Florida Department of Environmental Protection
Division of Environmental Assessment and Restoration
Water Quality Monitoring Program

Apple iPhone and Apple iPad
Operations Manual

WQMP Tablet Taskforce /
WQMP Survey123 Maintenance Group

August 2023

Device Specifications (Apple iPhone 13 Pro Max)[1]

Product Dimensions (inches): 3.07 x 6.33 x 0.30

Main Display Size: 6.7"

Weight: 240g

Charging Port: Lightning

Camera resolution (Rear): 12.0 MP - Telephoto,

Wide, and Ultra-Wide cameras

Camera resolution (Front): 12.0 MP

Video Resolution (Rear): 1080p HD video recording

at 25 fps, 30 fps, or 60 fps

Sensor Types: Face ID, LiDAR Scanner, Barometer,

Three-axis gyro, Accelerometer,

Proximity sensor, Ambient light sensor

Operating System: iOS 16.5.1

Internal Memory: 256GB Storage

Processor Type: A15 Bionic chip

Carrier: Verizon Cellular/Wi-Fi

Location: GPS, GLONASS, Galileo,

QZSS, BeiDou, Wi-Fi, Cellular, iBeacon

Bluetooth: v5.0

Wi-Fi: 6 (802.11ax) with 2x2 MIMO

Video Play Time: Up to 28 hours

Music Play Time: Up to 95 Hours

External Buttons and Connectors

1. Front camera
2. Side button
3. Lightning connector
4. SIM tray
5. Volume buttons
6. Ring/Silent switch
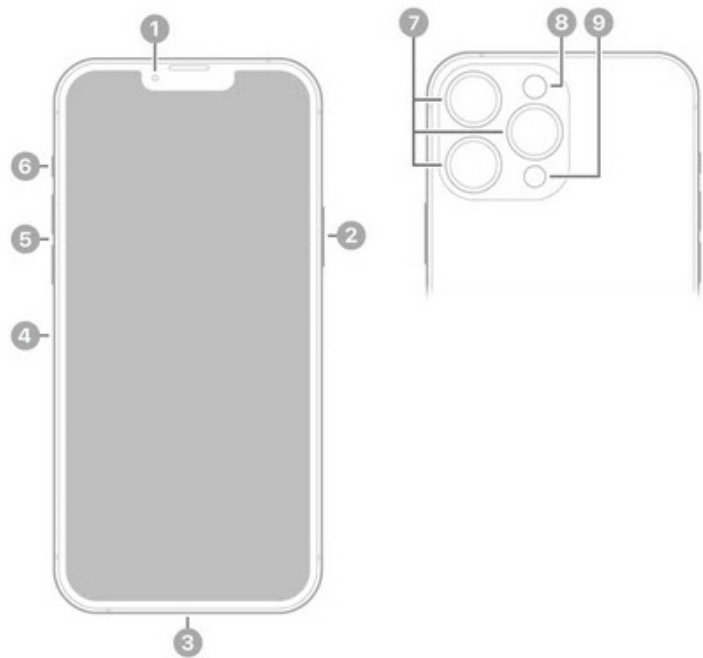7. Rear cameras
8. Flash
9. LiDAR Scanner

Figure 1: Phone Layout

Device Specifications (Apple iPad Pro 11-inch, 4th Generation)[2]

Product Dimensions (inches): 7.02 x 9.74 x 0.23

Main Display Size: 11"

Weight: 470g

Charging Port: Thunderbolt / USB 4 port

Camera resolution (Rear): 12.0 MP - Telephoto, Wide, and Ultra-Wide cameras

Camera resolution (Front): 12.0 MP

Video Resolution (Rear): 1080p HD video recording at 25 fps, 30 fps, or 60 fps

Sensor Types: Face ID, LiDAR Scanner, Barometer, Three-axis gyro, Accelerometer, Ambient light sensor

Operating System: iPadOS 16

Internal Memory: 128 GB

Processor Type: Apple M2 chip

Carrier: Verizon Cellular/Wi-Fi

GPS Navigation: Digital compass, Wi-Fi, iBeacon, GPS/GNSS

Bluetooth: 5.3

Wi-Fi: Wi-Fi 6E (802.11ax) with 2x2 MIMO

Video Play Time: Up to 10 hours of surfing the web on Wi-Fi or watching video
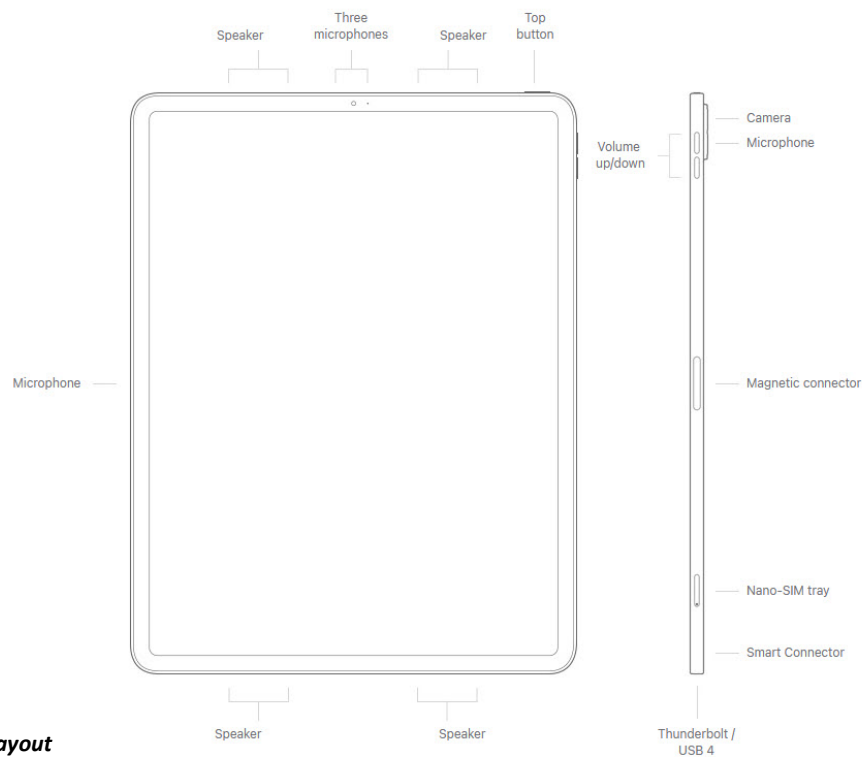

Figure 2: iPad Layout

Initial Set Up

Insert the SIM Card into the Device.
The SIM card slot is located on the side of the device, near the bottom. Use the small metal tool included in the box to open the SIM card slot.

Please note that iPhones will no longer require a physical SIM card to be inserted.

Install Waterproof Protective Case
The iPhone 13 Pro Max has an ingress protection rating of IP68 (device is protected against dust and can withstand being submerged in up to 1.5m of water for up to 30min). Use of an IP68 rated case is recommended to provide an additional layer of protection from environmental hazards (dust, water, impact, etc.). Follow manufacturer's instructions for case installation, use and maintenance.

The iPad Pro devices do not have an ingress protection rating and are not waterproof. Use of an IP68 rated case is required to protect the device from environmental hazards (dust, water, impact, etc.). Follow manufacturer's instructions for case installation, use and maintenance.

Charge the device
Fully charge the device before turning it on. The device comes with a charger cube/head and a USB-C to Lightning cable for iPhone devices and USB-C to USB-C cables for iPad devices. Plug the included charging cube/head into an outlet and connect the appropriate Apple cable into the charging cube/head. Once these are connected, plug the other end of the appropriate cable into the charging port of your iPhone or iPad.

Caution: Only use Apple-approved charging devices. Improper handling of the charging port, as well as the use of an incompatible charger, may cause shock or fire, damage to the device and void warranty.

Turning the device on and off
Press and hold the **Side Button** for iPhones (Figure 1) and **Top Button** for iPads (Figure 2) to turn **On** devices.

Press and hold both the Side Button and one of the Volume Buttons (for iPhone) or the Top Button and one of the volume Buttons (for iPad) to turn **Off** the device. The device can also be turned **Off** in the setting app (select **Settings→General→Shut Down**).

Configure the device
When initially turning on the device, individuals will be prompted to conduct preliminary configuration. Individuals will be instructed to select a language and whether they would like to choose a **Quick Start** or to **Set Up Manually**. Users should select Set Up Manually if this is the first DEP Apple device they are setting up.

Connect to Wi-Fi

Open the Settings options by tapping on the Settings icon. Find and click **Wi-Fi** to open up wi-fi settings. Click on the appropriate DEP Wi-Fi option if they are available and sign in with your DEP username and password.

Set Up Passcode

It is mandated to enable screen lock features to increase the security of the device. Users should select either the "Four – Digit passcode", "Custom Numeric Code", or "Custom Alphanumeric Code" option and choose a code that is at least 4-characters long. When the device is not in use, individuals are asked to lock the screen. Press the **Side Button** for iPhones (Figure 1) and **Top Button** for iPads (Figure 2) to **Lock** devices.

To unlock, users can press the **Side Button** for iPhones (Figure 1) and **Top Button** for iPads (Figure 2) and then enter password to unlock devices. Settings can also be customized for users to set up **Tap to Wake** which would allow users to simply tap on the screen of a device to wake it.

Biometric options for locking the device (Face ID and Touch ID) should not be used on DEP mobile devices.

Creating Apple ID for New User/Device

Users will be prompted with several options on whether device will be set up from preexisting Apple ID accounts. Select **Don't Transfer Apps & Data**. On the following screen select **Forgot password or don't have an Apple ID?** Next, select the option **Create a Free Apple ID.** You will then be given an option to enter an email to assign your Apple ID. Enter your DEP email to set as the email associated with your Apple ID. Any security issues with accessing or unlocking your account can then be done using your DEP email.

Turn on "Find My" app

Users can locate lost or stolen devices with the Find My app.
Go to **Settings→[*your name]*→Find My→Find My→Find My [Device] →Toggle Find My [Device] on**
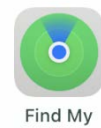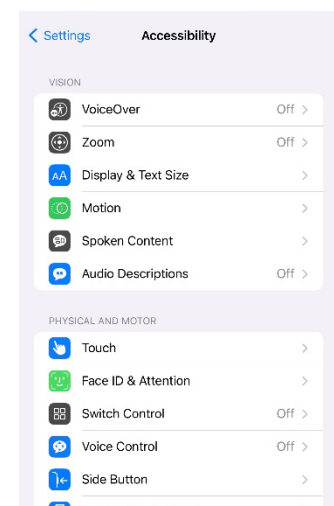
Customization of iPhone Device [3]

Use built-in accessibility features

iPad provides many accessibility features to support your vision, physical and motor, hearing, and learning needs. Change text appearance, make it easier to use the touchscreen, and more.

To customize these settings, go to **Settings→Accessability**

Choose sounds and vibrations

iPhone can play different sounds and vibrations for phone calls, calendar alerts, and other notifications.

Go to **Settings→Sounds & Haptics.** You can also change the sounds iPhone plays for certain people; in the **Contacts** app, select a person's name, tap **Edit**, then tap **Ringtone**.

Add widgets to your Home Screen

Widgets let you easily see the information that's most important to you, like the current weather and upcoming calendar events.

To add a widget, touch and hold the background on any Home Screen page until the apps juggle, then tap the "**+**" symbol.

Customizing the Control Center

Some iPhone features – like the flashlight, timer, or calculator – are just a swipe away in the Control Center. To quickly open the Control Center, swipe down from the top-right edge. You can add more features – like the alarm or magnifier – to Control Center in **Settings→Control Center.**

Personalizing your Lock Screen

You can showcase a favorite photo, add filters, widgets, and even change the font of the date and time.

To get started, touch and hold the Lock Screen, then tap "+" at the Bottom of the screen. Browse the gallery of options, then tap one to customize its appearance. When you've created a Lock Screen that you like, tap Add, then tap Set as Wallpaper Pair.

Customization of iPad Device [4]

Use built-in accessibility features

iPad provides many accessibility features to support your vision, physical and motor, hearing, and learning needs. Change text appearance, make it easier to use the touchscreen, turn on subtitles/captions, and more.

To customize these settings, go to **Settings→Accessibility**

Add widgets to your Home Screen

Widgets help you easily see the information that's most important to you, like the current weather and upcoming Calendar events.

To add a widget, touch and hold the background on any Home Screen page until the apps jiggle, then tap "**+**". Tap a widget, swipe right or left to view the different sizes, then tap **Add Widget**.

Set a photo as your wallpaper

You can set the background of your Home Screen or Lock Screen to display a favorite photo.

Open the Photos app, then tap a photo to open it in full screen. Tap ⬆ then tap **Use as Wallpaper.** Drag the photo to move it around or pinch to zoom in or out. Tap **Set**, then choose if you want the photo to appear on your Lock Screen, Home Screen, or both.

Apple Tips App

Users are also encouraged to explore the Apple TIPS app. The TIPS app will give users a tour of the many features of the Apple Device they are using.

Application Management and Use

Applications to Download

The device will come with many applications that will or can be utilized by samplers. With this being stated, several apps need to be downloaded from the App Store which will assist users with field data collection. In order to keep applications functioning correctly, please be sure to update apps daily or turn on **App Updates** located in the App Store settings under **Automatic Downloads**.
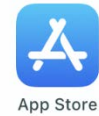
Necessary Apps:

Survey123 for ArcGIS   Field Maps for ArcGIS

Microsoft Office Apps:

| Word | Excel | PowerPoint |
| OneDrive | Outlook | Teams |

Additional Apps

| Firefox/Mozilla/Chrome (Web Browsers) | Google Maps/Waze (Navigation) | AccuWeather/Wunderground (Weather Apps) |
| Adobe Acrobat Reader | Google Earth | Organic Maps Offline Hike Bike (useful for navigation in areas with no cellular data signal) |
| Compass (useful when taking direction photos) | NOAA Tide & Currents | |

9

Remove Unnecessary Applications

Remove any pre-installed applications that are not needed for environmental data collection activities. To remove an application, long press the application icon and wait for the minus sign to appear in the upper left corner. Click the minus sign, then select the option to remove the application.

Use of text messaging and social media applications is not permitted on DEP mobile devices. Please remove any pre-installed applications in these categories (e.g., FaceTime, Messages).
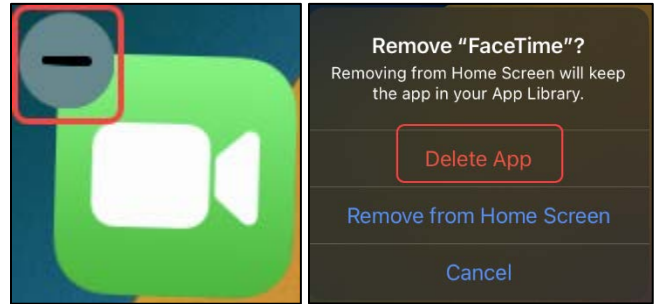
Priority Application Login

After the above listed applications are downloaded to the device, three primarily utilized applications must be logged into, before data collection commences. Within the Microsoft Office Suite, **OneDrive** will need to be logged into. Two additional applications must be logged into as well, **Field Maps for ArcGIS** and **Survey123 for ArcGIS**.

Field Maps for ArcGIS Login

Users will need to navigate to their Field Maps for ArcGIS widget. Upon opening the application, users will be required to sign in. Select "**Sign in with ArcGIS Online**", then select "**Your ArcGIS organization's URL**". The application is searching for the Organization URL. Users need to type "*FDEP*" into the sign-in box. The app will provide an auto-filled item http://fdep.maps.arcgis.com, which the user can tap as demonstrated by the following image. Click "**Using Your FloridaDEP Account**". This should redirect the user to a login page as shown below. Please note that while trying to log into ArcGIS credentials while connected to DEP Wi-fi network may pose issues with signing in. Make sure you are not connected to your District's Wi-fi network when signing into ArcGIS apps.
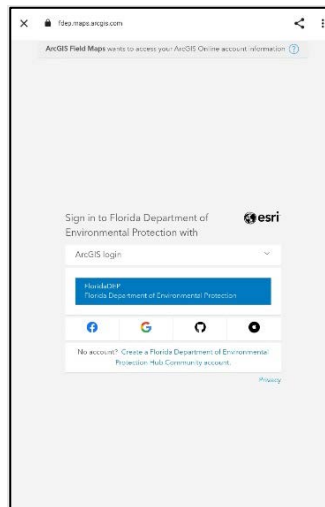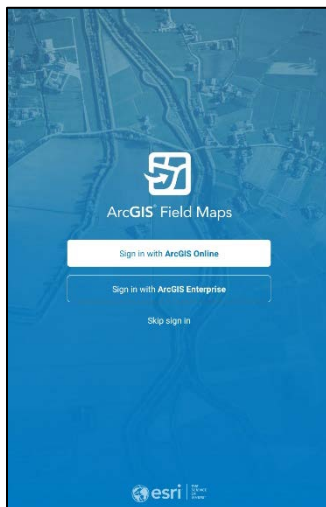
Figure 2: Field Maps App Login   Figure 3: Field Maps App FDEP Account

Users will then login with their "**organizational account**" (name@FloridaDEP.gov) as they would on their desktop/laptop.
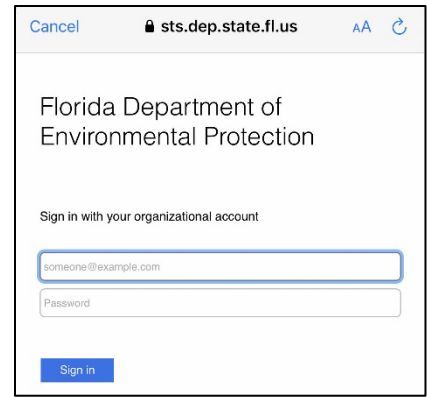

Figure 4: Field Maps App User Login

Survey123 for ArcGIS Login

Users will need to navigate to their Survey123 for ArcGIS widget. Upon opening the application, users will be required to sign in. Select "**Sign in with ArcGIS Online**", then select "**Your ArcGIS organization's URL**". Enter "**FDEP**" as the organization. These steps are illustrated below. After entering the organization URL, a button with the organization name will appear. Click the organization name to proceed to the final step and login with the user's "**organizational account**" (name@FloridaDEP.gov) as they would on their desktop/laptop. The final step is illustrated in **Figure 12** located above.
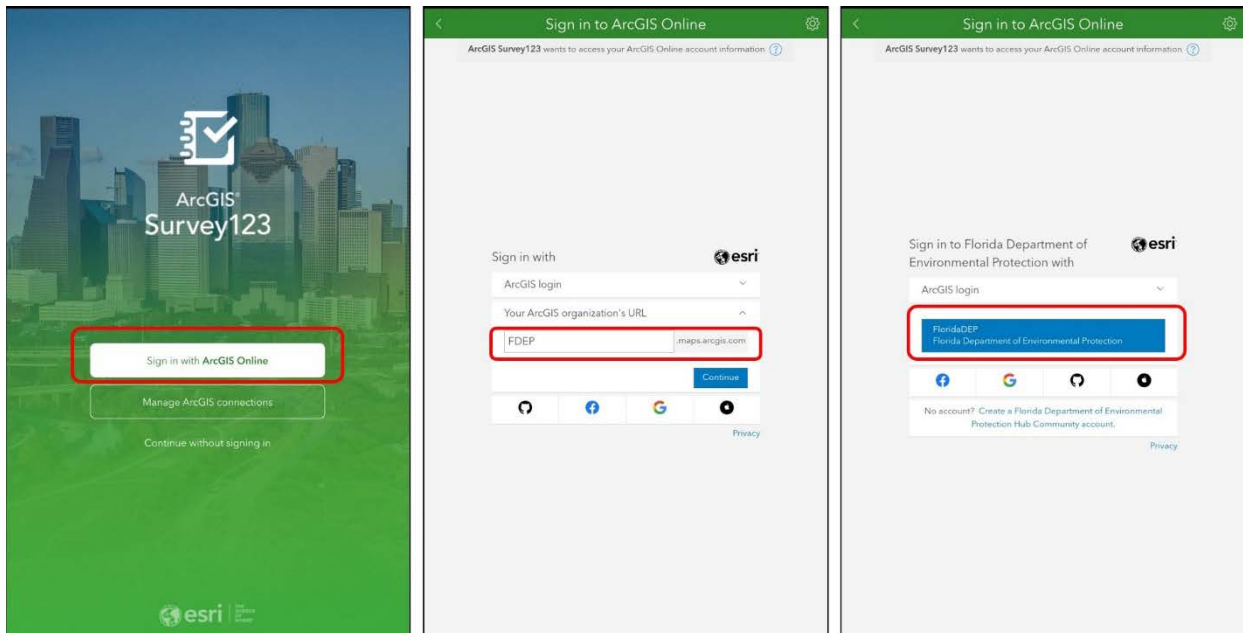

Figure 5: Survey123 for ArcGIS Sign in

Contact Aaron.Koelker@Floridadep.gov if you have any questions.

Strategic Monitoring Program and Other DEAR Surface Water Project Sampling

Ensure that the ArcGIS applications, Collector and Survey123, are both installed and logged into using the appropriate ArcGIS account credentials prior to sampling. Please refer to the **Priority Application Login** chapter for details.

Navigate to the Field Maps App widget and open it. Within the Field maps App, users will be able to see the "**Collector Map for SMP**" as one of the available maps. Open the map. To use the navigation feature within Field Maps, verify that the layer "WinStations" is selected. Open "Collector Map For SMP" then open "Layers" by tapping the layers icon, top right of screen, to inspect which layers are selected. Users will be able to zoom out until they see the region in which their sampling stations are located. Click on the desired sampling station. In the pop-up window for the selected station, click on the "**Open in Survey123**" link. You can also tap the direction symbol at bottom left of the screen or scroll to bottom and click on "Directions" to open your navigation app to help you navigate to the site. If navigating in a vessel, the "compass" symbol button, or scrolling to the bottom and clicking "Compass", is useful for straight line navigation (i.e on the water or where no roads exist). If the desired sampling station is not on the map, click on any sampling station and then click the "**Collect at new Station in Survey123**" link. Refer to **Figure 14.**
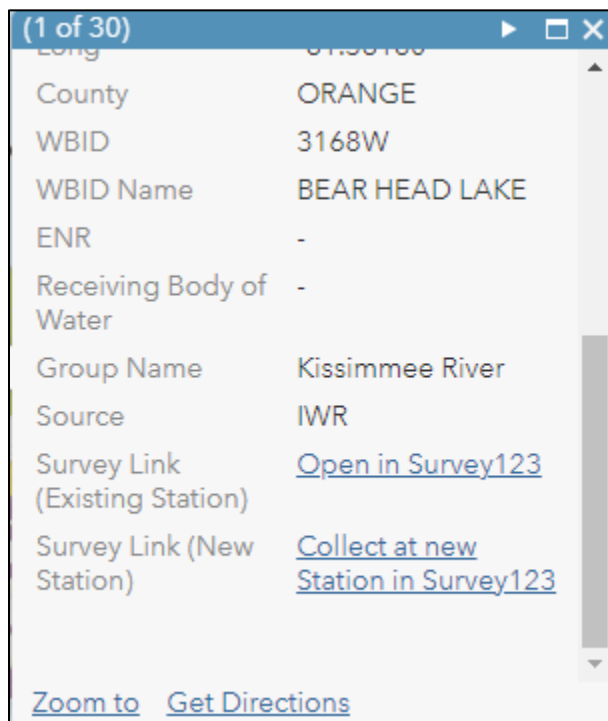

Figure 6: Open Survey123 Application from Field Maps

This will open the Survey123 application on the user's device, and automatically begin a download of the SMP sampling survey titled "*DEAR Surface Water Monitoring*". If the sampling station was in "*Collector Map for SMP*" this process will also prepopulate the survey with the station's information

within the survey. The user is asked to complete the survey. Anything noted with a red asterisk is a required field within the survey.

Once the survey is submitted, a field sheet and chain of custody will be generated and saved within OneDrive. The pathway is as follows: **OneDrive\DEAR\Field Sheets\Sheets to Be Processed**. The survey will automatically be converted to a different digital field sheet formatted as a PDF. The filename will use the following nomenclature: **RQ_WINID_MMDDYY**. In the same direction and methodology, a separate file will be made. This will be a chain of custody using the following nomenclature: **RQ_Coversheet_complete**.

When a user opens their OneDrive, they will be able to access the above folder and documents. If users cannot, please contact Curtis.Musson@FloridaDEP.gov

---

A chain of custody will be generated and named after each survey submission. If the user collects more samples under the same RQ and team, an updated chain of custody will be generated and saved over the previous version of the file.

Once all samples are collected, samplers will review their field sheets, add signatures if they are missing, and save the files on the FTP in the applicable project folder. The pathway is as follows: **DEAR\WQAPmonitoring\Project Name\Year\Organization Code\WBID\WIN Station ID**.

Status & Trend Networks Sampling

Ensure that the Survey123 for ArcGIS application is installed and logged in using the appropriate ArcGIS account credentials prior to sampling. Please refer to the **Priority Application Login** chapter for details.

Navigate to the Survey123 App widget and open it. Within the Survey123 App, select the download surveys option from the menu in the upper right corner. Users will be able to select the "*FL DEP Status and Trend Networks – Surface Water*" and "*FL DEP Status and Trend Networks – Groundwater*" surveys from the list of available surveys. Once the surveys are downloaded, they will appear in the "My Surveys" section on the main app screen. **If users are not able to download these surveys, please contact Stephanie.Sundermanbarnes@FloridaDEP.gov.**

Open the survey that corresponds to the type of sampling being performed (surface water or groundwater). Users are then presented with a series of questions to be completed at a single station. Anything noted with a red asterisk is a required field within the survey. Responses to these questions are often used to populate lists of choices for other questions that follow (e.g. responses to questions about collection agency are used to populate lists of choices for team member names and sampling equipment).

Once the survey is submitted, a field sheet and custody sheet will be populated and saved within OneDrive. The pathway is as follows: **OneDrive\Status Trend Field Sheets**. These documents will automatically be converted to PDF file. The field sheet filename will use the following nomenclature: **ProjectName_FieldID_MMDDYYYY**. The custody sheet will use the following nomenclature: **RQ_MMDDYYYY_FieldStaff1_CustodySheet**. A custody sheet will be generated and

named after each survey submission. If the user collects more samples under the same RQ /date/team, an updated custody sheet will be generated and saved over the previous version of the file.

When a DEP user opens their OneDrive, they will be able to access the above folder and documents. If DEP users cannot, please contact Stephanie.Sundermanbarnes@FloridaDEP.gov.

Non-DEP sampling teams will not have access to the DEP OneDrive. For these teams, a copy of the field sheets and custody sheets will be emailed to the field staff. **If non-DEP users are not receiving these emails, please contact Stephanie.Sundermanbarnes@FloridaDEP.gov.**

Each day, once all samples are collected, field staff will review their field sheets and custody sheets, add signatures if they are missing and transfer documentation to a more permanent storage location on the DEP file share server. If samples were collected from multiple RQs on the same day, a separate custody sheet PDF is required for each RQ.

Endnotes

[1] iPhone 13 Pro Max – Technical specifications (https://support.apple.com/kb/SP848; accessed 8/11/2023)

[2] iPad Pro – Technical Specifications (https://www.apple.com/ipad-pro/specs/; accessed 8/11/2023).

[3] iPhone User Guide (https://support.apple.com/guide/iphone/welcome/ios; accessed 8/11/2023).

[4] iPad User Guide (https://support.apple.com/guide/ipad/welcome/ipados; accessed 8/11/2023).