Craters and Cinder Cones Loop

This 185-mile loop follows quiet dirt roads and two-tracks through woodlands and grasslands among 800+ extinct volcanoes of all sizes, from small cinder cones to the towering San Francisco Peaks in northern Arizona. Optional side trips include fire lookouts, cinder cone summits, and Lava River Cave. This loop also acts as a northern extension to the popular Coconino Loop.
Disclaimer
This route and associated information is just a starting point for your preparation, and your safety is your responsibility. Although this route, its GPS track, and route data were prepared after extensive research, their accuracy and reliability are not guaranteed. Check for current conditions, route updates, use your common sense, obey local laws and rules, and travel with alternative means of navigation. Bikepacking Roots, its directors, employees, and volunteers will in no way be responsible for personal injury or damage to personal property arising in conjunction with using this route. If you do encounter changed conditions or inaccuracies,

We want your feedback
If you have any feedback on this route or found areas where route updates are necessary, we’d love to hear from you. Please send any comments to routes@bikpackingroots.org.

And if you ride this route and enjoy it, please join Bikepacking Roots –membership is free – and consider sending us a donation to support future route development projects.

Our Founding Supporters
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General route description
Perfect for bikepackers looking to get off the beaten path while following dirt roads and two-tracks, the San Francisco Volcanic Field Loop meanders through northern Arizona’s San Francisco Volcanic Field. 800+ volcanoes that erupted over the past few million years dot the landscape - some are a few hundred feet tall, and some tower many thousands of feet above the surrounding countryside. From Flagstaff, the route heads west toward Bill Williams Mountain on dirt roads and jeep tracks, passing through sprawling parks and ponderosa pine forests.

Beyond Williams, the route enters deserted, dry pinon-juniper woodlands and then high grasslands of the Babbitt Ranches. You’ll pass eerily dark, yawning cinder cones before climbing into the young, cindery landscape of Sunset Crater National Monument. Sunset Crater is the youngest volcano in the area, having erupted just 1,000 years ago. The tallest peaks in Arizona, the San Francisco Peaks, are the final feature you’ll experience, climbing high into aspen forests at over 9,000 feet and then descending a hugely scenic water pipeline service road that’s closed to motorized use back toward Flagstaff.

This is a stellar ~3-day route with numerous options for side exploration and minimal technical riding in countryside rarely visited. But water is scarce, so plan accordingly.

Highlights
● Quiet, non-technical riding through pine forests and grasslands
● 1,000-year-old cinder landscapes and lava flows in Sunset Crater National Monument
● San Francisco Peaks’ Inner Basin and the Waterline Road traverse
● Fire lookout side trip options on Red Mountain and O’Leary Peak
● Hike into Lava River Cave, a 0.5-mile-long lava tube
● Climb SP Crater, one of the most striking cinder cones in the area

Route development
The Craters and Cinder Cones Loop was developed by Kurt Refsnider to create a northern extension to the popular 250-mile Coconino Loop (developed by Scott Morris and Chad Brown) and to share with bikepackers one of Kurt’s favorite Arizona landscapes.
Basic Route Information and Logistics

Route length: 185 miles  
Total climbing: 12,000 feet  
Recommended number of days: 3+  
Recommended starting location/direction: Flagstaff, clockwise

Approximate surface conditions  
% Paved: 10%  
% Dirt road: 50%  
% 4x4 road/2-track: 38%  
% Singletrack: 2%  
% Rideable: 98%

Average physical difficulty (1-10): 4-5  
Average technical difficulty (1-10): 3-4  
Bikepacking challenges: Limited water  
Longest stretch between resupply (miles/days): 120 miles, 2+ days  
Longest stretch between water sources (miles/days): 50 miles, 1+ days

Recommended bike type: Mountain bike

Recommended printed topographic maps  
• Trails Illustrated map 856 (Flagstaff/Sedona)  
• Trails Illustrated map 854 (Sycamore Canyon/Verde Valley)

General Advice  
• **Ideal time of year (and potentially weather conditions):** Late spring, early fall. The route is rideable May–October, but the summer months will be warm and monsoon storms in July and August should be avoided.  
• **DO NOT** attempt this route when wet or when rain is in the weather forecast. The soil in this region is full of clay that becomes impassable when wet in many areas  
• You **NEED** an Arizona State Land Department Recreation Permit.  
• The northern part of the route passes through land owned by **Babbitt Ranches**. Public access and camping is permitted - simply respect their land and stock.  
• Do not camp within ¼ mile of water sources  
• Water sources on this route are limited and include many stock tanks that are most reliable in late Spring and late Summer. Waypoints for these are provided with labels like “poor” (unreliable, likely silty) and “good” (more reliable, cleaner water). **DO NOT** plan that every stock tank will have water, and **carry more water than you expect to need**. Water from some stock tanks is often silty and will clog water filters and is not amenable to UV water treatments. Carry a means of chemical water treatment like Aqua Mira or iodine.

Other Resources  
• [Roadside Geology of Wupatki and Sunset Crater Volcano National Monuments](#)  
• [Coconino Loop information](#) on Bikepacking.com
Segment-by-Segment Details

Segment 1: Flagstaff to Williams (southern side of loop)
This 60-mile segment climbs west out of Flagstaff on old two-track across Observatory Mesa before meandering in and out of grassy parks and through ponderosa pine forests. Farther west, the route passes Lava River Cave, traverses Spring Valley, climbs over the east shoulder of Sitgreaves Mountain, and then crosses Interstate 40. The final miles pass Dog Lake Reservoir and Bill Williams Mountain before dropping quickly into the touristy Route 66 town of Williams. Riding is mostly on dirt forest roads with some short sections of rougher two-track.

Segment 1 Highlights

- Quiet dirt road (and a bit of rougher two-track) riding through ponderosa pines and meadows
- Stay at the U.S. Forest Service Spring Valley Cabin Bunkhouse below Sitgreaves Mountain (mile 31). Reservations required; call the Kaibab N.F. (928-635-8200) for information.
- Hike Lava River Cave (mile 21; 1 mile round trip; dress warmly and bring lights)
Segment 1 Information and Logistics

Segment length: 60 miles
Total climbing: 3,000 feet
Recommended number of days: 1-2

Approximate surface conditions
- % Paved: 10%
- % Dirt road: 70%
- % 4x4 road/2-track: 20%
- % Singletrack: 0%
- % Rideable: 98%

Average physical difficulty (1-10): 3-4
Average technical difficulty (1-10): 3-4
Bikepacking challenges: Limited water

Longest stretch between resupply (miles/days): 60 miles, 1-2 days
Longest stretch between water sources (miles/days): 35+ miles, 1 day

Recommended printed topographic maps
- Trails Illustrated maps 856 (Flagstaff/Sedona)
- 854 (Sycamore Canyon/Verde Valley)

Logistics
- The two most reliable water options are (1) around mile 31-35 (USFS cabin if vacant or stock tanks nearby and (2) Dogtown Lake Campground at mile 52
- There are no resupply options on this segment until Williams. Williams offers restaurants, a grocery store, and motels.
- Dispersed camping is permitted in most areas of this segment aside from the obvious areas of private land around miles 28-30 (Spring Valley) and miles 40-50 (south of Interstate 40)
- You NEED an Arizona State Land Department Recreation Permit for this section of the route
- The northern part of the route passes through land owned by Babbitt Ranches. Public access and camping is permitted - simply respect their land and stock and abide by Leave No Trace ethics.

Nearest medical facilities
- Flagstaff: Flagstaff Medical Center (928-779-3366) - 1200 N Beaver St, Flagstaff, AZ
- Williams: North Country HealthCare (928.635.4411) - 301 S 7th St, Williams, AZ
Segment 2: Williams to Flagstaff (northern side of loop)
The northern part of this route passes through the heart of the San Francisco Volcanic Field and its nearly countless cinder cones. Leaving Williams, you’ll pass through rural neighborhoods on mostly graded dirt roads before turning onto remote two-tracks and and entering some quiet countryside of pinon-juniper woodlands before descending north into lower grasslands. Red Mountain Lookout offers a short side trip option along the way.

At the farthest northeastern corner of the loop is SP Crater, a striking cinder cone that’s worth a hike to the top for a stellar view into the crater itself. Approach using the obvious steep trail on the southwest side of the cone and then scrambling to the top. Plan for ~90 minutes round trip at least for this side hike. After circling around SP Crater, you’ll begin climbing back toward the San Francisco Peaks, passing the yawning Colton Crater along the way. The route then turns east around O’Leary Peak and onto loose cinder tracks that link into the back entrance of Sunset Crater National Monument. These cinder trails are usually packed enough from ATV traffic, but they’re slow going for ~4.5 miles as you experience the otherworldly landscape and views of the 1,000-year-old Sunset Crater.

The route then follows pavement through the National Monument along recent lava flows before climbing dirt road steeply into the San Francisco Peaks’ inner basin. The last part of the climb to the highest part of the route can be done following an old two-track or a beautiful but technical singletrack. At the top, 2,500 feet above the Monument, you’ll turn onto Waterline Road, enjoy huge views along the west side of the Peaks, and then drop from Schultz Pass back to Flagstaff (with singletrack or dirt road options for the descent.)

Segment 2 Highlights

- Remote countryside and countless volcanic features
- The impressive SP Crater, the San Francisco Peaks’ Inner Basin, and Waterline Road.
- Exploring Sunset Crater National Monuments’ lava flows and the option big climb up to the O’Leary Peak Lookout
**Segment 2 Information and Logistics**

**Segment length:** 125 miles  
**Total climbing:** 9,000 feet  
**Recommended number of days:** 2-3+

**Approximate surface conditions**  
% **Paved:** 10%  
% **Dirt road:** 40%  
% **4x4 road/2-track:** 48%  
% **Singletrack:** 2%  
% **Rideable:** 98%

**Average physical difficulty (1-10):** 3-4  
**Average technical difficulty (1-10):** 3-4  
**Bikepacking challenges:** Limited water  
**Longest stretch between resupply (miles/days):** 120 miles, 2-3 days  
**Longest stretch between water sources (miles/days):** 50 miles, 1+ days

**Recommended printed topographic maps**  
- Trails Illustrated maps 856 (Flagstaff/Sedona)  
- 854 (Sycamore Canyon/Verde Valley)  
- See Arizona Gazetteer for northwest quarter of loop

**Logistics**  
- Like on the first segment of the route, water sources are limited in this dry landscape. The most reliable water sources are (1) a pipe-fed stock tank at mile 44, (2) several pipe-fed stock tanks between miles 51 and 53 (FILL UP HERE!), (3) Sunset Crater N.M. Visitor’s Center at mile 98, (4) a pond in Lockett Meadow at mile 105, and (5) a piped spring at the high point on the route at mile 98.  
- There are no resupply options on this segment until returning to Flagstaff aside from a gas station 7 miles northeast of Williams.  
- Dispersed camping is permitted in most areas of this segment except for the first ~12 miles northeast of Williams. Sunset Crater N.M. has a small campground near the Visitor’s Center, and there’s another campground in Lockett Meadow just before the high point on the route.  
- You **NEED** an [Arizona State Land Department Recreation Permit](http://www.azstate.gov/dof/recreation) for this section of the route.  
- The northern part of the route passes through land owned by Babbitt Ranches. Public access and camping is permitted - simply respect their land and stock and abide by Leave No Trace ethics.

**Nearest medical facilities**  
- Flagstaff: Flagstaff Medical Center (928-779-3366) - 1200 N Beaver St, Flagstaff, AZ  
- Williams: North Country HealthCare (928.635.4411) - 301 S 7th St, Williams, AZ
Craters and Cinder Cones Loop - Detailed Navigation Information

A few words of caution: The following cues are meant to supplement navigation using the provided GPS track and waypoints. These cues are based on GPS data, so distances are not exact, and these are not designed to be a primary means for navigating on route. However, the combination of these cues and the recommended paper maps should provide a reliable back-up means of navigation for most riders in most situations. And note that route numbers and names do change with time, signs go missing, and routes can become impassable for any number of reasons. You are always responsible for your own safety.

Segment 1: Flagstaff to Williams - the south side of the loop

0.0 mi This route begins just northwest of downtown Flagstaff near the edge of town. The following mileages begin just west of Fort Valley Road at the intersection of Bonito St. and Thorpe Road. Head west on Thorpe Road, past the dog park, and continue straight onto the wide trail that climbs west toward Observatory Mesa.
1.8 Continue west on FR 515 (Observatory Mesa Road)
4.6 Turn right on FR 506
5.2 Turn left on FR 518B
5.9 Turn left on FR 9011K and descend
7.0 Turn right on wider FR 518
8.1 Veer left to remain on FR 518
10.5 Veer right to remain on FR 518
11.7 Turn left on FR 519A (possibly also signed FR 518)
12.5 South Wing Stock Tank on left. Poor quality if water is present
13.2 Turn right onto FR 222A
15.1 Turn hard left on FR 222
17.9 Turn right onto FR 171
20.1 Lava River Cave parking and trailhead on right (FR 171B); Continue north on FR171. The cave entrance is only a few hundred feet from the trailhead. The cave itself is ½ mile long and non-technical. Bring a light and warm clothes!
21.5 Stay left to remain on FR171; Antelope Hill to west, Kendrick Peak to north
24.8 Veer left to join FR 730
25.6 Turn right to remain on FR 730
28.5 Turn left onto FR 725
30.1 Turn left onto County Road 141 (Beale Wagon Historic Trail); entering private property for next 2 miles
30.7 Turn left onto FR 850
31.3 Spring Valley Cabin (Kaibab N.F.) on left; piped water in main cabin building Reservations required for overnight stays. Sitgreaves Mountain to west.
32.4 Likely muddy stock tank to east; poor quality
33.7 Schultz Pass summit. Continue down, staying on FR 850.
36.0 Small stock tank on right. Possible water. Remain on FR 850; becomes county road 76
39.6 Turn right onto historic U.S. Route 66
40.0 Oak Hill picnic area on left; entering private land
41.4 Turn left onto Sherwood Forest Road (FR 102), crossing over Interstate 40
43.2 Good stock tank on left; then cross railroad tracks
43.9 Turn left onto to continue on FR 102/520 (straight becomes private)
46.7 Turn right onto FR 141; Davenport Hill on left
48.9 Turn left onto rough 2-track FR 717; stay left at next 3 main intersections to remain on main track
50.0 Stay on FR 717, veering to the right
50.4 Cross Davenport Hill Trail (closed to bikes)
50.6 After short, steep descent, stay right on FR 717
52.1 **Turn right to go to Dogtown Lake Reservoir, campground, and water spigots; route continues straight on FR 717 and begin climbing**
52.7 Turn right on FR 140; continue climbing
53.6 Top of climb
55.4 Turn right onto paved County Road 44. Begin descent to Williams. Bill Williams Mountain to west
59.0 **Williams**: restaurants, motels, and a grocery store (at west end of town). Turn right on main street, W. Grant Ave. End of Segment 1

**Segment 2: Williams to Flagstaff, the north side of the loop**
0.0 Begin Segment 2. Turn left on 2nd Street
0.4 Turn right on W Edison Ave
0.6 Turn left on Airport Road
3.7 Turn right at airport entrance onto graded Pronghorn Ranch Road. Remain on main road for 3 miles. This is mostly private land, although there is public land on the north side of the road ~1.5 miles past the airport for dispersed camping.
6.8 Turn left on paved Highway 64. Ride with caution due to a high volume of tourist traffic heading north to the Grand Canyon
7.4 Gas station and mini-mart on left
8.2 Turn right onto E Spring Valley Road / FR 141 for 4 miles across private land
12.3 Turn left onto FR 220, entering public land. Route becomes a bit rougher
13.2 Turn right onto FR 221
14.9 Turn left onto FR 240
14.4 Turn right onto FR 210 / FR 84; Cedar Mountain to west
16.6 Remain on FR 210 / FR 84 as it veers left and down Trap Canyon
18.3 Cowboy Tank on right; possible silty water, continue north, remaining on FR 210 / FR 84
21.6 Turn right onto FR 160 / FR 736. Howard Mesa to northwest
25.1 Continue straight on main road (FR 325 / FR 87) as FR 160 / FR 736 veers right
27.1 Veer right onto FR 334; Buck Mountain to south
29.5 Stock Tank on left; possible silty water. Continue south up rougher climb.
33.0 To climb up to Red Hill Lookout, turn left. The dirt road climb is 1.7 miles in length
and gains 800 feet. Continuing south, FR 334 becomes FR 430 / FR 88 as it crosses a broad park.

36.1 Turn left onto FR 144
37.6 Turn right onto FR 910 / FR 90A and begin climb up Juniper Ridge
40.8 Tiptop Tank may contain some decent water; Kendrick Mountain to south
41.9 Top of climb. Continue on FR 910 / FR 90A, the main road through the area
45.2 **Spring fed stock tank. There should be clear water here, but nothing is 100% reliable. If there is water here, stock up, because the next reliable water is in Sunset Crater N.M. at mile 98.**

45.4 Turn left onto FR 750 / FR 90. Continue descending on this road, ignoring any side roads. This road, however, is not shown on the Trails Illustrated map.

48.5 Turn right onto FR 164H to loop around the west and north sides of Slate Mountain.

51.6 **Piped stock tank. There should be clear water here, but nothing is 100% reliable.** Continue on 164H.

52.4 Cross US Highway 180
52.7 Turn left onto FR 517B
53.1 Turn right onto 9222A. **Stock tank near intersection should contain clear water, but nothing is 100% reliable.** Continue on FR 9222A down a rough descent.

56.4 Turn right onto graded FR 417
51.1 Cedar Ranch on right

58.6 Turn left onto FR 9008A, descending into high grasslands and entering lands that are a checkerboard of Babbitt Ranches and Arizona State Land Trust.

62.3 Tub Ranch on left; stay right on main graded road. Do not camp for next few miles.

70.3 SP Crater on right. Road crosses through lava flow that breached the bottom of the cinder cone.

72.0 Turn right and begin climbing south past SP Crater. This is the lowest point on the loop.

73.3 Stay right
73.7 Stay right

74.1 Turn right to reach **SP Crater “trailhead.”** Stay right and aim for the steep 2-track that climbs up steeply to the left of the cinder cone. Leaving your bikes at the bottom, it’s a challenging 1-mile round-trip hike/scramble to the rim of the crater, but it’s very worth the effort.

74.1 Turn left to head due south toward the yawning Colton Crater on FR 9005C

75.9 Continue straight on main road (FR 9005C) here and at next intersection
76.7 Entering Coconino National Forest; still on 9005C

78.2 Turn left onto FR 417. Remain on FR 417 for 8 miles until it hits US Highway 89.

86.2 Cross US Highway 89 onto FR 546. Continue on FR 546 for 3.5 miles as you ride below the north side of O’Leary Peak.

89.7 Continue straight/south on FR 546 at intersection with FR 779; road becomes FR 6005 as it turns south

90.8 FR 6005 becomes loose as you enter a landscape of cinders and ponderosa pines. Begin climbing. Some bike pushing may be required.
95.0 Nice views of Sunset Crater to southwest
95.7 Turn right onto paved county road 395 and enter Sunset Crater National Monument. You may be asked to pay a fee at the entrance booth where you will exit the park to the west. Camping is only permitted in the official campground.
97.9 Bonito Lava Flow to north
99.2 Visitors Center (water spigot) and campground
99.4 Turn right to begin side-trip to O’Leary Peak Lookout. This service road climbs nearly 2,000 feet over 5 miles to reach the summit. Otherwise continue straight toward the park exit.
101.2 Cross US Highway 89 and continue straight west on graded dirt road toward the San Francisco Peaks.
101.8 Turn right, following signs for Lockett Meadow on FR 552. The upcoming climb is 1,200 feet to Lockett Meadow and another 900 feet to the high point on the route.
105.8 Entering Lockett Meadow at the lower end of the Inner Basin of the San Francisco Peaks. Water in pond. Camping permitted only in designated camp sites.
106.1 Road ends. At trailhead, continue up relatively technical singletrack climb (Trail 29) or look for old road grade just to the north.
107.7 Top of climb; intersect Waterline Road Trail 146. If you climbed the trail, turn right to find water spigot at pumphouse. This spigot may not be turned on in the earliest part of the riding season. If you climbed the old road grade, look for the spigot on your right.
107.7 Turn left (south) onto Waterline Road Trail 146 and begin long, gradual traverse that generally trends downward toward the south. The City of Flagstaff gets much of its water from wells in the Inner Basin, and pipes beneath this service road deliver the water to town.
116.6 End of Waterline Road. Turn right onto Schultz Pass Road (FR 420).
116.7 Schultz Tank to south may have water
117.0 Follow GPS track to take Schultz Creek Trail 152 singletrack down or stay on FR 420 / Schultz Pass Road for a graded dirt road descent.
121.6 Turn right to stay on N. Schultz Pass Road
122.1 Outskirts of Flagstaff and US Highway 180. Gas station to right. Cross highway at traffic light and immediately turn right onto the Flagstaff Urban Trail. Continue on urban trail to close the loop.
124.8 End of Segment 2 and the Craters and Cinder Cones Loop