

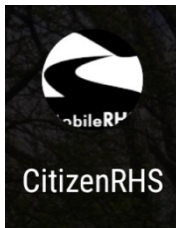


# How to use the Citizen RHS application

The Citizen River Habitat Survey (cRHS) application (hereafter 'app') makes surveying much easier by freeing your hands of clipboards and WeatherWriters. Armed with just your mobile device and ranging pole you can now complete the full cRHS form including the Risk Assessment, Spot checks and Sweep Up. The application even links to your mobile device's camera and GPS so that you can take photos and videos and enter your location details all in one place. The files created can then be uploaded straight to the RHS Toolbox ready to be shared online.

Note that cRHS application is a separate app from the 'RHS mobile' app.

## Uploading the app to your Android mobile device

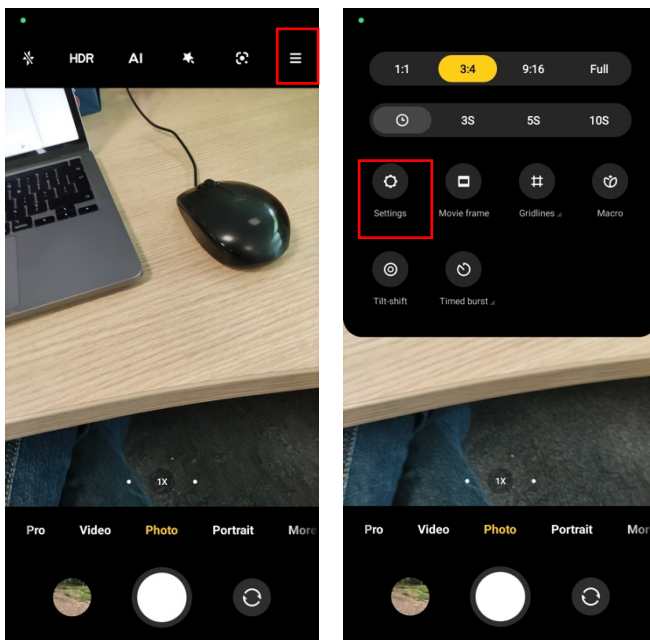


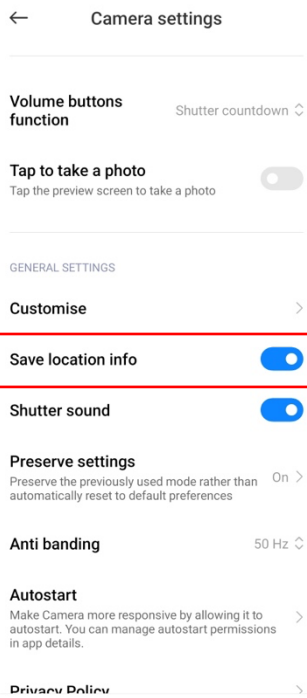
1. Visit the River Habitat Survey website to download the app - [http://www.riverhabitatsurvey.org/RHSMobile/cRHS\\_Mobile.apk](http://www.riverhabitatsurvey.org/RHSMobile/cRHS_Mobile.apk)
2. On your device, open the app in File Manager and accept the warnings about installation.
3. On your home screen or applications page, open the app (see image to the left for what the app logo will appear as). If you can't find it, swipe up from the bottom of the screen to see other apps.

## Mobile device camera settings

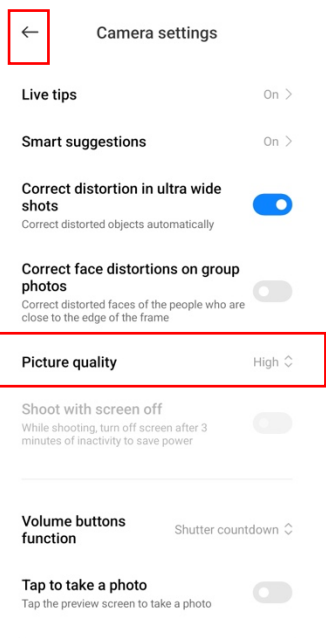
We need to set the camera settings so they're appropriate to the survey

1. To open your mobile device camera settings: select camera > three lines icon > cog icon (as shown in the screenshot below) OR select camera > cog icon.





2. Select Location tags and switch them to ON (see screenshot to left)



3. Select Picture quality if it is available (front video and rear video settings may need to be entered separately).

4. Select resolution and choose HD 1280 x 720 or 'Medium'

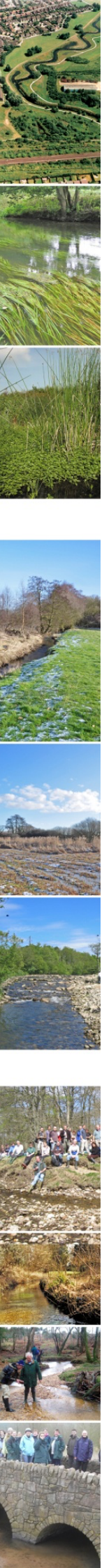
5. Close camera settings by clicking the arrow in the top left of the screen and continue.

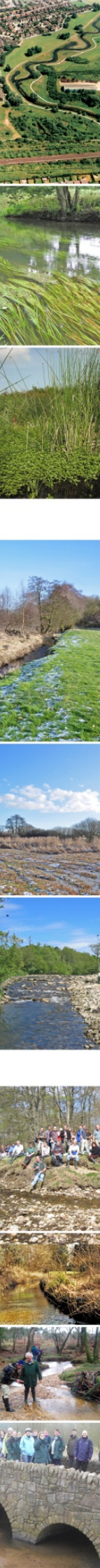
## Getting started – river name, site reference and health and safety assessment

1. Click on the application to open it.
2. Select 'New Survey'.

3. Enter the river name. For 'Site Reference' enter a unique reference number or name to describe where the site is on the river.
4. Answer 'No' to adding an RHAT assessment page unless your survey is in Ireland or Northern Ireland in which case you may wish to use it.
5. Select 'Continue' in the top right-hand corner of your mobile device screen.

6. Complete the 'Site Health and Safety Assessment' by inputting text for the 'weather conditions' (e.g. cloudy, still) and 'flow conditions' (e.g. moderate)
7. Select the appropriate level of risk for access and parking, conditions, obstacles etc.
8. For help deciding the flow conditions, visit <https://check-for-flooding.service.gov.uk/river-and-sea-levels> and find the nearest recording station – if the water level is within the normal range, type "moderate".
9. Select 'Continue' in the top right hand corner of your mobile device screen. A pop-up box may appear – if it does, select continue again.





☰ 1 - Survey Generic Information

A & B C D E F

Field Survey Details

Reach reference :  
Please enter the reach reference

Is the site part of a river or an artificial channel?  
 Part of an artificial channel  Part of a river

Adverse conditions affecting survey?  
 Yes  No

Is spot check 1 at upstream or downstream end ?  
 Downstream  Upstream

Surveyor name :  
Please enter your name

9. You will be taken to page: “1 – Survey Generic Information”. The page has 5 tabs (‘A&B C D E F’ as left) the letters can be clicked or the screen swiped to navigate between them (see left). Fill in the pages as appropriate.

### Opening and closing the app mid-survey

If you need to close the app (e.g. to check your photo and video settings), it is fine to leave it – your changes will automatically be saved. When you wish to return to the survey you have already started, you should be able to re-open the app if you didn’t close it. If the app has closed, you can find it by re-opening the app:

1. Find the cRHS app and click it.
2. Click on ‘List surveys’ in the bottom right-hand corner of the screen.
3. Click on the survey you wish to edit.
4. Click on ‘Edit survey’.
5. It will open automatically on ‘1 – Survey Generic Information’. If you have already filled in this section, you will be able to see the information you entered earlier. Navigate the form by clicking the menu button (three horizontal lines) in the top left-hand corner of your mobile device screen and selecting the section of the form you wish to fill in next.

## Recording Spot Checks

1. Select the three horizontal lines in the top left-hand corner of your mobile device screen to view the cRHS menu.

2. Select '2 – SpotChecks' by clicking it. This will automatically open up a screen for you to begin filling in Spot check 1 information (as in the first spot check). (see left) The spot check number can be found in a box (see top red outline in screenshot to the left). You choose the spot check number by clicking this box.

3. There are 3 tabs for each spot check number – 'G, H, I' (see middle red outline in screenshot to the left). As previously, they can be navigated by swiping or clicking on the letters themselves. Work through the questions on the first tab (section G).

4. If you are at spot check 1, 6 or 10 there will be a box asking you to set coordinates (see red outline in screenshot to the left) (for spot check 10 remember you need to walk a further 50 m to the end of the survey site before taking the coordinates).

5. Select 'Set Coordinates'. If a box opens asking if you are happy to allow the app to access your device's location, select 'Allow'. You should then see some coordinates appear in the

space on the form.

6. click on the "Take a video" button (bottom red outline in screenshot above). A reminder pops up to check your mobile device settings for video resolution – use 720 or 1070 p as higher resolution files are too large. Remember to take videos in landscape orientation, pan slowly and state the river name, spot check number, and which direction is upstream and downstream. Click 'OK' and take the video.
7. Continue filling in section G (Physical Attributes) by selecting an option from each dropdown box, beginning with Left Bank material (you will recognise the acronyms and the terms are written in full so you won't need your cheat sheet). At the top of each page, there is a prompt to remind you that these physical attributes are assessed within a 1 metre transect (the other sections of the form contain similar reminders).



8. Once section G is complete, click the letters or swipe to move to section H. Fill in section H ('Banktop Landuse and Vegetation Structure') by selecting the correct option from the dropdown lists until all the information is recorded.

9. Upon completion of section H, Click or swipe to fill in section I.

10. If no vegetation is present, it is possible to speed up entry here by selecting 'NO – No vegetation' in the 'None or Not Visible' box (red outline to left) – this autofills all of the other boxes. You can take a similar action if visibility is too poor to view whether there is any channel vegetation - select 'All not visible'.

11. If the channel bed is visible, yet most of the vegetation types were not present, except for one or two that were, you can select 'NO – No vegetation' in the top box to autofill the other boxes below. If you do this you will need to adjust to "leave blank" in the top box and amend the other boxes to "present" as required.

12. Don't forget to take a photo of any features of significance, or anything you are unsure about.

13. After setting the coordinates, taking a video and completing sections G to I, you have finished your spot check and can move



on to the next spot check number 2. Repeat the steps from 3 to 12 above.

## Structure, Acronyms and Photographs

The form within the app is split up into the same sections found on your paper cRHS form. At the top of each section, there is a prompt to remind you whether you are assessing the river over a 1 m, or 5 m or 10 m transect for the features within that section.

### Taking photos

If you need to take a photograph of the river or any feature (such as a bridge, weir, or culvert), you can opt to at any point during the survey. Whichever part of the form you are in, select the three horizontal lines in the top left-hand corner of your mobile device screen. Click on 'Take a picture'.

☰ 3 - 500m Sweep-Up

J K L M N

Channel Dimensions (measure at one straight & uniform section, preferably across a riffle)

**Left Bank**

Banktop height (m) \_\_\_\_\_

Embanked height (m) \_\_\_\_\_

**Right Bank**

Banktop height (m) \_\_\_\_\_

Embanked height (m) \_\_\_\_\_

**Channel**

Bankfull width (m) \_\_\_\_\_

Water width (m) \_\_\_\_\_

Water depth (m) \_\_\_\_\_

How were dimensions measured?

### Sweep Up

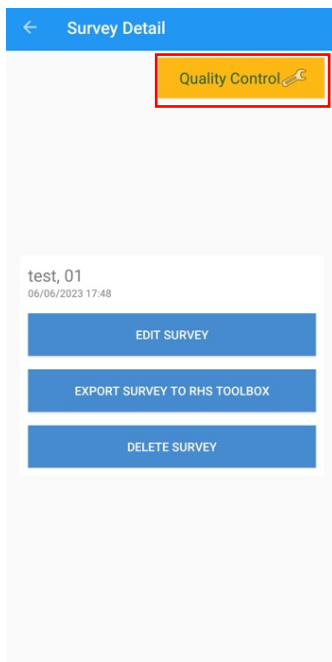
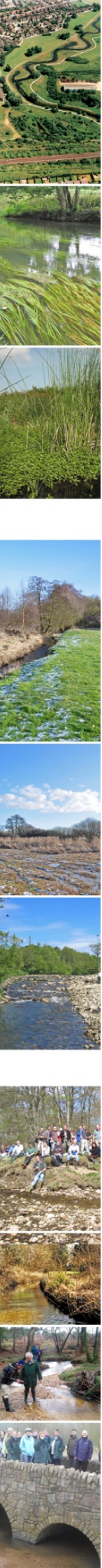
1. Navigate to a different section of the form by selecting the three horizontal lines button in the top left-hand corner of your mobile device screen to view the Mobile cRHS menu. Select '3 –500m Sweep-Up' by clicking it. This will automatically open a screen for you to begin filling in Sweep Up information. Work through the questions on the first tab first (section J). Remember to record the dimensions in metres.
2. Once you have completed section J, you can move through sections K to O by clicking on each of the tabs at the top of the screen. Don't forget to scroll to the bottom of each section. To select an answer either choose one from the drop-down box provided, or click on the most appropriate answer (e.g. Extensive, Present or None).

### Finishing up

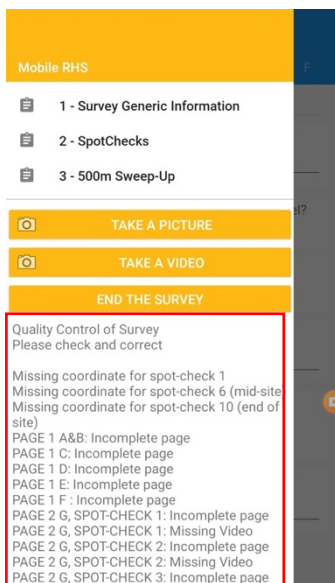
1. When you think you have completed all sections of the form, return to the main menu by selecting the three horizontal lines in the top left-hand corner of your mobile device screen. Select the orange button 'End the survey'.



Working to restore & enhance our rivers



2. You will now see a screen that has an orange box in the top right-hand corner 'Quality Control'. Click this button to check that all parts of the form have been completed. If all sections have not been completed, another box will pop up to warn you that this is an incomplete survey. Click 'OK'.



3. If your survey was incomplete, click 'Edit Survey', then click the three horizontal lines in the top left corner of your screen. At the bottom of the menu bar that appears (see left) is a list of any parts of the form that are incomplete. You can now visit each one and fill in the missing data.

4. When you think you have addressed each point, continue below to upload the survey.

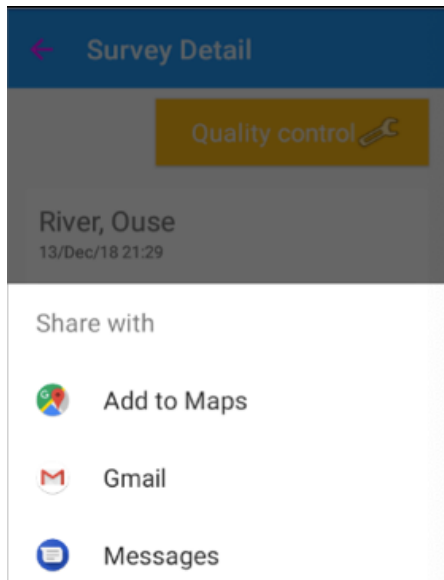




## Exporting your data

It is advisable to upload the data when you are connected to WiFi.

1. Click the three horizontal lines in the top left corner of the screen.
2. Click 'END THE SURVEY'.
3. Click 'EXPORT SURVEY TO RHS TOOLBOX'.



4. A dialogue box will appear providing options of how to export, for example: sharing to a driver, using a link or email.