

iPad Requirements for Aquatic AIM Data Collection

The preferred electronic data capture setup for aquatic AIM is an iPad Air generation 1 16 GB Wi-Fi and cellular enabled device with a Verizon 3 GB/month data plan. Devices are protected by a waterproof case (LifeProof Fre iPad Air generation 1 case) and heavy duty carrying straps (Otterbox Utility Series Latch II Case for 10 inch tablets) modified with paracord. If electronic data capture setups differ from this, iPads must meet the following specifications:

- iPad Air generation 1 or 2 or iPad generation 5 (2017 version), 6 (2018 version), or later
- DO NOT get iPad minis. The screen size is too small.
- iPads MUST be both Wi-Fi AND cellular (4G) enabled (network provider doesn't matter). This is required for the iPad GPS to work.
- iPads must have a cellular data plan with a minimum of 3 GB of data per month and an associated simcard
 - For locations such as Alaska that will not have reliable access to internet even with a cellular data plan, an external backup device is recommended instead. [SanDisk Connect Wireless Stick Flash Drive](#) is the recommended device for this purpose. The Sandisk Connect App must be downloaded on the iPad to use the device and it works via a Bluetooth connection with the iPad.
- iPads can be 16 GB, 32 GB, or more
- iPads must run iOS version 12 or later
- iPads must have Filemaker Go version 17 installed; This application can be installed from the apple app store. The version will be updated at the start of each field season so check with NAMC for current requirements.
- Updates to the iOS version or Filemaker versions are not recommended during the field season to prevent any compatibility issues.
- iPads must have Filemaker application SARAHI installed; Beginning in April 2019, the most recent version of SARAHI will be available on the AIM website at <https://aim.landscapetoolbox.org/data-collection/field-season-preparation-2/>. See the Data Management and SARAHI Protocol for more information on how to download and set up SARAHI.

Additionally, a waterproof case and heavy duty straps are HIGHLY recommended for all iPads. The Otterbox Utility Series Latch II Case for 10 inch tablets should work as straps with all the iPad versions listed above. However, NAMC recommends modifying these straps by replacing the rubber straps with paracord to prevent straps from stretching and breaking. Waterproof cases are specific to the different versions of iPads. Below are NAMC's recommendations on cases for specific iPads:

- iPad Air generation 1- LifeProof Fre iPad Air generation 1 case; this has a built in screen protector and has helped prevent cracked screen issues we have had with the LifeProof NUUD cases.
- LifeProof Fre cases were discontinued after iPad Air generation 1 so we recommend getting the LifeProof NUUD case that fits your specified iPad model and considering adding a screen protector (Make sure it doesn't interfere with the LifeProof case waterproofness though!).

In addition to Filemaker Go and SARAHI, Gmail, Google Drive and Google Sheets applications

are also required for AIM data collection. These are free applications that can be downloaded from the apple store.

The National AIM Team provides georeferenced pdf maps to assist with office evaluation and site navigation. These maps can be used on an iPad using the free Paper Maps application (directions found [here](#)). However, this application and maps are simply recommended and many similar applications exist especially for a charge.

Other useful free applications include:

- A calculator of some sort
- A random number generator
- A voice recorder
- Google hangouts- allows video conferencing and computer screen sharing
- Adobe Acrobat – can store important pdf files including:
 - Data Management & SARA Protocol
 - Site Scouting & Design Management Protocol
 - Field Methods Protocol
 - YSI manuals
 - SPOT manual
- Riparian plant species field apps such as the Colorado Wetlands Mobile App
- Google Earth
- Google Maps
- RiverCast and RiverData Lite - view real time river gauges

If contractors are unable to obtain the required electronic capture setups, project leads can contact NAMC, and NAMC may have a limited supply of iPads to loan BLM field offices.