

WET-DRY MAPPING QUICK START GUIDE

Why Do We Do Wet-Dry Mapping?

Flow regime determinations are the foundational building blocks we use to develop and maintain designated uses, water quality standards, and assessment decisions. Roughly 82% of Arizona's reaches are in need of flow regime determinations. Wet-dry mapping addresses this gap in a simple, streamlined way. Users walk along reaches and capture data on the proportion of wet to dry segments of a given reach. When we upload your wet-dry mapping data points to the U.S. Environmental Protection Agency's water quality database, we (Arizona Department of Environmental Quality or ADEQ) can use it to determine flow regime over time.

What Do I Need to Get Started?

You'll need two ArcGIS apps downloaded to your phone while you have a mobile or internet connection: **QuickCapture** and **Survey123**. After setting up your apps, you won't need a mobile signal while you're out in the field, but you'll need to upload your data when you're back in service.



QuickCapture



Survey 123

Setting Up Your Smart Phone

Step 1: Download both apps onto your phone

For Android phones:

- [Download QuickCapture from Google Play](#)
- [Download Survey123 from Google Play](#)

For iPhones:

- [Download QuickCapture from the App Store](#)
- [Download Survey123 from the App Store](#)

Step 2: First open the QuickCapture app and select **Continue without logging in**

Step 3: Tap the **plus sign (+)** in the bottom right corner of the screen. Several options will appear. Tap **Scan QR Code**. This automatically opens your phone camera to begin scanning. Use it to scan the following QR code:



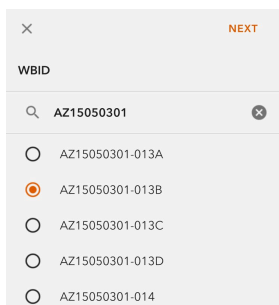
The Wet-Dry Lines app will then be listed in your QuickCapture app workspace.

Step 4: Tap the Wet-Dry Lines app and complete the **WBID**, **Date Started** and **Volunteer Name** screens. On the final screen, tap **Go To Survey123**. Survey123 will open automatically.

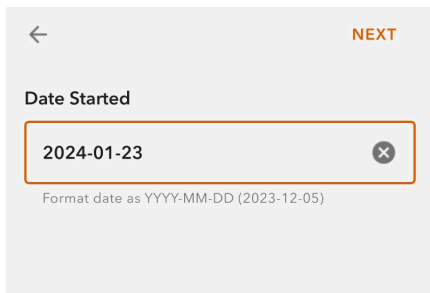
Step 5: On the Survey123 login screen, select **Continue without logging in**. The Wet-Dry Lines form will then open and be ready to use.

At Your Starting Location

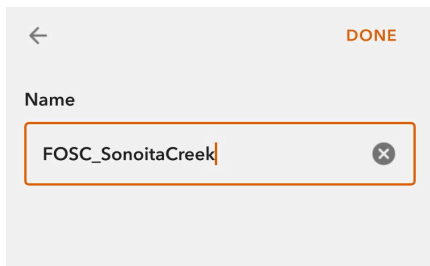
Step 1: Open **QuickCapture** and tap “Continue without signing in”



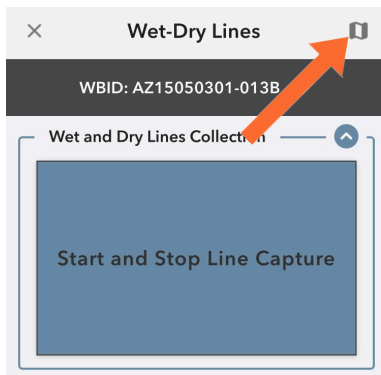
Step 2: Tap the **Wet-Dry Lines** application from your workspace. **Wet-Dry Lines** will open to the Water Body ID (WBID) page. Enter the WBID of your reach. If you do not know it, you can select any WBID and navigate to the next page. There will be an option to look at the map, find your WBID, and edit it later. Tap **Next** in the top right corner of the screen.



Step 3: Enter the date you are doing wet-dry mapping, using YYYY-MM-DD format. Tap **Next** in the top right corner of the screen.

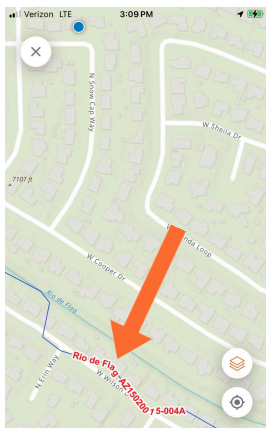


Step 4: Enter your name. Since the data is public, we recommend using your first name and last initial (example: Beth R.). Tap **Done** in the top right corner of the screen.

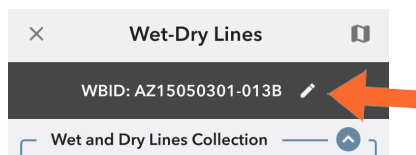


You are now on the Wet-Dry Lines page.

If you're not sure about the WBID, you can find it by selecting the map icon in the top right corner.

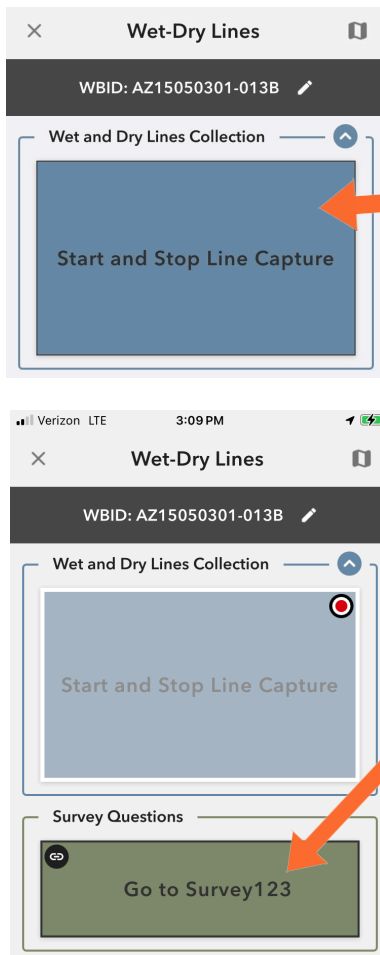


A map will open with a blue pulsing dot representing your location. You may see the WBID on the stream nearby in **red bold**. Write it down, screenshot, or remember it enough to find it in the list a couple screens later. Return to the main screen by tapping the X in the top left corner.



Back on the main screen, tap the pencil icon to edit and save the correct WBID number.

Let's Start Tracking!



Step 1: Tap the blue **Start and Stop Line Capture** button.

The button will gray out with a pulsing red circle in the upper right corner. Choose **Wet** or **Dry** from the next page, based on what you see on the ground in front of you at your starting location. You are now collecting data!

Step 2:

If you are at a wetted reach, select the green **Go to Survey123** button to fill out the survey before walking further.

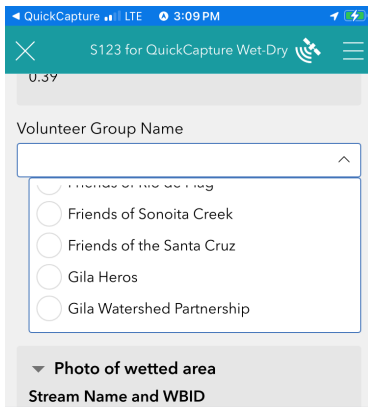
If you are at a dry reach, walk along the reach until you encounter a wetted reach. Tap the **Start and Stop Line Capture** button to stop tracking the dry line. Tap it again to start tracking a wet line, and then tap the **Go to Survey123** button.

Completing the Form for Wetted Reaches

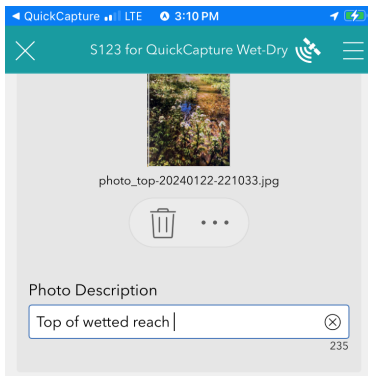
Step 1: Use the **Choose Stream Name and WBID** dropdown to find and enter your location. This will automatically populate the box below.

The screenshot shows the 'Choose Stream Name and WBID' form. At the top, there is a header with 'S123 for QuickCapture Wet-Dry' and a close button. Below that is a link for 'Wet-Dry Mapping How-To Video'. The form has a title 'Choose Stream Name and WBID *' and a subtitle 'or type first few letters to bring up names'. There is a search input field with a dropdown arrow. Below the input field is a table with two columns: 'Stream Name and WBID' and 'Reach (WBID)'. The first row contains 'Sonoita Creek AZ15050301_013B' and 'AZ15050301_013B'. The second row contains 'Reach Length in Miles' and 'Flow Regime'. The third row contains '0.39' and 'P'.

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Step 2: Select your volunteer name from the dropdown.



Step 3: Take a photo of the wetted area and enter a brief description. For example: “top of wetted reach”, “bottom of wetted reach”, or other description of your photo.



Step 4: Select the type of meter you are using and enter a temperature measurement. These data points act as further evidence of a wet point to EPA’s water quality database. Think of it like two-factor authentication used by tech companies. Water temperature verifies that water is there!

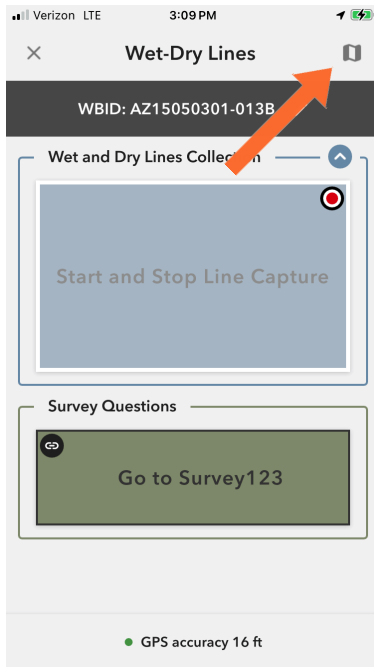
Click the blue arrow to close the number pad.

Step 5: Submit the form by tapping the **check mark** in the bottom right corner of the screen.

A screen will appear giving you the following options:

- **Send now:** if you have sufficient phone service, select this option to send the survey right away
- **Continue this Survey:** select this option if you need to go back and make edits
- **Save in Outbox:** if you do *not* have sufficient phone service, select this option to save the survey and submit it later

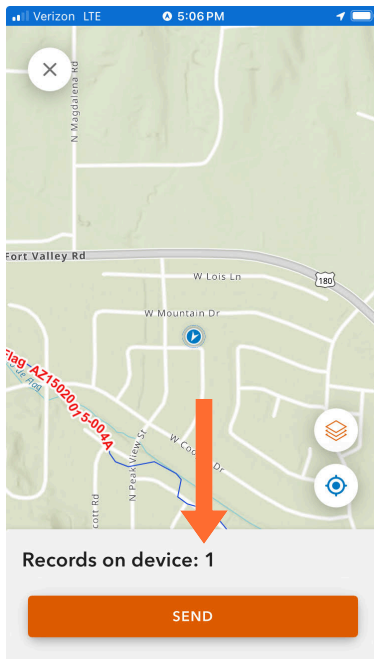
Repeat and Wrap-Up



After completing the form, you will be directed back to QuickCapture.

Here, you can proceed with collecting data along the reach. When you are at the end of a wetted reach, tap the blue **Start and Stop Line Capture** to complete the wetted segment you started. Tap it again to start a new dry segment. Repeat the steps on Pages 4 and 5.

After you've recorded segments, you can tap the **map icon** in the top right corner to review your tracked lines.



The map will show you the wet line you've tracked so far.

Continue collecting data along the stream by repeating the process above until you reach the end of your stream segment.

Whenever you have sufficient phone service, you can submit the lines you've tracked and saved by selecting the orange **Send** button at the bottom of the screen.

Remember to submit surveys at the end of your trip! 😊