

# **Outfall Safari**

## **Technical Manual**

**Setting up and using EpiCollect5 to gather data**January 2019

#### Produced by:



### **Using this document**

This manual is designed to be used in conjunction with the Outfall Safari Guide published by ZSL and is part of a package of resources which ZSL and The Rivers Trust have designed to facilitate others to adopt the outfall safari methodology.

The Outfall Safari guide and the supporting resources can be downloaded here: <a href="https://catchmentbasedapproach.org/learn/outfall-safari-guide">https://catchmentbasedapproach.org/learn/outfall-safari-guide</a>

The production of the Outfall Safari guide was supported by the following partners and programmes:











#### Setting up and managing EpiCollect5

You can setup an EpiCollect5 account for free using a Google account to register. https://five.epicollect.net

(N.B. make sure you are using EpiCollect5 platform, not the earlier EpiCollect plus version.)

Download the <u>OutfallSafariEpiCollect5FormTemplate.zip</u> file from the CaBA website and extract the **OutfallSafari.json** file to your local machine.

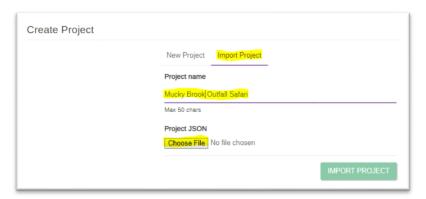
The <u>User Guide</u> and <u>Community Forum</u> are comprehensive guides to the app, but these steps will take you through the basics of setting up the app and importing the outfall safari form template:

#### Setting up the outfall safari form

Click Create Project at the top left of the page

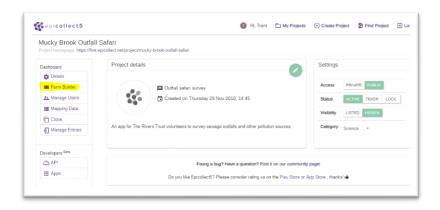


Click Import Project and give your project a name, then click Choose File

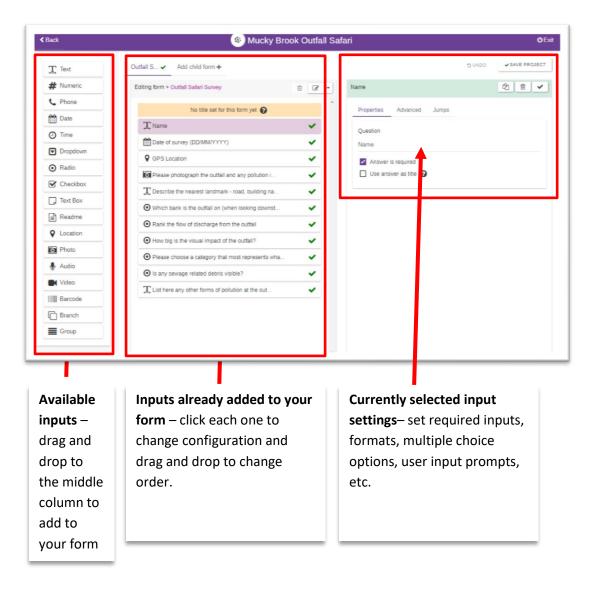


Select the **OutfallSafari.json** file and click **Import Project.** 

Click Form Builder to edit the form template, or you can use it as is



The OutfallSafari.json form template is based on the form used by Trent Rivers Trust for their Alfreton Brook outfall safari. It is easy to adapt the form design to suit local partner requirements by editing the various survey questions in the intuitive Form Builder interface.



Once you are happy with your form design, **click Save Project** in the top right



Go back to the project details view and check that the project is public. Now your project is ready for your volunteers to use.

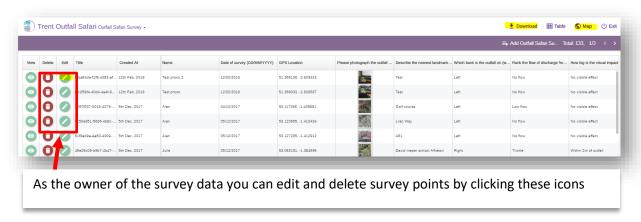


#### **Data Management Guidance**

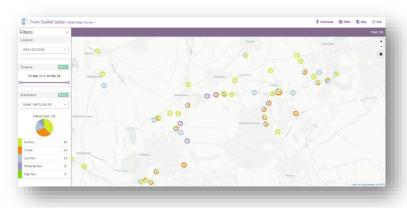
Whilst your outfall safari is in progress, you will want to keep tabs on where your volunteers have surveyed, so that you can steer them to cover any gaps and avoid duplication. You will also want to check the data and remove any duplicate data entries, and ensure that photos are of sufficient quality, and results correlate with the photos.

You can keep tabs on where your volunteers are collecting data in the data view of your project on the EpiCollect5 website:

https://five.epicollect.net/project/<your project>/data



To see a map of your survey points, click **Map** in the top right corner. You can change the basemap to satellite or other options, which provides better context to show which rivers have been surveyed.



Cartographic display options in the map viewer are limited. You can filter results by survey date and choose a limited number of fields to display data.

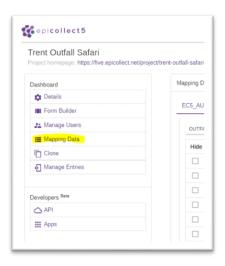
This map and the data list should be sufficient to flag up

possible duplicates and identify any missing or poor quality photos.

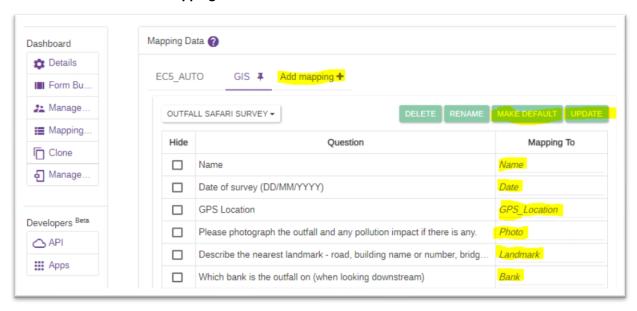
To calculate the scores based on the survey answers, and map the results against a river network, sewer network, catchment boundary, etc. so that you can track progress and identify coverage of river reach by each volunteer, and to produce maps for the report you will need to click **Download** and save them as a CSV file and then import them in to your chosen GIS package. QGIS is free, open source GIS software and ESRI ArcGIS Desktop is available at low cost to charities.

There is a facility in EpiCollect5 to change the attribute table column headings before you export the data. This is useful as the default headings are the same length as your question, so you may wish to shorten them. E.g.

7\_Rank\_the\_flow\_of\_discharge\_from\_the\_outfall would be re-named as FLOW\_RANK. Change these field headings by clicking Mapping Data on the project details page:



Click **Add New Mapping** and call the new set of fields something easy to find, e.g. "GIS" and then click in the boxes in the **Mapping To** Column to edit the field names.



When you have finished editing the field names click **Update** and **Make Default.** 

Return to the data table view and click Download to export as a CSV file. Most GIS software or online mapping programmes can import CSV format data. The coordinates will be in lat/long and the photos are stored on the epicollect web platform but the URL path will be stored in the downloaded table.

Use your GIS package's functions to project the lat/long coordinates to British National Grid, view the photos in a popup and calculate the scores for the visual impact and aesthetics (see Table 2).

8.	Ranking of the visual impact of the outfall	
a.	No visible effect	0
b.	Within 2m of outfall	2
c.	Impact 2 to 10m	4
d.	Impact 10 to 30m	6
e.	Impact greater than 30m	10
9.	Ranking of the aesthetics of the outfall	
a.	No odour or visible aesthetics	0
b.	Faint smell, slight discolouration	2
c.	Mild smell, mild discolouration, small coverage of sewage fungus	4
d.	Strong smell, strong discolouration, large coverage of sewage fungus and/ or litter	6
e.	Gross smell, gross sewage	10

Table 2. Impact scores

Use your GIS functionality to sense check the surveys – e.g. filter out a sample and check the photos match the impact scores. Check the highest scoring results. Check the photo quality.

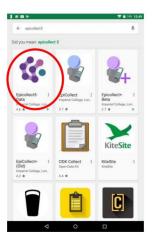
Share the maps and progress with your volunteers and flag up any un-surveyed reaches or any eroneous results via a Facebook group, Whatsapp, etc

The Outfall Safari report template contains some basic intro text and a table for including the survey results. Use your GIS package functionality to generate the output table.

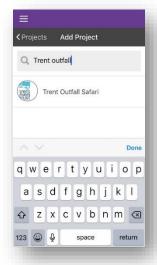
#### **Volunteer Instructions**

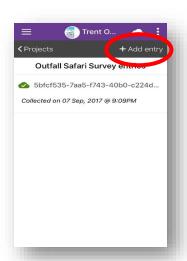
You will need a mobile phone or tablet in order to use the mobile app. EpiCollect5 is only available for Android or IOS (Apple) devices.

- 1. Open the Play Store (Android) or App Store (iOS)
- 2. Search for "Epicollect 5"
- 3. Click "Install" then "Accept"
- 4. Once downloaded, click "Open"



- 5. Search for the project by typing '<your survey name>' in the search bar.
- 6. It should come up as you are typing click on the project to open it





- 7. Click on 'add entry' in the top right and then fill out the survey questions
- 8. You can collect survey points 'offline' if there is no internet or phone signal, and then upload the entries later. To upload your survey, click **Upload Now** from the project view:

