

Virginia State Parks and Avenza Maps

A Learn in 30 presentation

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For PATACS + OPCUG

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Agenda

- How I found the app
- Key features of the app, and why those are useful
- Use the app to obtain trail maps for Virginia State Parks
- Selecting a map for use
- Key features of map use
- Marking your parking place on the map, so you can find it
- NOTE: This app, and its maps, are available on Android and iOS

How I found the app

- I visited **Bear Creek Lake State Park** in Cumberland County VA during March 2020.
- By my parking space, a park kiosk included a flier advertising a “**Virginia State Parks trail maps app**” and provided a QR code. I used the QR code to download the app.
- The app is named **Avenza Maps**. It is free for both Android and iOS.
- The app is not published by VSP.
- VSP does publish free trail maps that can be downloaded within Avenza Maps.

Key features of Avenza Maps

- The app enables you to create ***Placemarks***, for instance so you can find your car after a hike.
- The app can ***record and measure your hiking track***.
- Offline maps ***scroll and magnify faster*** than online map such as Google or Waze.
- Offline maps ***use less battery power*** than online maps.
- Offline maps ***work where no cell tower service exists***.
- Offline maps are ideal for use on a ***retired smart phone***, to conserve battery charge on your current smart phone.

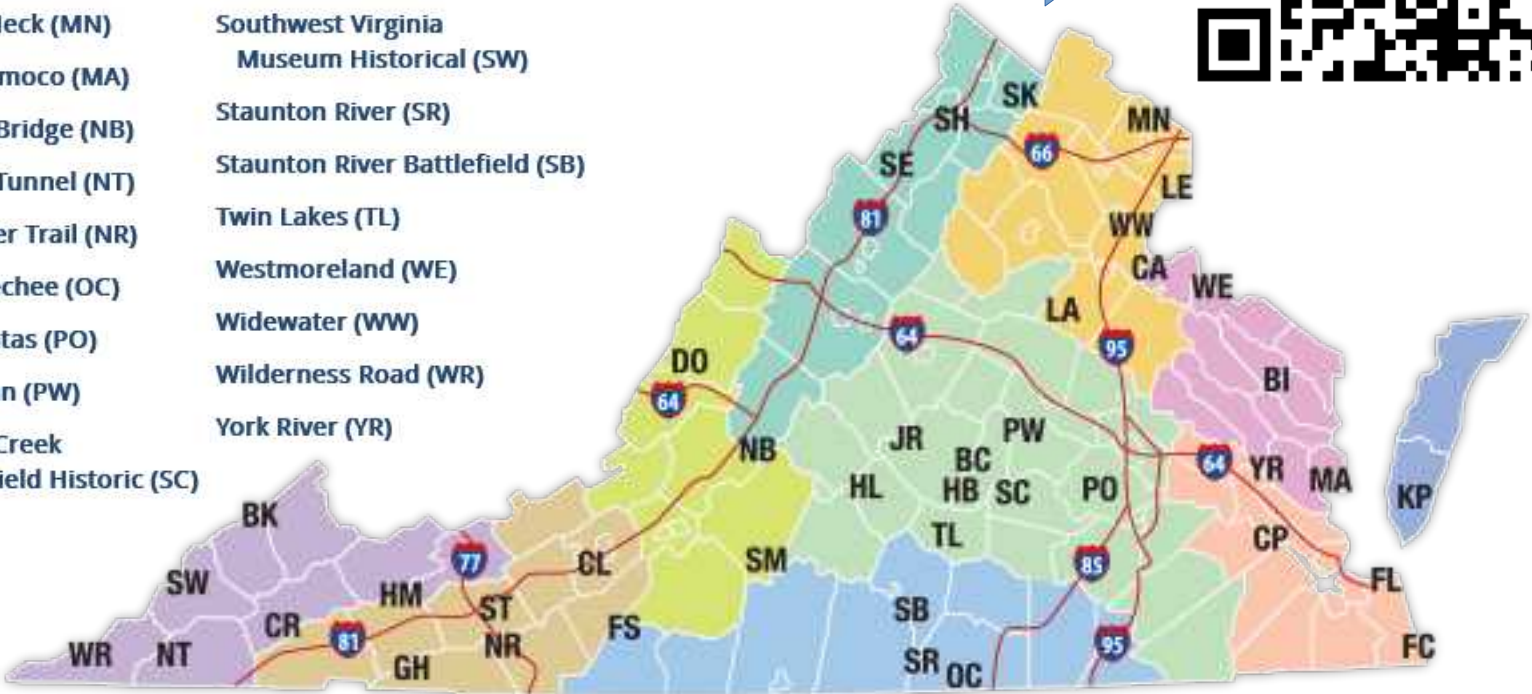
VSP includes 41 state parks

- The newest are **Machicomco State Park** in Gloucester County and **Seven Bends State Park** near Woodstock VA on I-81.
- Nearby state parks include **Mason Neck** (Fairfax), **Leesylvania** (Stafford), **Sky Meadow**, and **Shenandoah River**.
- In development: **Clinch River**, in southwest VA.
- Many state parks feature water recreation such as swimming pools, beaches, fishing, river access and/or lake access.
- Many have extensive networks of hiking trails. And geocaches.
- Many parks have a Visitors Center and Gift Shop or Camp Store.

<https://www.dcr.virginia.gov/state-parks/find-a-park>

- Bear Creek Lake (BC)
- Belle Isle (BI)
- Breaks Interstate (BK) *
- Caledon (CA)
- Chippokes Plantation (CP)
- Claytor Lake (CL)
- Clinch River (CR) **
- Douthat (DO)
- Fairy Stone (FS)
- False Cape (FC)
- First Landing (FL)
- Grayson Highlands (GH)
- High Bridge Trail (HB)
- Holliday Lake (HL)
- Hungry Mother (HM)
- James River (JR)
- Kiptopeke (KP)
- Lake Anna (LA)
- Leesylvania (LE)
- Mason Neck (MN)
- Machicomoco (MA)
- Natural Bridge (NB)
- Natural Tunnel (NT)
- New River Trail (NR)
- Occoneetchee (OC)
- Pocahontas (PO)
- Powhatan (PW)
- Sailor's Creek Battlefield Historic (SC)
- Seven Bends (SE)
- Shenandoah River (SH)
- Shot Tower (ST)
- Sky Meadows (SK)
- Smith Mountain Lake (SM)
- Southwest Virginia Museum Historical (SW)
- Staunton River (SR)
- Staunton River Battlefield (SB)
- Twin Lakes (TL)
- Westmoreland (WE)
- Widewater (WW)
- Wilderness Road (WR)
- York River (YR)

Use the QR code



VSP Admission Fees

- Most parks charge a parking fee per car
- Annual passes are available at a steep discount, sold at park stores and entrances
- Annual pass covers either a single park of your choice, or all parks
- Pay for parking at one park, use that for free admission to other parks on the same day

Other VSP maps

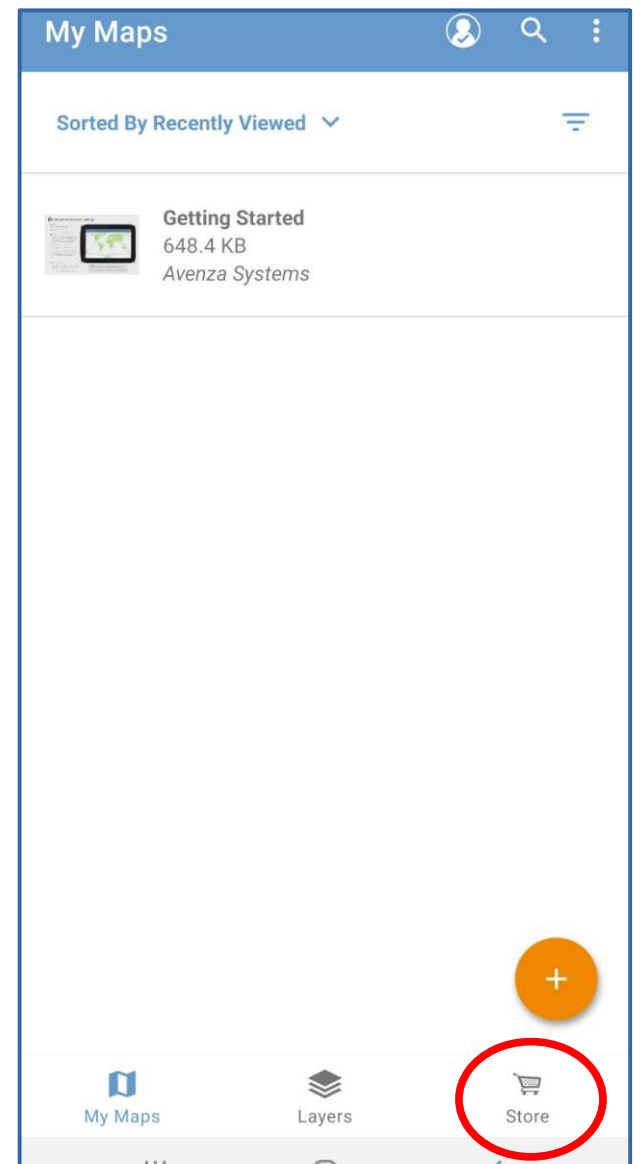
- You can obtain a free **printed map** of park roads, buildings, parking lots and trails, at the entrance to each park
- The same map can be downloaded as a **PDF file** from the park web site

Use the Avenza Maps app to download VSP trail maps


- This info was developed using Avenza Maps v3.1.4
- Install the **Avenza Maps** app, and start it.
- The app will prompt you to create a **free Avenza account**; you provide a valid email address and an account password.
- You must create the account in order to download maps.
- The app will send an email confirmation to the email address you specify. You must click the **Confirm button** in the email.
- After that confirmation, click the **X** in the upper right corner of the app's My Account screen.

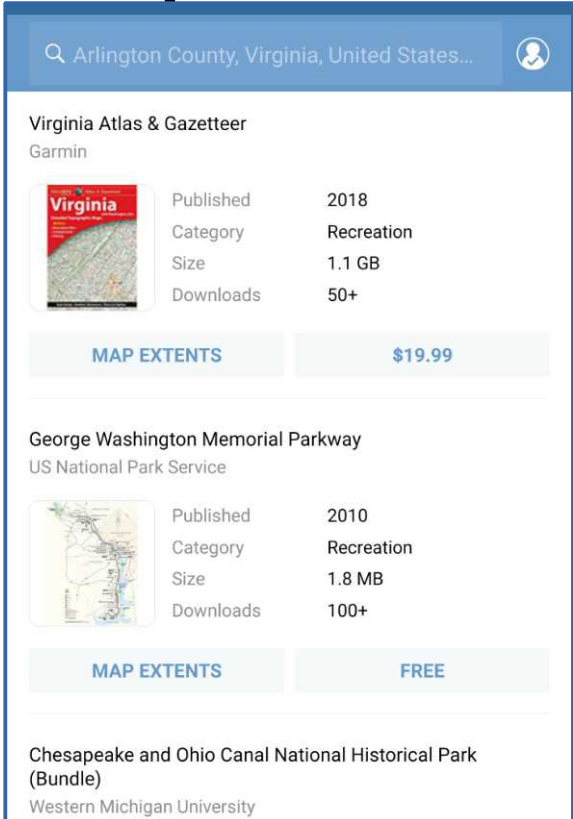
The My Maps Screen

- Initially, it contains only the **Getting Started** document.
- To find and download maps, tap the **Shopping Cart** icon at the bottom right corner



Using the Store Screen to download VSP maps

- The Store Screen appears. 
- Initially, the screen displays maps covering your location. This list is long; scroll down to see all of it.
- Where I live, in Arlington, none of the VSP maps cover my location. So no VSP maps were listed.
- Some of the listed maps cost money, such as the Virginia Atlas & Gazetteer.

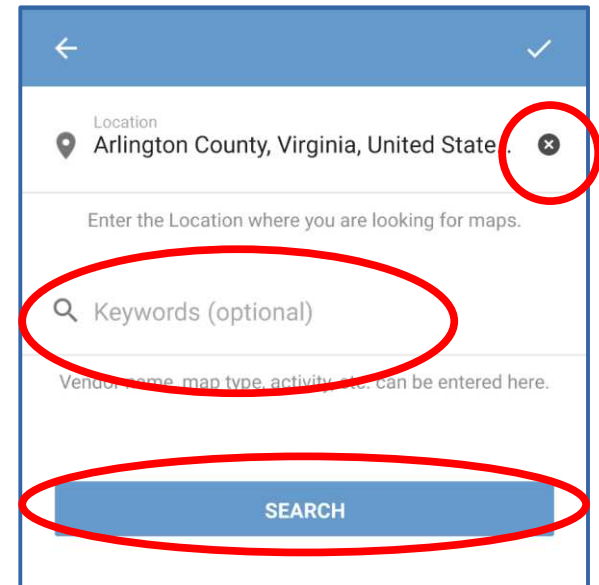
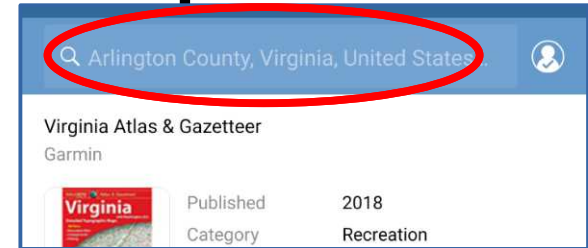


A screenshot of a mobile application store interface. At the top, there is a search bar with the text "Arlington County, Virginia, United States..." and a user profile icon. Below the search bar, the first listing is for "Virginia Atlas & Gazetteer" by Garmin. It includes a small map thumbnail, a table of metadata, and two buttons: "MAP EXTENTS" and "\$19.99". The second listing is for "George Washington Memorial Parkway" by US National Park Service, also with a map thumbnail, metadata table, and buttons for "MAP EXTENTS" and "FREE". The third listing is partially visible at the bottom: "Chesapeake and Ohio Canal National Historical Park (Bundle)" by Western Michigan University.

Map Title	Author	Published	Category	Size	Downloads	Price
Virginia Atlas & Gazetteer	Garmin	2018	Recreation	1.1 GB	50+	\$19.99
George Washington Memorial Parkway	US National Park Service	2010	Recreation	1.8 MB	100+	FREE
Chesapeake and Ohio Canal National Historical Park (Bundle)	Western Michigan University					

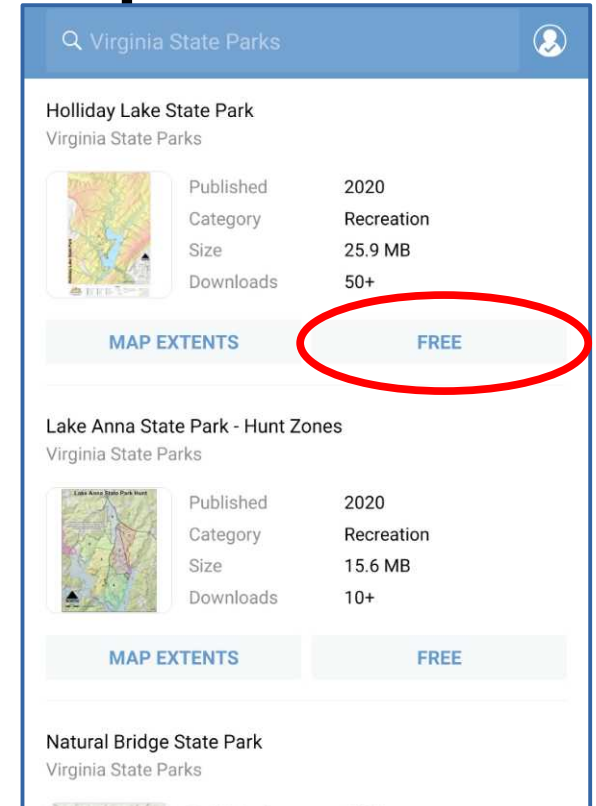
Using the Store Screen to download VSP maps

- Tap the **Search field** at the top of the Store screen.
- The current **Search Criteria** screen appears.
- Delete the Location criterion by tapping the circled X.
- In the **Keywords** field (also circled), type: **Virginia State Parks**
- Tap the blue **SEARCH** bar.



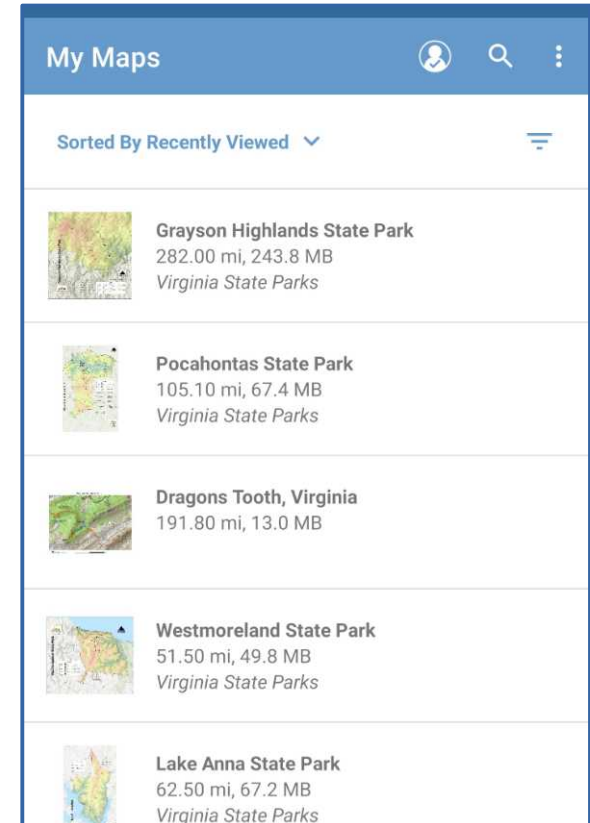
Using the Store Screen to download VSP maps

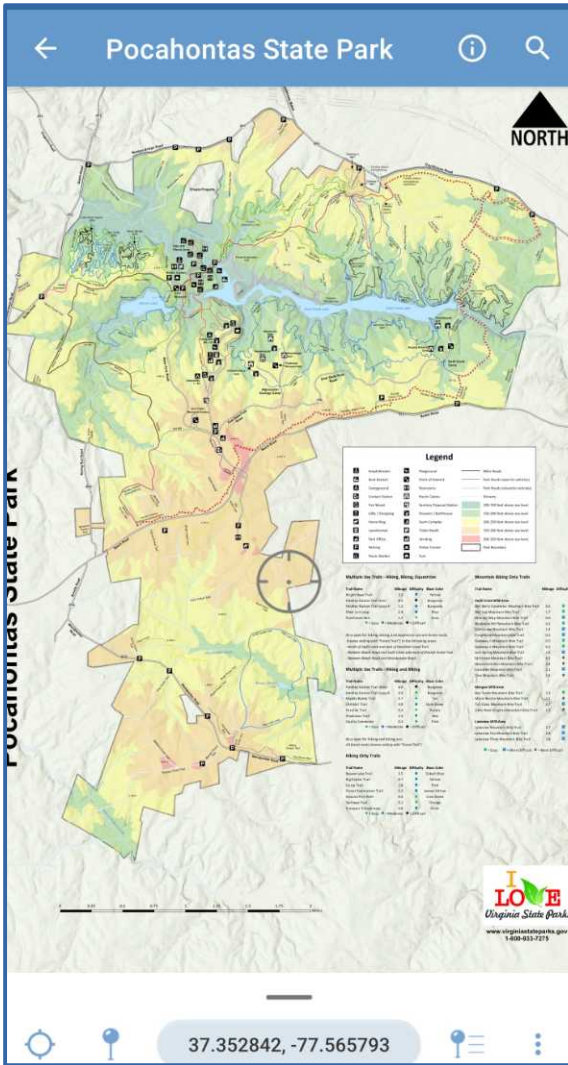
- The Store screen reappears, and now lists VSP maps. Again, it is a long list.
- Tap the **Free** button to download a map.
- The word Free changes to **Download?** Tap it again.
- The word Download changes to **Processing**. This is a temporary state.
- The word Processing changes to **Open**.



Using a downloaded VSP map

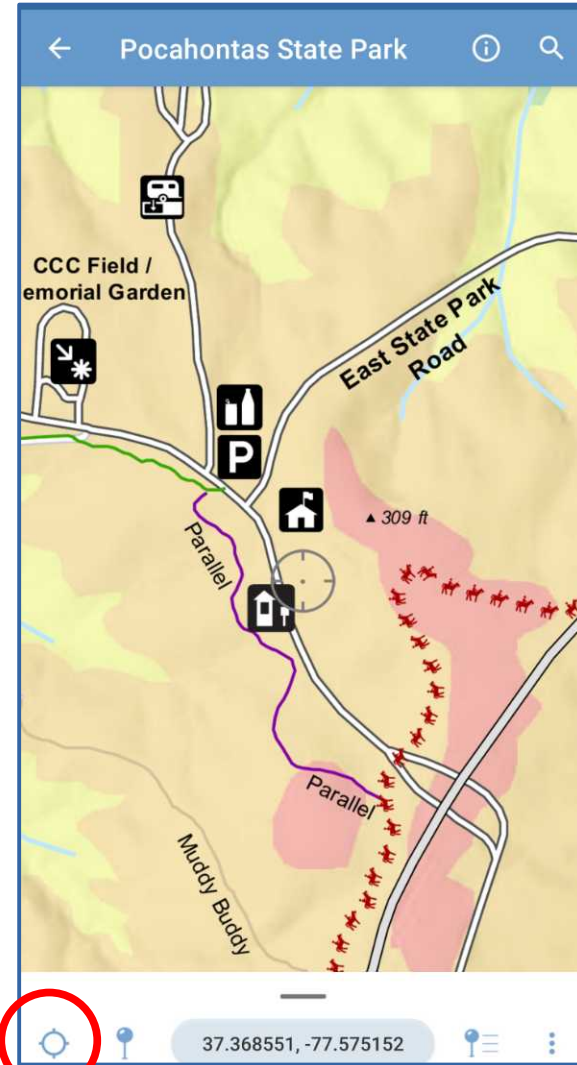
- In the Store screen, tap the **My Maps** icon in the lower left corner (not shown). The **My Maps screen** appears.
- All downloaded maps are listed in My Maps.
- To use a map, tap it.





VSP map use

- Default view when open is the entire map
- To zoom in, “Unpinch” with two fingers
- To zoom out, pinch with two fingers
- Scroll with one finger
- Tap this CENTER ON ME icon to cause the map to follow your movement



VSP map features

- VSP includes permanent placemarks for restrooms, WiFi, swimming, gift shops, camp stores, and other park features.
- VSP legend notes trail blaze colors, trail lengths and trail difficulty ratings.
- VSP legend also notes trails that are **multi use**, in case you want to ride bikes, or avoid bikes, or ride horses, or avoid horses

Legend

	Amphitheater		Playground		Main Roads
	Boat Rentals		Point of Interest		Park Roads (open to vehicles)
	Campground		Restrooms		Park Roads (closed to vehicles)
	Contact Station		Rustic Cabins		Streams
	Fire Wood		Sanitary Disposal Station		100-150 feet above sea level
	Gifts / Shopping		Showers / Bathhouse		150-200 feet above sea level
	Horse Ring		Swim Complex		200-250 feet above sea level
	Laundromat		Ticket Booth		250-300 feet above sea level
	Park Office		Vending		300-350 feet above sea level
	Parking		Visitor Center		Park Boundary
	Picnic Shelter		Yurt		

Multiple Use Trails - Hiking, Biking, Equestrian

Trail Name	Mileage	Difficulty	Blaze Color
Bright Hope Trail	5.3		Yellow
Fendley Station Trail East	6.5		Burgundy
Fendley Station Trail Loop A	1.2		Burgundy
Otter Lick Loop	2.4		Blue
Poorhouse Run	1.4		Gray

= Easy
 = Moderate
 = Difficult

Also open for hiking, biking, and equestrian use are forest roads (names ending with "Forest Trail") in the following areas:

- North of Swift Creek and east of Deerfield Forest Trail
- Between Beach Road and Swift Creek Lake east of Dvorak Forest Trail
- Between Beach Road and Woodpecker Road

Mountain Biking Only Trails

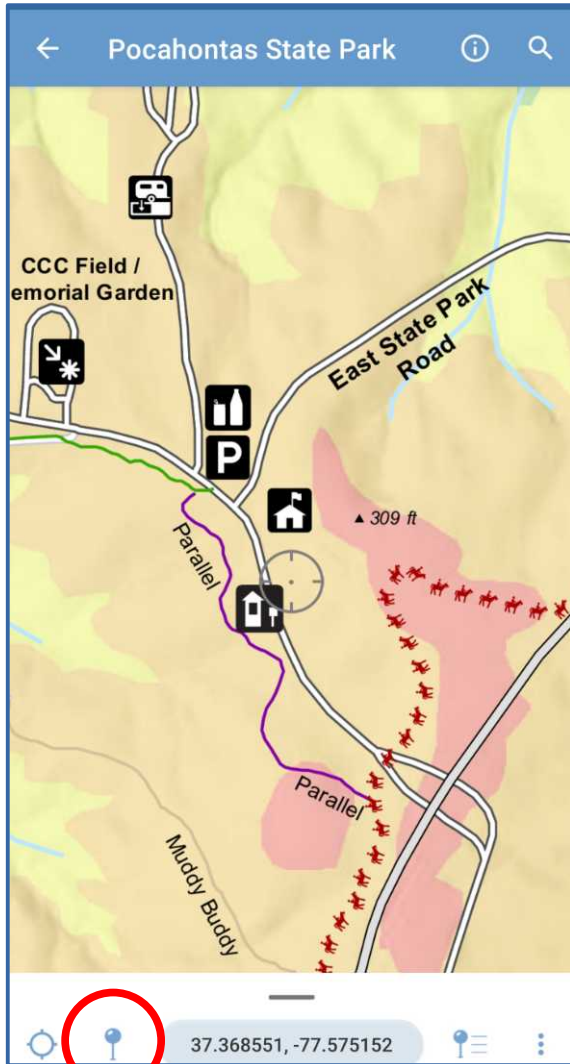
Trail Name	Mileage	Difficulty
Swift Creek MTB Area		
Bell Berry Connector Mountain Bike Trail	0.5	
Bell Lap Mountain Bike Trail	1.7	
Blue Jay Way Mountain Bike Trail	0.6	
Blueberry Hill Mountain Bike Trail	4.2	
Corkscrew Mountain Bike Trail	1.4	
Freightline Mountain Bike Trail	0.2	
Gateway 1 Mountain Bike Trail	0.5	
Gateway 2 Mountain Bike Trail	0.5	
Lost Spring Mountain Bike Trail	1.5	
Millstone Mountain Bike Trail	4.2	

Map Placemarks

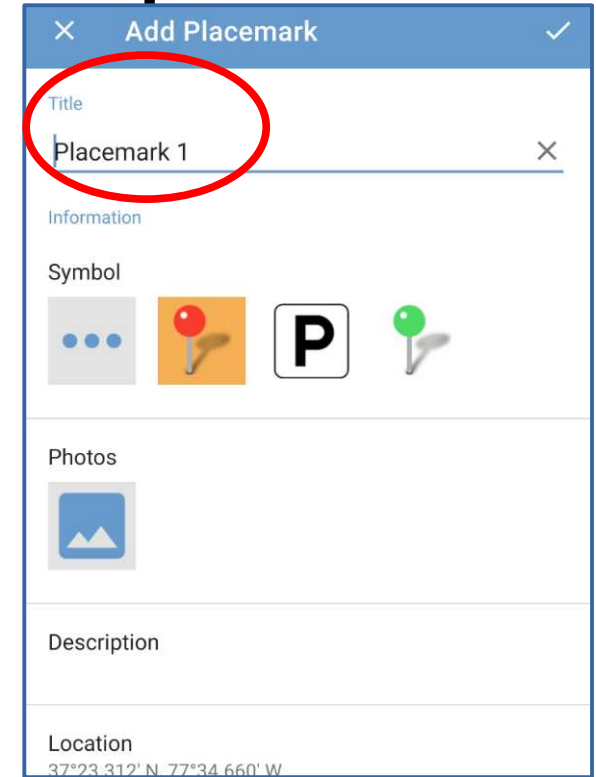
What is a Placemark?

- In map jargon, a Placemark is an identified **Waypoint** place on a map
- Also known as a **Point of Interest**
- App users can create *custom electronic* Points of Interest

Mark your parked car on the map

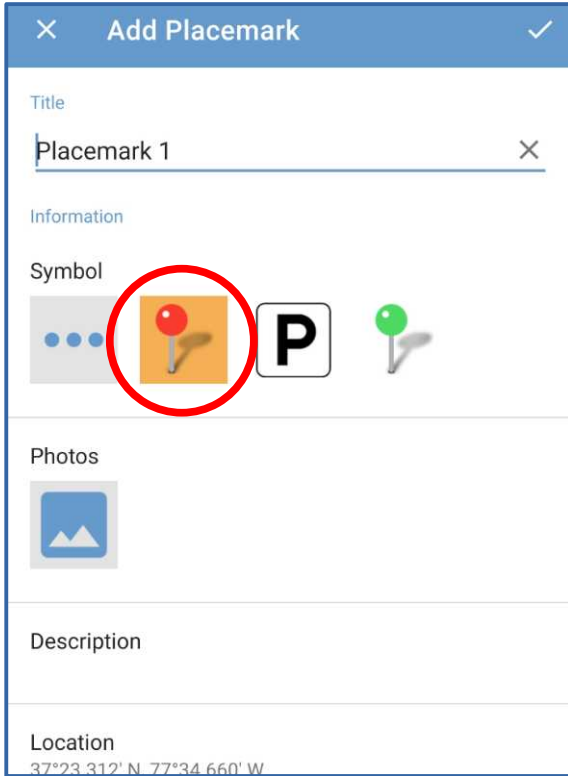


- Stand by your car. Tap the **CENTER ON ME** icon.
- Tap the Pushpin at the bottom left of the Map screen (circled at left).
- The **Add Placemark** screen appears.
- Type **My Car** in the Title field.

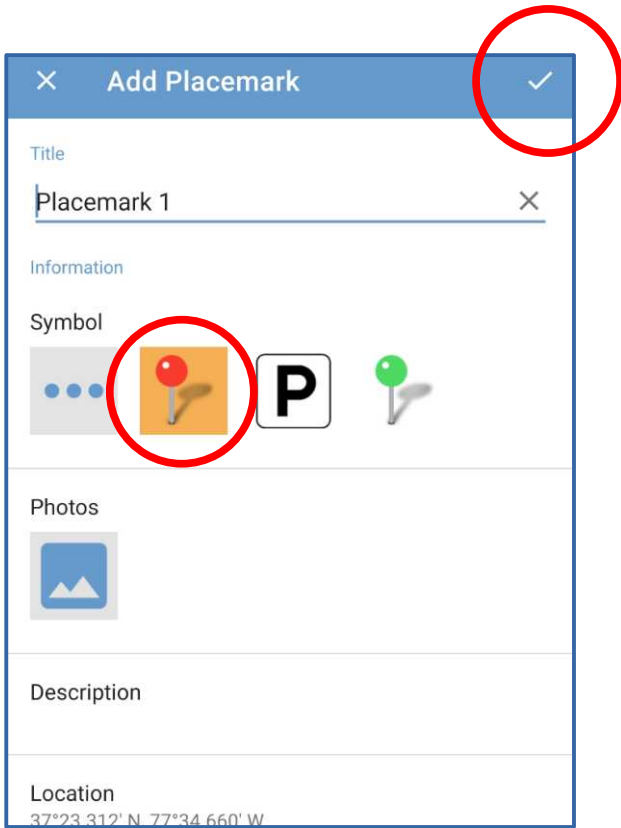


Mark your parked car on the map

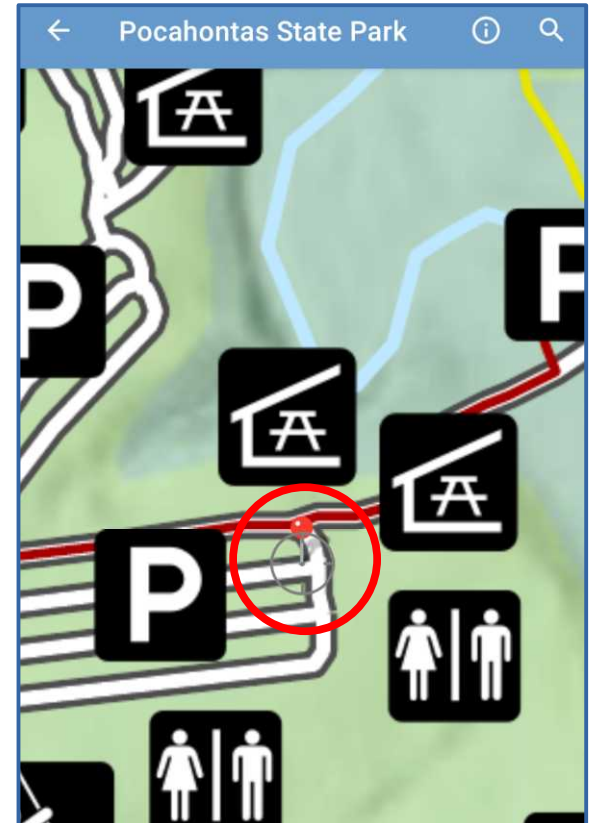
- Tap the red pushpin symbol



Mark your parked car on the map



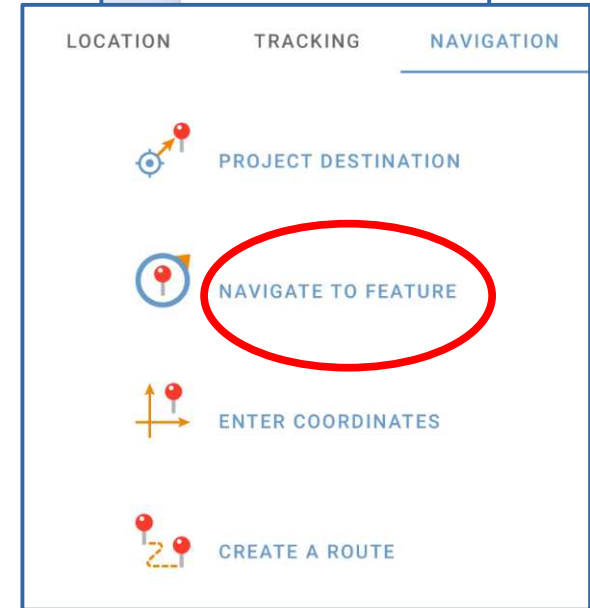
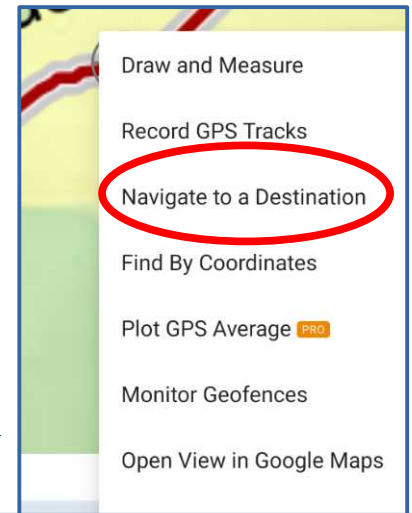
- Tap the red pushpin symbol
- Tap the check-mark in the upper right corner
- The pushpin appears on the map



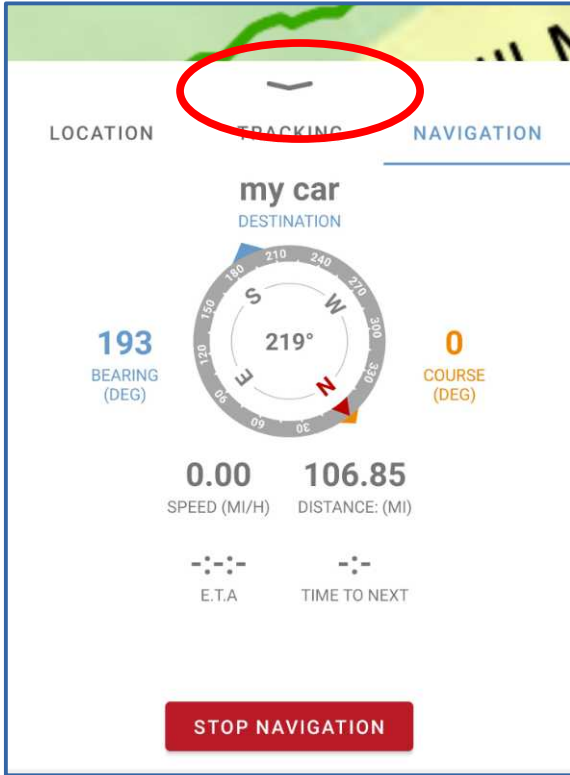
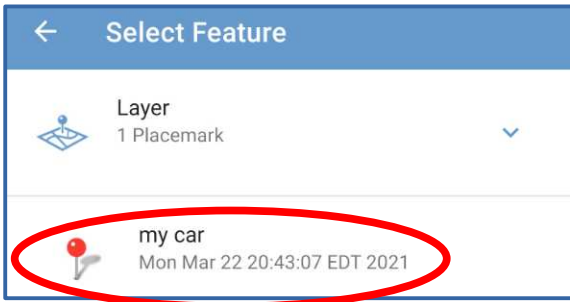


Finding your car

- While using the map, tap the **three-dot icon** in the lower right corner
- A menu appears. Select the **Navigate to a Destination** choice.
- The **Navigation** menu appears. Select the **Navigate to Feature** choice.



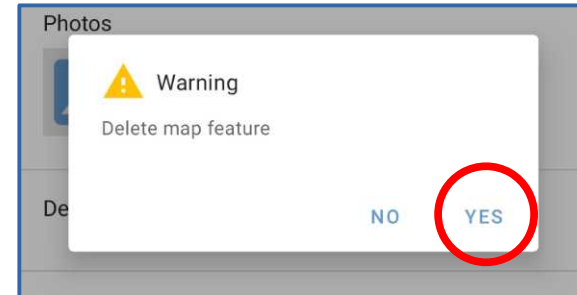
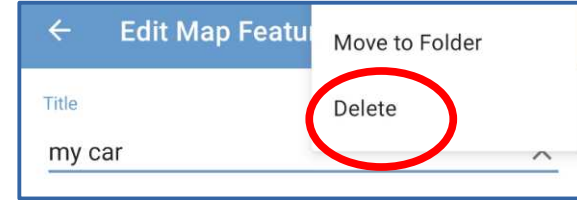
Finding your car



- The app displays the **Select Feature** screen. Tap the **My Car** feature.
- The app displays the **Navigation compass**, showing the direction (blue pointer) and air distance to My Car.
- Swipe down on the down-arrow to see the trail map again.

Removing My Car from the map

- Tap the red pushpin icon on the map. The **Placemark** name pops up. Tap the name.
- The **Edit Map Feature** screen appears. Tap the **three-dot icon** in the upper right corner.
- A menu appears. In that menu, tap the **Delete** choice.
- A **Warning** window appears. In that window, tap **Yes**.
- The map reappears.



Tracking your hike

What is a track?

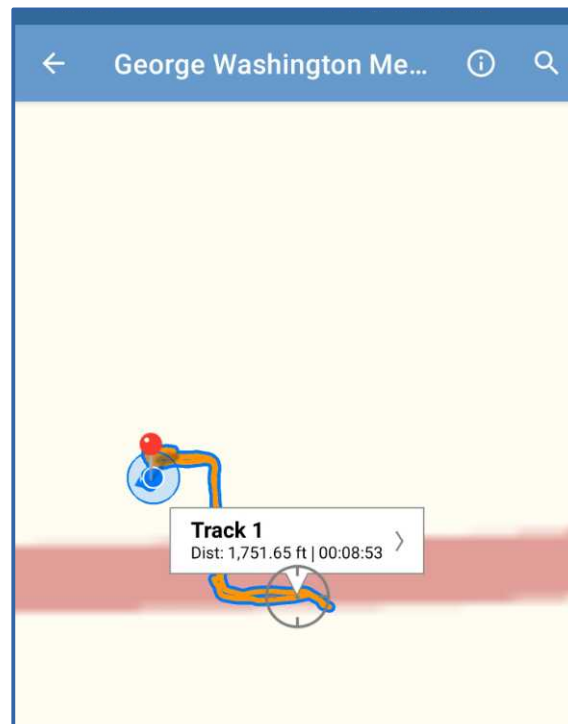
- An electronic record of the path you travel.
- The track includes duration and distance traveled.
- You can give the track a meaningful name.

Why are tracks useful?

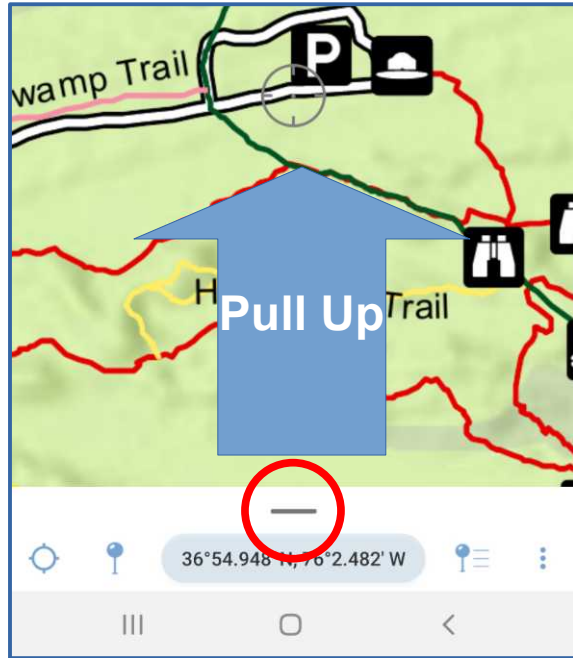
- While hiking, a track helps you to **backtrack**
- Later, helps to document the duration and distance traveled
- Useful if you want to plan to redo the same hike – provides a duration example
- Useful for exercise records
- Learn to recognize your limits

An example of a track

- Track appears as an orange line on the map
- The name, distance and duration of travel all appear in the track label box

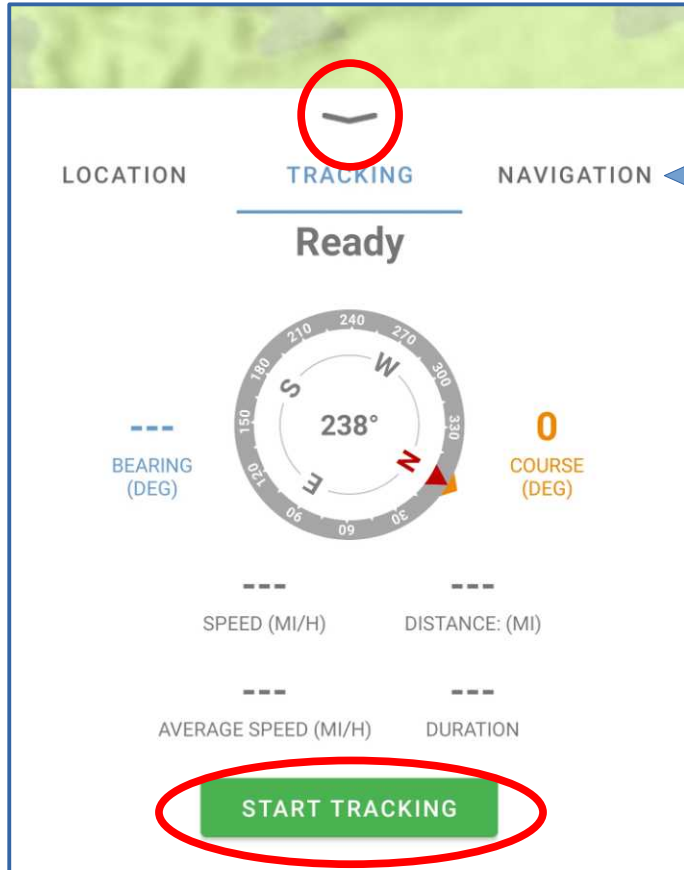


How to start a track



- Pull up the coordinates info at the bottom of the map screen

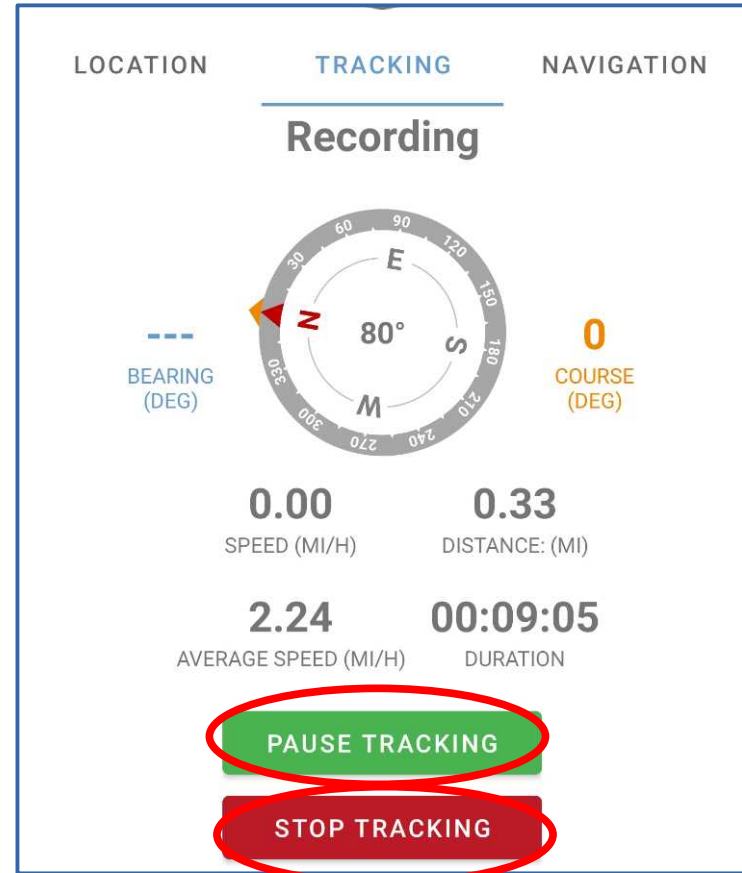
How to start a track



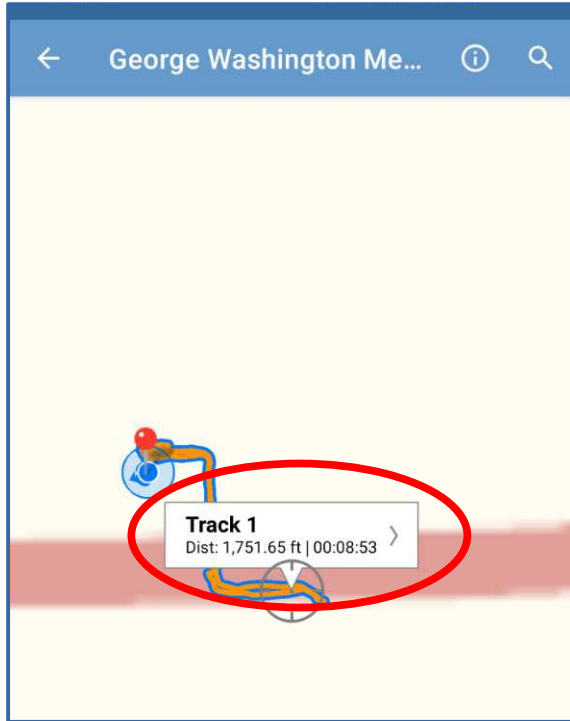
- Reveals three tabs: **Location**, **Tracking** and **Navigation**
- Tap the **Tracking** tab
- Tap the green **Start Tracking** bar
- Return to the map by sliding down the **down-arrow** (circled)

While you are hiking

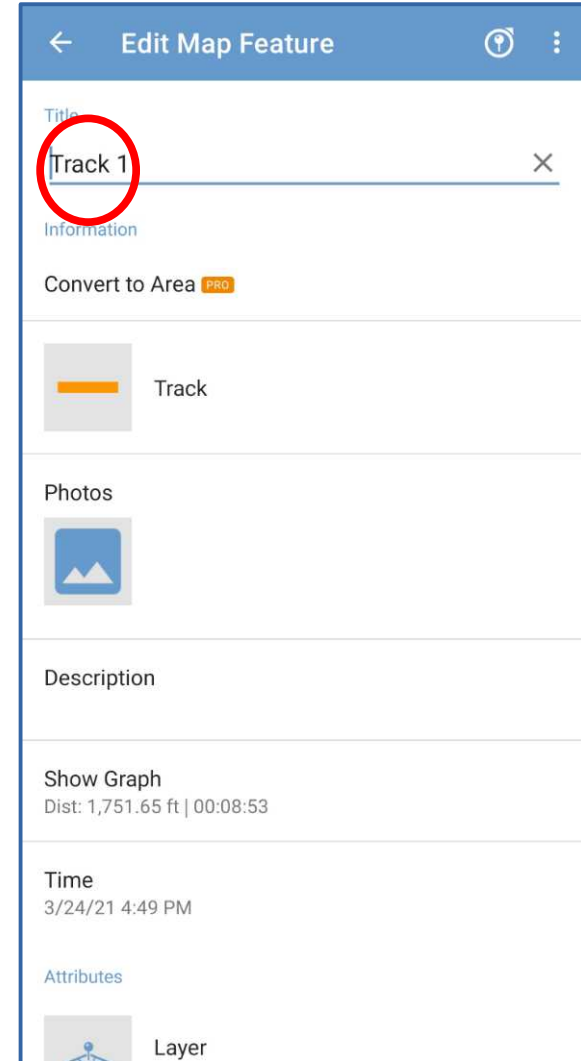
- You can see the current duration and distance traveled at any time by returning to the **Tracking tab**
- You can pause the track by tapping the green **Pause Tracking bar**
- You can end the track by tapping the red **Stop Tracking bar**



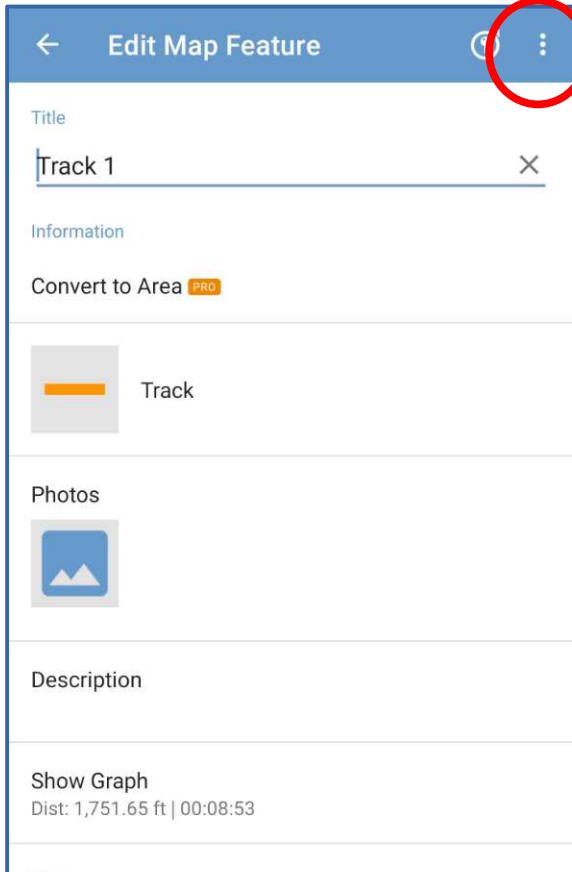
Naming Tracks



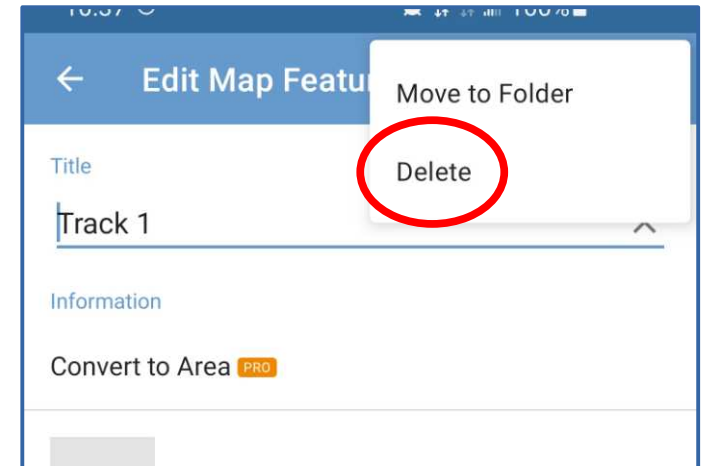
- Each track is saved with a generic name.
- You can rename a track by tapping its box on the screen (circled).
- The Edit Map Features screen appears.
- Use the **Title field** to rename the track; such as Locale and Date.



Deleting a saved track



- In the Edit Map Feature screen, tap the 3-dot icon at the top right (circled).
- A menu appears.
- In the menu, tap **Delete**



Map Updates

VSP sometimes updates its maps

- In the My Maps screen, tap the three-dot icon in the upper right corner.
- A menu appears. In that menu, select the **Check for Map updates** choice.
- If all maps are up to date, then the screen will display that status report briefly at the bottom.
- If an update is available for a map, then the words **UPDATE AVAILABLE** will appear to the right of the map.
- Tap **UPDATE AVAILABLE** to download the updated map.

Photos I have shot in VSP



Seven Bends
State Park



Hungry Mother
State Park

Grayson
Highlands
State Park



Photos I have shot in VSP



Grayson Highlands State Park view to northeast

Photos I have shot in VSP



Chippokes Plantation State Park, after a thunderstorm

THE END