
ENVISION CHAFFEE COUNTY CAMPSITE COLLECTOR USER GUIDE



PREPARED BY
GARRETT SMITH, PHD
LEAD RESEARCHER
POINTER CONSULTING LLC
GARRETT@POINTERCONSULTINGLLC.COM
POINTERCONSULTINGLLC.COM
520.661.6260

PROJECT INTRODUCTION

Thank you for your interest in the Campsite Collection App!

Campsite Collector is a critical but simple collector tool that community members and land management agencies can use to gather data on dispersed campsites, view the data in the field and in ARCGIS “Survey123,” and report simple summary statistics by camping area and over time. The App is downloaded on your handheld device, such as your cell phone or tablet.

The data that you collect is stored by Chaffee County’s GIS department so it can be used to monitor campsites and track changes resulting from site enhancements or impacts from growing use of our public lands. Collected data has already been instrumental for planning and will continue to underpin many strategies and long-term tracking of community success in managing growing outdoor recreation use. Project partners include Chaffee County, Envision Chaffee County, Greater Arkansas River Nature Association (GARNA), US Forest Service – Salida Ranger District and Bureau of Land Management – Royal Gorge Field Office.

The Campsite Collector App is currently available in Chaffee County, Colorado. The App will function without Wi-Fi coverage, as long as you have downloaded it onto your device when Wi-Fi coverage is available. Data measured by Campsite Collector includes a waypoint with latitude and longitude over Google Earth or topographic maps; trash and amount; human waste and amount; fire rings and number; site containment (boulders, fencing or other materials that show campers the appropriate place to camp); spur roads or trails (unofficial trails or roads that originate from the campsite); and any work performed at the site. All this information is used by the Envision Recreation in Balance (<https://envisionchaffeecounty.org/recreation-in-balance/>) initiative and the involved public land agencies to inform our Community Recreation and Resource Protection Plan.

Following are directions for downloading the App onto your device and using the App to collect data and record any site enhancements that you choose to report or complete. Thanks again for contributing to the sustainable management of Chaffee County’s public lands!

PROJECT DEFINITIONS

Red Dots on Maps

Visible on the default online and offline maps are campsite locations previously collected with the RIMS application.

New Survey

Survey choice used when campsite location does not fall on top of one of the red dots or previously collected campsites on the map

Re Survey

Survey choice used when campsite location falls on top of one of the red dots or previously collected campsites on the map

Action

There are actions that can be undertaken by volunteers under their own discretion and actions that can only be taken with agency approval. The first action question asks, "What actions are required?" This question flags sites for agency action.

Non-system Routes and Social Trails

Routes and trails that are user-created, not signed, not maintained by a land management agency, and generally dead end into a campsite.

Non-system Spur Road

Roads that are user-created, not signed, not maintained by a land management agency, and generally dead end into a campsite.

Containment

Campsite containment is a campsite management strategy that adds a barrier to the perimeter of the acceptable campsite. Barriers may be boulders, fencing including buck and rail, and natural surroundings such as dense forest.

SURVEY DOWNLOAD

ESRI SURVEY123

Survey123 is an ESRI ArcGIS mobile application that is designed to collect data in the field using a mobile phone or tablet. An internet connection is necessary to download the Survey123 mobile application, but is not necessary for collecting data in the field. Before proceeding with this training document or going out in the field to collect data on dispersed campsites please follow the steps below.

1 DOWNLOAD THE ESRI SURVEY123 APP

YOU CAN CLICK THE LOGOS BELOW OR SEARCH FOR ARCGIS SURVEY123 ON YOUR PREFERRED PLATFORM

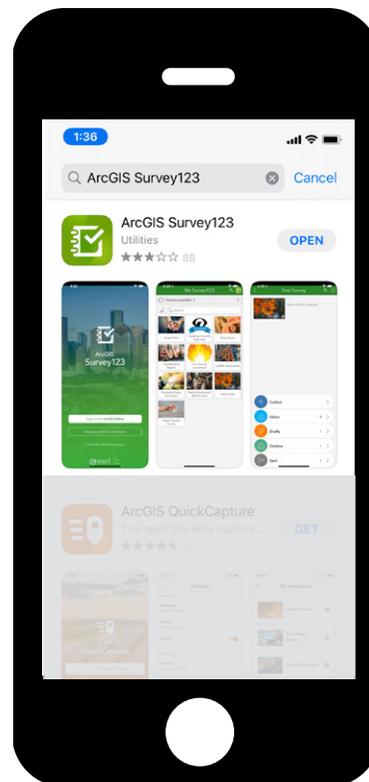
APPLE iOS



ANDROID



Please note, it is best to download the Survey123 application and survey when you are connected to wifi.



2 OPEN THE SURVEY123 APP

ONCE YOU HAVE DOWNLOADED THE SURVEY123 APP
OPEN THE APP ON YOUR DEVICE TO ENSURE IT LOADED

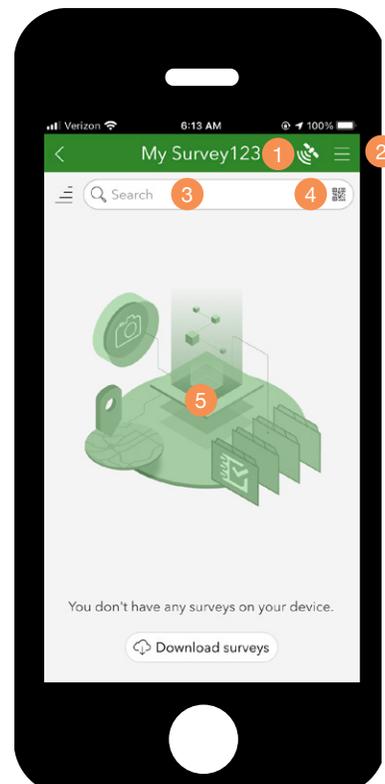
SURVEY123 APP LOG-IN SCREEN



1. IF YOU HAVE AN ARCGIS ONLINE ACCOUNT YOU CAN SIGN-IN
2. IF YOU DO NOT HAVE AN ARCGIS ONLINE ACCOUNT YOU CAN CLICK ON: "CONTINUE WITHOUT SIGNING IN"

ArcGIS Survey123 does not require a log-in to use publicly available surveys.

SURVEY123 APP HOME SCREEN



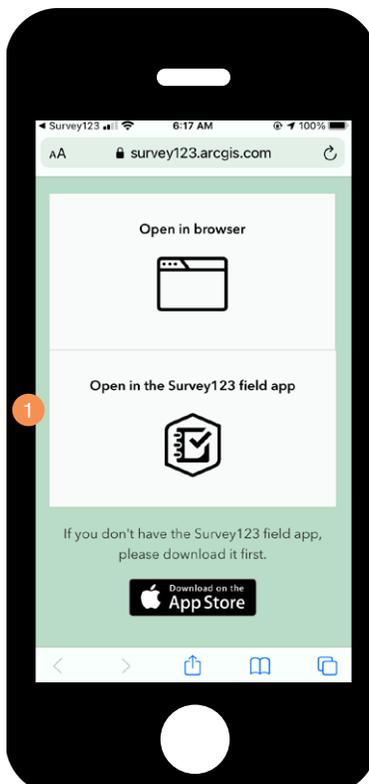
1. SATELLITE SIGNAL INDICATOR
2. SURVEY123 SETTINGS
3. SURVEY SEARCH
4. QR CODE SEARCH
5. WINDOW DISPLAY OF SURVEYS DOWNLOADED TO THE DEVICE

3 DOWNLOAD THE CAMPSITE COLLECTOR APP

Tap the QR code button in the search tab on the My Survey123 home-screen and scan the QR code to the right to download the Campsite Collector Survey.



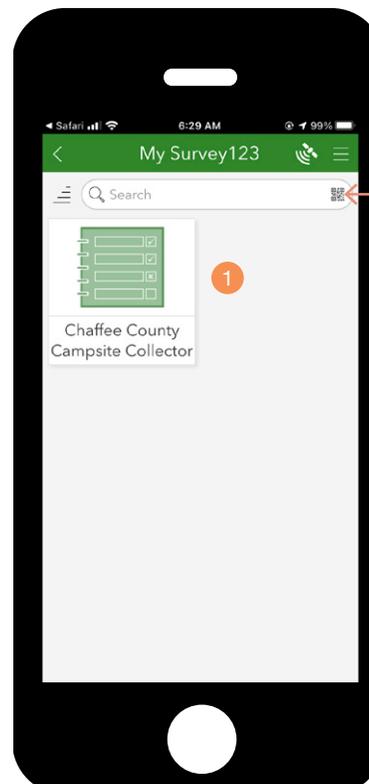
SURVEY123 SURVEY DOWNLOAD



1. CHOOSE OPEN IN THE SURVEY 123 FIELD APP AND CLICK ON “OPEN” ON THE POP UP SCREEN

Please note, the Survey123 app and Chaffee County Collector app require at least 1.5 GB to install on a mobile phone.

SURVEY123 HOME SCREEN



1. SURVEY WILL BE DISPLAYED IN THE MY SURVEY123 HOME PAGE WHEN SUCCESSFULLY DOWNLOADED

Please ensure that you download the survey with a reliable internet connection. It is best to download when connected wifi and not your cellular provider's network. The download will take 5 to 6 minutes.

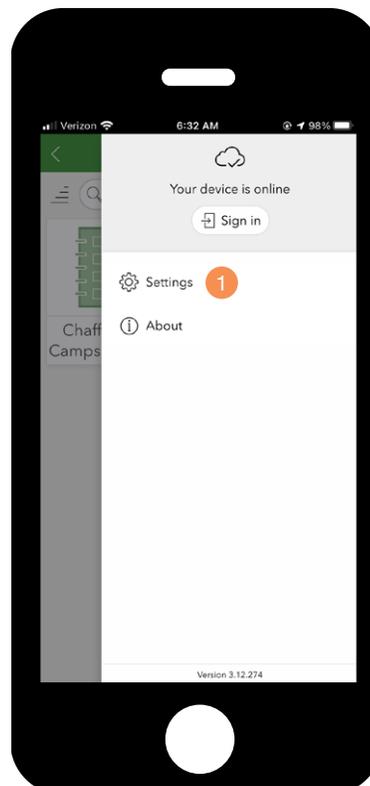
4 ADJUST SURVEY SETTINGS

SURVEY123 SETTINGS



1. CLICK ON THE SETTINGS BUTTON (THREE VERTICAL LINES), TO THE RIGHT OF THE SATELLITE ICON TO OPEN THE SETTINGS WINDOW

SURVEY123 SETTINGS WINDOW

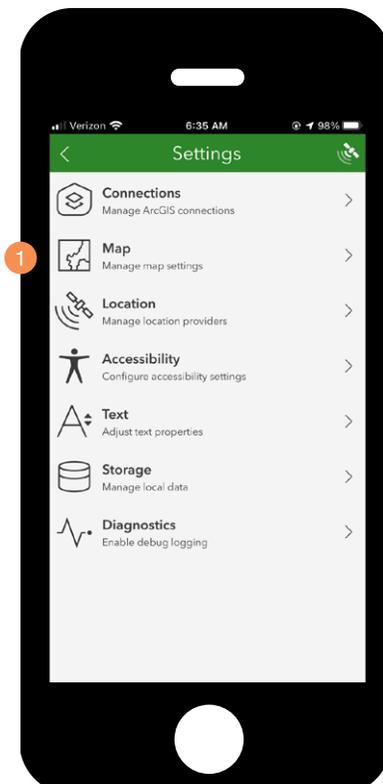


1. CLICK ON THE SETTINGS TOOL ICON TO OPEN THE SURVEY123 SETTINGS

4 ADJUST SURVEY SETTINGS

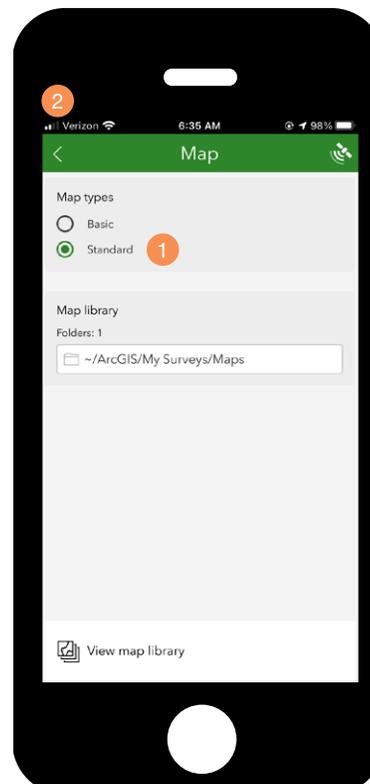
The Campsite Collector survey comes packaged with three offline maps, to enable them please adjust the map settings to Standard.

SURVEY123 SETTINGS



1. CLICK ON THE MAP OPTION TO OPEN MAP SETTINGS

SURVEY123 SETTINGS



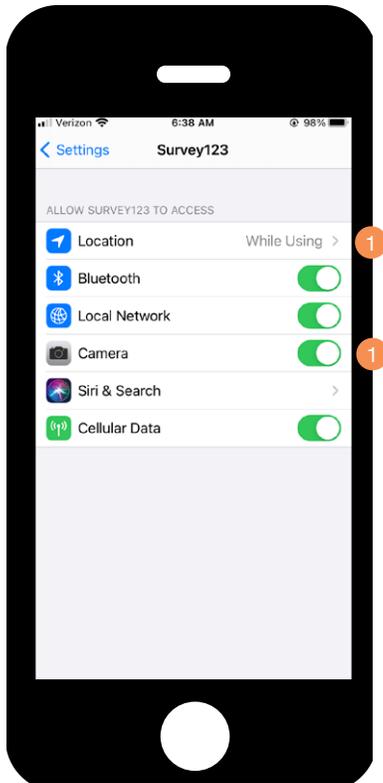
1. ENSURE THAT THE BUTTON NEXT TO STANDARD IS SELECTED

2. USE THE BACK ARROW TWO TIMES TO RETURN TO THE MY SURVEY123 HOME SCREEN

5 ADJUST PHONE SETTINGS

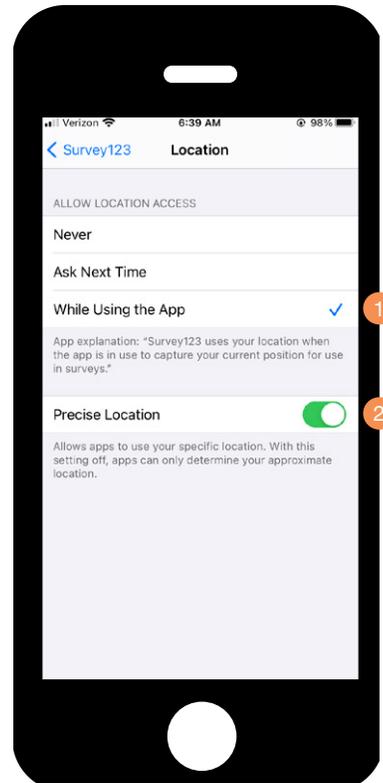
To ensure location accuracy and photo capability, ensure that you allow Survey123 access to your Location and Camera in your phone's settings. To access these settings on an iOS phone click on Settings > Survey123 (pictures below) on an Android phone click on Settings > Apps > Survey123 > Permissions.

SURVEY123 PHONE SETTINGS



1. ENSURE THAT YOU ARE ALLOWING SURVEY123 ACCESS TO YOUR LOCATION AND CAMERA

SURVEY123 LOCATION SETTINGS



1. ENSURE THAT YOUR PHONE IS ALLOWING YOUR LOCATION TO BE COMMUNICATED TO SURVEY123 WHILE USING THE APP

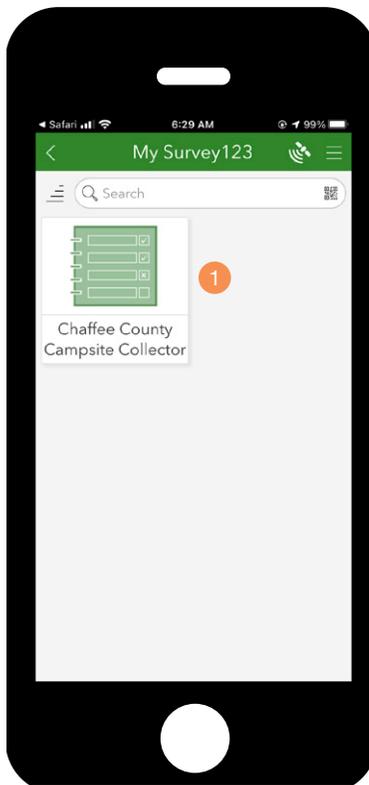
2. ENSURE THAT PRECISE LOCATION IS SELECTED

SURVEY USE

Once you have successfully downloaded the Chaffee County Campsite Collector survey, adjusted the survey's and your phone's settings you are ready to go out in the field and collect data.

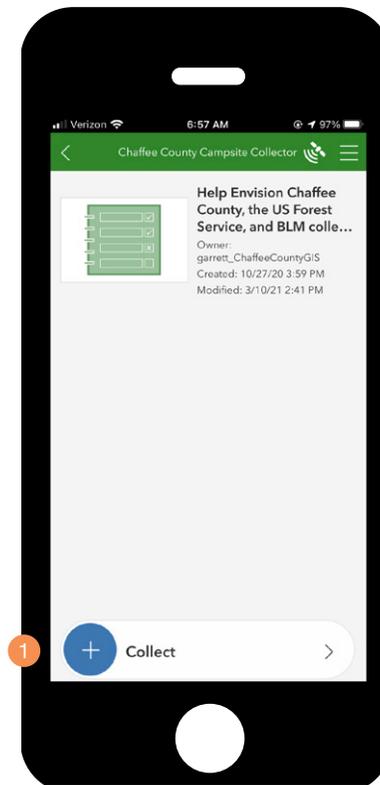
1 OPEN CAMPSITE COLLECTOR SURVEY

CAMPSITE COLLECTOR



1. CLICK ON THE CHAFFEE COUNTY CAMPSITE COLLECTOR ICON IN THE SURVEY123 HOME SCREEN

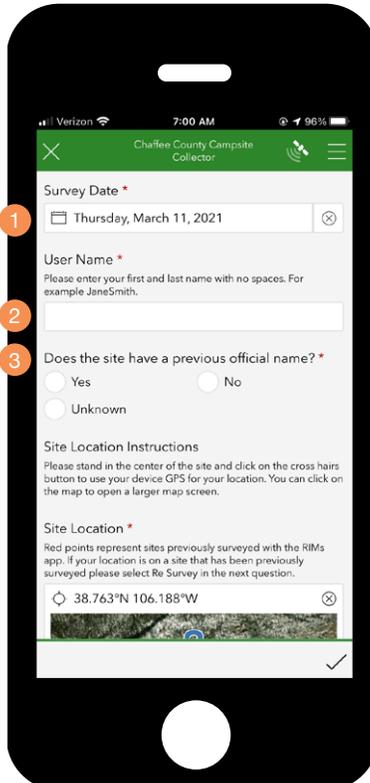
CAMPSITE COLLECTOR



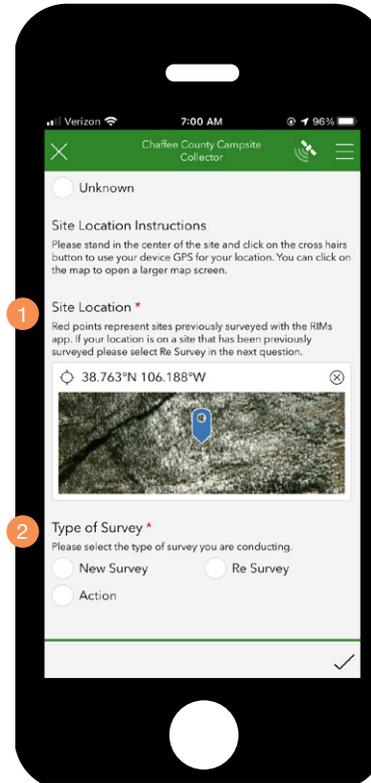
1. TO START COLLECTING DATA, CLICK ON THE COLLECT BUTTON

2 INITIAL SURVEY QUESTIONS

Most of the questions have hints affiliated with them. Please read hints fully before answering the questions.



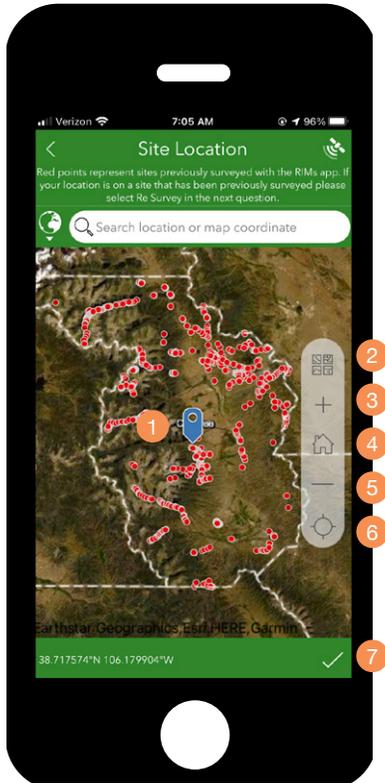
1. THE DATE IS SET AUTOMATICALLY.
2. PLEASE ENTER YOUR FIRST AND LAST NAME AS NOTED
3. IF YOUR SITE HAS A PREVIOUS NAME YOU WILL BE ABLE TO ENTER IT IF YOU ANSWER "YES"



1. SURVEY123 WILL AUTOMATICALLY CAPTURE YOUR LOCATION. TO OPEN A LARGER MAP CLICK ON THE MAP
Please note, when you are offline the small location map will not be shown.
2. THE TYPE OF SURVEY SELECTED WILL BE BASED ON THE LOCATION FROM THE PREVIOUS QUESTION

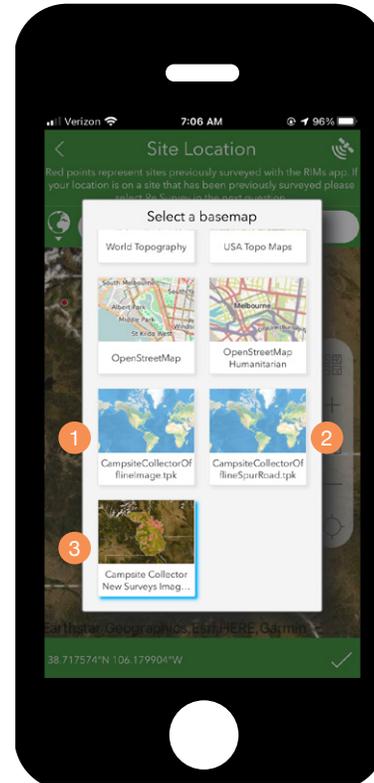
3 LOCATION QUESTION LARGER MAP

By default a satellite map is opened. The red points on the map represent sites that were collected using RIMS.



1. YOUR LOCATION
2. BASEMAP OPTIONS
3. ZOOM IN
4. RETURN TO THE MAP'S DEFAULT EXTENT
5. ZOOM OUT
6. CELL PHONE LOCATION
7. LOCK-IN LOCATION AND RETURN TO THE SURVEY

Please note, you can pan in and out and scroll around the map using your fingers. Please zoom in to the map if you are unsure if your location is on top of a red point.

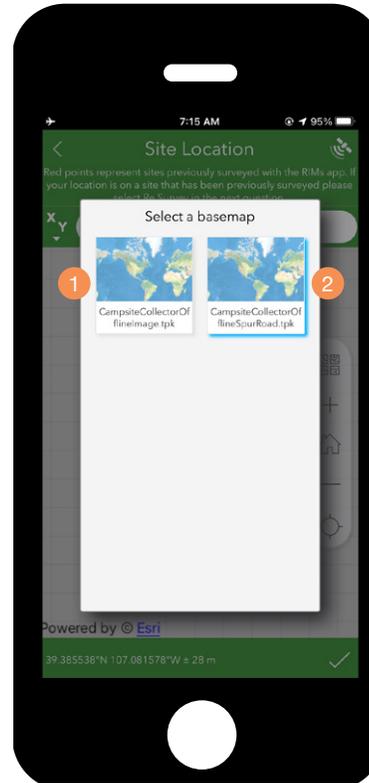
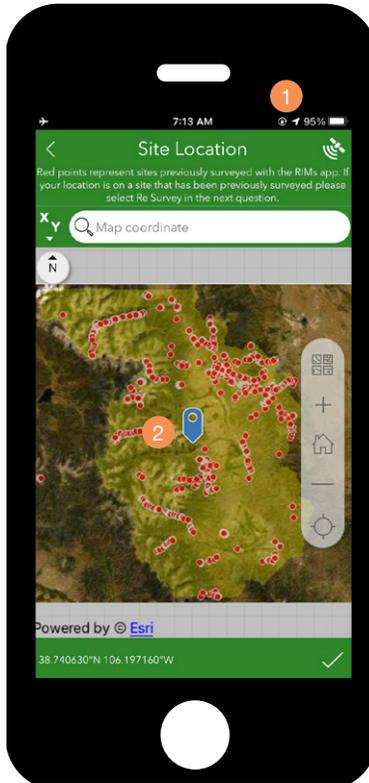


If your phone has service you will be able to select from a number of default Esri basemaps and Campsite Collector specific basemaps. Surveys with a .tpk after their name are for offline usage. You can freely choose any of these maps.

1. OFFLINE IMAGERY MAP
2. OFFLINE IMAGERY MAP WITH NO COUNTY OR PREVIOUSLY COLLECTED CAMPSITES
3. DEFAULT SATELLITE IMAGE DISPLAYED WHEN CONNECTED TO SERVICE

4 OFFLINE LOCATION QUESTION LARGER MAP

If you do not have cell service you can still capture your location using your cell phone's GPS and the spatially referenced tile packages loaded with the survey.



Tile packages are spatially referenced images. All the tile packages included in the survey are clipped to the immediate study area, which is the reason for the gray margins. To keep file sizes down the tile packages included are medium resolution and will become more blurred as you zoom in. You do not need to upload these offline maps manually, they are included when you download the survey.

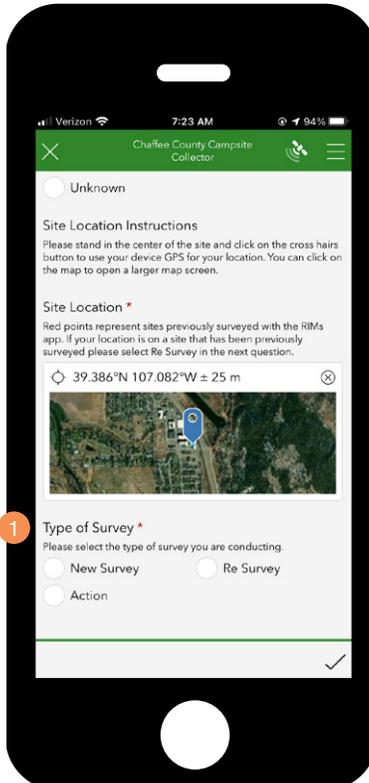
1. PHONE IS OFFLINE
2. LOCATION ON SPATIALLY REFERENCED TILE LAYER MAP

If you do not have cell service you are only presented with the two tile packages for offline use. You can choose any of these maps to use while offline.

1. OFFLINE IMAGERY MAP (DEFAULT)
2. OFFLINE IMAGERY MAP WITH NO COUNTY OR PREVIOUSLY COLLECTED CAMPSITES

5 SURVEY TYPE SELECTION

If you do not have cell service you can still capture your location using your cell phone's GPS and the spatially referenced tile packages loaded with the survey.



If your location is not on top of a previously collected site or red point you are conducting a new survey. If your location is on top of previously collected site you are conducting a re survey. If you are unsure that is ok as the project team will be doing quality control during the data analysis phase.

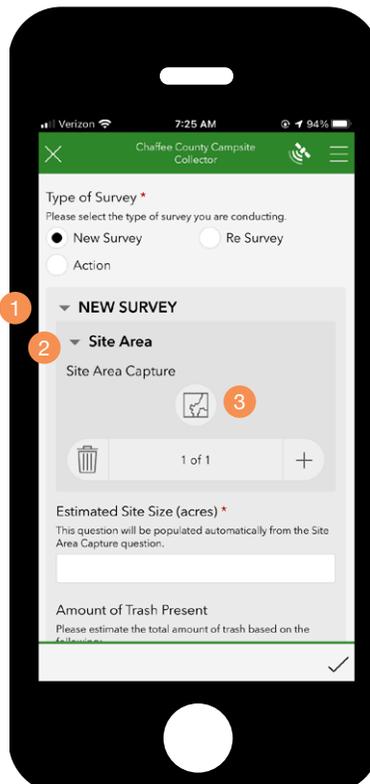
If you are simply conducting an action select action.

1. SELECT THE APPROPRIATE SURVEY TYPE TO BE DIRECTED TO THAT SURVEY'S SPECIFIC QUESTIONS.

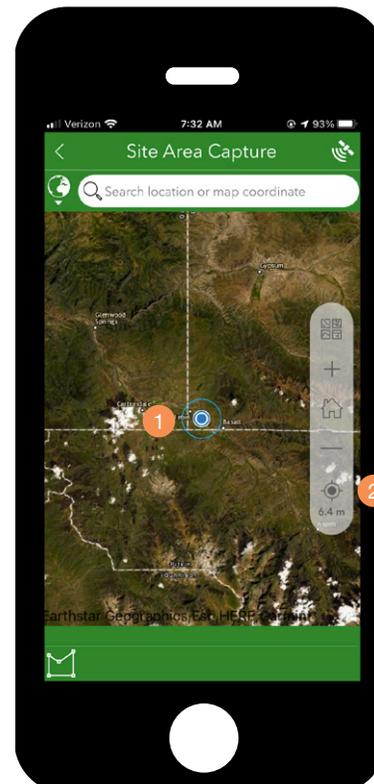
NEW AND RE SURVEY

Both the new and resurvey survey questions are the same within the app, though they are presented differently when the data is analyzed by the project team. Please follow these steps for both.

1 SELECT NEW OR RE SURVEY



1. DISPLAY OF THE TYPE OF SURVEY BEING CONDUCTED
2. CLICK ON THE ARROW TO EXPAND THE SITE AREA QUESTION
3. CLICK ON THE MAP ICON TO OPEN THE SITE AREA

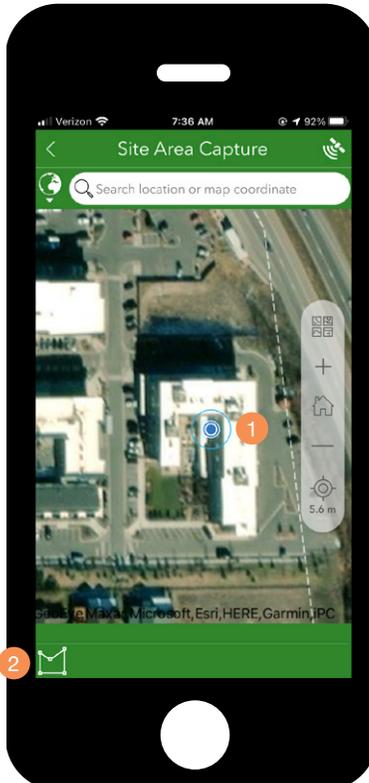


1. LOCATION OF PHONE BASED ON GPS
2. ACCURACY OF PHONE LOCATION, IN THIS EXAMPLE THE PHONE'S ACCURACY IS + OR - 6.4M.

Hint. The accuracy will increase the longer you let it settle.

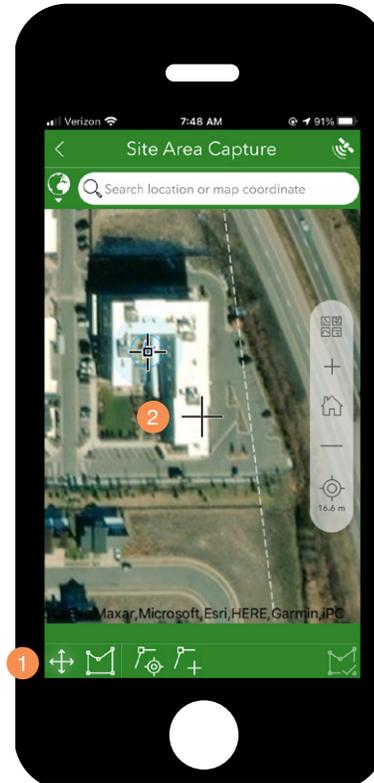
2 SITE AREA CAPTURE

The Site Area Capture location will allow you to draw a polygon around the campsite to determine the area of the campsite.



1. BEFORE STARTING, ZOOM INTO YOUR LOCATION. THE MAP WILL BECOME BLURRIER TO MORE YOU ZOOM IN
2. WHEN YOU ARE HAPPY WITH YOUR ZOOM LEVEL, CLICK ON THE CAPTURE VERTEX BUTTON TO BEGIN TRACING THE CAMPSITE

Please note, you can pan in and out and scroll around the map using your fingers. Once you click on the Capture Vertex Button you will have to use the “+” and “-” navigation options on the side of the map.

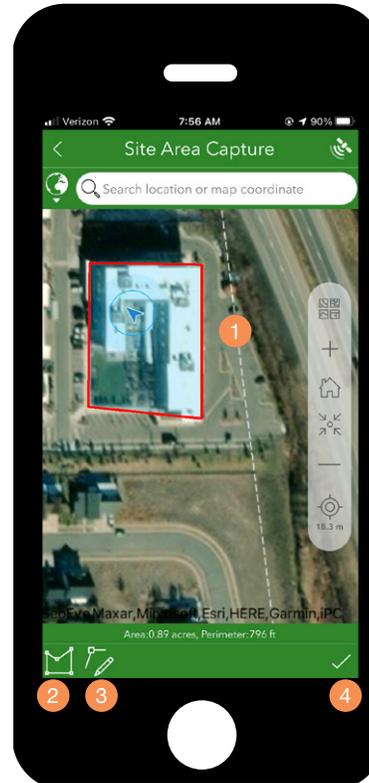


- DRAWING CAMPSITE POLYGON BY TRACING THE BOUNDARIES ON YOUR SCREEN
1. CLICK ON THE CROSSHAIR BUTTON TO BRING UP THE LARGE BLACK CROSSHAIR ON THE SCREEN
 2. WHEN THE CROSSHAIR BUTTON IS PRESSED A LARGE CROSSHAIR WILL APPEAR ON THE MAP

2 SITE AREA CAPTURE



1. USE YOUR FINGERS TO MOVE THE CROSSHAIR TO LOCATIONS AT THE PERIMETER OF THE CAMPSITE
2. WHEN YOU HAVE THE CROSSHAIR PLACED ON AN APPROPRIATE LOCATION AROUND THE PERIMETER, PRESS THE ADD VERTEX BUTTON THIS WILL AUTOMATICALLY PLACE AND CONNECT ALL THE POINTS PLACED AROUND THE PERIMETER
3. ONCE YOU ARE HAPPY WITH THE PERIMETER, CLICK ON THE COMPLETE POLYGON BUTTON



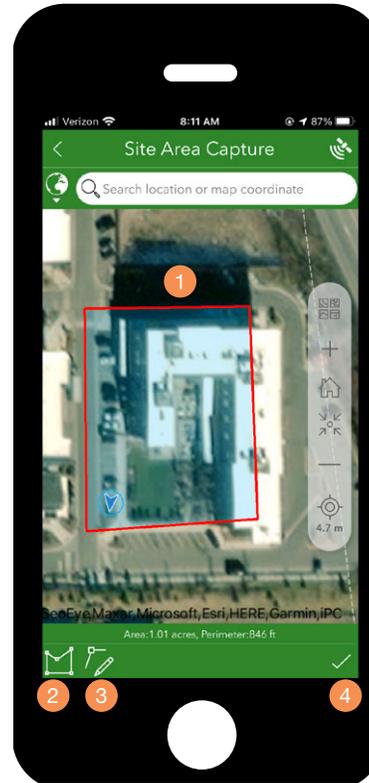
1. AFTER TO COMPLETE POLYGON BUTTON IS PUSHED, THE PERIMETER OF THE CAMPSITE WILL BE DISPLAYED
2. IF YOU WOULD LIKE TO DRAW A NEW PERIMETER YOU CAN CLICK ON THE NEW POLYGON BUTTON
3. IF YOU WANT TO EDIT THE POLYGON YOU CREATED, YOU CAN CLICK ON THE EDIT VERTEX BUTTON
4. IF YOU ARE HAPPY WITH YOUR POLYGON, CLICK ON THE CHECK MARK BUTTON TO RETURN TO THE SURVEY

2 SITE AREA CAPTURE



DRAWING CAMPSITE POLYGON BY WALKING THE PERIMETER OF THE CAMPSITE

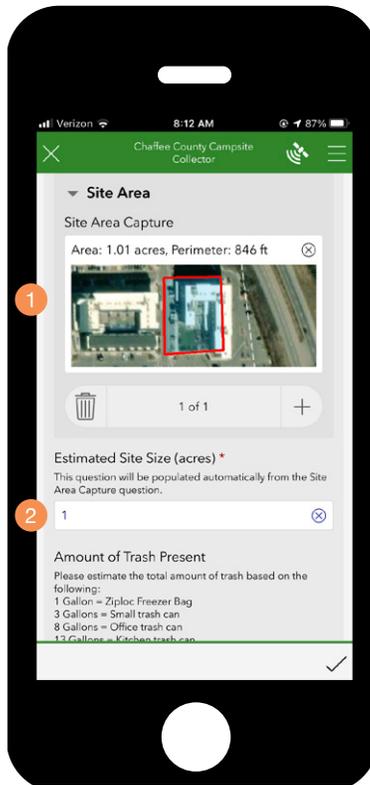
1. CLICK ON THE CAPTURE LOCATION VERTEX BUTTON
2. WALK THE PERIMETER BOUNDARIES OF THE CAMPSITE, THE CROSSHAIR ICON REPRESENTS THE LOCATION OF YOUR PHONE
3. CLICK ON THE ADD VERTEX FROM LOCATION BUTTON TO ADD A POINT AROUND THE PERIMETER
3. ONCE YOU ARE HAPPY WITH THE PERIMETER, CLICK ON THE COMPLETE POLYGON BUTTON



1. AFTER TO COMPLETE POLYGON BUTTON IS PUSHED, THE PERIMETER OF THE CAMPSITE WILL BE DISPLAYED

2. IF YOU WOULD LIKE TO DRAW A NEW PERIMETER YOU CAN CLICK ON THE NEW POLYGON BUTTON
3. IF YOU WANT TO EDIT THE POLYGON YOU CREATED, YOU CAN CLICK ON THE EDIT VERTEX BUTTON
4. IF YOU ARE HAPPY WITH YOUR POLYGON, CLICK ON THE CHECK MARK BUTTON TO RETURN TO THE SURVEY

2 SITE AREA CAPTURE

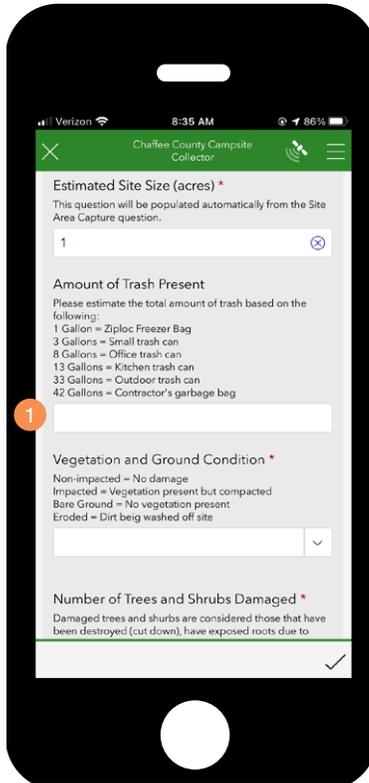


DRAWING CAMPSITE POLYGON BY WALKING THE PERIMETER OF THE CAMPSITE

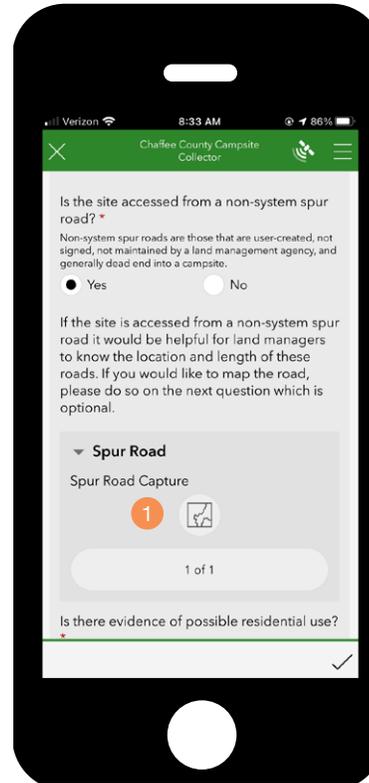
1. AFTER RETURNING TO THE SURVEY, THE POLYGON CREATED WILL BE DISPLAYED ON THE MAP
2. THE ESTIMATED SITE SIZE QUESTION WILL AUTOMATICALLY BE POPULATED BASED ON THE POLYGON THAT WAS DRAWN USING THE SITE AREA QUESTION

3 SURVEY CONTINUED AND SPUR ROADS

Once the site area is captured, please proceed with the survey.



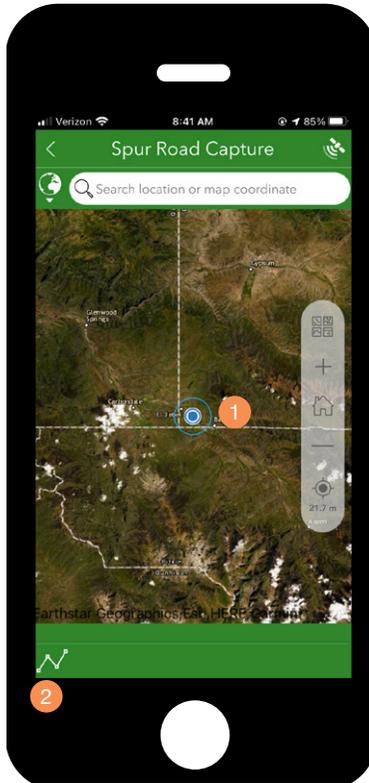
MOST OF THE QUESTIONS IN THE SURVEY CONSIST OF SELECT ONE OR SELECT ALL THAT APPLY ANSWERS, IN ORDER TO TRACK THE TOTAL AMOUNT OF TRASH PRESENT, THIS QUESTION WILL INVOLVE ESTIMATING THE TOTAL AMOUNT BASED ON THE GIVEN VALUES



The United States Forest Service (USFS) and Bureau of Land Management (BLM) are interested in identifying sites that are accessed with a non-system spur road. If the site is accessed from a non-system spur road please follow the next steps to capture the location and length.

1. CLICK ON THE MAP ICON TO CAPTURE THE LOCATION AND LENGTH OF THE NON-SYSTEM SPUR ROAD

4 SPUR ROAD CAPTURE



1. BEFORE STARTING, ZOOM INTO YOUR LOCATION. THE MAP WILL BECOME BLURRIER TO MORE YOU ZOOM IN
2. WHEN YOU ARE HAPPY WITH YOUR ZOOM LEVEL, CLICK ON THE CAPTURE VERTEX BUTTON TO BEGIN TRACING THE CAMPSITE

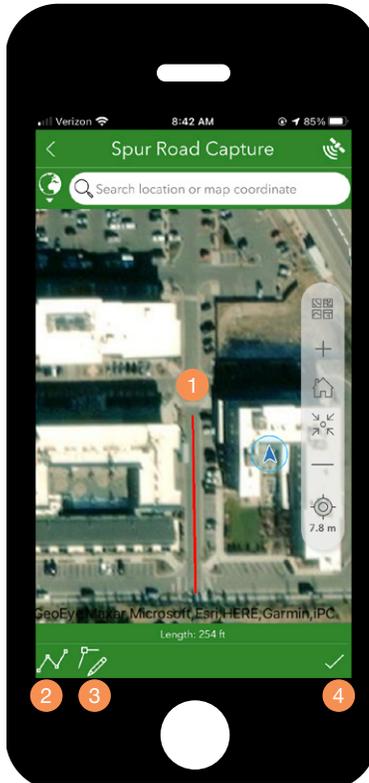
Please note, you can pan in and out and scroll around the map using your fingers. Once you click on the Capture Vertex Button you will have to use the “+” and “-” navigation options on the side of the map.



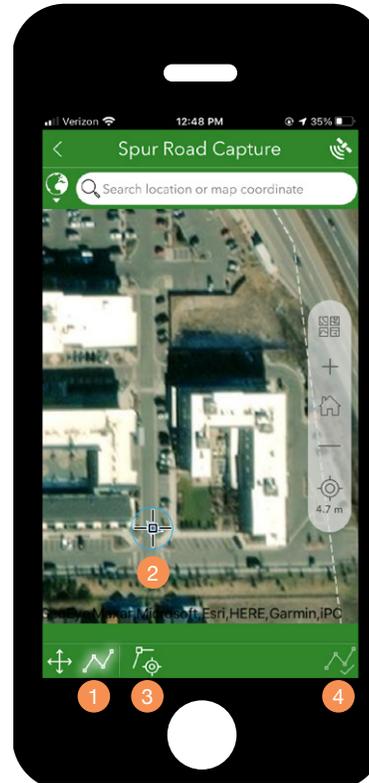
DRAWING SPUR ROAD LINE BY TRACING THE ROAD ON YOUR SCREEN

1. CLICK ON THE CROSSHAIR BUTTON TO BRING UP THE LARGE BLACK CROSSHAIR ON THE SCREEN
2. USE YOUR FINGERS TO MOVE THE CROSSHAIR TO LOCATIONS ALONG THE ROAD
3. WHEN YOU HAVE THE CROSSHAIR PLACED ON AN APPROPRIATE LOCATION ALONG THE ROAD, PRESS THE ADD VERTEX BUTTON THIS WILL AUTOMATICALLY PLACE AND CONNECT POINTS PLACED ALONG THE ROAD
4. ONCE YOU ARE HAPPY WITH THE LINE, CLICK ON THE COMPLETE LINE BUTTON

4 SPUR ROAD CAPTURE

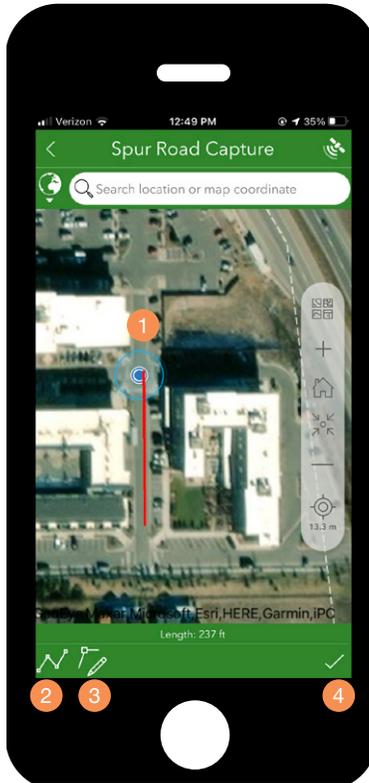


1. AFTER TO COMPLETE LINE BUTTON IS PUSHED, THE SPUR ROAD WILL BE DISPLAYED
2. IF YOU WOULD LIKE TO DRAW A NEW LINE YOU CAN CLICK ON THE NEW LINE BUTTON
3. IF YOU WANT TO EDIT THE LINE YOU CREATED, YOU CAN CLICK ON THE EDIT VERTEX BUTTON
4. IF YOU ARE HAPPY WITH YOUR LINE, CLICK ON THE CHECK MARK BUTTON TO RETURN TO THE SURVEY

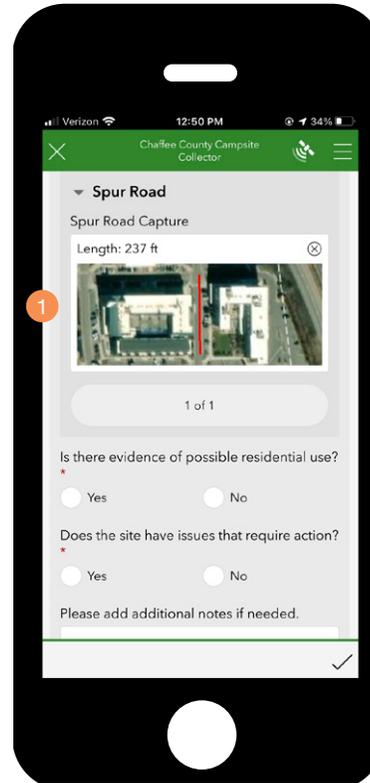


- DRAWING SPUR ROAD BY WALKING ALONG THE SPUR ROAD FROM CAMPSITE
1. CLICK ON THE CAPTURE LOCATION VERTEX BUTTON
 2. WALK ALONG THE SPUR ROAD FROM THE CAMPSITE, THE CROSSHAIR ICON REPRESENTS THE LOCATION OF YOUR PHONE
 3. CLICK ON THE ADD VERTEX FROM LOCATION BUTTON TO ADD A POINT ALONG THE SPUR ROAD
 3. ONCE YOU ARE HAPPY WITH THE SPUR ROAD, CLICK ON THE COMPLETE POLYGON BUTTON

4 SPUR ROAD CAPTURE

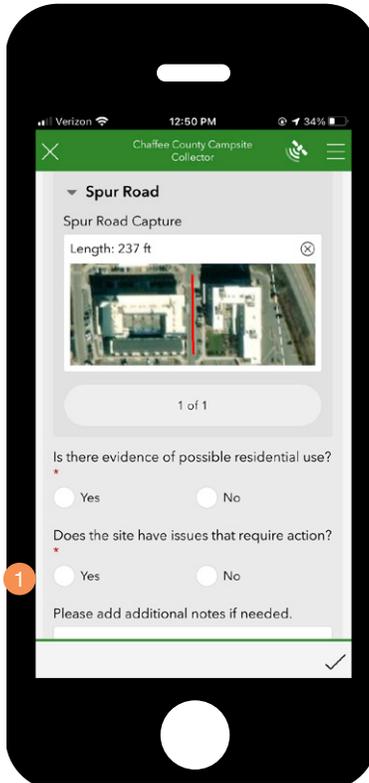


1. AFTER TO COMPLETE LINE BUTTON IS PUSHED, THE SPUR ROAD WILL BE DISPLAYED
2. IF YOU WOULD LIKE TO DRAW A NEW LINE YOU CAN CLICK ON THE NEW LINE BUTTON
3. IF YOU WANT TO EDIT THE LINE YOU CREATED, YOU CAN CLICK ON THE EDIT VERTEX BUTTON
4. IF YOU ARE HAPPY WITH YOUR LINE, CLICK ON THE CHECK MARK BUTTON TO RETURN TO THE SURVEY



1. WHEN YOU RETURN TO THE SURVEY, THE SPUR ROAD LINE IS DISPLAYED ON THE MAP

5 SURVEY CONTINUATION



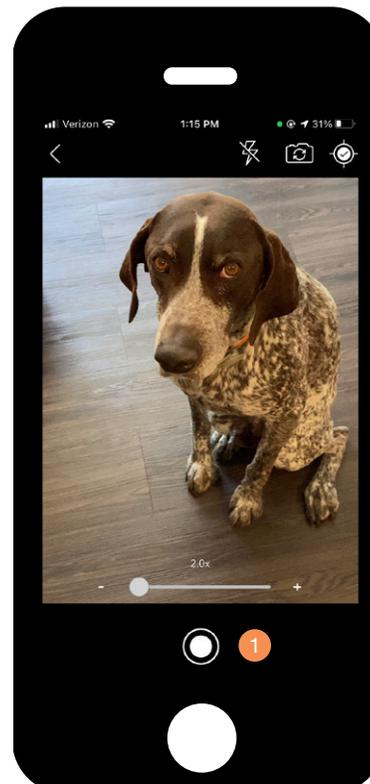
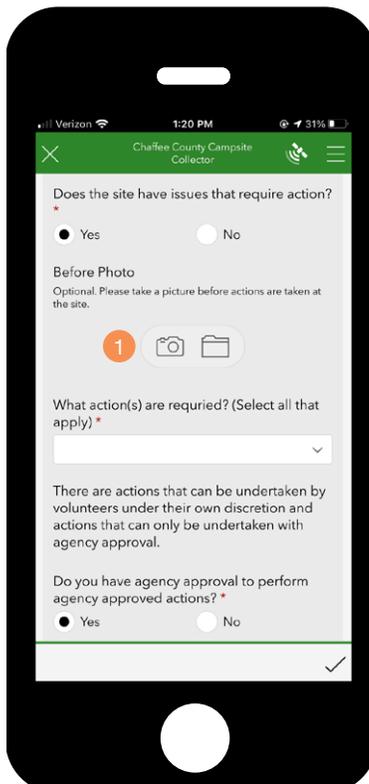
1. ACTION ITEMS

Please note that the action item survey questions for the new surveys and re surveys are the same as those for the action survey. These action items will be addressed in the following section.

ACTION SURVEY

You have a choice in both the new survey and re survey questions to identify if actions are needed at the site you are surveying. These action questions are the same for all the surveys, though they are presented differently when the data is analyzed by the project team.

1 ACTION PHOTOGRAPHS



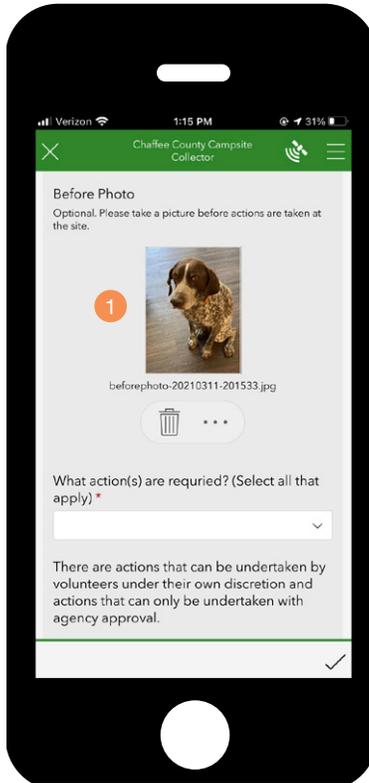
1. MANAGERS ARE INTERESTED IN HIGHLIGHTING ACTION WORK PERFORMED BY VOLUNTEERS, YOU WILL HAVE THE OPPORTUNITY TO SUBMIT BEFORE AND AFTER ACTION PHOTOS FOR THE CAMPSITE

1. USE YOUR DEVICE'S CAMERA TO TAKE A PHOTOGRAPH OF THE SITE

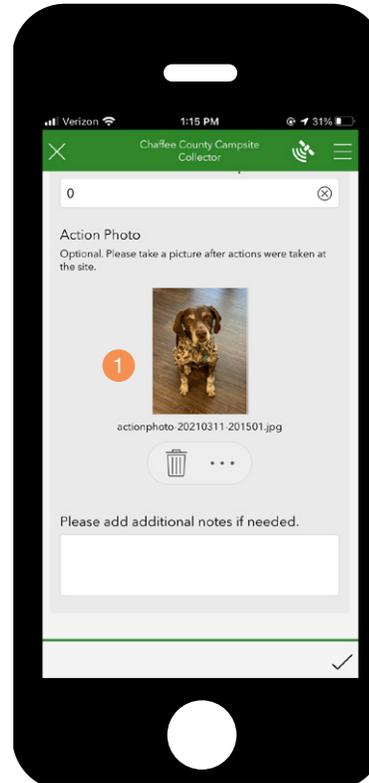
Hint. If you are unable to access your phone's camera refer to page 6.

PRESS THE CAMERA BUTTON TO ACCESS THE CAMERA

1 ACTION PHOTOGRAPHS

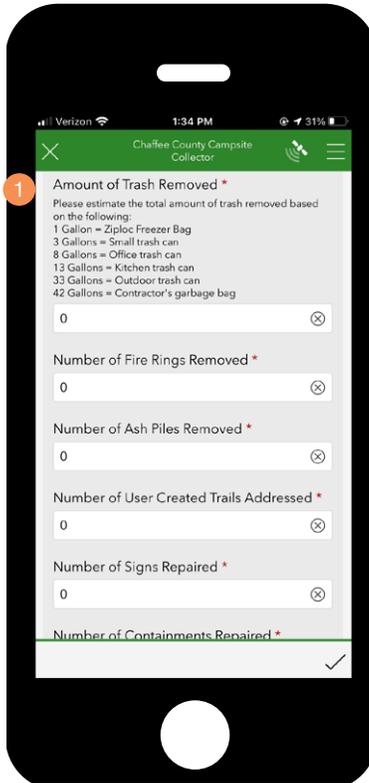


1. ONCE THE PHOTOGRAPH IS TAKEN AND ACCEPTED IT WILL APPEAR AS AN IMAGE IN YOUR SURVEY

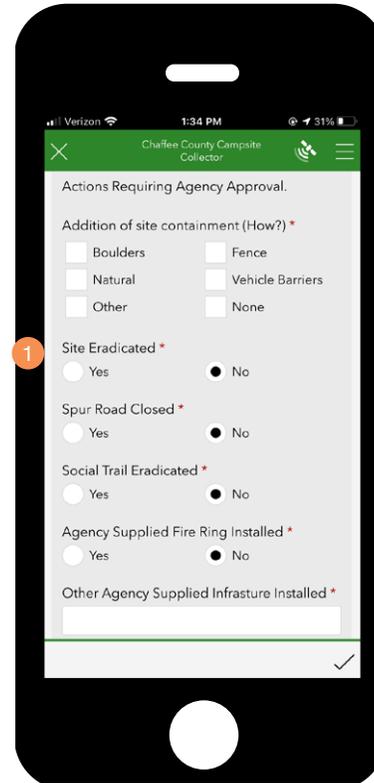


1. YOU WILL ALSO BE GIVEN THE OPPORTUNITY TO RECORD AND AFTER ACTION PHOTOGRAPH DOCUMENTING THE ACTION TAKEN AT THE SITE

2 ACTION ITEMS, NON-AGENCY AND AGENCY



1. ACTIONS THAT CAN BE UNDERTAKEN IN THE FIELD WITHOUT AGENCY APPROVAL



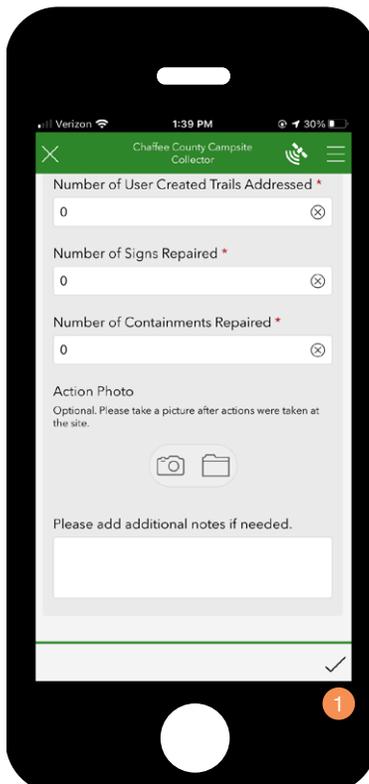
1. ACTIONS THAT CAN BE UNDERTAKEN IN THE FIELD ONLY WITH AGENCY APPROVAL

When agency approval “Yes” is selected you are presented with the following questions. Please do not perform any of these actions if you have not been properly trained by the associated land management agency in order to ensure that these actions are performed using the proper agency protocols.

SURVEY SUBMISSION

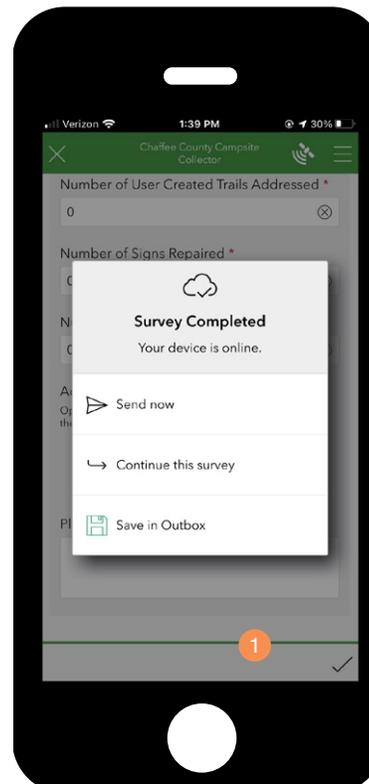
When you are online you can submit survey results immediately. However, if you are offline you will have to submit surveys when you are back online.

1 ONLINE SURVEY SUBMISSION



1. CLICK TO SUBMIT SURVEY RESULTS

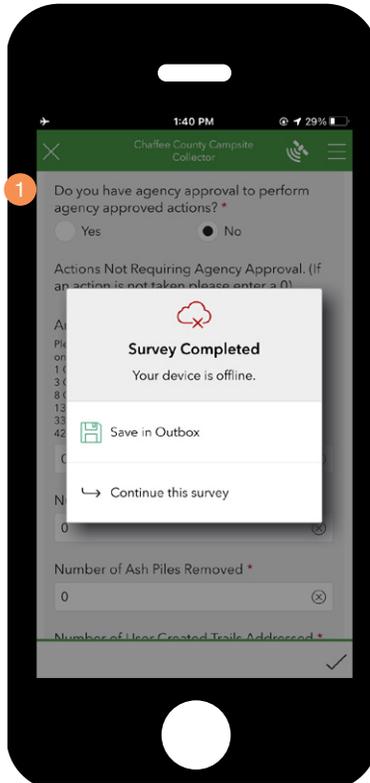
Please note, the survey will not be allowed to be submitted if all the required questions are not answered.



1. CLICK TO SEND SURVEY RESULTS NOW

When survey results are submitted you will receive a confirmation message.

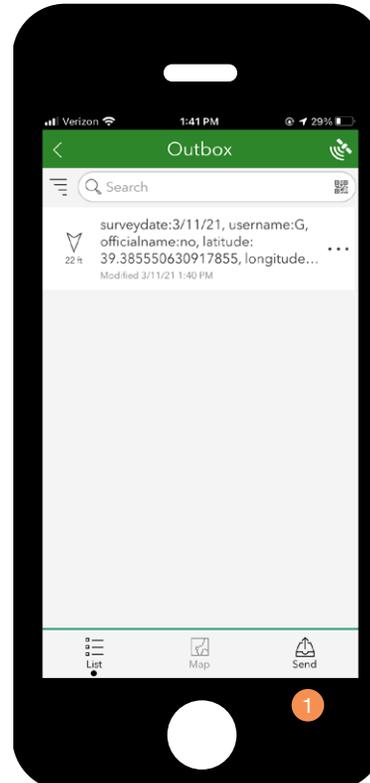
2 OFFLINE SURVEY SUBMISSION



1. CLICK TO SAVE SURVEY RESULTS TO YOUR OUTBOX

Please note, you can collect multiple surveys while offline. Make sure you save each new offline survey to your outbox.

Please note, when you return to service, please close the app and reopen it. Sometimes, especially if pictures are attached, the survey will give an error message when submitting surveys collected while offline.



1. CLICK TO SUBMIT WHEN YOUR PHONE IS BACK ONLINE

When survey(s) results are submitted you will receive a confirmation message.

When the survey is submitted while online or placed in the inbox if offline, you can press the "Collect" button to collect additional site surveys.

THANK YOU FOR HELPING MONITOR CAMPSITES IN CHAFFEE COUNTY.