing'

PCT Clearing data are maintained by Statutory Data Edit users and Administrators. The 'PCT Clearing' drop-down menu item can only be seen by these users.

User information for the 'Administration – PCT Clearing' section is detailed in Section 10.2 (Part C) of this user manual and the upload/import template format is provided in Appendix A5.6.

Refer to Appendix A6.8 for the process flow diagram relating to PCT Clearing Status management.

15.10 'NSW Landscapes'

NSW Landscapes data (including 'Over-cleared Landscapes, or OCL, data) are maintained by Statutory Data Edit users and Administrators. The 'NSW Landscapes' drop-down menu item can only be seen by these users.

To access the NSW Landscapes edit function:

1. Select 'NSW Landscapes' from the drop-down list under Administration (see Figure 345).

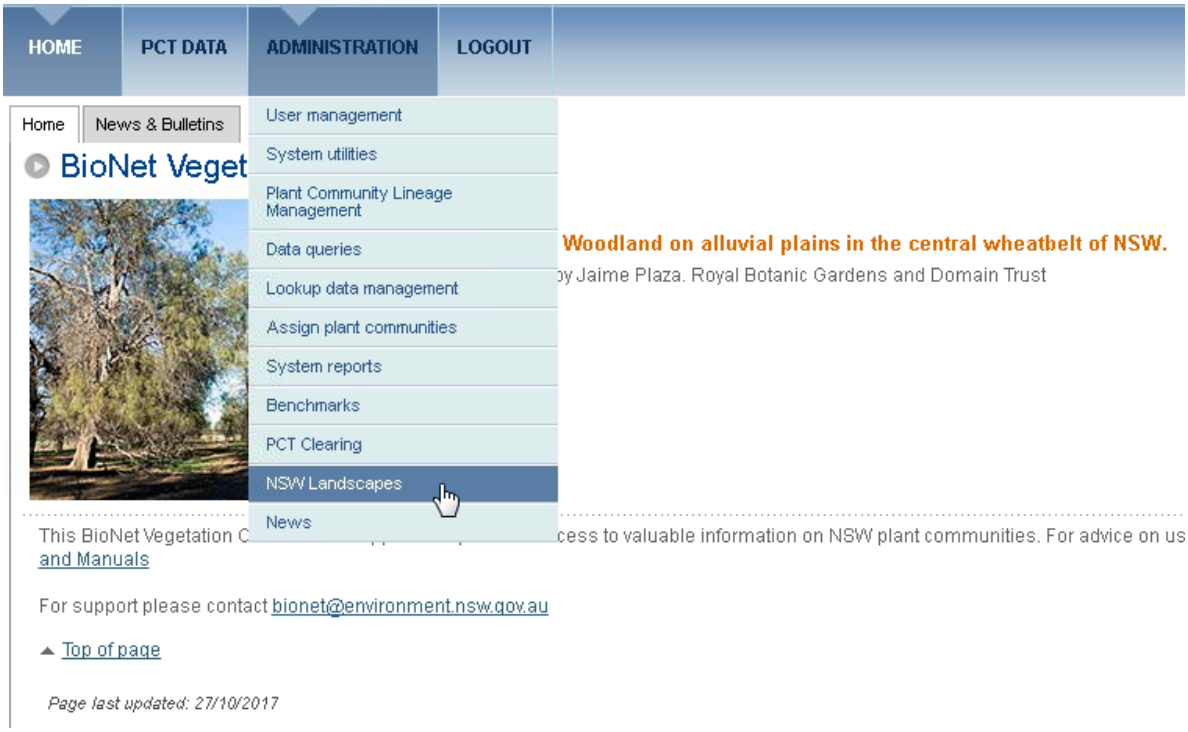


Figure 345 Select 'NSW Landscapes' from the 'Administration' tab in the top navigation bar

2. This will open the NSW Landscapes selection screen (see Figure 346).
3. There are 20 Landscapes listed per page; use the page numbers at the top and bottom left to navigate between the pages to view the other landscapes.
4. Export the data if desired by clicking on the 'Export data' button (see Figure 346).

Figure 346 Use the scroll bar to view the 20 Landscapes listed per page. Export the data if desired

5. View the information for a Landscape by clicking the 'View' hyperlinked text on the left (see Figure 347).

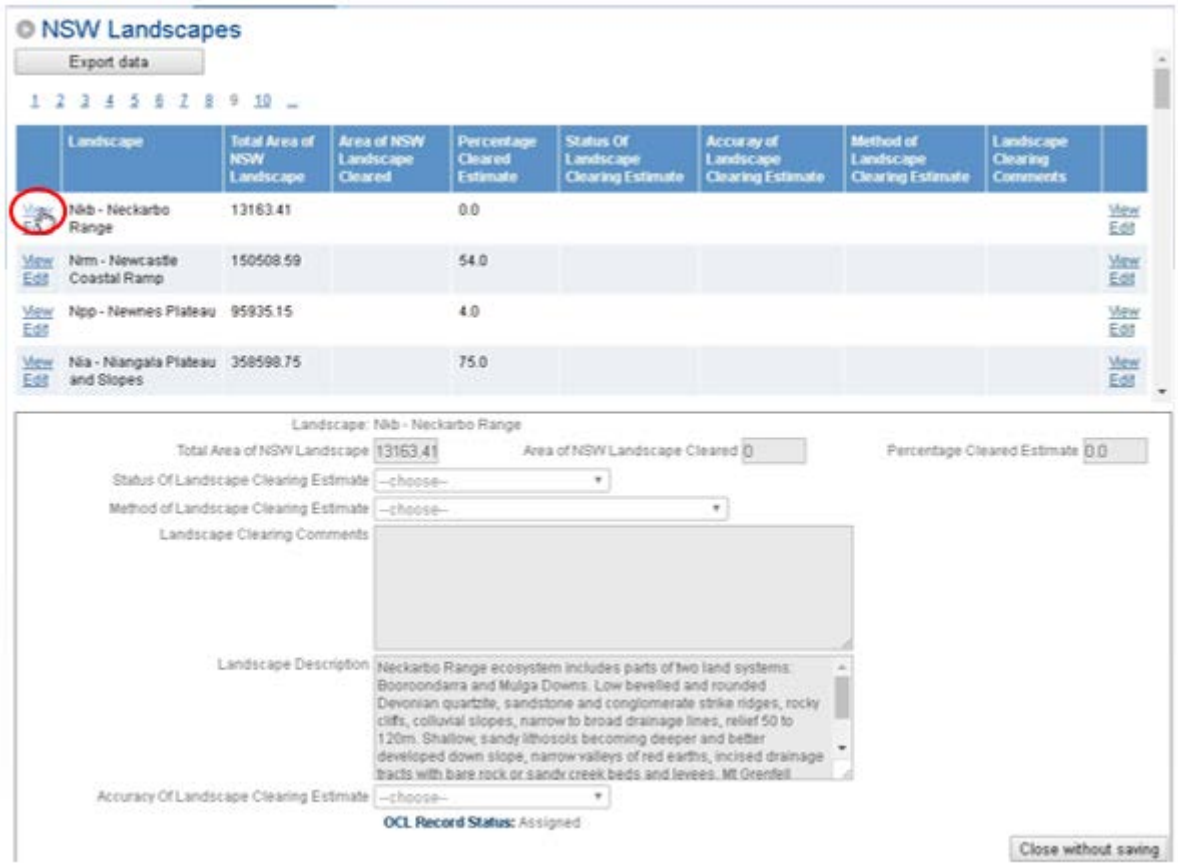


Figure 347 The greyed inactive fields indicate ‘View’ mode

6. To edit the data, click the ‘Edit’ hyperlinked text and the edit screen will open (see Figure 348).

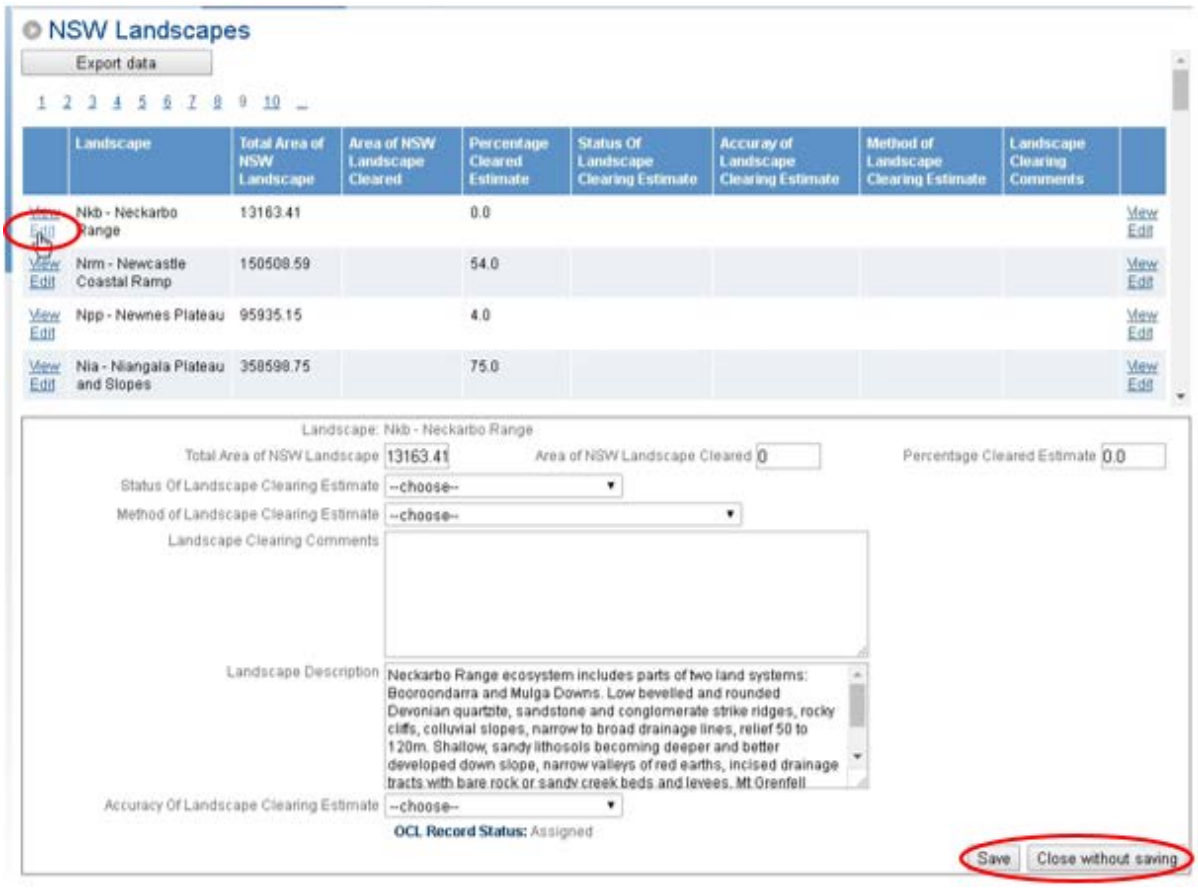


Figure 348 White active fields indicative of 'Edit' mode

7. Enter or modify the data directly in the relevant field(s):
   a. 'Total Area of NSW Landscape' – free text
   b. 'Area of NSW Landscape Cleared' – free text
   c. 'Percentage Cleared Estimate' – free text
   d. 'Status of Landscape Clearing Estimate' – drop-down menu item
   e. 'Method of Landscape Clearing Estimate' – drop-down menu item
   f. 'Landscape Clearing Comments' – free text
   g. 'Landscape Description' – free text
   h. 'Accuracy of Landscape Clearing Estimate' – drop-down menu item.
8. Ensure you update the 'Landscape Clearing Comments' field regarding the source of such changes.
9. When you have finished making edits, click 'Save' to save your changes, or 'Close without saving' to exit the screen without saving your changes (see Figure 348).

15.11 News

This functionality allows Administrators to alert public and edit application users to BioNet Vegetation Classification systems and data updates.

To access the News edit function:

1. Select 'News' from the drop-down list under Administration (see Figure 349).

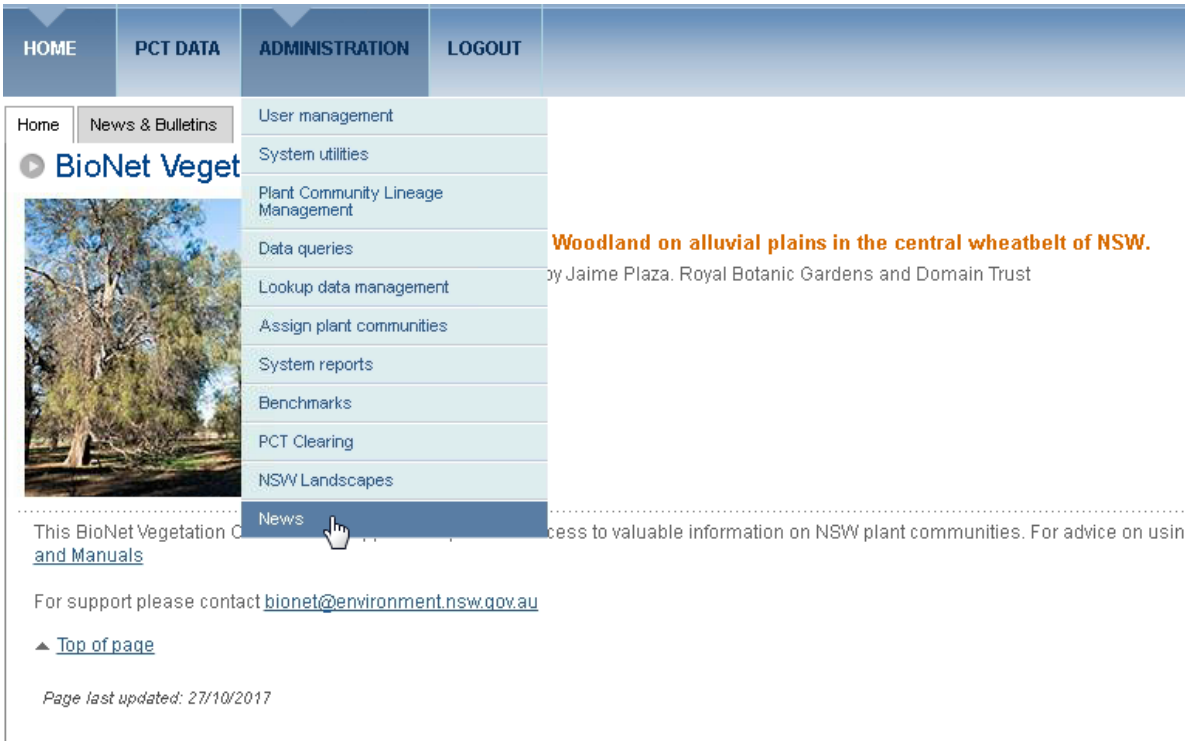


Figure 349 Select 'News' from the 'Administration' tab in the top navigation bar

2. This will open the News management area (see Figure 350).

Figure 350 News management area

3. To edit an existing news item listed, click the 'Edit' hyperlinked text on the right of the item (see Figure 350).
4. This will open the pre-populated edit screen (see Figure 351).

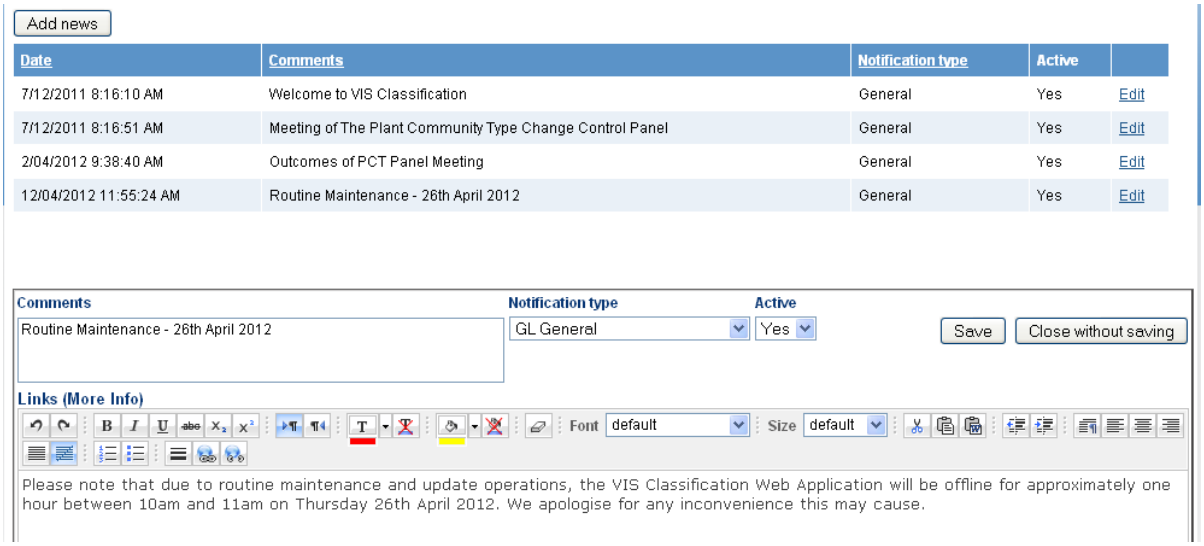


Figure 351 Open an existing news item to undertake edits

5. Alternatively, to add a new News item, click the ‘Add news’ button at the top (see Figure 350).
6. This will open a blank edit screen (see Figure 352).

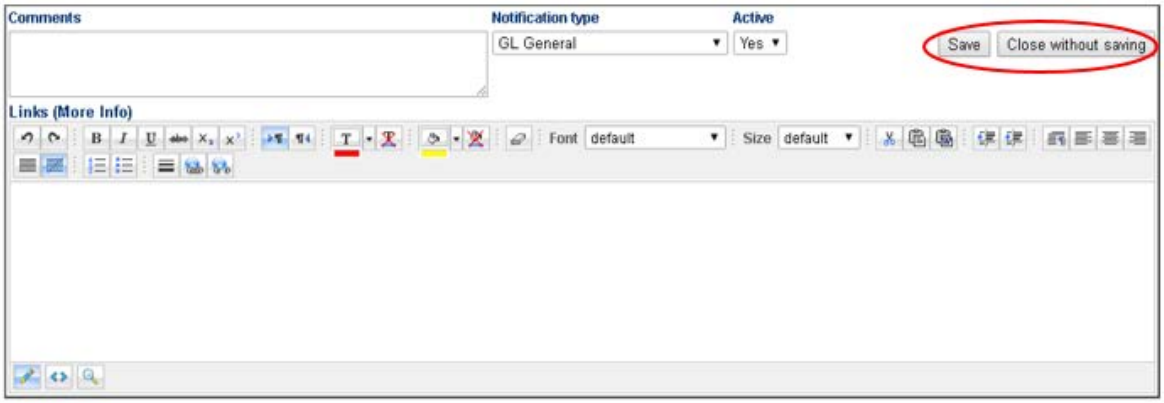


Figure 352 Create a new news item and then save

7. Make any edits via the edit screen. Formatting options are available via the tool buttons along the top of the ‘Links (More Info)’ area (see Figure 353). To provide a link to another page, highlight the relevant text and use the hyperlink tool to enter the required link url.

Figure 353 Formatting options

8. When you have finished click ‘Save’ to save your changes, or ‘Close without saving’ to exit the screen without saving your changes (see Figure 352).

Part E Appendices and additional information

Appendix 1 Possible Internet Explorer Issues

Users may experience some issues when using Internet Explorer:

If the pop-up blocker is turned off, you may have problems with some functions including producing reports.

A known issue with Internet Explorer is the retrieval of cached information overriding the loading of updated pages.

A1.1 Pop-up blocker

To enable some functions, including producing reports, you may need to have the pop-up blocker turned off. In Internet Explorer, you can do this via the Tools menu, under ‘Internet options’ (see Figure 354).

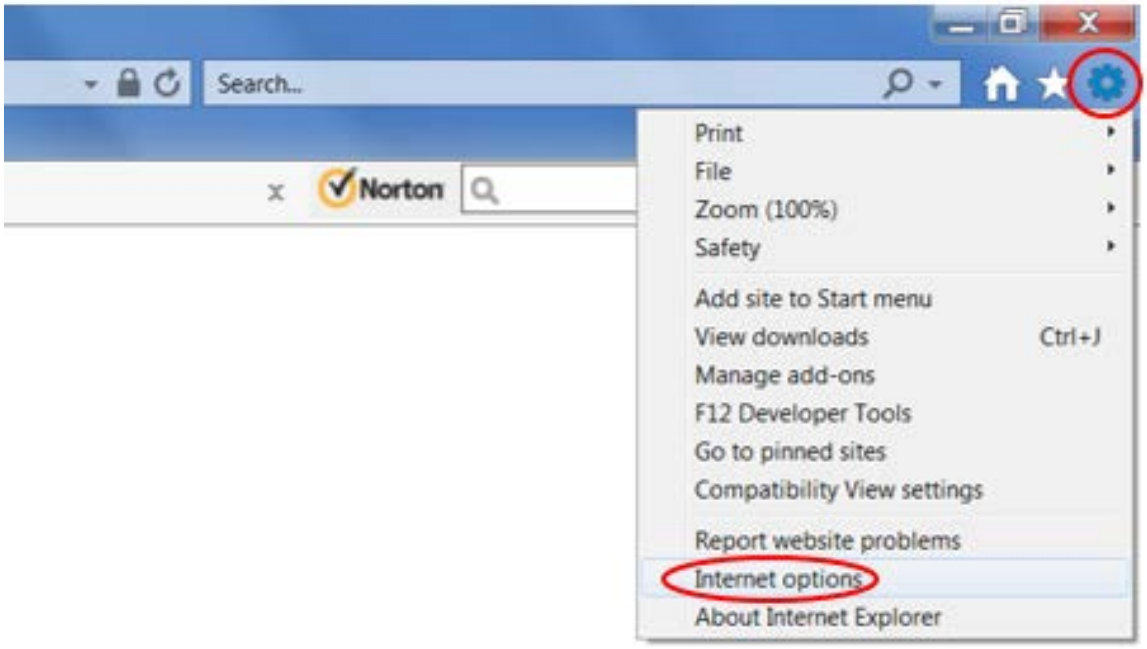


Figure 354 The ‘Tools’ menu on Internet Explorer

On the general tab, go to ‘Tabs’ (see Figure 355).

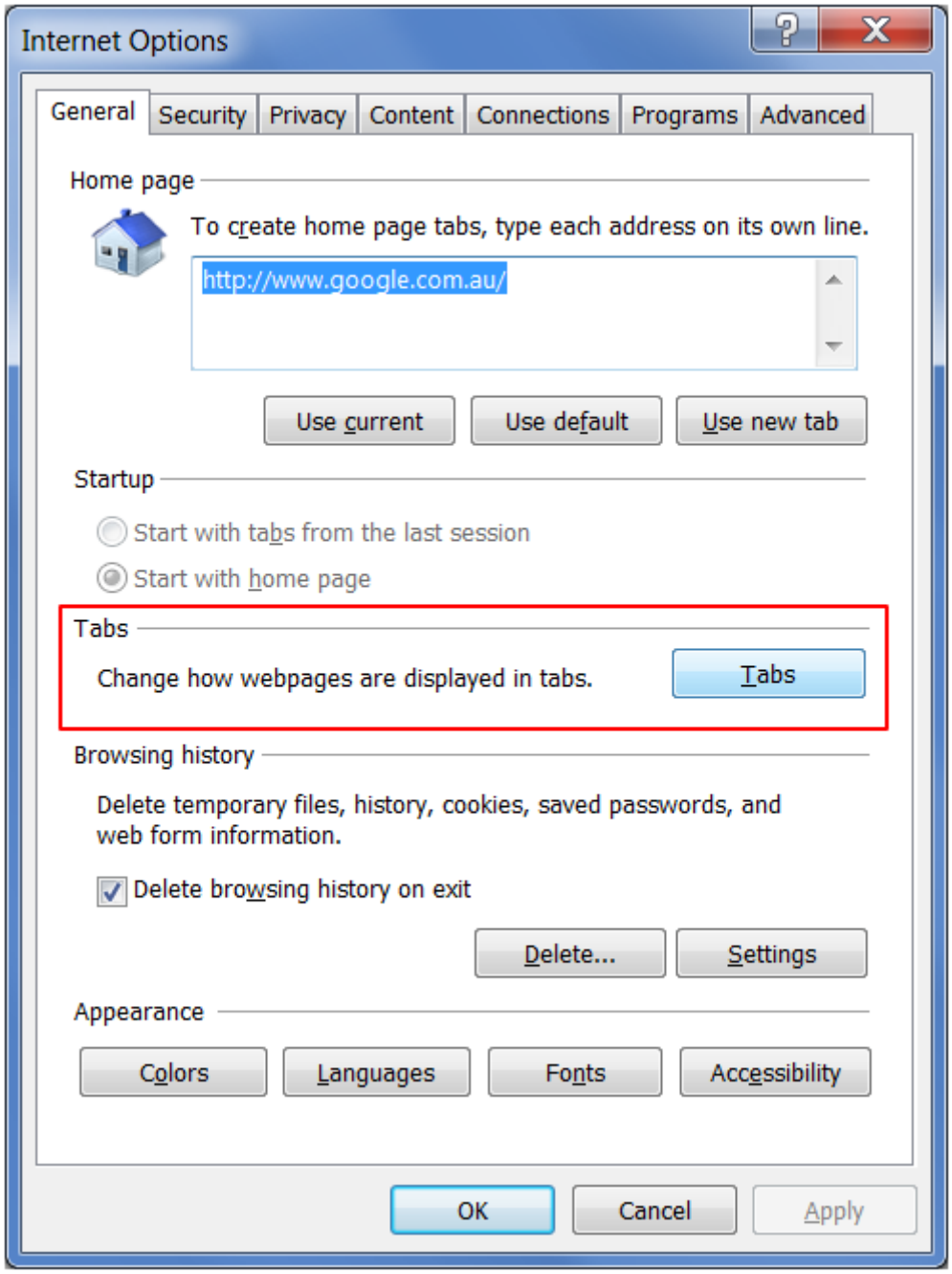


Figure 355 The ‘Tabs’ button under the ‘Internet Options’ menu

Once the ‘Tabs’ button is selected, ensure ‘Let Internet Explorer decide how pop-ups should open’ (see Figure 356).

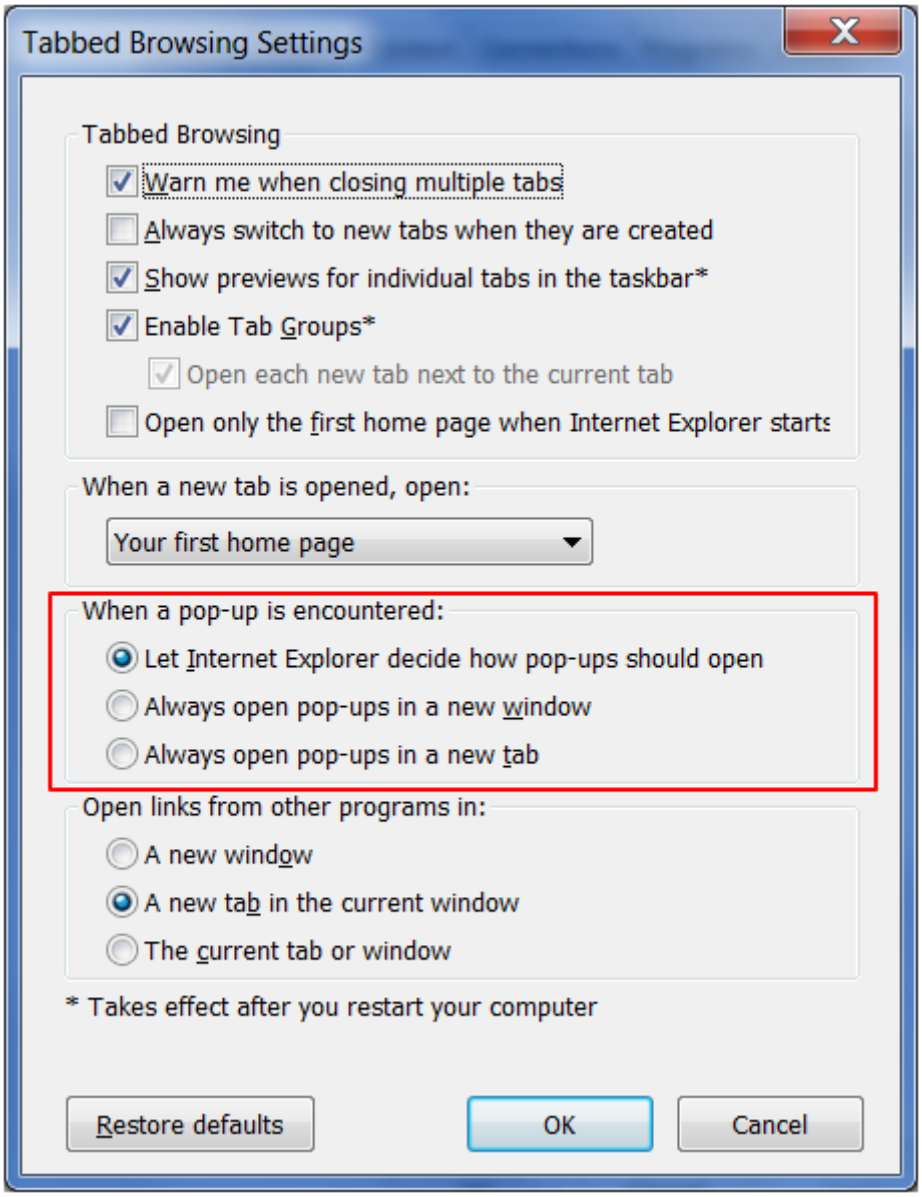


Figure 356 The pop-up options on the 'Tabbed Browser Settings' menu

A1.2 Issues with refreshing pages

There is a known issue with Internet Explorer in that the retrieval of cached information may override the loading of updated pages. If, during use, you find that pages or areas are not refreshing as expected (e.g. clicking on 'options' buttons do not clear previous selections), this may be due to cache retrieval.

To fix this, select the 'Internet Options' from the Tools menu in Internet Explorer, as shown in the previous section. Then select 'Browsing history settings' (Figure 357).

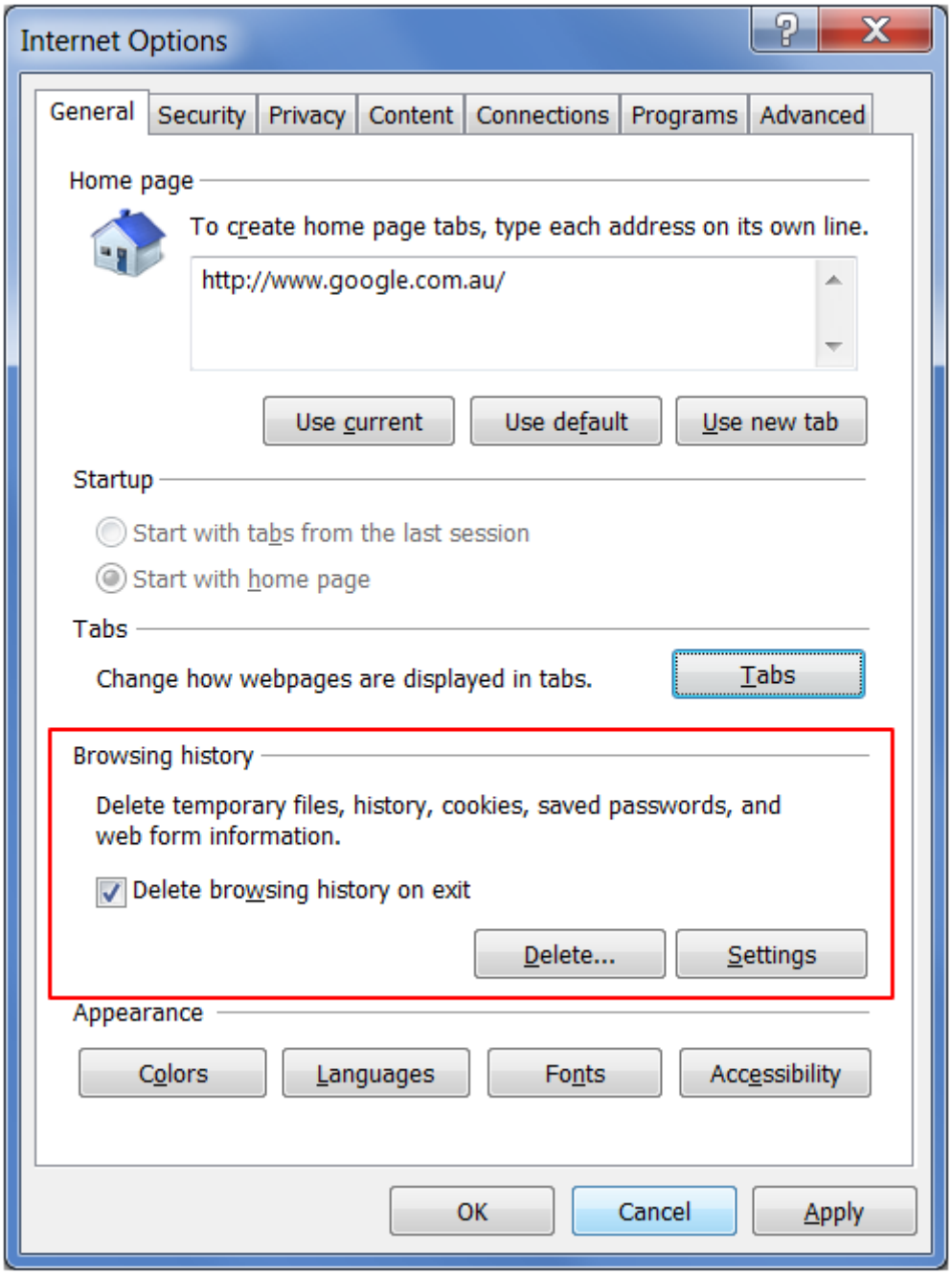


Figure 357 Browsing history options under the ‘Internet Options’ menu

On the ‘Settings’ page, ensure that ‘Automatically’ is ticked (see Figure 358).

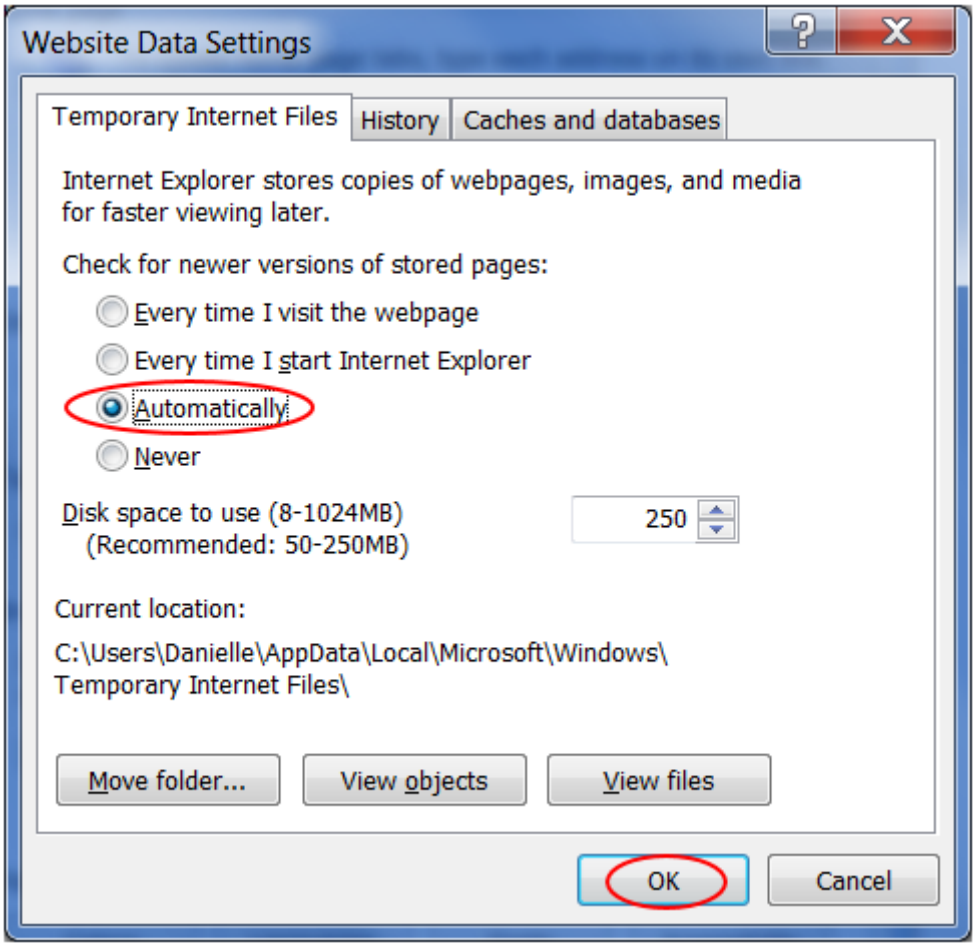


Figure 358 Select ‘Automatically’ under the ‘Temporary Internet Files’ tab

Click ‘OK’, which will take you back to the previous screen. Here, click on ‘Delete’ in the Browsing history section (see Figure 359).

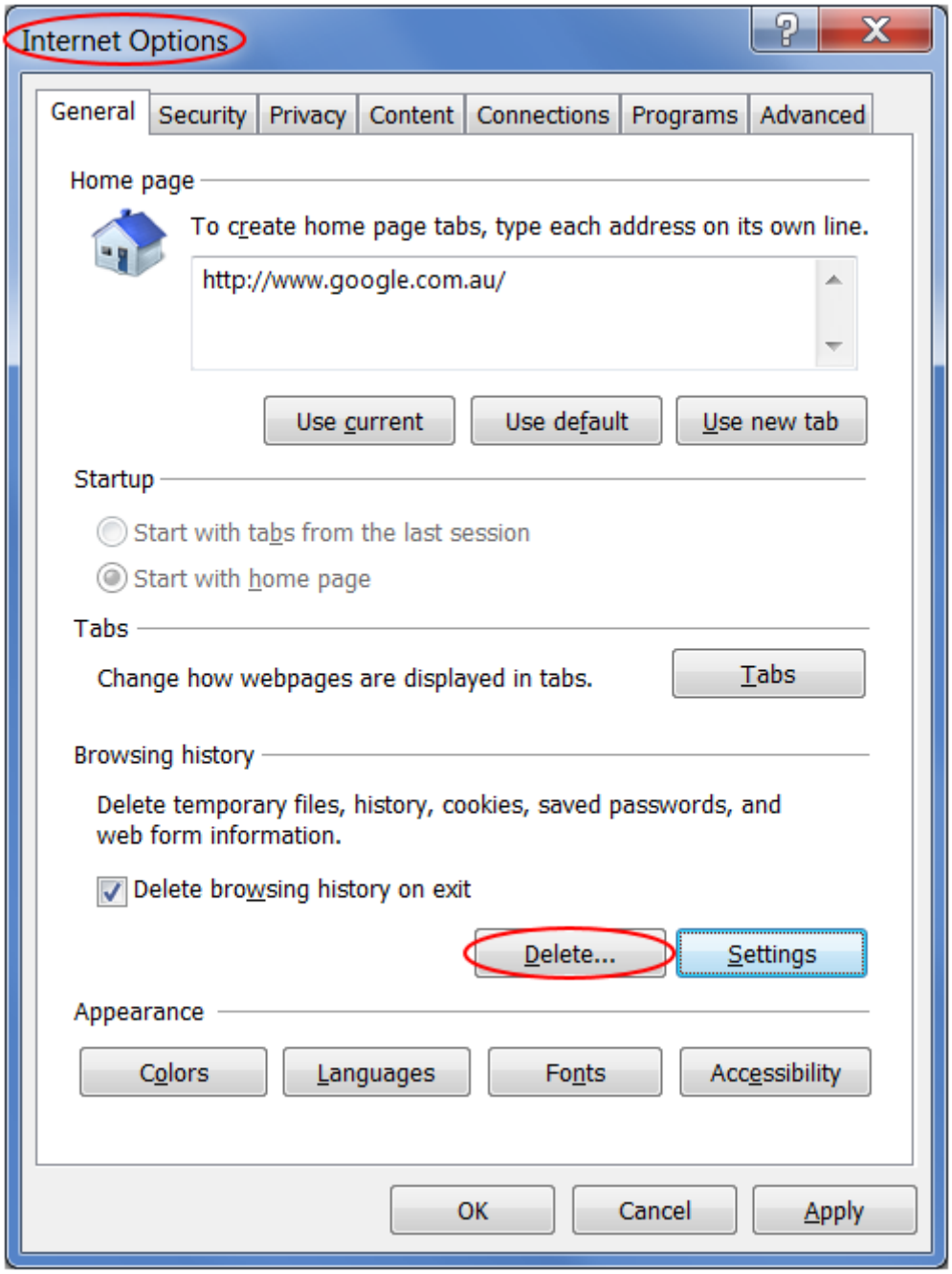


Figure 359 The ‘Delete’ button on the ‘Browsing history’ menu

Tick ‘Temporary Internet files and website files’ and ‘Cookies and website data’, then click ‘Delete’. This may take a while, depending on how often you delete these files and data (see Figure 360).

Afterwards, click ‘OK’ until you are out of the Internet options box.

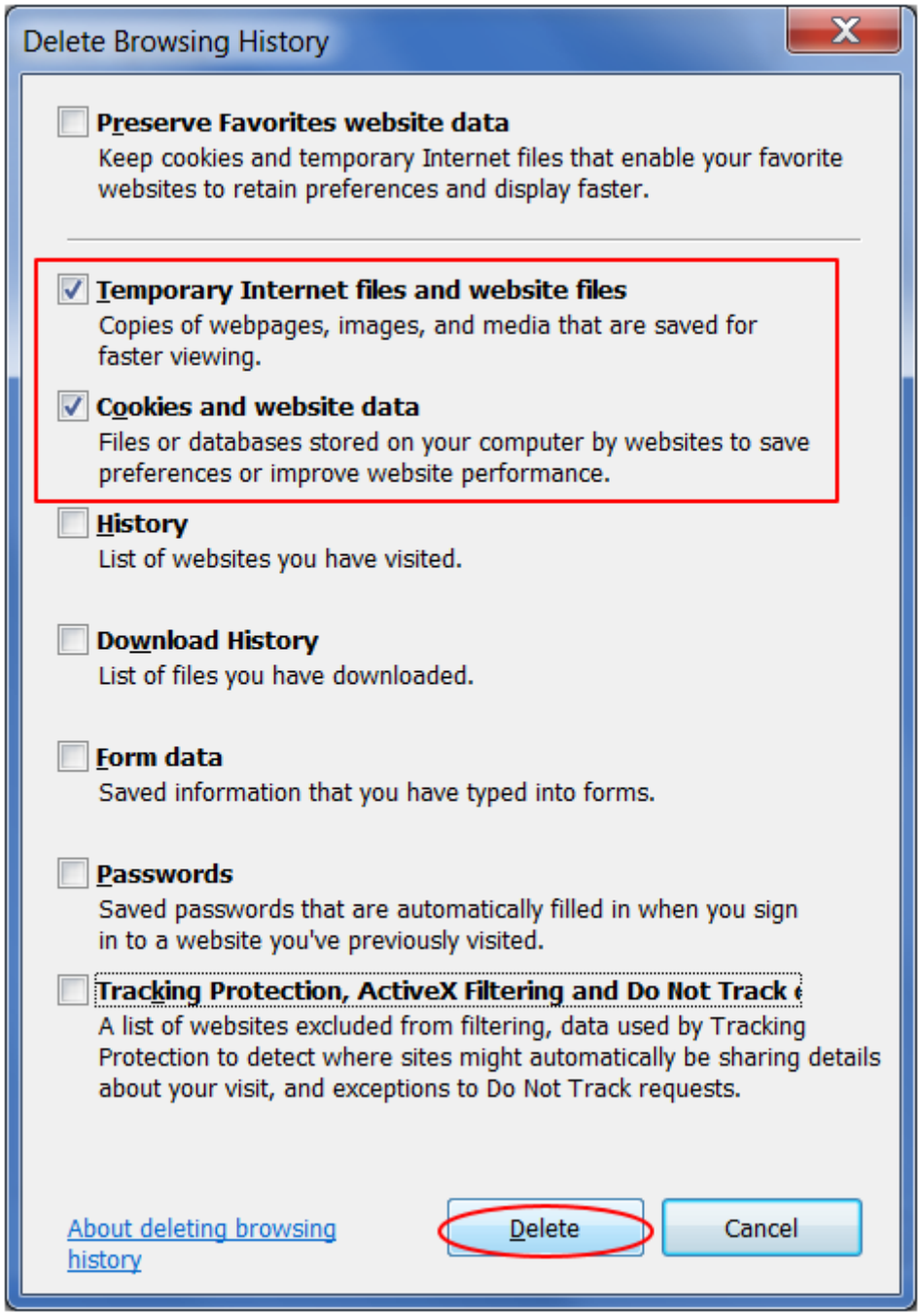


Figure 360 The 'Delete Browsing History' menu in Internet Explorer

Appendix 2 Example searches for reports and exports

A2.1 Exporting a list of Plant Community Types in a particular IBRA Bioregion

1. Choose ‘Reports/Exports’ from the drop-down menu under the ‘PCT Data’ top navigation bar (see Figure 361).

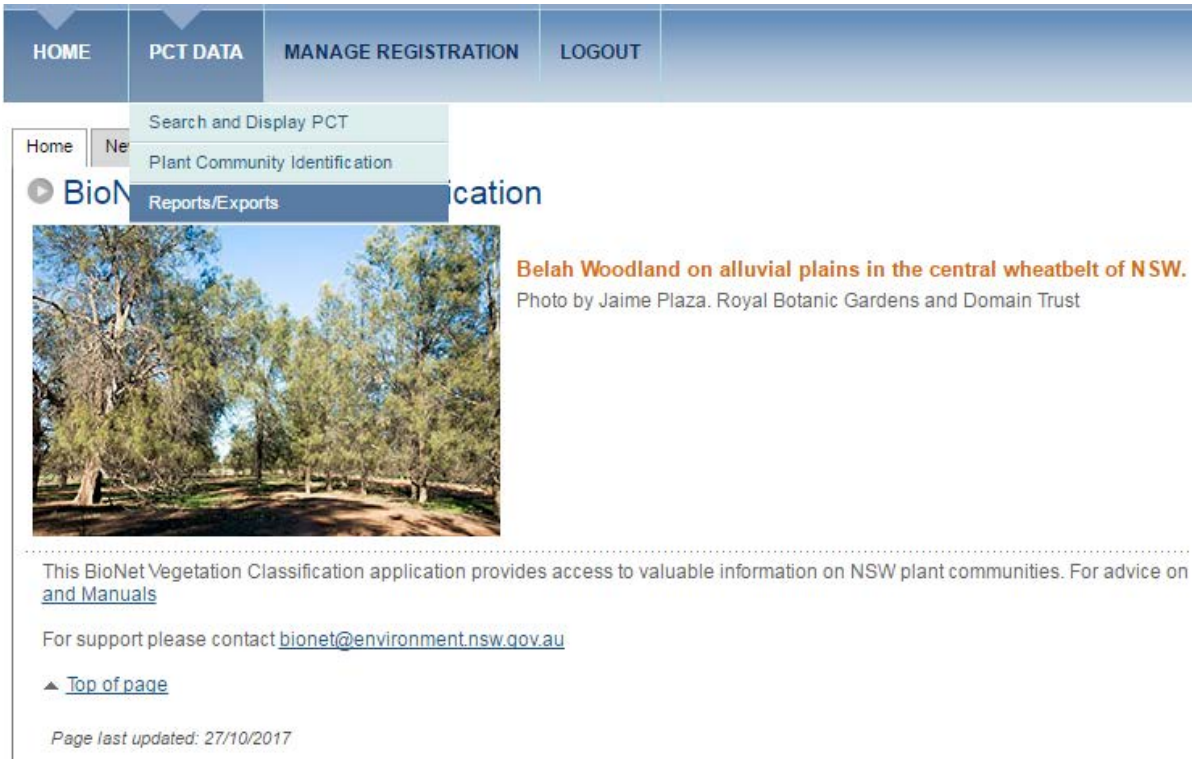


Figure 361 Select ‘Reports / Exports’

2. Select ‘Exports’ (see Figure 362)**.**

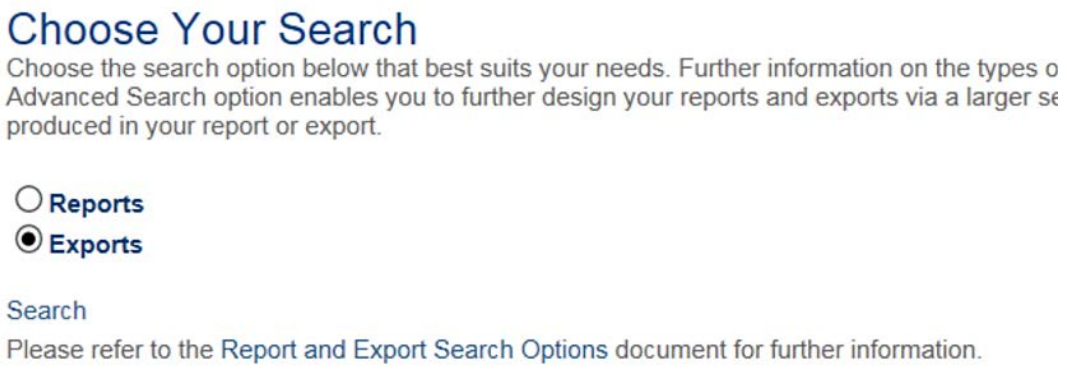


Figure 362 Choose exports under ‘Choose your search’

3. Step 1: Choose the ‘Community profile report’ export template.
4. Step 2: Select common terms and check ‘IBRA Bioregion’ (see Figure 363).

Figure 363 Selecting the desired IBRA Bioregion

5. Select ‘Add’. A window will pop-up asking you to select the search condition. Select search conditions as:
   a. Operator: =
   b. Enter value: ‘SYB: Sydney Basin’ (see Figure 364)
   c. Select records for: ‘Any (Or)’
6. Select ‘OK’ to close display window. The screen will then show the criteria selected.

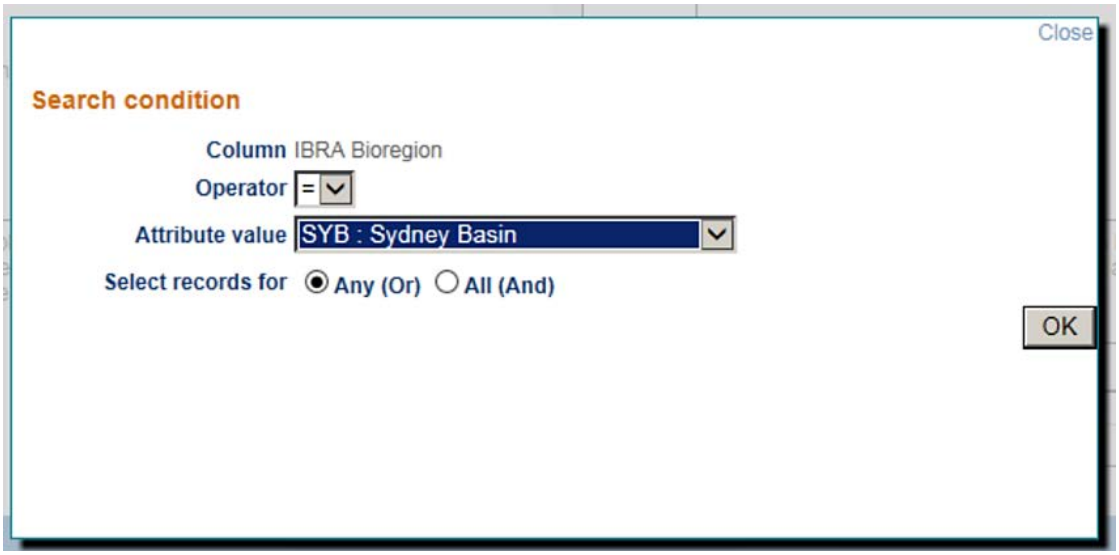


Figure 364 Selecting SYB:Sydney Basin as the IBRA Bioregion

7. Follow Section 5.1.3 and Section 5.1.4 to show the results and run a report, respectively.

As you compile criteria, please check the ‘Show’ button in Step 3 of the interface. This allows you to see if the current combination of criteria returns at least one expected PCT. If the ‘Show’ button is greyed-out, there are no PCTs that meet the current combination of criteria.

A2.2 Exporting a benchmark report for an IBRA Bioregion

To export a report containing benchmark data for PCTs in certain IBRA sub-regions (see Figure 365):

1. Select ‘PCT Benchmarks Report’ in Step 1.
2. Select ‘IBRA Subregion’ under ‘Distributional Information’ and ‘Add’ to your search criteria.
3. Repeat this step to add multiple IBRA Regions to your benchmark report.

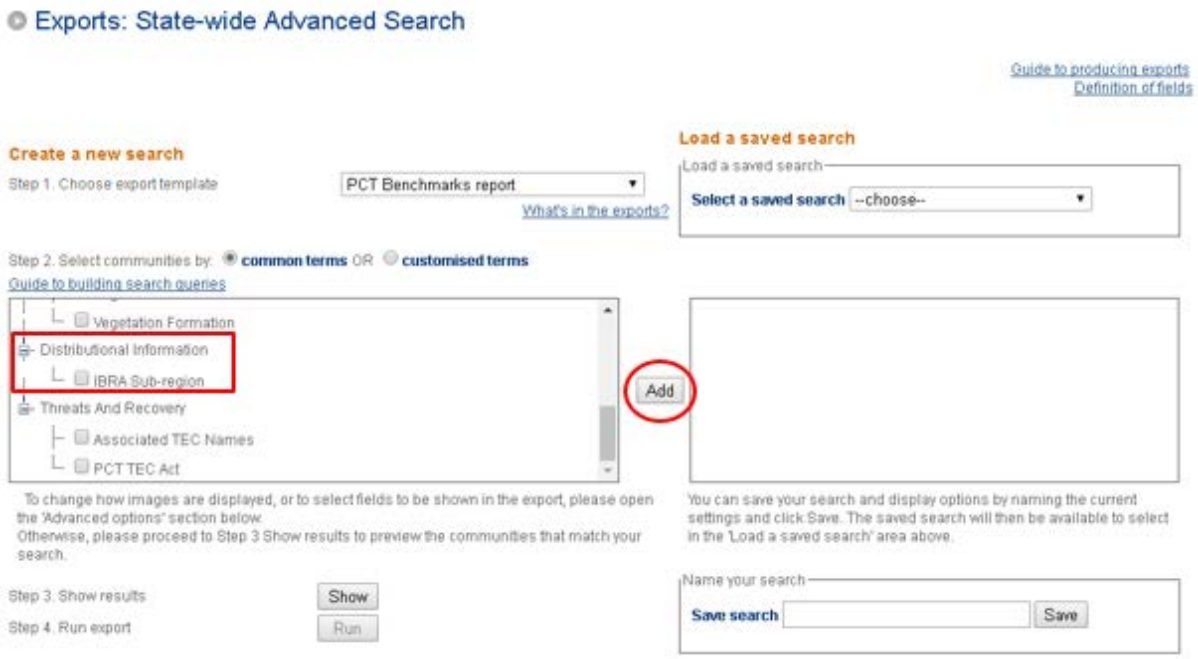


Figure 365 Exporting benchmark data for PCTs in specified IBRA Sub-regions

Appendix 3 User role access matrix for BioNet Vegetation Classification edit application

Table A3.1 Detailed matrix showing edit access rights for the five user roles in the BioNet Vegetation Classification edit application

[1]Fields marked as 'Yes', will automatically change the status of the PCT to Approved-Under Edit (if previously Approved); but this status change will not appear in the PCT Definition status change report. [2]Fields marked as 'Yes' will be included in the Change history report for the PCT.

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Main Panel / Top Banner	n/a	Classification Type	n/a	n/a	No	No	No	No	No	Identifies whether the PCT is Qualitative or Quantitative. System-generated as Quantitative when PCT Replicate data imported
Main Panel / Top Banner	n/a	PCT Definition Status	n/a	n/a	No	No	No	No	No	Displays the current PCT Definition Status
Main Panel / Top Banner	n/a	PCT Benchmark Calculation level	n/a	n/a	No	No	No	No	No	Displays the level at which the Benchmarks are maintained for the PCT. Possible values are PCT or Class/IBRA
Main Panel / Top Banner	n/a	Status	n/a	n/a	No	No	No	No	No	Displays the count of Benchmarks at Class/IBRA level that have been marked as Approved (e.g. 5 out of 7 IBRA regions approved)
Main Panel / Top Banner	n/a	PCT % Cleared Status	n/a	n/a	No	No	No	No	No	Displays the current PCT % Cleared Status

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Main Panel / Top Banner	n/a	PCT Threatened Ecological Communities Association Status	n/a	n/a	No	No	No	No	No	Displays the date at which the TEC association with the PCT was last updated
Main Panel / Top Banner	n/a	Classification confidence level	n/a	n/a	No	No	No	No	No	Displays the Classification confidence captured for the PCT
Main Panel / Top Banner	n/a	Authority	n/a	n/a	No	No	No	No	No	Authority or Classification project by which the PCT was created
Main Panel / Top Banner	n/a	Tool Ready	n/a	n/a	No	No	No	No	No	Derived from PCT Definition Status PCT Benchmark Status PCT Clearing Status PCT TEC Definition status (defined or not) If all four statuses are approved/available, then the Tool Ready status will be set as Yes. This is defined in the User defined procedure - uspVCA3_GetPCTHeaderStatuses

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Vegetation community details	Community Name and Classification Level	Plant community type ID	Yes	n/a	No	No	No	No	No	Auto-generated from Atlas Flora Survey - Created in Veg Classification when PCT Core Data file is uploaded
Vegetation community details	Community Name and Classification Level	VCA ID	Yes	n/a	No	No	No	No	No	Populated for a subset of existing PCTs. Not populated for newly created PCTs
Vegetation community details	Community Name and Classification Level	Authority	Yes	Yes	Yes	Yes	No	No	No	Also populated from PCT Core Data upload file with data from Atlas Flora Survey
Vegetation community details	Community Name and Classification Level	Common name	Yes	Yes	No	No	No	No	No	Populated when PCT Core data file is uploaded with data from Atlas Flora Survey
Vegetation community details	Community Name and Classification Level	PCT Common Usage Name	Yes	Yes	Yes	Yes	No	No	No	Colloquial name for the PCT
Vegetation community details	Community Name and Classification Level	PCT Scientific Name	Yes	Yes	Yes	Yes	No	No	No	Previously system-generated from dominant species information from each stratum. Manually populated henceforth with form of existing Common

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
										name using scientific species names
Vegetation community details	Community Name and Classification Level	Classification confidence level	Yes	Yes	Yes	Yes	No	No	No	n/a
Vegetation community details	Community Name and Classification Level	Classification source	Yes	n/a	Yes	Yes	No	No	No	n/a
Vegetation community details	Community Name and Classification Level	Classification method	Yes	n/a	Yes	Yes	No	No	No	Options: quantitative data, expert opinion or a combination of the two
Vegetation community details	Vegetation Formation and Class	Vegetation Formation	Yes	Yes	Yes	Yes	No	No	No	n/a
Vegetation community details	Vegetation Formation and Class	Vegetation Class	Yes	Yes	Yes	Yes	No	No	No	Veg Class is also populated from PCT Core Data upload file
Scientific description	Species by Stratum	Species upper stratum (plus associated fields)	Yes	Yes	Yes	Yes	No	No	No	‘Diagnostic species’ edited here

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Scientific description	Species by Stratum	Species middle stratum (plus associated fields)	Yes	Yes	Yes	Yes	No	No	No	'Diagnostic species' edited here
Scientific description	Species by Stratum	Species lower stratum (plus associated fields)	Yes	Yes	Yes	Yes	No	No	No	'Diagnostic species' edited here
Scientific description	Species by Growthform	All fields	n/a	n/a	No	No	No	No	No	Data from Atlas Flora Survey, populated from PCT Taxon Data upload file (not fully functional as yet)
Scientific description	Community structure	All fields	n/a	n/a	Yes	Yes	No	No	No	(Includes cover and height data)
Scientific description	Descriptive Attributes	Diagnostic species	Yes	Yes	(Yes)	(Yes)	No	No	No	Edited in the 'Species by Stratum section
Scientific description	Descriptive Attributes	Diagnostic species method	Yes	n/a	Yes	Yes	No	No	No	n/a
Scientific description	Descriptive Attributes	Vegetation description	Yes	n/a	Yes	Yes	No	No	No	n/a

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Scientific description	Descriptive Attributes	Variation and natural disturbance	n/a	n/a	Yes	Yes	No	Yes	No	n/a
Scientific description	Descriptive Attributes	Is a derived plant community type?	n/a	Yes	Yes	Yes	No	No	No	n/a
Scientific description	Descriptive Attributes	Original community this PCT is derived from	Yes	n/a	Yes	Yes	No	No	No	n/a
Scientific description	Descriptive attributes	Derived community comments	n/a	n/a	Yes	Yes	No	No	No	n/a
Scientific description	Descriptive Attributes	Other Diagnostic features	n/a	n/a	Yes	Yes	No	No	No	n/a
Scientific description	Descriptive Attributes	Fire regime	n/a	n/a	Yes	Yes	No	Yes	No	n/a
Scientific description	References	References	n/a	n/a	Yes	Yes	No	No	No	n/a
Scientific description	References	Full Reference	n/a	n/a	Yes	Yes	No	No	No	n/a

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Scientific description	References	Citation	n/a	n/a	Yes	Yes	No	No	No	n/a
Scientific description	References	Profile Source	n/a	n/a	Yes	Yes	No	No	No	n/a
Distribution information	Environmental Regions	IBRA Region	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey,
Distribution information	Environmental Regions	IBRA Version	n/a	n/a	Yes	Yes	No	No	No	n/a
Distribution information	Environmental Regions	IBRA Version and Attribution comments	n/a	n/a	Yes	Yes	No	No	No	n/a
Distribution information	Environmental Regions	IBRA Subregion	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey
Distribution information	Environmental Regions	NSW Landscapes (Mitchell 2002)	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey
Distribution information	Environmental Regions	Landscape position	n/a	n/a	Yes	Yes	No	No	No	n/a

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Distribution information	Administrative areas	LGA	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey
Distribution information	Climate, Landform and Substrate	Rainfall - min, max and median	n/a	n/a	No	No	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey
Distribution information	Climate, Landform and Substrate	Elevation - min, max and median	n/a	n/a	No	No	No	No	No	Also populated from PCT Domain Data upload file with data from Atlas Flora Survey
Distribution information	Climate, Landform and Substrate	All other fields	n/a	n/a	Yes	Yes	No	No	No	n/a
Extent	Extent	All fields	* PCT Percent cleared	n/a	No	No	No	No	No	Read-only. Populated from the 'PCT Clearing' function (under Administration menu). * Will cause PCT % Cleared Status change to 'Revised'
Threatened Biodiversity,	Threatened Biodiversity	All fields	n/a	n/a	No	No	No	No	No	Data obtained from Atlas Threatened Biodiversity

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
TECs & Benchmarks										function - refreshed overnight
Threatened Biodiversity, TECs & Benchmarks	Community Condition Benchmarks	All fields	*	n/a	No	No	No	No	No	Read-only. Populated from the 'Benchmarks' function (under Administration menu). * Will cause PCT Benchmark Status change to 'Revised'
Threatened Biodiversity, TECs & Benchmarks	Threatened Ecological Communities (TEC) Listings	All fields	*	n/a	Yes	Yes	No	Yes	No	TEC list obtained from Atlas. PCT - TEC association done from Veg Classification function. * Will cause PCT TEC Association Status (date) to update
Spatial information	Mapping	Pre-European mapped or modelled	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Current extent mapped or modelled	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Map Unit Id	n/a	n/a	Yes	Yes	No	No	No	n/a

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Spatial information	Mapping	VIS ID	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Mapped	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Map Product Code	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Mapped Community Name	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	PCT_MU Fit	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Geometry Check	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Mapping	Threatened ecological community (TEC) list	n/a	n/a	Yes	Yes	No	No	No	n/a
Spatial information	Plot data	Survey Name	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Replicate upload file with data from Atlas Flora Survey
Spatial information	Plot data	Site Number	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Replicate upload file with

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
										data from Atlas Flora Survey
Spatial information	Plot data	Replicate Number	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Replicate upload file with data from Atlas Flora Survey
Spatial information	Plot data	All other fields	n/a	n/a	Yes	Yes	No	No	No	Also populated from PCT Replicate upload file with data from Atlas Flora Survey
Image management	Assign images	All fields (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a
Image management	Upload new images	All fields (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a
Image management	Manage images	All fields (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Lineage	All fields	n/a	n/a	No	No	No	No	No	Populated from PCT Lineage Management screen (under Administration menu)

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Status and Lineage	Status	Current status	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	New status	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	Reason for status change	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	Status change comments	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	Panel date for decision	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	Panel decision comments	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	TSP Assignment Status	n/a	n/a	Yes	No	No	No	No	n/a
Status and Lineage	Status	TSP Assignment Date	n/a	n/a	Yes	No	No	No	No	n/a
Status and Lineage	Status	PCT Export Date	n/a	n/a	Yes	Yes	No	No	No	n/a

PCT UI Tab	PCT UI Section	Field Name	[1]Is Core Field/s?	[2]Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Status and Lineage	Status	TSP Assignment Comments	n/a	n/a	Yes	Yes	No	No	No	n/a
Status and Lineage	Status	Previous panel date	n/a	n/a	No	No	No	No	No	n/a
Status and Lineage	Status	Previous panel comments	n/a	n/a	No	No	No	No	No	n/a

Table A3.2 Detailed matrix showing menu and functionality access rights for the five user roles in the BioNet Vegetation Classification edit application

Top Navigation Bar	Drop-down Menu Item	Functionality and / or Field Name/s	Is Core Field?	Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
PCT Data	Community Identification	All (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a
PCT Data	Reports / Exports	All (except system auto-fill)	n/a	n/a	Yes	Yes	Yes	Yes	Yes	n/a
Administration	User management	All fields (except	n/a	n/a	Yes	Yes	No	No	No	n/a

Top Navigation Bar	Drop-down Menu Item	Functionality and / or Field Name/s	Is Core Field?	Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
		system auto-fill)								
Administration	System utilities > PCT Definition Status Management	All (except system auto-fill)	yes	yes	Yes	Yes	No	No	No	n/a
Administration	System utilities > Publish Data to Public database	All (except system auto-fill)	n/a	n/a	Yes	No	No	No	No	n/a
Administration	System utilities > PCT TSP Management	All (except system auto-fill)	n/a	n/a	Yes	No	No	No	No	n/a
Administration	System utilities > Species Management	Update ‘VIS species data’ button	n/a	n/a	Yes	Yes	No	No	No	n/a
Administration	System utilities > Public User Management	All (except system auto-fill)	n/a	n/a	Yes	No	No	No	No	n/a

Top Navigation Bar	Drop-down Menu Item	Functionality and / or Field Name/s	Is Core Field?	Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Administration	System utilities > Upload/Import PCT Data Management Routines	All (except system auto-fill)	n/a	n/a	Yes	Yes	Yes	No	No	n/a
Administration	System utilities > Atlas Export templates	All templates	n/a	n/a	Yes	No	No	No	No	n/a
Administration	System utilities > TEC Management	‘Update TEC data 'button	n/a	n/a	Yes	No	No	No	No	Functionality disabled
Administration	Plant Community Lineage Management	All (except system auto-fill)	No	Yes?	Yes	Yes	No	No	No	n/a
Administration	Data queries > Advanced data queries	All (except system auto-fill)	n/a	n/a	Yes	No	No	No	No	n/a
Administration	Data queries > Simple data queries	All (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a

Top Navigation Bar	Drop-down Menu Item	Functionality and / or Field Name/s	Is Core Field?	Is Tracked Field/s?	Role					Comments
					Administrator	Classification Edit User	Statutory Data Edit User	TR Edit User	Public/read-only user	
Administration	Lookup data management	All (except system auto-fill)	n/a	n/a	Yes	Yes	No	No	No	n/a
Administration	Assign plant communities	All (except system auto-fill)	n/a	n/a	Yes	No	No	No	No	n/a
Administration	System Reports	All (except system auto-fill)	n/a	n/a	Yes	Yes	Yes	No	No	n/a
Administration	Benchmarks	All (except system auto-fill)	Yes	Yes	Yes	Yes	Yes	No	No	n/a
Administration	PCT Clearing	All (except system auto-fill)	Yes	Yes	Yes	Yes	Yes	No	No	n/a
Administration	OCL	All (except system auto-fill)	No	Yes?	Yes	No	Yes	No	No	n/a

Appendix 4 Standards for PCT Common Names

A Plant Community Type Common Name should be comprised of:

1. Common Name of the dominant (up to three if co-dominant) species (e.g. ‘River Red Gum’). If more than one species is included, names are to be separated by a hyphen, e.g. ‘River Red Gum – Coolabah’.
2. Characteristic overall community structure (e.g. open forest, wetland)*. If possible, only one term should be used but two descriptors can be used as per the format in the following example to denote a range of community structure in terms of cover or height: ‘low forest/shrubland’. Use of two terms may be used separately where two different structural types occur, e.g. ‘woodland wetland’.
3. Characteristic landscape association, geology, landform or soil type if the plant community type is confined to one (e.g. ‘lake fringes’. N.B. this is an optional component of the name and should only be used where doing so adds significantly to describing the type).
4. Geographic description of range as appropriate (generally use IBRA regions if possible but whatever description best encapsulates the expected range, e.g. ‘Brigalow Belt South Bioregion’ or ‘central NSW’). If more than one IBRA is used, the full term is to be used each time, e.g. ‘Brigalow Belt South Bioregion and Nandewar Bioregion’, i.e. no plurals or abbreviations.

Thus, for the examples used here, a name conforming to these conventions would be: ‘River Red Gum open forest of lake fringes in the Brigalow Belt South Bioregion and Nandewar Bioregion’.

* N.B. for rainforest, grassland and wetland communities the relevant term should be used as a standard in their common names, e.g.

- Coachwood - Soft Corkwood - Crabapple warm temperate rainforest of the NSW North Coast Bioregion;
- Native Millet - Cup Grass grassland of the Darling Riverine Plains Bioregion;
- Coolabah - River Cooba - Lignum woodland wetland of frequently flooded floodplains mainly in the Darling Riverine Plains Bioregion.

These conventions are applied to allow for the rapid searching for and identification of plant community types within the BioNet applications and other systems or applications that incorporate PCT Data.

Appendix 5 Data upload/import templates

A5.1 PCT core data template

Table A5.1 PCT Core Data Upload/Import template, including example

Field Name	PCTID	PCTCommonUsageName	VegetationClass	Authority
Data Format	Integer	Text	LUT	Text
LUT Options			LUT of 99 Vegetation Classes	
Example	5	River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes	Sydney Coastal Dry Sclerophyll Forests	VCA 1.1 - archive

Template is stored as DOC18/634867. Files must be .csv format.

A5.2 PCT taxonomy data template

Table A5.2 PCT Taxonomy Data Upload/Import template, including example

Field Name	PCT_ID	GrowthFormGroup	Species	Growth_Form_Group_Freq	Growth_Form_Median_cover_score
Data Format	Integer	Auto-generated from LUT	Auto-generated from LUT	Integer (% occurrence)	Integer (0-10)
LUT Options		Tree (TG) Shrub (SG) Grass & grasslike (GG) Forb (FG) Fern (EG) Other (OG)			
Example	155	Fern (EG)	Cheilanthes sieberi subsp. sieberi	64	1

Template is stored as DOC18/634867. Files must be .csv format.

A5.3 PCT structure data template

Table A5.3 PCT Structure Data Upload/Import template, including example

Field Name	PCT_ID	Stratum	CoverMin	CoverMax	CoverMean	HeightMin	HeightMax	HeightMean
Data Format	Integer	LUT	Decimal (1 dec. pl.)	Decimal (1 dec. pl.)	Decimal (1 dec. pl.)	Decimal (1 dec. pl.)	Decimal (1 dec. pl.)	Decimal (1 dec. pl.)
LUT Options		E U1 U2 M1 G1						
Example	27	U1	10.0	65.0	34.0	15.0	35.0	25.0

Template is stored as DOC18/634867. Files must be .csv format.

A5.4 PCT replicate data template

Table A5.4 PCT Replicate Data Upload/Import template, including example

Field Name	PCTID	SurveyName	SiteNo	ReplicateNo
Data Format	Integer	Text (alphanumeric)	Text (alphanumeric)	Integer
LUT Options				
Example	5	ABEL	BRS75P3U	2

Template is stored as DOC18/634867. Files must be .csv format.

A5.5 PCT domain data template

Table A5.5 PCT Domain Data Upload/Import template, including example

Field Name	PCTID	IBRA	IBRA_Subregion	LGA	NSWLandscape	Rainfall_Minimum	Rainfall_Maximum	Rainfall_Median	Elevation_Minimum	Elevation_Maximum	Elevation_Median
Data Format	Integer	LUT	LUT	LUT	LUT	Integer	Integer	Integer	Integer	Integer	Integer
LUT Options		Australian Alps Brigalow Belt South Broken Hill Complex Channel Country Cobar Peneplain Darling Riverine Plains Murray Darling Depression Mulga Lands Nandewar New England Tablelands NSW North Coast NSW South Western Slopes Riverina South East Corner South Eastern Highlands South Eastern Queensland Simpson Strzelecki Dunefields Sydney Basin	LUT of 139 IBRA Sub-regions	LUT of 128 LGAs plus Unincorporated Area	LUT of 569 NSW Landscapes						
Example	5	Riverina	Murray Fans	Murray	Mullion Slopes	375	480	415	300	600	485

Template is stored as DOC18/634867. Files must be .csv format.

A5.6 PCT % cleared and extent data template

Table A5.6 PCT % Cleared (and Extent) Data Upload/Import template, including example

Field Name	PCTID	Pre-European extent (ha)	Pre - European accuracy (%)	Pre-European qualifiers	Pre-European comments	Current extent (ha)	Current extent accuracy (%)	Current extent qualifiers	Current extent comments	PCTPercentCleared	PercentAccuracyOfPCTPercentClearedEstimate	PCTPercentClearedSource	PCTPercentClearedComments	PCTPercentClearedStatus
Definition		A measured or estimated pre-European extent of the plant community based on the best available information including mapping, modelling or expert advice.	An accuracy rating for the pre-European extent figure.	Select description for derivation of pre-European extent.	Comments on the pre-European extent figure describing any qualifications about the figure.	A measured or estimated extent of the plant community based on the best available information including mapping, modelling or expert advice.	An accuracy rating for the current extent figure.	Select description for derivation of current extent.	Comments on the current extent of the plant community type.	Proportion (percentage) of the PCT cleared (i.e.area of pre-European PCT distribution minus the extant PCT distribution area, expressed as a percentage)	An accuracy rating for the PCT percent cleared value.			
Data Format	Integer	Integer	Integer - LUT	LUT	Text	Integer	LUT	LUT	Text	Decimal (%)	LUT	LUT	Text	LUT
LUT Options			10 30 50 70 90	Estimated from extant vegetation maps: full range Estimated from extant vegetation maps: part range Estimated from pre-European map: full range Estimated from pre-European map: part range Expert estimate not based on any mapped vegetation Modelled from sound site or polygon data			10 30 50 >70 >90	Estimated from broadly classified current extant vegetation map Estimated from mapped extant vegetation: full range Estimated from mapped extant vegetation: part range Estimated from pre-European map: full range Estimated from pre-European map: part range Expert estimate Measured from map of extant vegetation Modelled from sound site data over unclassified map of extant vegetation			+/- 10 +/- 20 +/- 30 +/- 40 +/- 50 +/- 60 +/- 70 +/- 80 +/- 90	E (= Expert opinion) M (= Calculated from current and Pre-European PCT mapping)		Draft Proposed Approved Unassigned

Template is stored as DOC18/632951. Files must be .csv format.

A5.7 PCT Benchmarks data upload/import template

Table A5.7 PCT Benchmarks Data Upload/Import template, including example

Benchmark Calculation Level	Vegetation Class	IBRARegion Code	Tree Richness	Shrub Richness	GrassAnd GrassLike Richness	Forb Richness	Fern Richness	Other Richness	Tree Cover	Shrub Cover	GrassAnd GrassLike Cover	Forb Cover	Fern Cover	Other Cover	Total Length FallenLogs	Litter Cover	Number Large Trees	LargeTree Threshold Size	BenchmarkVariation	Default	Benchmark Source	Benchmark Confidence	Benchmark Reference Site	BenchmarkComments
LUT	LUT	LUT	Integer (-1 to 20)	Integer (-1 to 20)	Integer (-1 to 20)	Integer (-1 to 20)	Integer (-1 to 20)	Integer (-1 to 20)	Decimal (-1.0 to 100.0)	Decimal (-1.0 to	Decimal (-1.0 to 100.0)	Decimal (-1.0 to 100.0)	Decimal (-1.0 to 100.0)	Decimal (-1.0 to 100.0)	Integer (-1 to 1000)	Integer (-1 to 100)	Decimal (-1.0 to 20.0)	LUT	LUT	LUT	LUT		Text	Text
PCT Class/IBRA	LUT of 99 Vegetation Classes	AUA (= Australian Alps) BBS (= Brigalow Belt South) BHC (= Broken Hill Complex) CHC (= Channel Country) COP (= Cobar Peneplain) DRP (= Darling Riverine Plains) MDD (= Murray Darling Depression) MUL (= Mulga Lands) NAN (= Nandewar) NET (= New England Tablelands) NNC (= NSW North Coast) NSS (= NSW South Western Slopes) RIV (= Riverina) SEC (= South East Corner) SEH (= South Eastern Highlands) SEQ (= South Eastern Queensland) SSD (= Simpson Strzelecki Dunefields) SYB (= Sydney Basin)															20 30 50 80	Monthly average, following AVERAGE RAINFALL year January, following WET year January, following AVERAGE RAINFALL year January, following DRY year February, following WET year February, following AVERAGE RAINFALL year February, following DRY year March, following WET year March, following AVERAGE RAINFALL year March, following DRY year April, following WET year April, following AVERAGE RAINFALL year April, following DRY year May, following WET year May, following AVERAGE RAINFALL year May, following DRY year June, following WET year June, following AVERAGE RAINFALL year June, following DRY year July, following WET year July, following AVERAGE RAINFALL year July, following DRY year August, following WET year August, following AVERAGE RAINFALL year August, following DRY year September, following WET year September, following AVERAGE RAINFALL year September, following DRY year October, following WET year October, following AVERAGE RAINFALL year October, following DRY year November, following DRY year December, following WET year December, following AVERAGE RAINFALL year December, following DRY year None Growing season Dormant season Dry Wet (standing water present) Wet (standing water absent)	Yes No	E (= Expert opinion) O (= Observed from raw data distribution) P (= Predicted from raw data modelling) M (= Multiple methods)			
Class/IBRA	Subtropical Rainforests	NNC	17	9	2	4	8	12	140	32	1	2	38	44	30	80.5	6	50	Monthly average, following AVERAGE RAINFALL year	Yes	M			Benchmark Levels: Logs-FormationxRegion, Litter-Class, Large Trees-Class, Richness-ClassXIbra, Cover-ClassXIBRA

Template is stored as DOC18/630954. Files must be .csv or .txt format.

A5.8 PCT Lineage data upload/import template

Table A5.8 PCT Lineage Data Upload/Import template, including example

Field Name	TransformationDate	ParentPCTIDs	TransformationType	OffspringPCTIDs	TransformationDetails	ReasonForLineageChange	PCTSpecificTransformationNotes
Data Format	Date (yyyymmdd)	Integer	LUT	Integer	Text	LUT	Text
LUT Options			1 to 1 replaced by Single split to Complex split to Amalgamated into			Systematic ecological revision Systematic revision of key attributes Systematic error correction by Admin One-off ecological revision One-off attribute revision One-off error correction	
Example	20120927	1282	Single split to	1539	Greater Hunter Mapping Project: PCTID 1282 SPLIT TO PCTIDs 1539, 1540 & 1572 (H/CR CMA area only) and PCTID 1282 (HN CMA area). PCTs 1539, 1540 & 1572 together are largely equivalent to PCT 1282. PCT 1282 is derived	Systematic ecological revision	Number of plots defining this community = 24.
	20120927	1282	Single split to	1540	Greater Hunter Mapping Project: PCTID 1282 SPLIT TO PCTIDs 1539, 1540 & 1572 (H/CR CMA area only) and PCTID 1282 (HN CMA area). PCTs 1539, 1540 & 1572 together are largely equivalent to PCT 1282. PCT 1282 is derived	Systematic ecological revision	Number of plots defining this community = 10.
	20120927	1282	Single split to	1572	Greater Hunter Mapping Project: PCTID 1282 SPLIT TO PCTIDs 1539, 1540 & 1572 (H/CR CMA area only) and PCTID 1282 (HN CMA area). PCTs 1539, 1540 & 1572 together are largely equivalent to PCT 1282. PCT 1282 is derived	Systematic ecological revision	Number of plots defining this community = 16.
	20120927	1282	Single split to	1282	Greater Hunter Mapping Project: PCTID 1282 SPLIT TO PCTIDs 1539, 1540 & 1572 (H/CR CMA area only) and PCTID 1282 (HN CMA area). PCT 1282 retained in HN CMA area only. PCT 1282 is derived from the work of NPWS (2000c);	Systematic ecological revision	PCTID 1282 retained in HN CMA area only.

Template is stored as DOC18/632966. Files must be .csv format.

Appendix 6 Data Process Flows

A6.1 PCT Data Business Process Flow

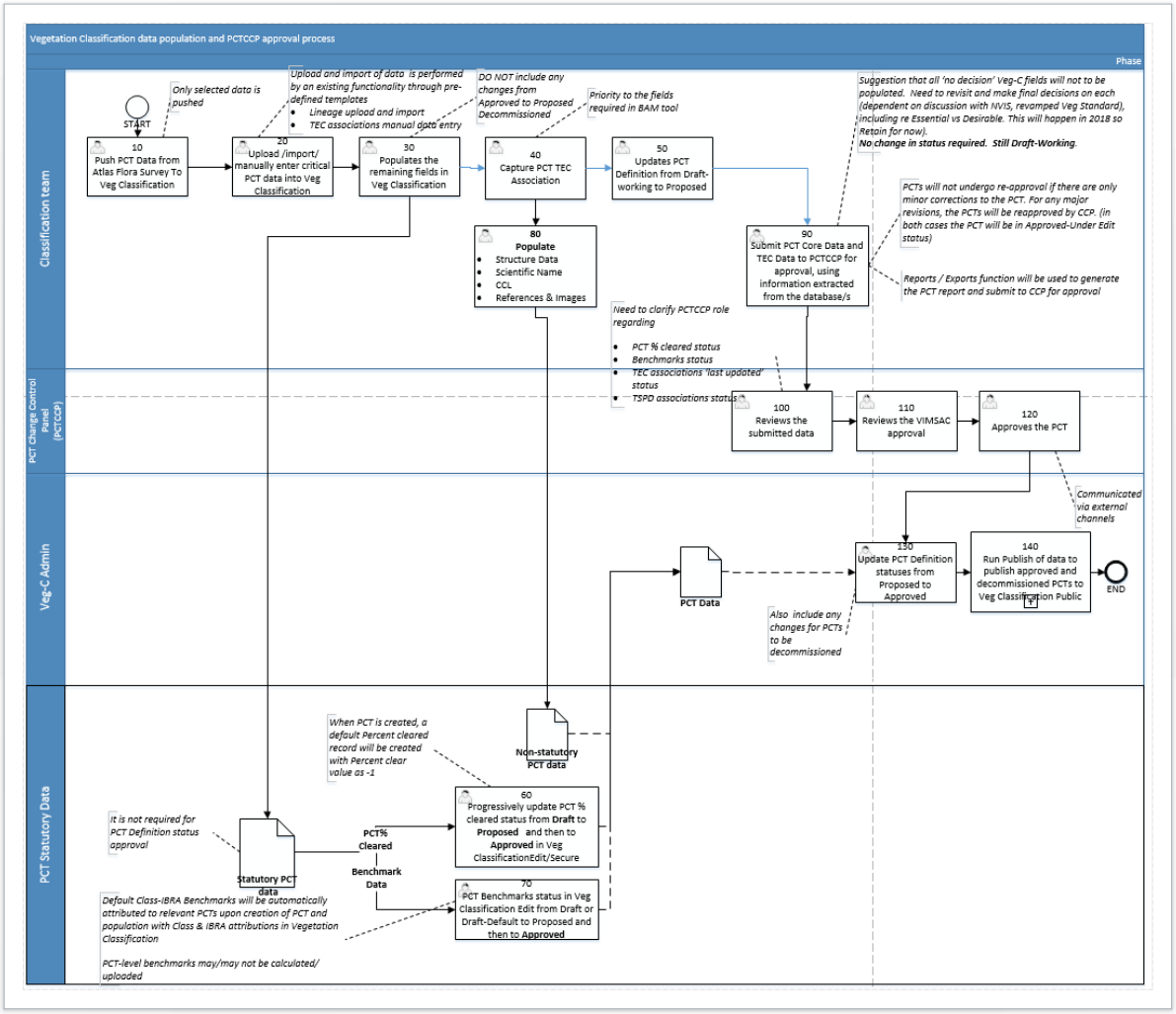


Figure 366 PCT Data – Business Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.2 PCT Data – Integration between Atlas Flora Survey and Veg Classification System – Process Flow

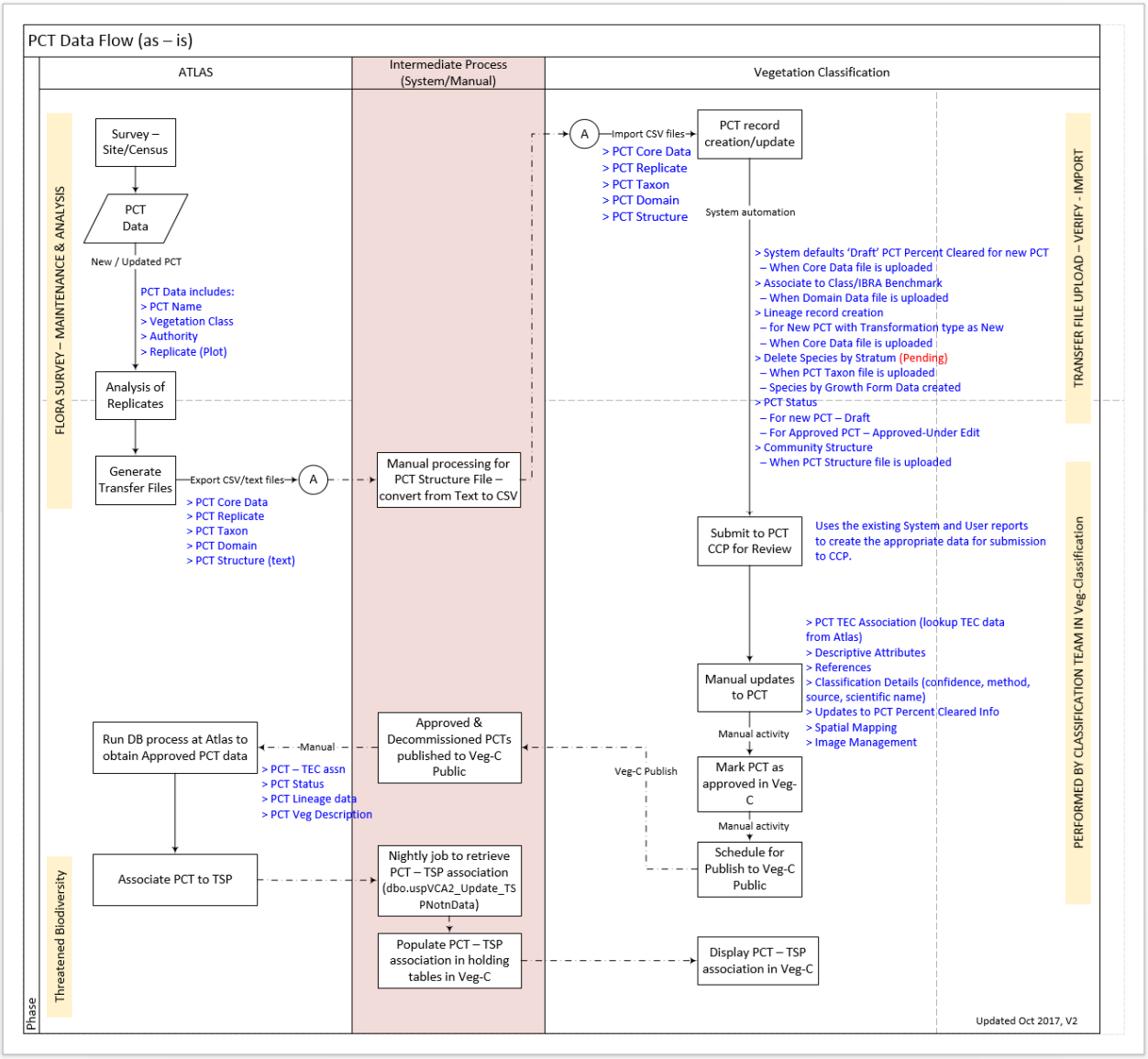


Figure 367 PCT Data – Integration between Atlas Flora Survey and Veg Classification System – Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.3 Manage PCT Lifecycle – Process Flow and screen navigation

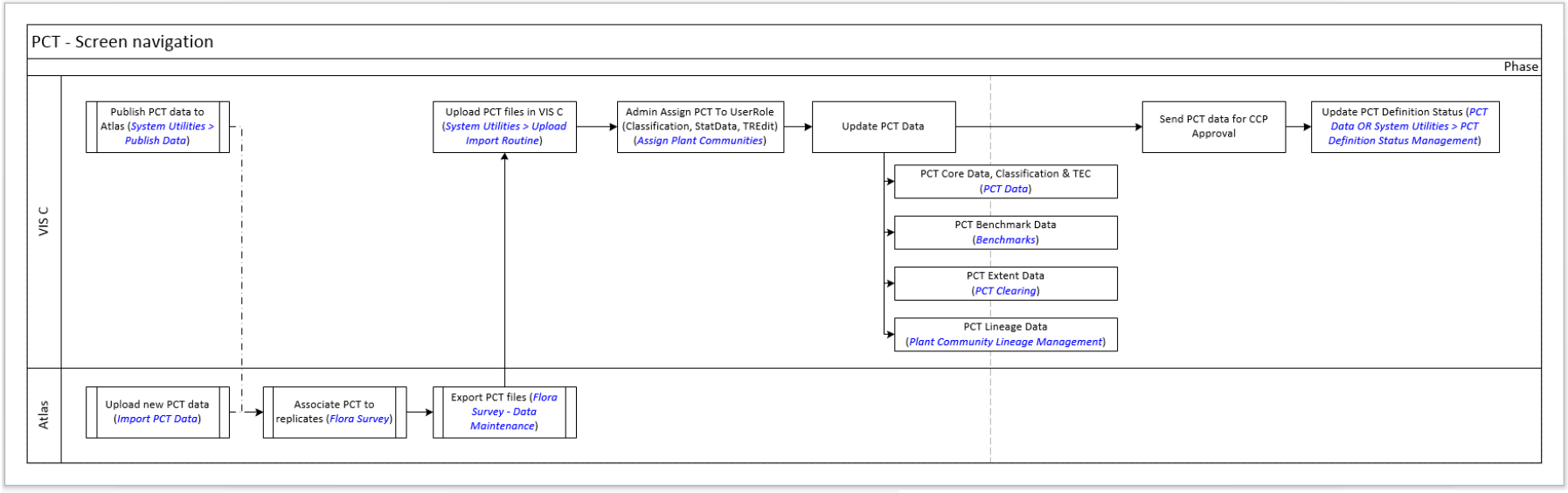


Figure 368 Manage PCT Lifecycle – Screen navigation – Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.4 PCT Lineage – User Process Flow

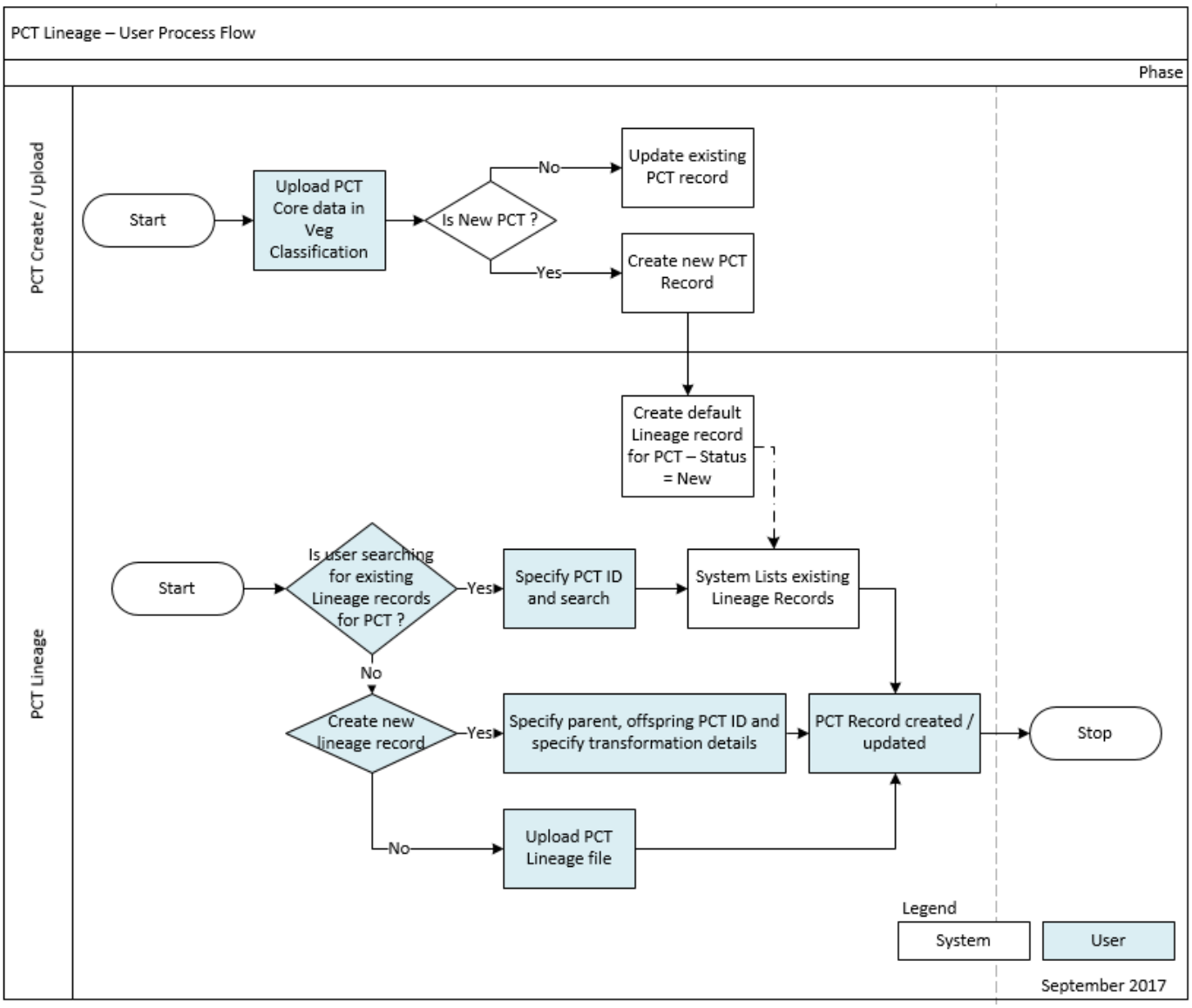


Figure 369 PCT Lineage – User Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.5 Upload Benchmark Data Process Flow

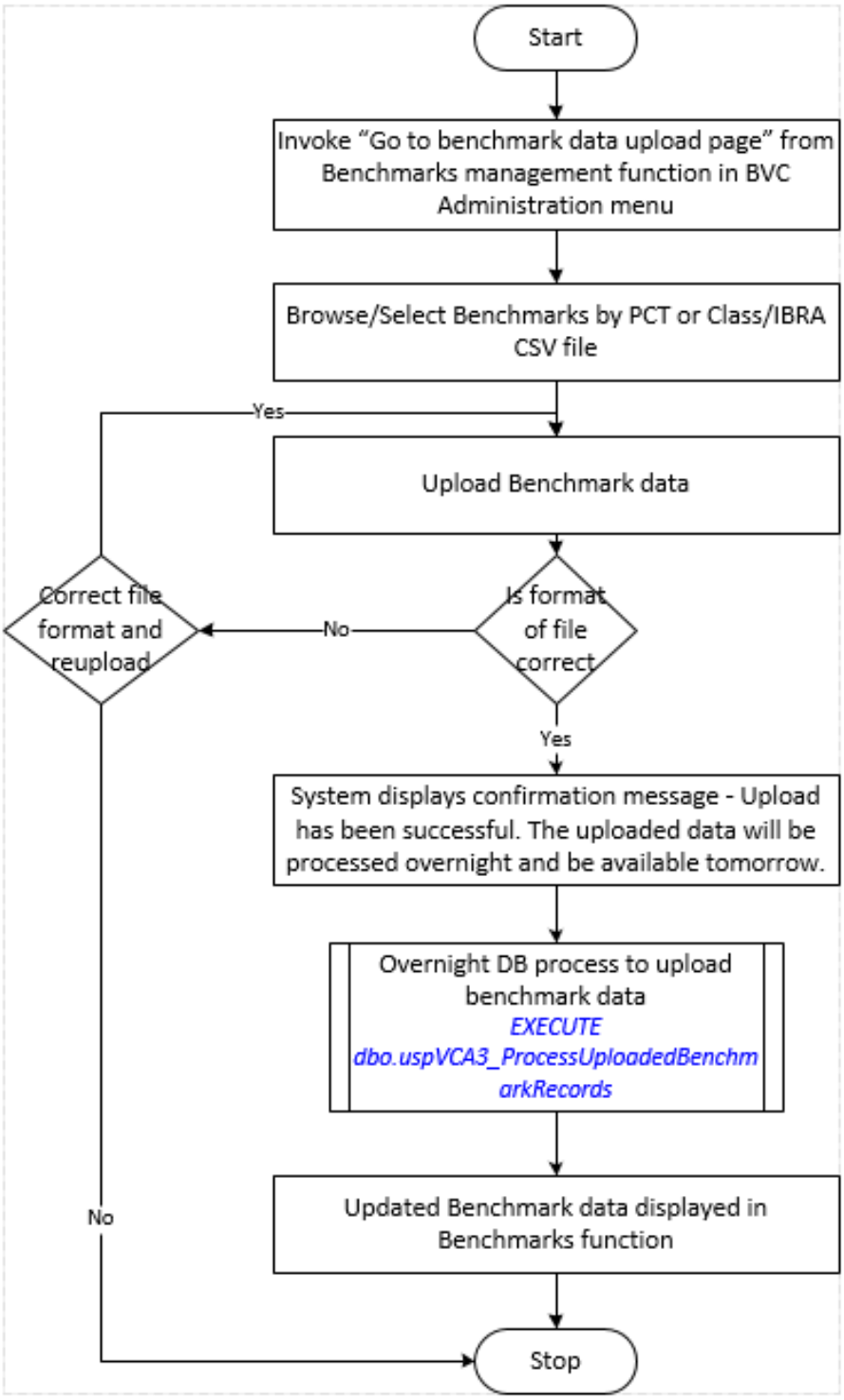


Figure 370 Upload Benchmark Data – Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.6 Creating and Updating Benchmark Data – Process Flow

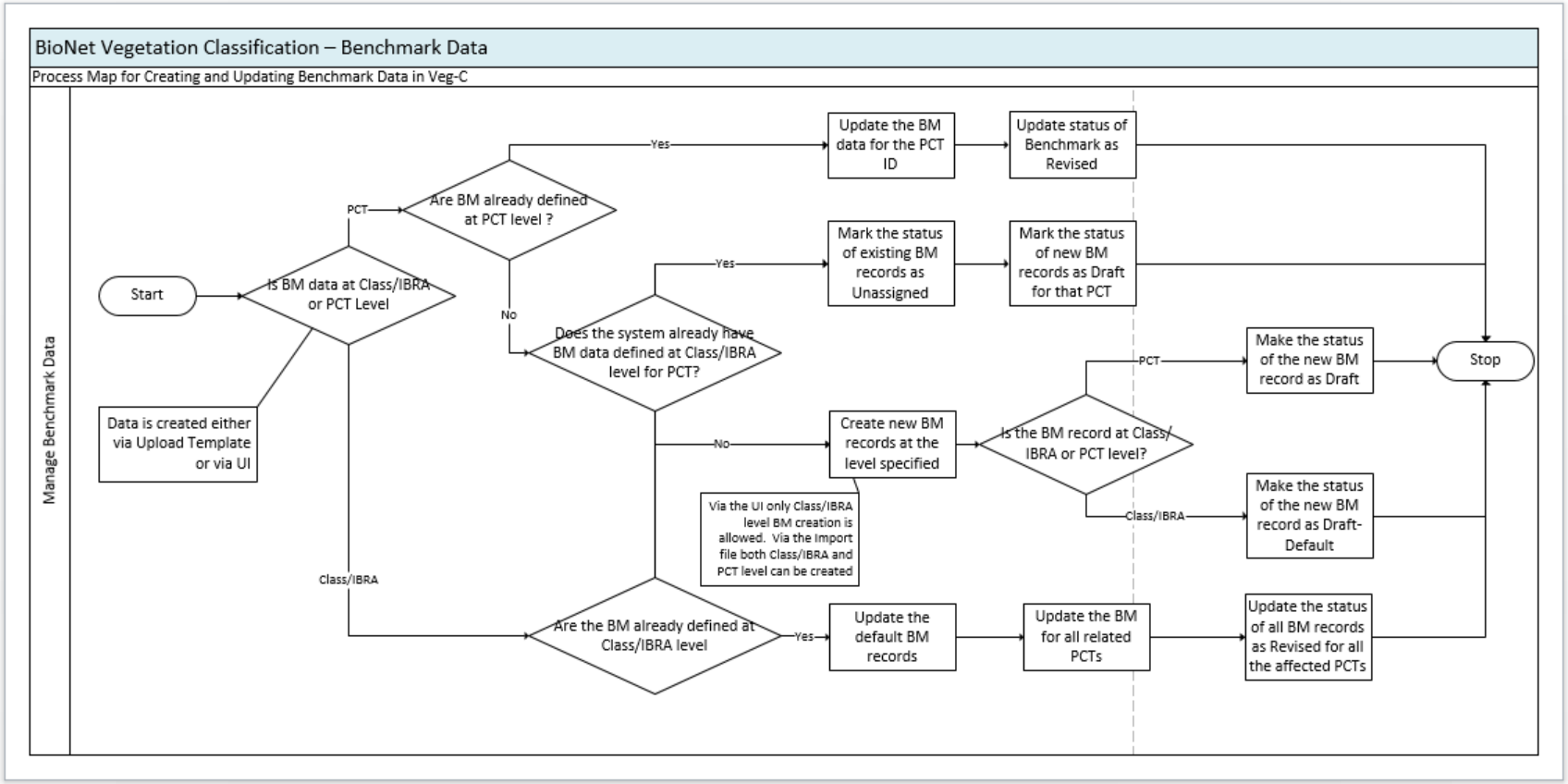


Figure 371 Creating and Updating Benchmark Data – Process Flow

Source: BioNet Veg Classification Functional Solution (DOC17/646969).

A6.7 PCT Benchmarks Status – Process Flow

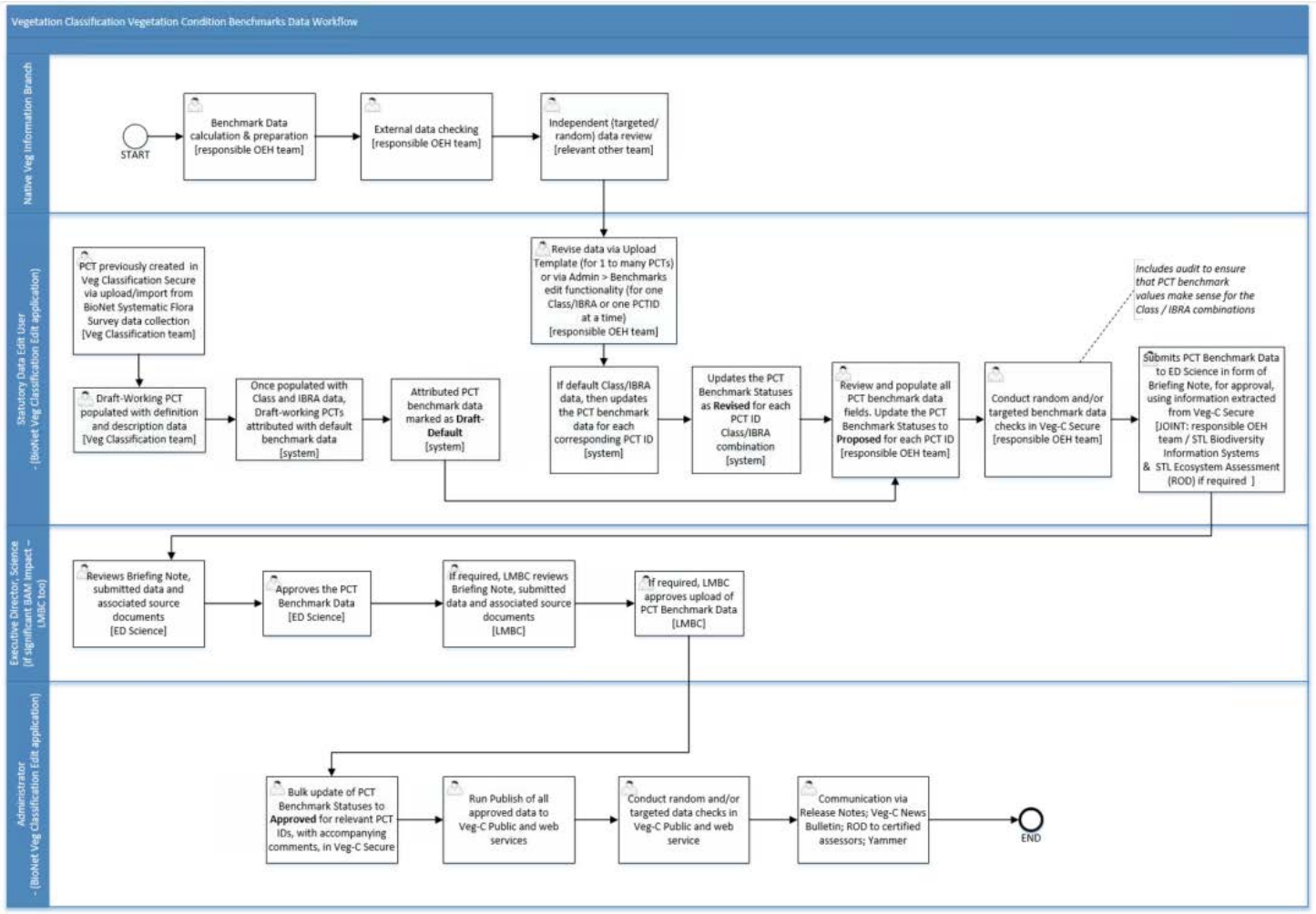


Figure 372 PCT Benchmarks Status – Process Flow

A6.8 PCT Clearing Status – Process Flow

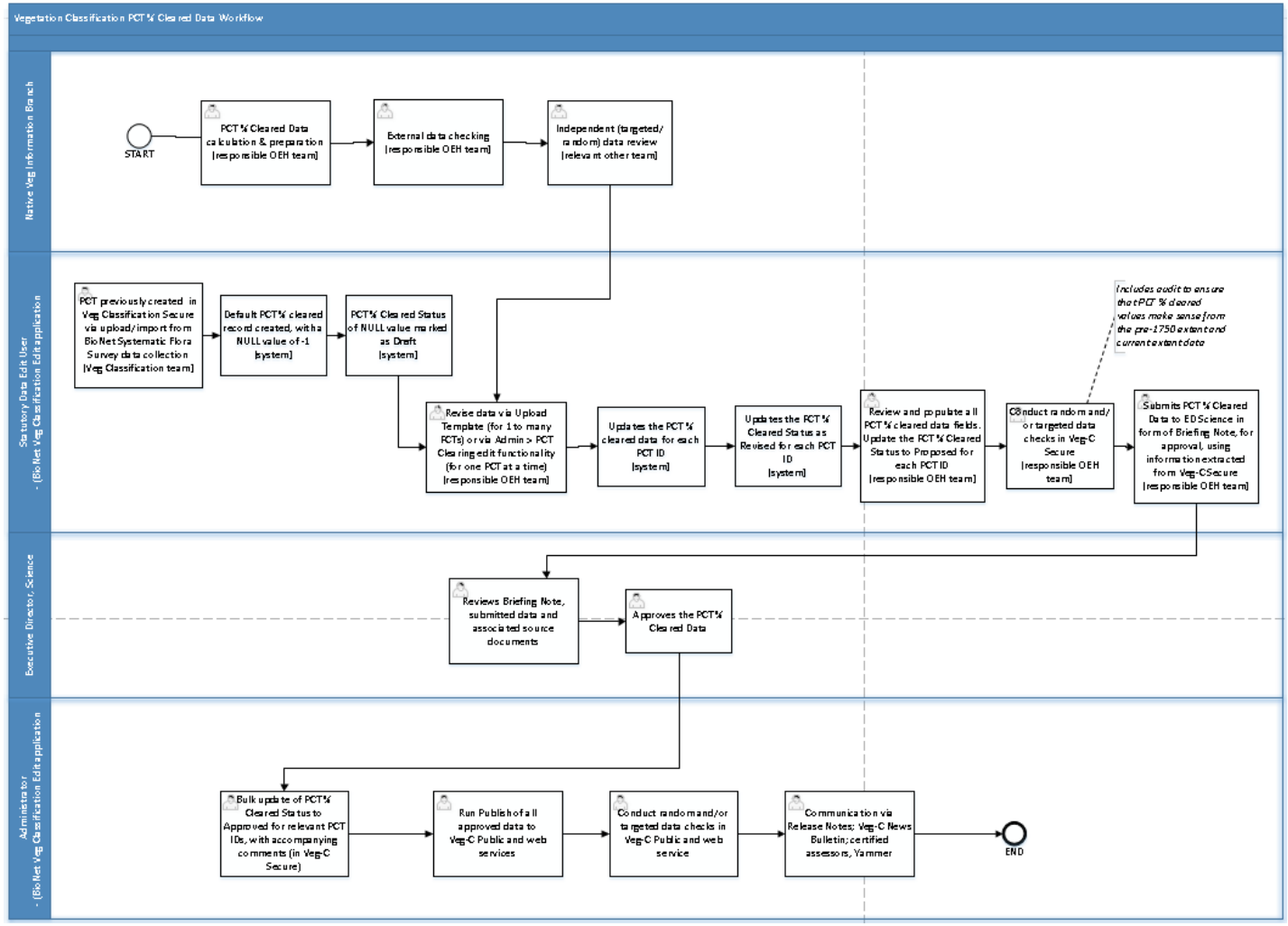


Figure 373 PCT Clearing Status – Process Flow

Appendix 7 Acronyms and abbreviations

Acronym or abbreviation	Definition
IBRA	Interim Biogeographic Regionalisation of Australia
LGA	local government authority
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
PCT	plant community type
TEC	threatened ecological community
VCA	Vegetation Classification and Assessment
VIS	Vegetation Information System

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