

ShoreView User Guide

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1. Background: Campaigns, Deployments and Projects

Campaigns

Can be thought of as a large body of data collection, consisting of multiple surveys i.e. spent 3 weeks in the north west collecting data for project X, doing video collection of mangroves. Campaigns contain Deployments.

Campaigns can contain the following data:

- Name
- Description
- Associated researchers
- Associated publications
- Associated research grant
- Start date
- End date
- Contact person

Deployments

Are individual instances of data collection, surveying over a transect i.e. a single drop and retrieve of a towed video body over a transect. Deployments belong to campaigns.

Deployments contain the following data:

- Parent Campaign
- Type
- Operator
- Start position
- End position
- Transect shape
- Start time
- End time
- Name
- Mission aim
- Contact Person
- Descriptive Keywords
- License

Projects

Are where we contain the data for the analysis of imagery. In Projects we can collate images from multiple deployments, sub sample images from those deployments and annotate the imagery we have sampled.

2. Importing Data

Importing data into ShoreView is an administration function. Due to the fact the ShoreView is built on EnviroComs it is recommended you contact the system administrator to initiate the import process.

3. Viewing Campaigns and Deployments

1. Click on 'Campaigns' in the Navigation menu.



2. Clicking on 'Campaigns' in the Navigation menu takes us to the following location
<http://rdsi-mangrove.hpc.jcu.edu.au/data/campaigns/>

A screenshot of the 'Campaign List' page. The top navigation bar shows 'Campaigns' as the active tab. Below the map, there is a table with one row:

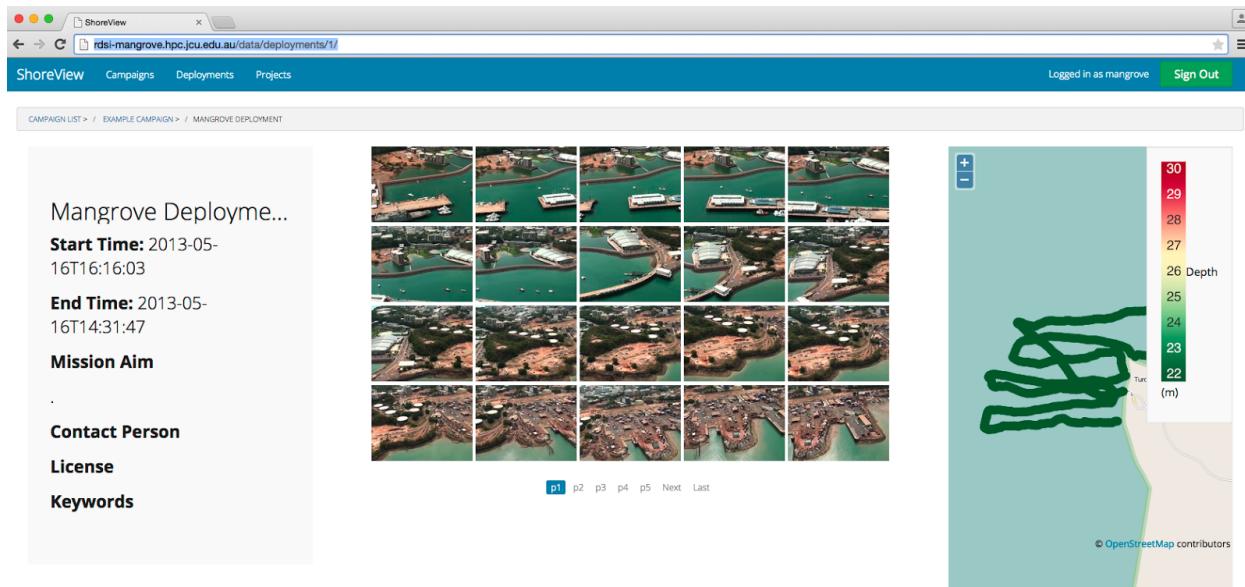
Name	Start Date	End Date	Deployments	Researchers	Publications	Grant	Description
Example...	2015-02-03	2015-02-03	1				

- Click on the Campaign Name you wish to view. In the above example, clicking 'Example Campaign' will take us to the campaign summary page.

The screenshot shows a web browser window titled 'ShoreView' with the URL 'rdsi-mangrove.hpc.jcu.edu.au/data/campaigns/1/'. The top navigation bar includes links for 'ShoreView', 'Campaigns', 'Deployments', and 'Projects'. On the right, it shows 'Logged in as mangrove' and 'Sign Out'. Below the navigation, a breadcrumb trail reads 'CAMPAIN LIST > / EXAMPLE CAMPAIGN'. The main content area is titled 'Example Campaign' and displays the following details:
Start Date: 2015-02-03
End Date: 2015-02-03
Description
Researchers
Publications
Grant
To the right of the details is a map of Australia and surrounding regions, with a green marker indicating the location of the deployment. Below the map, a section titled 'Deployments in Example Campaign' lists one entry:

Name	Type	Start Time	End Time	Min Depth	Max Depth
Mangrove Deployment	SVAM	2013-05-16T16:16:03	2013-05-16T14:31:47	5	5

- Click on the Deployment Name you wish to view. In the above example clicking on 'Mangrove Deployment' will take us to <http://rdsi-mangrove.hpc.jcu.edu.au/data/deployments/1/>



4. Projects

4.1 Creating Projects

1. Click on 'Projects' in the Navigation menu, and you will be taken to the project list page.



2. Click the 'Create New Project' button, and you will be taken to the create project page.

The screenshot shows a web-based application titled 'BenthоБox - Project List'. At the top, there are standard browser controls (back, forward, search, etc.) and a URL bar displaying 'rdsi-mangrove.hpc.jcu.edu.au/projects/'. Below the header, a navigation bar includes 'ShoreView', 'Campaigns', 'Deployments', 'Projects' (which is the active tab), and 'Logged in as mangrove' with a 'Sign Out' button. A 'PROJECTS' section contains a table with one row:

Name	Description	Owner
Example Project	Example project description.	mangrove

A red box highlights the 'Create New Project' button at the top left of the table.

3. Input project details:

- a. Title
- b. Description
- c. Select Project Type 'Mangrove Watch SVAM Project'
- d. Image Sampling (Random, Stratified or All images)
- e. Number of Images (used in Random and Stratified sampling)

The screenshot shows the 'Project Details' creation form. The URL in the address bar is 'rdsi-mangrove.hpc.jcu.edu.au/projects/create/'. The form fields are:

- Name: Example Project 2
- Description: Example project 2 description.
- Project Type: Mangrove Watch SVAM Project
- Deployment to work on: Mangrove Deployment
- Annotation method:
 - Broad Scale
- Image Sampling: Random
- Number of images: 300

A blue 'Create Project' button is located at the bottom right of the form.

4. Click the 'Create Project' button.

Broad Scale

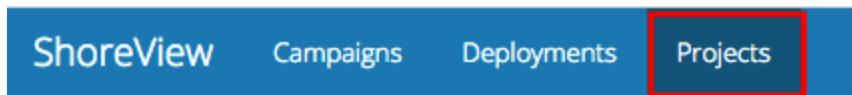
Image Sampling: Random

Number of Images: 300

Create Project

4.2 Viewing Projects

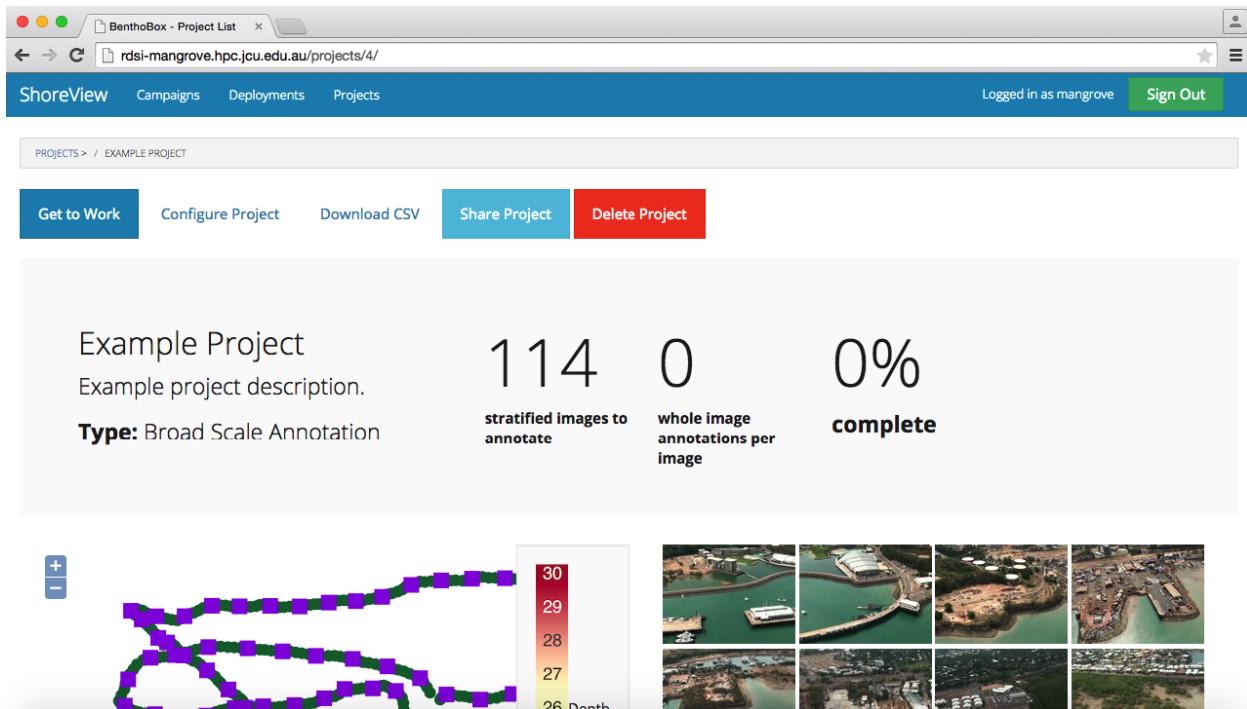
- Click on 'Projects' in the Navigation menu, and you'll be take to the project list page.



- Clicking on 'Projects' in the Navigation menu takes us to the following location
<http://rdsi-mangrove.hpc.jcu.edu.au/projects/>

Name	Description	Owner
Example Project	Example project description.	mangrove
Example Project 2	Example project 2 description.	mangrove

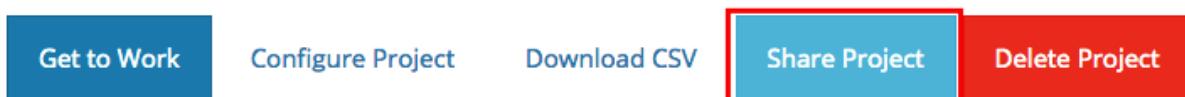
- In the above example, clicking on 'Example Project' takes us to the project summary page.



4.3 Sharing Projects with other users

1. Navigate to the project summary page. See “Viewing Projects” for more detail.

2. Click the ‘Share Project’ button.



3. Search for the username of the user you wish to share with.

x

Project Permissions and Sharing

bob

Add

bob

project:

Everyone Hidden (Private, not visible or editable to general public.)

Cancel

Save

4. Click the 'Add' button.

x

Project Permissions and Sharing

bob

Add

Who has permission to this project:

Everyone Hidden (Private, not visible or editable to general public.)

Cancel

Save

5. Select the permissions you'd like to give the user to your project.

Project Permissions and Sharing

bob Add

Who has permission to this project:

Everyone	Hidden (Private, not visible or editable to general public.)
bob	Can Edit & View

Remove

Cancel Save

6. Click the 'Save' button.

X

Project Permissions and Sharing

 Add

Who has permission to this project:

Everyone	Hidden (Private, not visible or editable to general public.)
bob	Can Edit & View

Remove

Cancel **Save**

4.4 Making Projects public

1. Navigate to the project summary page. See “Viewing Projects” for more detail.

2. Click the ‘Share Project’ button.

Get to Work Configure Project Download CSV **Share Project** Delete Project

3. Set permissions for ‘Everyone’ to ‘Can View’.

X

Project Permissions and Sharing

Add friends

Add

Who has permission to this project:

Everyone

Can View (Publicly visible with no editing.)

Cancel

Save

4. Click the 'Save' button.

4.5 Export Project to CSV

The export to CSV function allows users to export the tags/labels/annotations which have been assigned to the images in the project, so the results can be taken away and analysed in other packages like Excel.

Each row in the document will correspond to a single annotation/tag/label. Because of this, there will be a lot of repetitive data in each of the rows. For example, if there are 10 labels per image, and we have 500 images in the project, the CSV file will have 5000 rows.

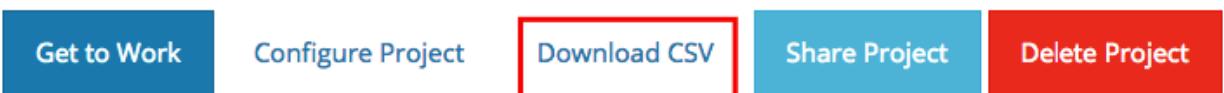
The meaning of the headers in the document are as follows:

- **Annotation Name:** The annotation label
- **Annotation Code:** The unique code for the label
- **Annotation Set Type:** The type of project, which can be broad or fine scale. In the case of mangroves, this will always be 'Broad'
- **Image Name:** The name of the image for which the annotation corresponds to
- **Campaign Name:** The campaign where the image came from
- **Campaign Id:** The ID of the campaign in the database
- **Deployment Name:** The deployment where the image came from

- **Deployment Id:** The ID of the deployment
- **Image Location:** The point location of the image in Well Known Text (WKT) format - http://en.wikipedia.org/wiki/Well-known_text

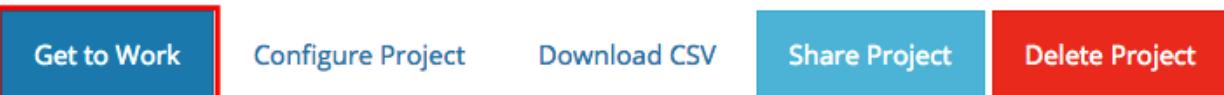
To export the data, follow these instructions:

1. Navigate to the project summary page. See “Viewing Projects” for more detail.
2. Click ‘Download CSV’

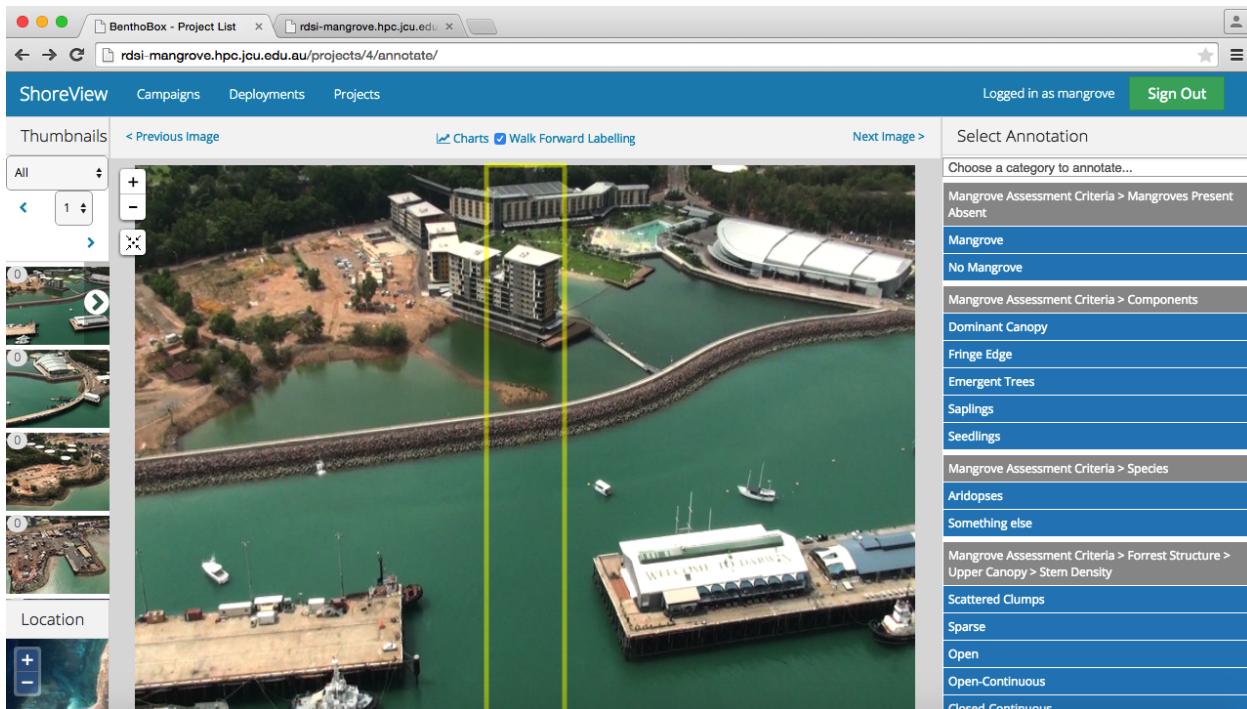


4.6 Labelling Images

1. Navigate to the project summary page. See “Viewing Projects” for more detail.
2. Click the ‘Get to work’ button.



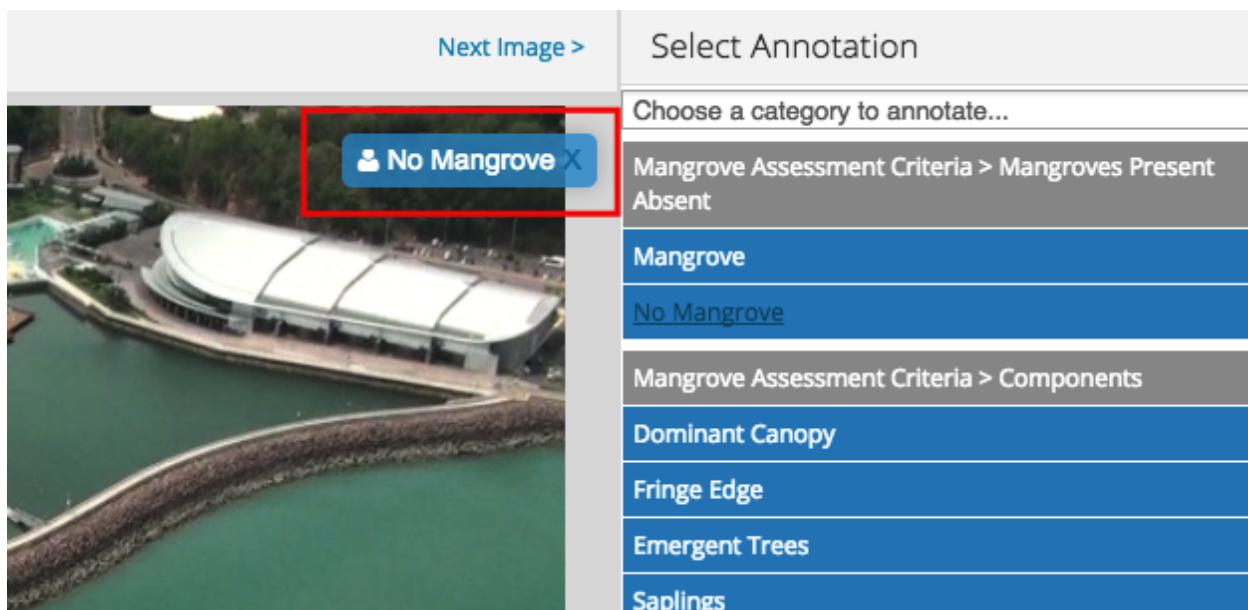
3. Clicking the ‘Get to work’ button directs you to the project annotation page.



4. Click on a Label in the annotation panel.

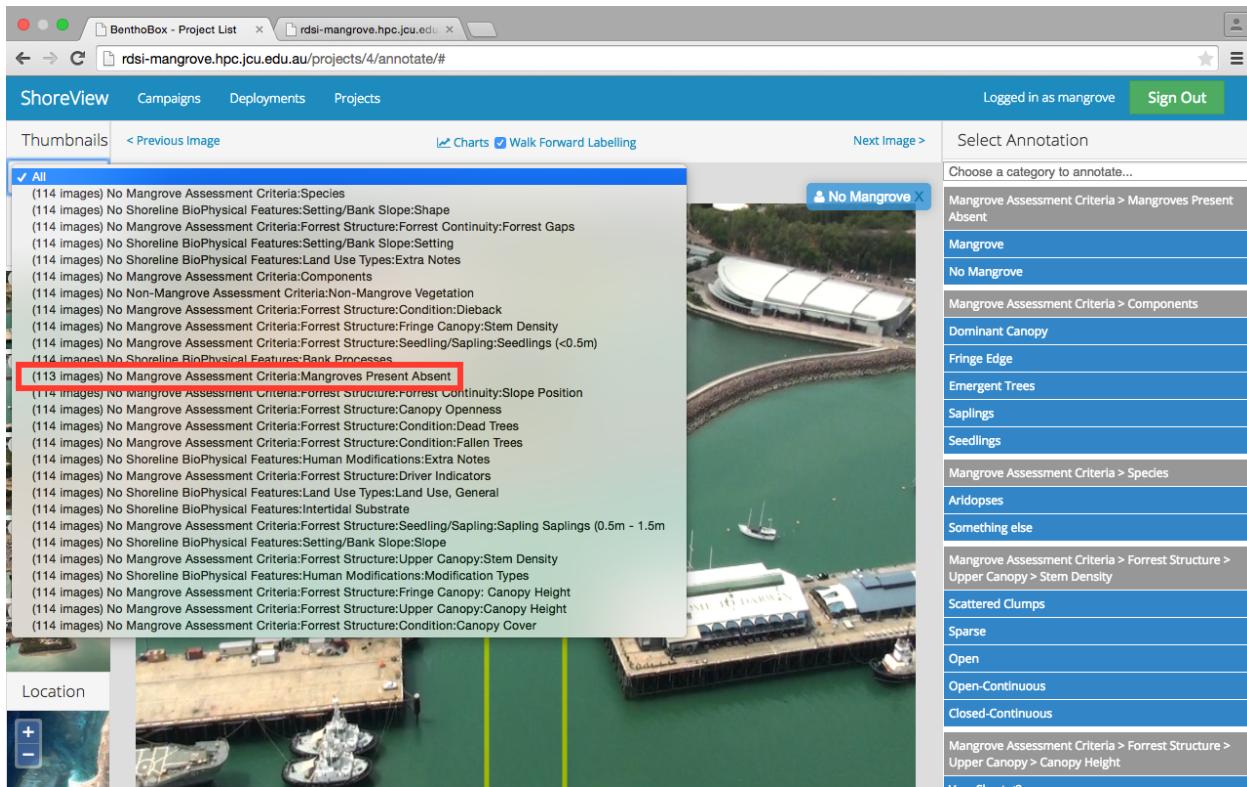
This screenshot shows the ShoreView application interface with a different image from the previous one. The main view displays an aerial photograph of a coastal area with a large white building labeled 'WELCOME TO DARWIN' on a pier, a green lagoon, and a construction site. The right sidebar is identical to the previous screenshot, showing the 'Select Annotation' panel with various mangrove categories. The 'No Mangrove' option is highlighted with a red border, indicating it has been selected for annotation.

5. A label will be assigned to your image.



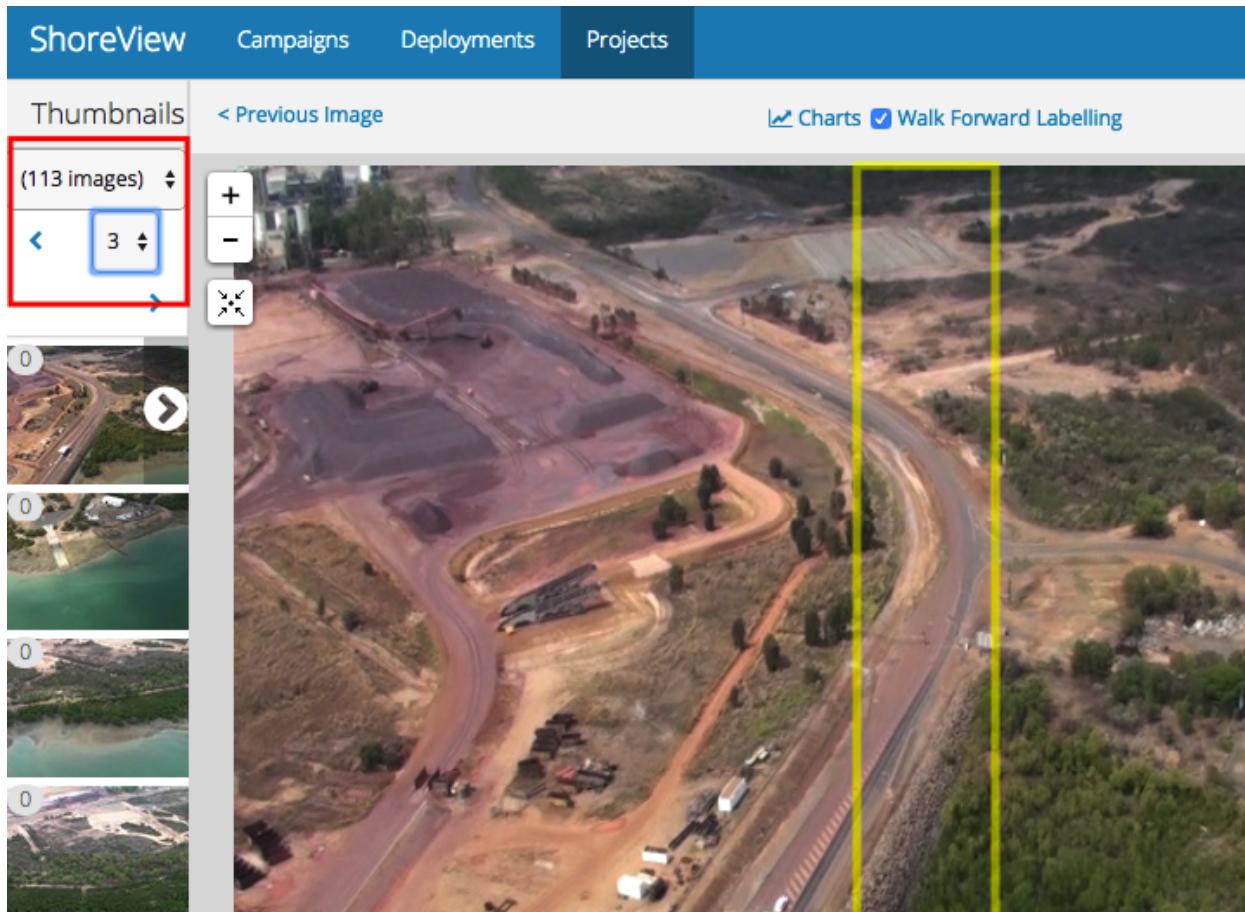
4.7 Filtering Images in Projects

1. Navigate to the project annotation page. See “Labelling Image” for more detail.
2. Select from dropdown in top left corner. In this example, there are **113** images that don’t have labels in the ‘Mangroves Present Absent’ category.



3. Selecting the item from the dropdown will filter the thumbnails for us.

4. Select the page you want to navigate to. Selecting page 3 in this example takes us to the 3rd page of thumbnails.



4.8 Walk Forward Labelling

The walk forward labelling feature in ShoreView copies the labels from the current image in view to the next image in the sequence when clicking the 'Next Image' button in the toolbar and navigating to the next image. The labels will only be copied if they don't already exist on the next image. Labels will not be copied when moving to the 'Previous Image'.

1. Navigate to the project annotation page. See "Labelling Image" for more detail.

2. Check the 'Walk forward labelling' checkbox to enable. Uncheck the box to disable.



4.9 Viewing Charts

1. Navigate to the project annotation page. See “Labelling Image” for more detail.

2. Click the ‘Charts’ button.



3. Clicking the ‘Charts’ button will show statistics for the project.

4.10 Filtering Annotation Panel

There are times where we only want to label specific things in images i.e. I only want to label species. In order to do this we can filter the annotation panel to show only the labels we want to use at that current point in time.

1. Navigate to the project annotation page. See “Labelling Image” for more detail.

2. Click in the ‘Choose a category to annotate...’ box, and you will be presented with a list of options.

[Next Image >](#)

Select Annotation

Choose a category to annotate...

Mangrove Assessment Criteria > Mangroves Present
Absent

Mangrove

No Mangrove

Mangrove Assessment Criteria > Components

Dominant Canopy

Fringe Edge

Emergent Trees

Saplings

Seedlings

Mangrove Assessment Criteria > Species

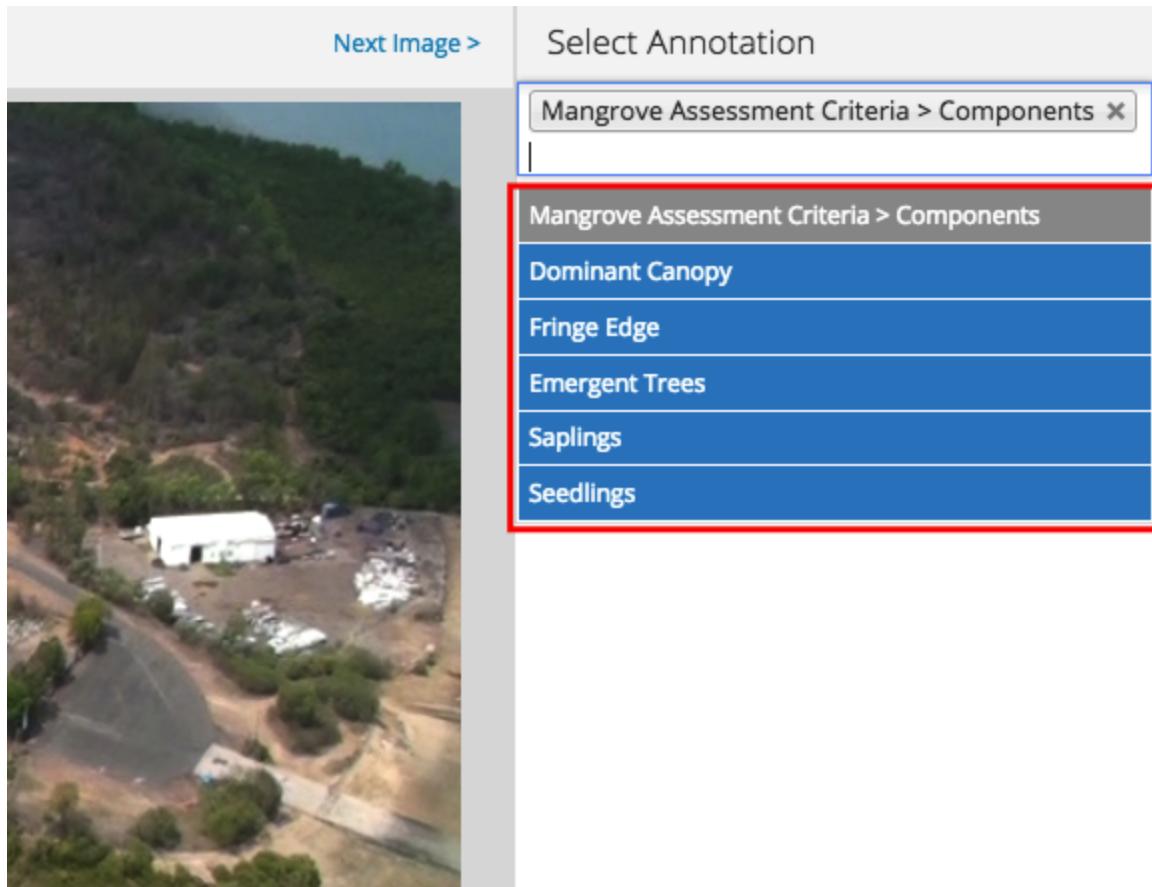
Aridopsis

Something else

Mangrove Assessment Criteria > Forrest Structure >
Upper Canopy > Stem Density



3. In the following example we selected 'Mangrove Assessment Criteria > Components', which filtered our list to only show labels under the components category.



5. Adding new Labels to annotation scheme

Occasionally you may want to update your annotation scheme to add or remove labels, or move them between categories. For consistency purposes (maintaining consistent labels into the future) it is recommended you **not** do this inside ShoreView, and that you define your updates as a new version of the annotation scheme and have the administrator import an updated scheme with a new version number. If though you do wish to modify the Mangrove Watch annotation scheme inside shoreview this is the process you would follow.

1. Login to the admin site <http://rdsi-mangrove.hpc.jcu.edu.au/admin/>

2. Click the 'Add' Annotation Codess link

The screenshot shows the Django administration interface at <https://rdsi-mangrove.hpc.jcu.edu.au/admin/>. The 'Projects' section is expanded, showing various annotation types. The 'Annotation codess' row has its 'Add' button highlighted with a red box.

	+ Add	Change
Annotation codess	+ Add	Change
Annotation schemess	+ Add	Change
Annotation sets	+ Add	Change
Point annotations	+ Add	Change
Projects	+ Add	Change
Qualifier codess	+ Add	Change
Whole image annotations	+ Add	Change

3. Enter details:

- Caab code: This is a unique code for the label. Convention used in other labels is to specify the entire hierarchy of the label separated by colons e.g ‘Non-Mangrove Assessment Criteria:Non-Mangrove Vegetation:Saltpan’
- Code name: Is the human readable label e.g. ‘Saltpan’
- Category name: The category the Label belongs to e.g ‘Non-Mangrove Assessment Criteria:Non-Mangrove Vegetation’

- d. Cpc code, Point colour and Description are un-necessary.

The screenshot shows a Django admin page titled 'Change annotation codes'. At the top, there's a navigation bar with icons for red, yellow, and green, followed by the title 'Change annotation codes' and a close button. Below the title is a URL bar with the address 'https://rdsi-mangrove.hpc.jcu.edu.au/admin/projects/annotationcodes/167/'. The main content area has a dark blue header with the text 'Django administration'. Underneath, a breadcrumb trail shows 'Home > Projects > Annotation codes > Saltpan – (Non-Mangrove Assessment Criteria:Non-Mangrove Vegetation:Saltpan)'. The main section is titled 'Change annotation codes'. It contains three form fields: 'Annotation scheme:' with a dropdown menu labeled 'AnnotationSchemes object' and a '+' icon; 'Caab code:' with a text input field containing 'Non-Mangrove Assessment Criteria:Non-Mangrove Vegetation:Saltpan'; 'Cpc code:' with an empty text input field; and 'Point colour:' with an empty text input field.

Code name:	Saltpan
Description:	
Category name:	Non-Mangrove Assessment Criteria:Non-Mangrove Vegetation
Parent:	-----
* Delete	