



# Essentials of Trip Planning for Backpackers April 27, 2023–6:30pm

CHERYL TALBERT, MOUNTAINEERS BACKPACKING & GLOBAL ADVENTURES LEADER PLEASE MUTE AND TURN OFF YOUR VIDEO WHEN YOU JOIN

## Essentials of Trip Planning for Backpackers Outline



- ▶ I have an available time slot Where should I go?
- What permits will be required?
- Will the conditions be suitable and safe for my skill level?
- ▶ What route should I take? How long will it take me?
- ▶ How do I get there? How do I get out in an emergency?
- What gear and food do I need?

NOTE: A PDF and recording of this presentation and key reference worksheets will be emailed tomorrow to everyone registered for the session





- ▶ This is a basic overview of a structure and tools for planning an on-trail backpacking trip based on my experience planning dozens of US and international backpacking and trekking trips.
- ► There is MUCH more detail available on all these commercial online tools than I'll have the chance to show here.
- The best learning approach is to jump in and start planning an actual trip – then pursue more learning about the parts that you want to understand more



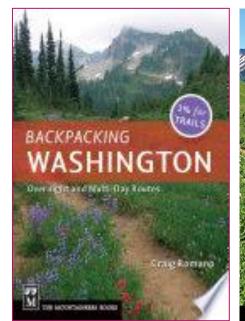
#### First you need to nail down:

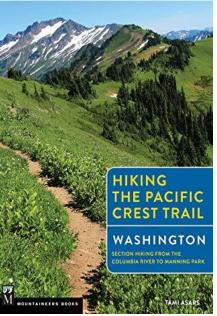
- \* The dates when you want to take your trip
  - > Will drive what places are accessible when you want to go
- \* How much time you have?
  - > To get there and back, and to walk
- \* Do you need a backcountry camping permit to do the route you want to do, and are permits available for your dates?
- \* What daily distance and elevation gain is reasonable for you?

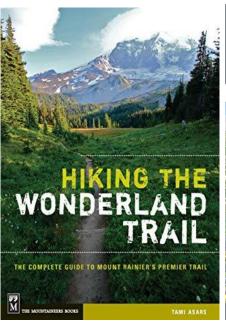


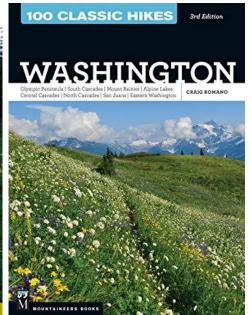
Start by investigating your options in the geography and season/month you want to visit

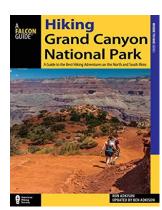
► Guidebooks!

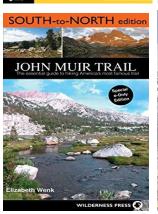


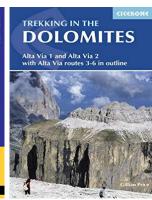


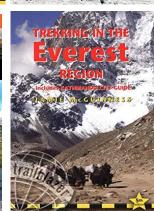






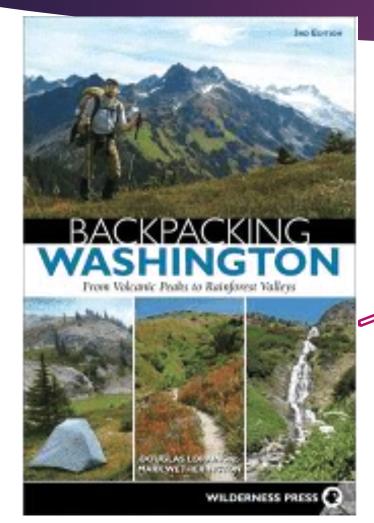








### THE MOUNTAINEERS



LITTLE WENATCHEE RIVER Henry M. Jackson Wilderness

#### MEANDER MEADOW-KODAK PEAK

12 miles High point 5400 feet Elevation gain 2400 feet Round trip to Kodak Peak 16 miles High point 6121 feet evation gain 3100 feet

Hikable July to October day or backpack Map: Green Trans No. 144 Benchmark Current Information: Ask at Lake

Wenatchee Ranger Station about trail No. 1525

Perhaps and carriest way in the Wenatchee area to sample the glories of the high country. A forest-and-meadow valley floor, a steep-and-hot struggle, and finally a superb little basin of grass and flowers and slow deep meanders of the headwaters stream. Above lie parklands of the Cascade Crest and endless easy wandering with views to everywhere

From the Lake Wenatchee Ranger Station drive 1.8 miles, then go left 14.8 miles on Little Wenatchee River road No. 65 (Hike 58) to its end at the Little Wenatchee Ford Campground and trailhead, elevation 3000 feet, and find Little Wenatchee River trail No. 1525.

In 1/4 mile pass the Poe Mountain trail junction. The first 4 miles are gently up and down, a net gain of only 700 feet, alternating between forest and glade and frequent stream crossings. The easy part ends at the edge of a vast meadow; here are a small creek and a campsite. The next 2 miles, gaining 1300 feet, may require courage and fortitude in the heat of the afternoon sun in fly season. The way climbs grass and brush, through sometimes-soggy greenery where at times the tread is hard to follow. Once above the meadow, in a mix of trees and avalanche paths, the tread is distinct but steep. Fortunately the views grow with every step. At 6 miles the trail drops a short bit into the basin of 5000foot Meander Meadow; the camps are splendid and so are the hours of flower walking.

The trail crosses a meandering fragment of the Little Wenatchee



Meander Meadow

River and climbs another open mile and 500 more feet to a ridge and trail fork. Go either way-north or south of a small hill-to join the Pacific Crest Trail at 5400-foot Sauk Pass.

The junction with the Crest Trail gives the first view of Glacier Peak and marks the boundary of the Glacier Peak Wilderness. Walk north 1/2 mile to a 5630-foot saddle on the east ridge of Kodak Peak. Climb a boot-beaten path through blossoms another 1/2 mile to the 6121-foot summit and start cranking film through the Kodak. For more exploring see Hike 60.

The return trip can be made by going south 2 miles farther on the Crest Trail and then left on Cady Ridge trail No. 1532 some 5 miles to the starting point or by way of Cady Pass (Hike 60).

## Essentials of Trip Planning for Backpackers Choosing your destination Washington Trails Association – wta.org

♠ > Go Outside > New to Hiking > Backpacking 101 > Overnight Backpacking Destination

#### **Overnight Backpacking Destinations**

We've selected 14 trails that are perfect for novice backpackers, or for those interested in backpacking trips with lower mileage and more time for relaxing and enjoying the scenery. On them you can explore various regions of the state and experience the diverse beauty Washington has to offer. If you're tired of crowded campgrounds, and long for quiet camping out under the starry sky, you should try backpacking. No reservations are needed (unless you are in a national park), which allows you to go where the sun will be. And backpacking allows you to stay at your destination instead of having to tear yourself away after eating your lunch.

You may notice that many of these destinations are also day hikes. Extending a day hike into a longer overnight trip adds an entirely new experience, with opportunities to watch the sun rise and set, stargaze and escape the crowds.

New to backpacking or want a refresher on what to pack and how to keep camp? Check out our Backpacking 101 series:

- · Backpacking 101: On the Trail
- Backpacking 101: Planning Your Trip



Interested in a longer trip?
The new book, Beckpecking
Weshington, has 70 multi-day
mutes. Read WTA's review here

#### North Cascades

#### TWISP PASS - DAGGER LAKE

Best Season: July - October Location: Near Twisp Length: 10 miles, roundtrip Elevation Gain: 2460 feet





OUR WORK - GO OUTSIDE - GET INVOLVED - JOIN

NY BACKPACK Log in (or Sign up)

★ > Go Outside > New to Hiking > Backpacking 101 > Weekend Backpacking Trips.

#### Weekend Backpacking Trips

After catching the backpacking bug with some overnight trips, you may be eager to immerse yourself in the backcountry with some longer hikes. This gives you the opportunity to push beyond what day hikers can get to and really experience some solitude - and some fantastic destinations!

The backpack trips described here are all between 15 and 23 miles - they generally can be hiked in two days (one night), but several would be much more enjoyable if you take three days. Most have side trips you won't want to skip, and all have fabulous views to absorb. Better yet, three of the featured trips are loops and one is a traverse. The scenery surely won't get old!

Before you go, take the time to review some of our great backpacking information here. Now on to the hikes!

North Cascades

#### **GOLDEN HORN - SNOWY LAKES**

Location: Hwy 20 - Rainy Pass Round Trip: 23 miles (2-3 days) Elevation Change: 2700' Season: August - September





Parking Pass/Entry Fee: Northwest Forest Rass

packers tion a.org

Same Miles to

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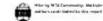
of-the-way garn in the Olympic National Forest.

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#### HIKE INFO

20 hip Reports for this tradi better as



You'll also find challenge. The path leading to Mildred Lakes was established by hibra and fahermen over the years, and never officially constructed. It is not maintained; in fact, it's little more than a root-shown climb to the takes. While it is comparitively well-established to Hackleberry Creek, beyond that it becomes steep and difficult to follow:

ake a sojourn in the Hood Canal Ranger District on this way trail within Mount

Skokomah Wildermana. If you're looking for solrtude, you'll find it on this out-

Be sare to have a map, compass, and route-finding skills, as well as stamms. The elevation pain on this trait is frustrating: it climbs up steeply, then plumes downfull. only to climb again and finally down to the takes, Because of the primitive characteristics of this trail, it is strongly recommended that boots with high tops be worn when hiking the trail.

#### MAP & DIRECTIONS



Then pull up the WTA hiking guide to find out more details and the location

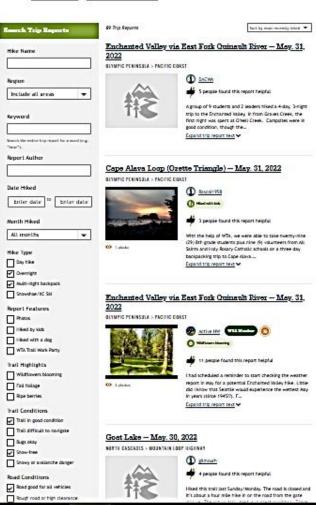


#### THE MOUNTAINEERS

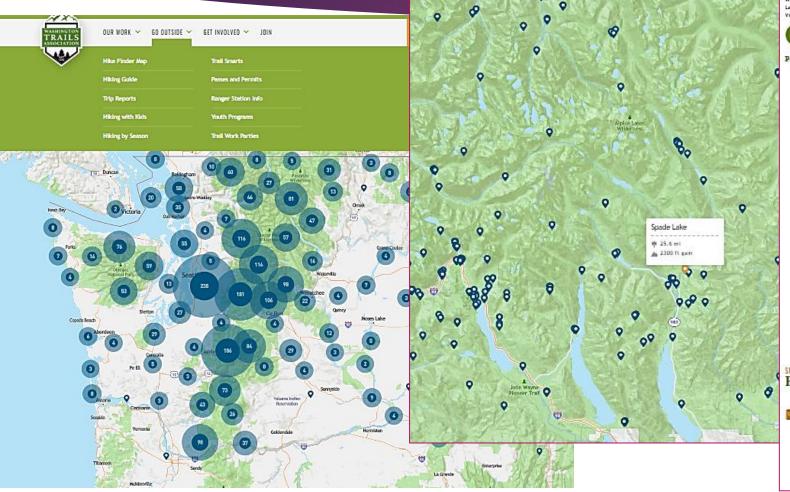
#### Trip Reports

You - and other history from across the Northwest - have posted 226,296 trip Reports to date. Search Into Reports to find out where others are hiterg and learn about current trial conditions.

You may also write a Trip Report or search the WTA Hiking Guide to learn more details about Inkes.



Washington Trails Association – wta.org







SHOQUALMIE REGION

COCATION
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 Sale Companyor

₱ LENGTH 25.6 miles, roundtri ELEVATION

Gain: 2300 ft.

Highest Point: 5400 ft

♥ RATING
★★★★★
(11 value)

+ Save Hike to MY BACKPACK









#### HIKE INFO

51 Trip Reports for Unit trail, below •

Spade Lake is a lovely, lonesome lake nestled in a rocky cirque high on Mount Daniel. Because it's a hefty hike to access, it is one of the most remote lakes in the Alpine Lakes Wilderness.

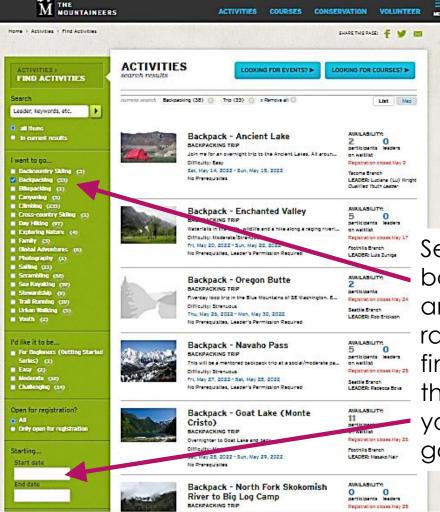
From the Waptus River Trail, just above Waptus Lake, the trail to Spade Lake heads straight uphill through old-growth forest. Past its junction with the Pacific Crest Trail, the trail becomes fairly steep.

The grade lessens 1.25 miles from the turnoff from Waptus, as the trail heads northwest along the mountainside and passes through several meadows and belts of smaller trees. It then enters a relatively open area with good views of the

### Essentials of Trip Planning for Backpackers

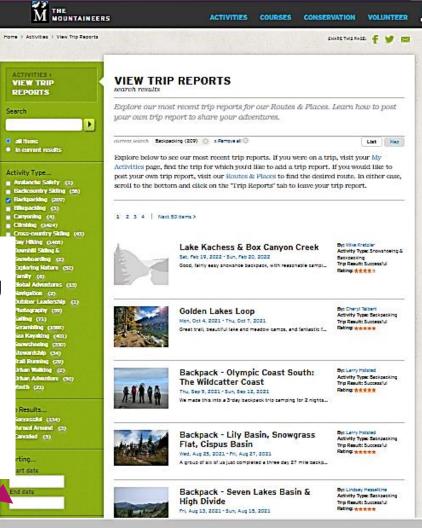
### Choosing your destination

Where are Mountaineers leaders going?



Set filters for backpacking and date ranges to find trips in the month you want to go





## Essentials of Trip Planning for Backpackers Choosing your destination Other online sources for trip ideas.....









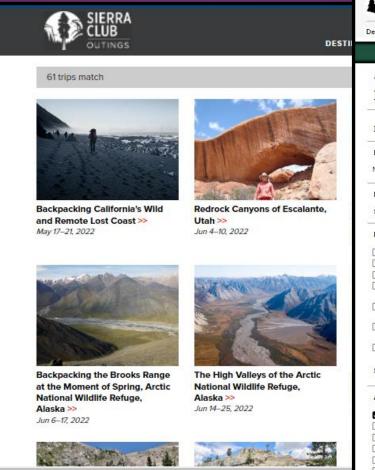


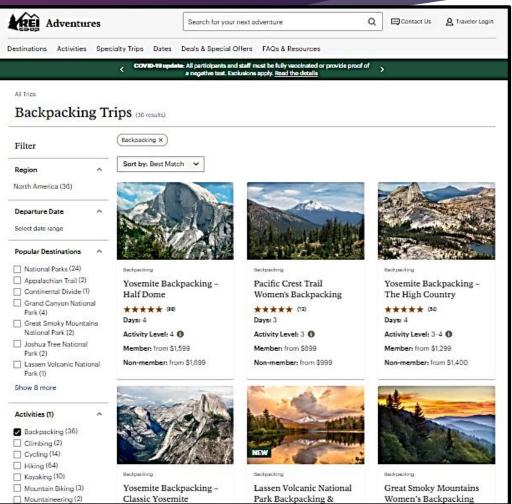
Hiking Blogs - Searches

## Essentials of Trip Planning for Backpackers Choosing your destination Where are commercial companies going?













Do you need a wilderness camping permit? Can you get one for your dates?

Many national parks and popular wilderness areas around the country and in Canada now require permits to camp in the backcountry.

Some operate by lottery, others by first-come-first-served

ALWAYS start by looking up the land manager and Wilderness or Backcountry Camping to find their latest permitting process. Most open in the winter or early spring for the following season.

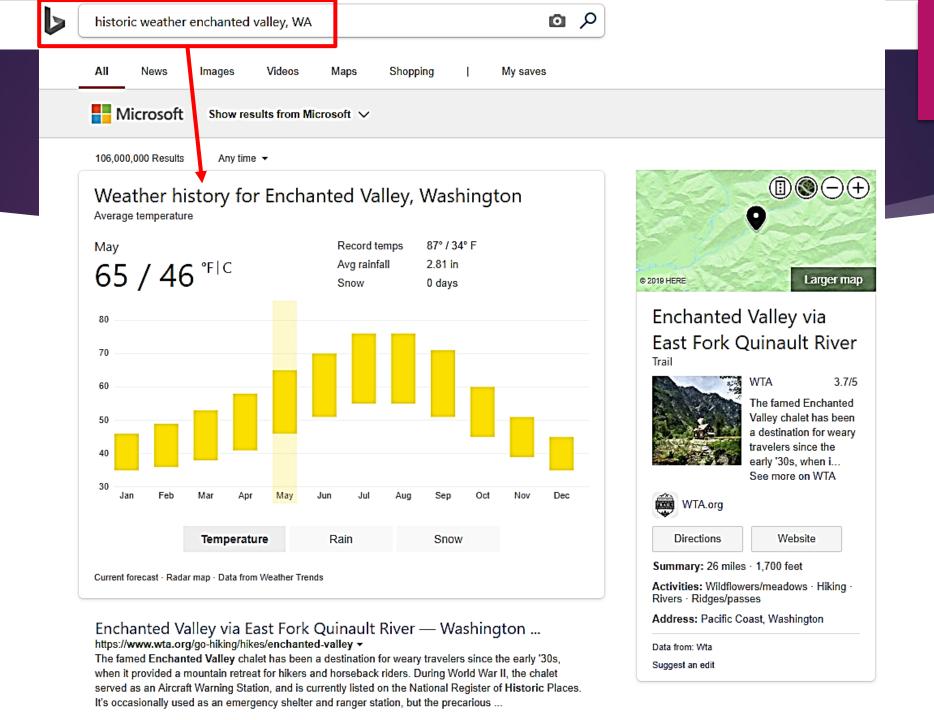
Washington Trails Association has an excellent overview of <u>permit requirements for backcountry camping</u> in Washington, as well <u>as parking permit requirements</u>





## Is your destination suitable and safe for the dates that you hope to go, given your skill-set and gear?

- ▶ Temperature, precipitation expectations for the month
- Then more detailed near term forecasts as the date gets closer:
  - Temp, precip
  - Snow levels
  - Fires, smoke
  - Road conditions, closures



#### www.weather.gov



FORECAST -PAST WEATHER -INFORMATION -Go mildred lakes, wa Active Weather for the Central and Mildred Lakes, WA, USA showers and thunderstorms, som cold front. Meanwhile, new recor Mildred Lakes, CA, USA aturday. Dry conditions remain acr Mildred Lake, CA, USA Mildred Lake, OR, USA Mildred Lake, TX, USA Mildred Lake, WI, USA Mildred Lake Dam, KS, USA Mildred Lake, KS, USA

42°F

Humidity 69%
Wind Speed SSE 1 MPH
Barometer NA
Dewpoint 32°F (0°C)
Visibility NA
Last update 13 May 08:36 AM PDT

#### Extended Forecast for 11 Miles NW Liliwaup WA

II miles MII Ein	waap vin			
Today	Tonight	Saturday	Saturday Night	Sunday
30%	* * * * * * * * * * * * * * * * * * *	60% 30%	30%	8
Mostly Sunny then Chance Snow Showers	Rain/Snow	Showers Likely then Chance Showers	Chance Showers	Rain
High: 38 °F	Low: 31 °F	High: 42 °F	Low: 36 °F	High: 44

#### **Detailed Forecast**

TOday A 30 percent chance of snow showers after 4pm. Partly sunny, with a high near 38. So Total daytime snow accumulation of less than a half inch possible.

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then Chance Snow Showers		Likely then Chance Showers	Showers	7	Showers then Slight Chance Showers	Showers	Rain/Snow then Slight Chance Snow Showers	Showers then Chance Rain/Snow
High: 38 °F	Low: 31 °F	High: 42 °F	Low: 36 °F	High: 44 °F	Low: 35 °F	High: 43 °F	Low: 30 °F	High: 39 °F

#### **Detailed Forecast**

Today	A 30 percent chance of snow showers after 4pm. Partly sunny, with a high near 38. South southwest wind 7 to 9 mph.
	Total daytime snow accumulation of less than a half inch possible.

Tonight Snow showers before 11pm, then rain and snow showers likely between 11pm and 1am, then rain showers likely after 1am. Snow level rising to 6200 feet after midnight. Low around 31. South wind 7 to 9 mph. Chance of precipitation is 80%. New snow accumulation of around an inch possible.

Saturday Showers likely, mainly before 11am. Mostly cloudy, with a high near 42. Southwest wind 5 to 10 mph. Chance of precipitation is 60%. New precipitation amounts between a tenth and quarter of an inch possible.

Saturday Night A 30 percent chance of showers, mainly after 11pm. Mostly cloudy, with a low around 36. Southwest wind 6 to 10 mph.

Sunday Rain. High near 44. South wind around 7 mph. Chance of precipitation is 90%. New precipitation amounts between a quarter and half of an inch possible.

Sunday Night A 50 percent chance of showers, mainly before 11pm. Mostly cloudy, with

Monday Night A slight chance of rain showers before 8pm, then a slight chance of rain.

then a slight chance of snow showers after 11pm. Mostly cloudy, with a k

Tuesday A chance of snow showers before 2pm, then a chance of rain showers. F

Tuesday Night A chance of rain and snow showers before 11pm, then a chance of snow

31.

Wednesday Rain and snow showers likely. Snow level rising to 4000 feet in the aftern

Wednesday Night Rain and snow showers likely. Snow level 4300 feet lowering to 3800 fee around 31.

Thursday Rain and snow showers likely. Snow level rising to 4000 feet in the afternoon. Mostly cloudy, with a high near 40.

#### Topographic Click Map For Forecast



Current destination not good? Click around the map to see if you can find a more suitable place!

DICUASI FAIIU.

11 Miles NW Liliwaup WA 47.56°N 123.29°W (Elev. 3619 ft)

9:40 am PDT May 13, 2022

9am PDT May 13, 2022-6pm PDT May 19, 2022

Forecast Discussion



#### Additional Forecasts and Information

ZONE AREA FORECAST FOR OLYMPICS, WA

Forecast Discussion Hourly Weather Forecast
Printable Forecast Tabular Forecast

Air Quality Forecasts International System of Units

#### Additional Resources

Radar & Satellite Image

www.weather.gov

## Another great source of actual weather conditions within 10 days of your trip...

<u>Windy.com</u> <u>–</u> forecasts many different variables, allows comparison of several models

Meteoblue – great for alpine environments!

#### Snow Levels

#### <u>SNODAS</u> – Snow data assimilation system

#### **GaiaGPS Snow Level layer** (also Caltopo)

#### Before you go:

- Call the land manager for the latest info
- > Join local backpacking facebook groups ask about conditions
- > Boots on the ground!

www.weather.gov

#### Fires, Smoke

FWAC Wildfire Map – fire, weather and avalanche ctr

IQAir – Air quality monitoring

GaiaGPS Smoke Forecast layer

## Road and trail status Land Manager Websites, WADOT

#### ► <u>Baker-Snoqualmie National Forest</u>

- ► Check your trail passable? Snow free? Trailhead open?
- ► Check the access roads, notes about parking lots
- ▶ WSDOT alerts



#### Route Planning

#### \* Using Maps and Map Tools to understand and plan:

- Overall route including where to start and end
- Daily route segments
  - Level of difficulty
  - Camp options
  - Water sources
- ▶ Transport options and travel route-time
- ► Emergency exit routes



#### Paper vs. Online Maps

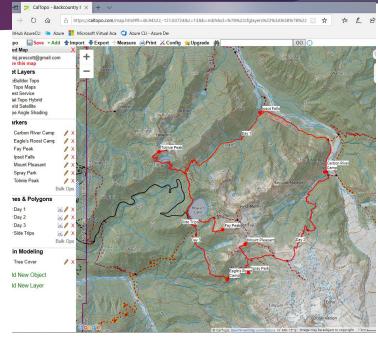
- \* I always obtain and study a paper map before a trip for big-picture planning, and bring it for backup in case my phone fails during a trip
- \* But for planning purposes, digital maps offer huge benefits:
  - Many more perspectives, scales and types, and basic mapping and planning functions are free!
  - ► Can use interactively to map out route options, distances and gains.
  - Can get map information for places, and at scales, for which commercial paper maps aren't available.
  - Most can be printed to high quality.



### THE MOUNTAINEERS

#### Digital Mapping Resources





CalTopo



#### GaiaGPS.com

#### Pros

- Simple route plotting, with output of distance-elevation profile.
- Has the most useful layers and overlays
- Syncs automatically with GaiaGPS app for navigation in the field.
- Can export route data easily for use in other devices and apps

#### Cons

- Inferior map printing.
- Map cluttered with previous tracks.
- Fewer customization options.
- ► Terrain statistics not as good.
- Can substantially overstate elevation gains and losses



#### GaiaGPS



- ► Available for iOS and Android.
- Consistently receives the highest praise from Mountaineers navigation committees.
- ▶ Base app is free, 40\$/yr for Premium plan.
- Mountaineers members receive one year of GaiaGPS Premium subscription FREE. Go to Membership→Benefits



#### GaiaGPS



- ► <u>Free Plan</u>: Access to all planning features including creating routes and waypoints that can synch to the phone app, and organizing, backing up, and sharing your data, and more.
- Premium Plan: Adds specialty maps (including NatGeo Trails and weather maps, international maps) and layers (snow level, smoke etc.), the ability to download maps & routes to your phone for offline use, and the ability to print custom maps.



#### CalTopo.com

#### Pros

- Superior map printing
- Detailed statistics and overlays
- More robust drawing and editing
- More drawing primitives (shapes, bearing lines, etc)
- Many useful layers

#### Cons

- Less beginner-friendly.
- Fewer layers and overlays than Gaia.
- Companion app is in beta.
- Free account limited to 5 saved maps.

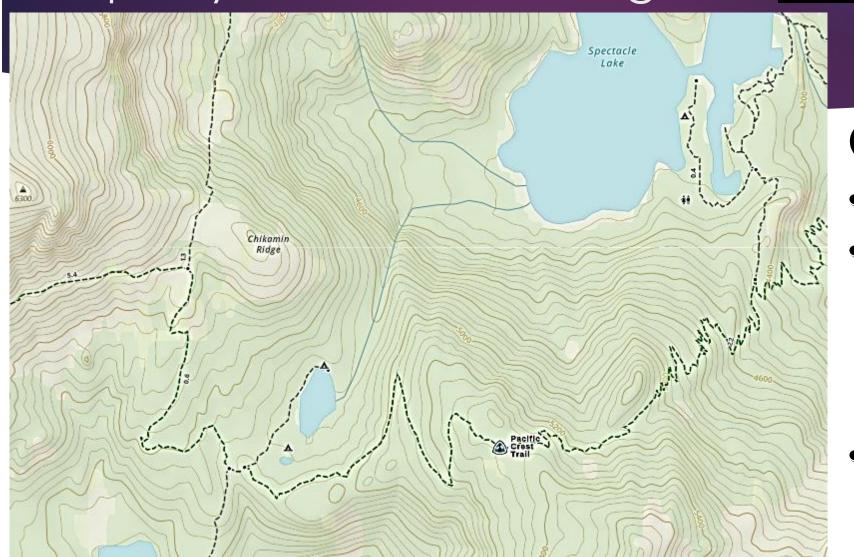
## THE MOUNTAINEERS

#### Map Layers and How they Differ

▶ Take advantage of multiple map layers to examine the terrain for different features





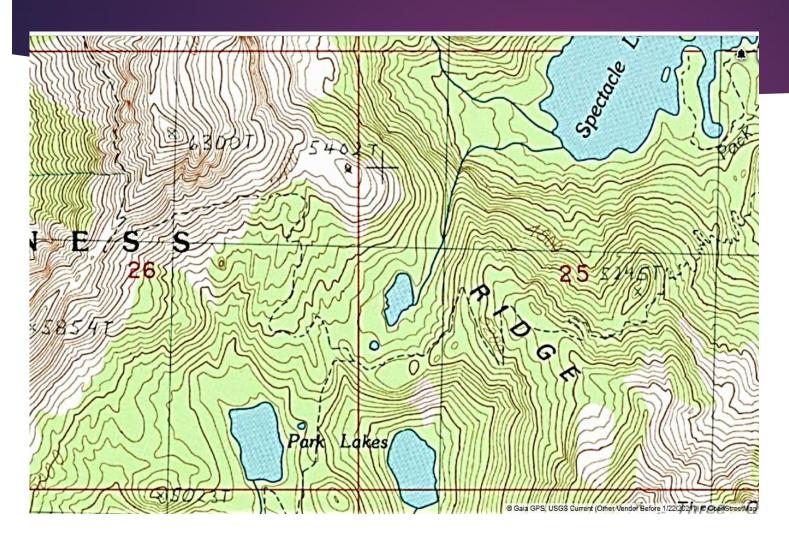


#### Gaia Topo

- Default
- More details including trail distances and camp locations
- International

#### Map Layers and Advantages



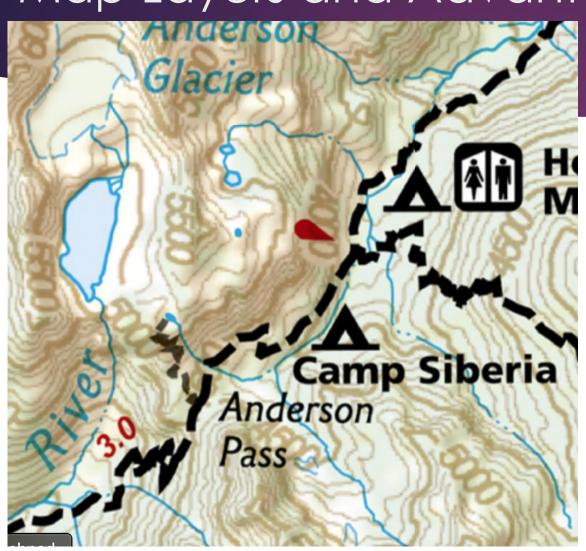


#### USGS

- The most topo detail
  - → ideal for off-trail navigation
- But little or no trail, camp detail
- No international coverage



#### Map Layers and Advantages!

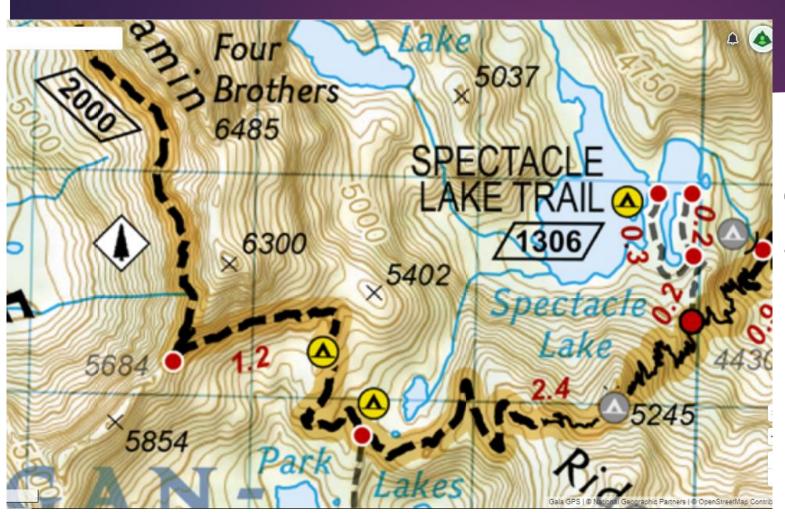


#### NatGeo Trails Illustrated:

Excellent detail for some areas, absent for others



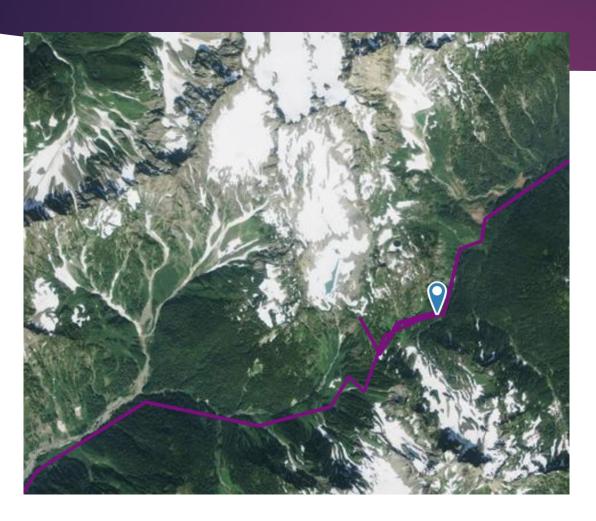




## NatGeo Pacific Crest Trail:

 Best detail along the PCT, none elsewhere

#### Map Layers and Advantages



#### Satellite:

 Sometimes offers insights on terrain, snow if cloud-free

#### Map Layers and Advantages



#### Google Earth:

- Best terrain visuals
- Not a Gaia Layer but can export Gaia routes to Google earth easily!



PCT Section J: Snoqualmie to Stevens Pass

## STEP 1: PLAN DAILY ROUTE AND CAMPS



#### Big Picture

- ▶ How long is the trip (distance, gain)?
  - \*~70 miles, ~17,000 ft gain (based on guidebooks, blogs)



- ► How long is the trip (distance, gain)?
- How many days do you want to take? What daily distance and elevation gain can you handle at your current fitness level? Start with gross averages.....

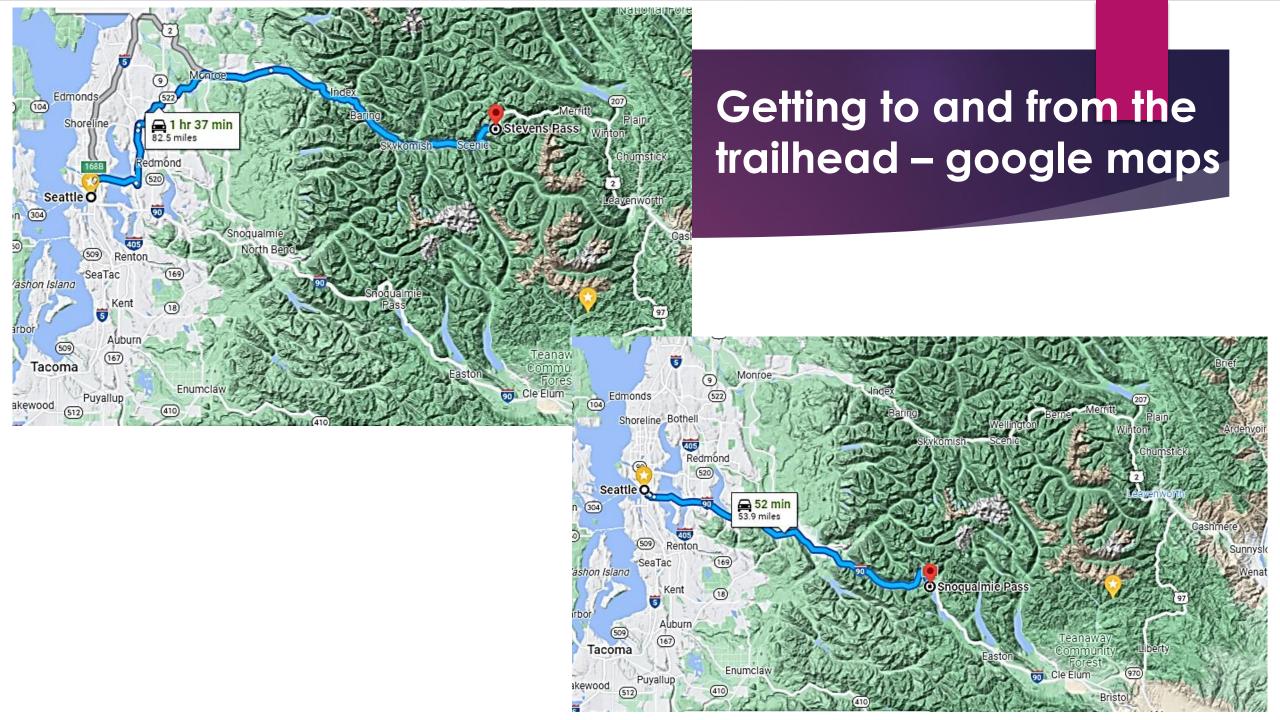
Unless you are heavily time-constrained, leave yourself a time buffer!!

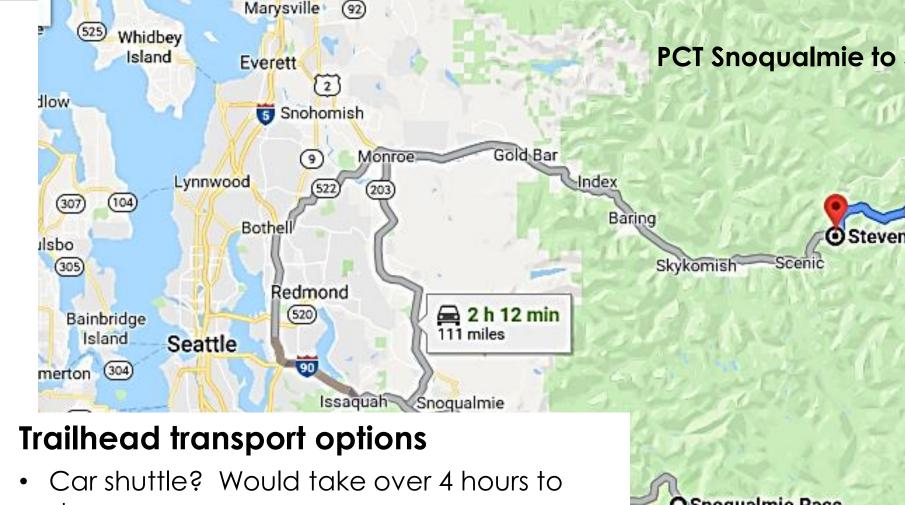
	Days	avg dist/day	avg gain/day
	6	11.7	2833
<	7	10	2440
	8	8.75	2136



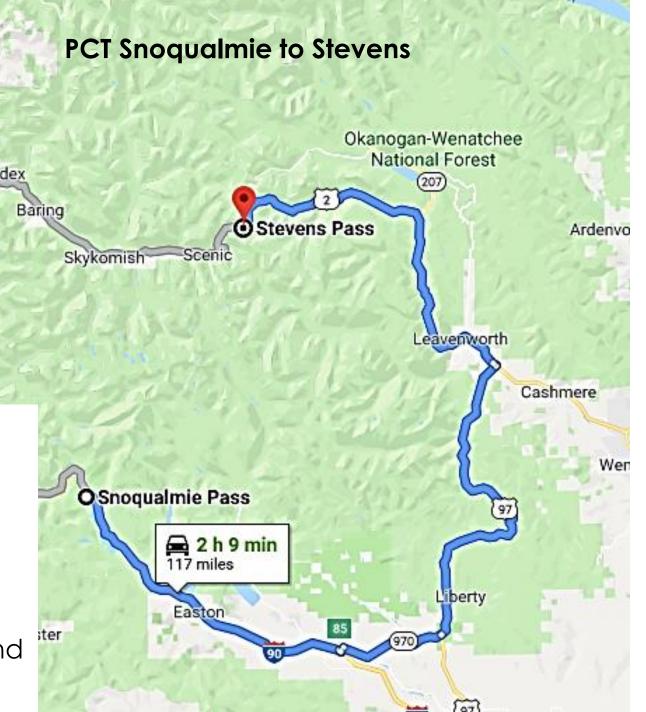
#### Details, Details!

- ▶ Let's plan for 7 day itinerary, Avg ~10 mi/day, ~2,400 ft gain/day.
- Start with transportation logistics
  - Google maps gives you a good quick visual with drive times





- stage cars
- Dropoff or pickup by friend or family? Or someone leaves a car at one end and gives you extra key?
- Key swap? ½ of group hikes from each end
- What about public transport options?

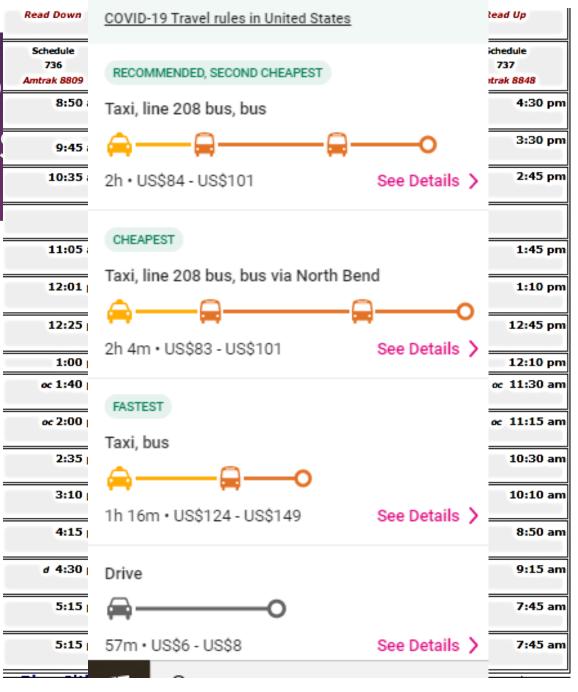


### Public Transport Options b Stevens or Snoqualmie Pa

RomeToRio offers comparison of transport options to or from most points on the globe!

Bus option to/from Stevens Pass – Northwest Trailways

More complicated to/from Snoqualmie – bus and taxi





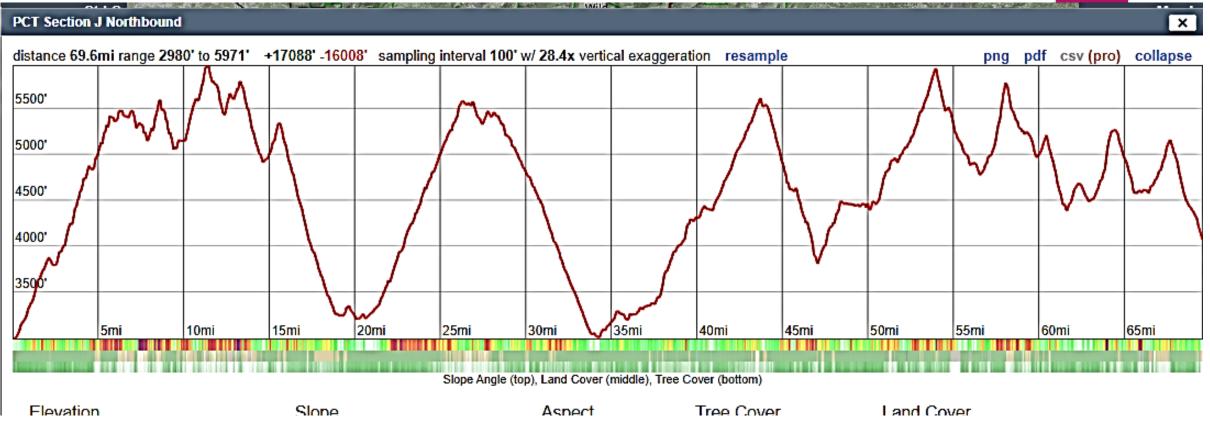
#### Details, Details!

- ▶ Let's plan for 7 day itinerary, Avg ~10 mi/day, ~2,400 ft gain/day.
- ► Transportation logistics
- Now let's check out which direction to go based on the elevation profile!

# GaiaGPS for route planning



- Start by building a distanceelevation profile using <u>GaiaGPS</u> <u>with NatGeo PCT map</u>
- Let's try this for PCT section J!



- 1. Stevens Pass is higher elevation than Snoqualmie, so a little less gain going SOBO
- 2. The first few days going SOBO from Stevens (when you have the heaviest packs and are getting in shape) are relatively less grueling
- 3. This profile argues for a SOBO trip (if you can work out the transport = logistics)

# GaiaGPS for route planning



#### Now:

- Let's work out daily route and waypoints using the same <u>GaiaGPS with NatGeo PCT map</u>
- When you're satisfied, you can save your daily routes into a folder to export, share or synch with your phone's Gaia app



#### First Draft 7-Day Itinerary

- Now let's examine and tentatively select daily routes using Gaia and the Nat Geo Pacific Crest Trail layer
- ▶ Save each day's route and file to a common folder
- Export the folder to Caltopo to confirm daily gains-losses, and/or to Google Earth to visualize the topography



#### What's Next?

# Iterate on your itinerary until you're happy with the cadence of your days

- Consider that your packs will be heaviest on the first few days
- ► Evaluate options to reduce longest days or lengthen shorter ones
- Cross-check your first and last day against your transport plans
- \*You can identify alternate camps on the map and change on the fly if needed! (possible on the PCT because permits not required)





1	Stevens Pass to Mig Lake	7.2	2509	1912
2	Mig Lake to Deception Lakes	10.1	3635	3207
3	Deception Lakes to Deep Lake Jct	11.7	3026	3728
4	Deep Lake Jct to Esco Toughest days	11.9	3601	2828
5	Escondido Ridge to S - within your capabilities?	9	1797	2806
6	Spectacle Lk to Ridge Lake	10.2	4778	3743
7	Ridge Lake to Snoqualmie Pass	7.3	1348	3646



# First Draft 7-Day Itinerary Plotted with Gaia

DAY	FROM-TO	MILES	GAIN (FT)	LOSS (FT)
1	Stevens Pass to Mig Lake	7.2	2509	1912
2	Mig Lake to Deception Lake Shorten day 4 by stopping		3207	
3	Deception Lakes to Deep La partway up to Escondido Ridge			3728
4	Deep Lake Jct to midway up ridge	10.3	2562	2357
5	Midway up ridge to Spectacle Lk	10	2448	2857
6	Spectacle Lk to Joe Lake	8	3714	2884
7	Joe Lake to Snoqualmie Pass	8.7	2238	4362



# First Draft 7-Day Itinerary Plotted with Gaia

DAY	FROM-TO	MILES	GAIN (FT)	LOSS (FT)
1	Stevens Pass to Mig Lake	7.2	2509	1912
2	Mig Lake to Deception Lakes	10.1	3635	3207
3	Deception Lakes to Deep Lake Jct	11.7	3026	3728
4	Deep Lake Jct to midway u Ease day 6 by stopping at Joe		ng at Joe	2357
5	Midway up ridge to Specta Lake instead of Ridge Lake			2857
6	Spectacle Lk to Joe Lake	8	3714	2884
7	Joe Lake to Snoqualmie Pass	8.7	2238	4362



# Additional Route Planning Other Excellent PCT Resources

- NatGeo Illustrated PCT Maps available in print or as a map source for GaiaGPS.
- FarOut Guides (used to be Guthook) (\$) great map detail including campsites and water, other trail notes – can install to use on your phone on the fly
- Halfmile's PCT maps & notes (free) GPX and google earth files, trail notes
- Many crowdsourced databases on <u>pcta.org</u> with info on trail conditions, water, resupply, shuttles, trail angels and more





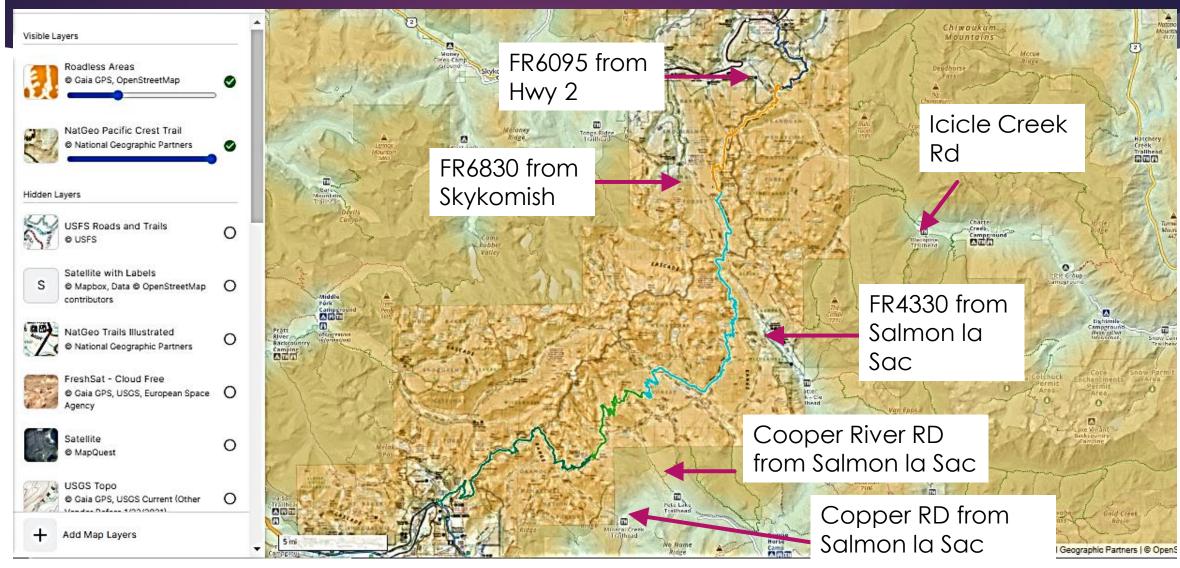
- Save our daily Gaia routes into a folder open daily routes and add waypoints for camps
  - Can mark alternate camps if you'd like
  - ► Mark reliable water sources from map and other resources
  - Many different symbols are available



### What about Emergency Exit Routes?

- Back to Gaia with some different layers in tandem:
  Gaia with NatGeo PCT map
  - ➤ Roadless Areas
  - ➤ USFS Roads and Trails
- NatGeo mas are good for identifying trailhead names.

# Intermediate trail access-exit points Use Roadless Area and Nat Geo map layers together





### Emergency Exit Plan

		Dist to		
		Start or		
Day	From-To	End	Best Exit Option	
			7.1 mi to Stevens Pass or 2.5 mi via trail 1061 to	
1	Stevens Pass to Mig Lake	7.1	FR6095	
			4.3 mi via trail 1059 to Deception Cutoff TH on	
2	Mig Lake to Deception Lakes	17.1	FR6830	
			7 mi via trail 1345 to Tucquala Mdws TH on FR	
3	Deception Lakes to Deep Lake JCT	28.5	4330	
	Deep Lake JCT to ridge above		6.9 mi via trails 1329 and 1323 to Pete Lake TH	
4	Waptus Lake	37.8	and Old Cooper River Rd	
			7.3 mi via PCT and trail 1323 to Pete Lk TH and	
5	Ridge above Waptus to Spectacle Lk	25.7	Old Cooper River Rd	
			10 mi via trail 1331 to Mineral Creek TH and	
6	Spectacle Lk to Joe Lake	16.6	Cooper Rd	
7	Joe Lake to Snoqualmie Pass	8.5	8.5 mi via PCT to Snoqualmie Pass	



# Essentials of Trip Planning for Backpackers Emergency plan

#### Your Emergency Plan should include:

- The best exit option(s)
- ► GPS coordinates for your daily camps and the potential exit trailheads (to help you communicate with rescuers)
- The county you are in and contact info for SAR services.
- Where the nearest hospitals / medical facilities are located
- How you will call for transportation from the various exit points

Before your trip, share your detailed route plan and possible exit routes with a trusted person at home – agree on how they can be reached, what they should do and when if they don't hear from you

On a route where you will be away from cell service for days at a time, seriously consider carrying a satellite communicator!



## Olympic Peninsula: Enchanted Valley Round Trip

# STEP 1: PLAN DAILY ROUTE AND CAMPS

First let's check out the overall route and distance-gain profile on <u>Gaia</u> with Nat Geo Trails Illustrated map.



- >Where do you want to go?
- > How long is the trip (distance, gain)?
  - \*~25.5 miles, 7290 ft gain & loss (Gaia)



- ► Where do you want to go?
- ► How long is the trip (distance, gain)?
- ► How many days do you want to take? What distance and gain are you prepared to take on?

Days	avg dist/day	avg gain/day
2	12.8	3645
3	8.5	2430
4	6.4	1823



- Can I add a dayhike to Anderson Glacier from Enchanted Valley camp? <u>Back to map</u> to try it out!
  - > Adds 9.2 miles and 4280 ft gain and loss
  - Probably requires a full additional day



### Now let's check Transport Logistics

Remember: we need to get to the Quinault Ranger Station to pick up permit and bear cans before we start!

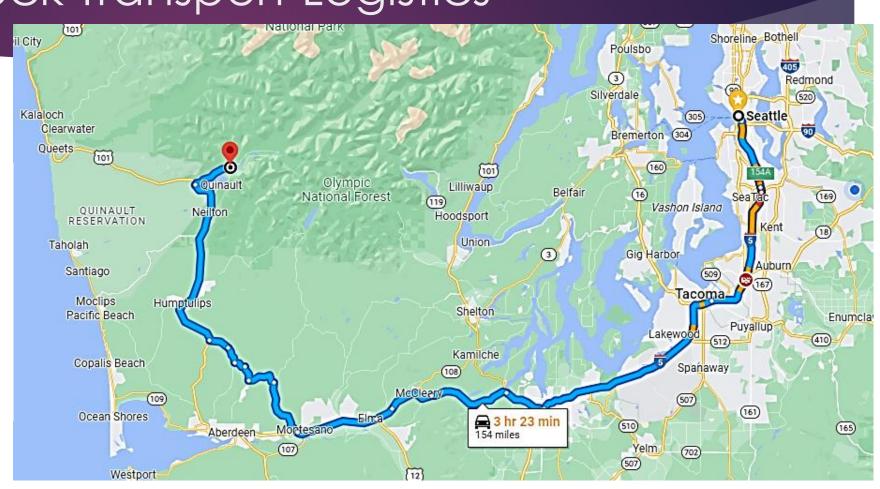
- Quinault Ranger Station open hours: M-F 8AM-4PM year round;
- > Sat 8-4, Sun 9-4 after Memorial Day

# THE MOUNTAINEERS

Now let's check Transport Logistics

Quinault Ranger Station open hours: M-F 8AM-4PM year round;

Sat 8-4, Sun 9-4 after Memorial Day

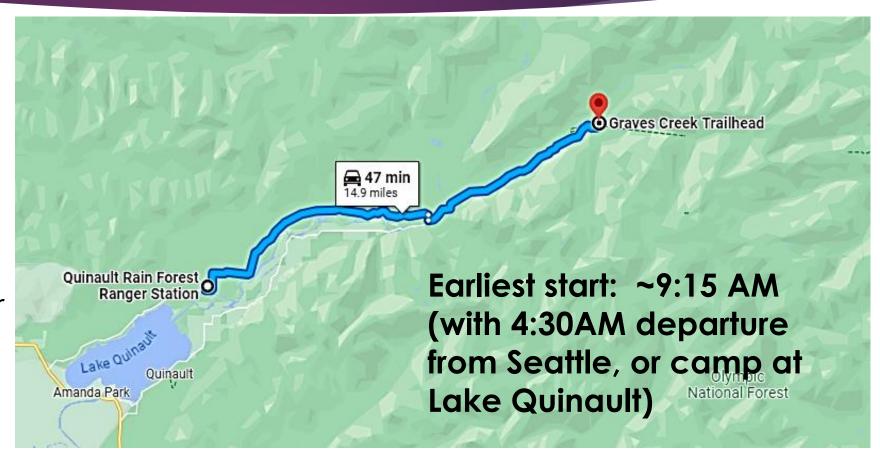




### Transport Logistics (continued)

Quinault Ranger Station open hours: M-F 8AM-4PM year round;

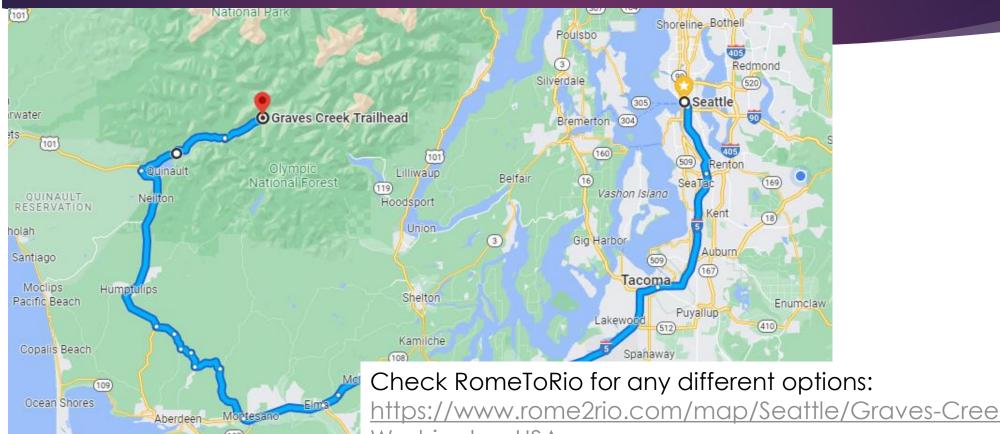
Sat 8-4, Sun 9-4 after Memorial Day





### Transport Logistics (continued)

Westport



https://www.rome2rio.com/map/Seattle/Graves-Creek-Trailhead-Washington-USA



#### Details, Details!

- Let's investigate our <u>route options on the digital map</u> using GaiaGPS!
  - ► Handy to save alternate routes with different camp possibilities into a folder for export to Caltopo or google earth!



#### Exploring our options

## 1. Walking all the way to Enchanted Valley is 12.8 miles, 4337' gain, 3005' loss

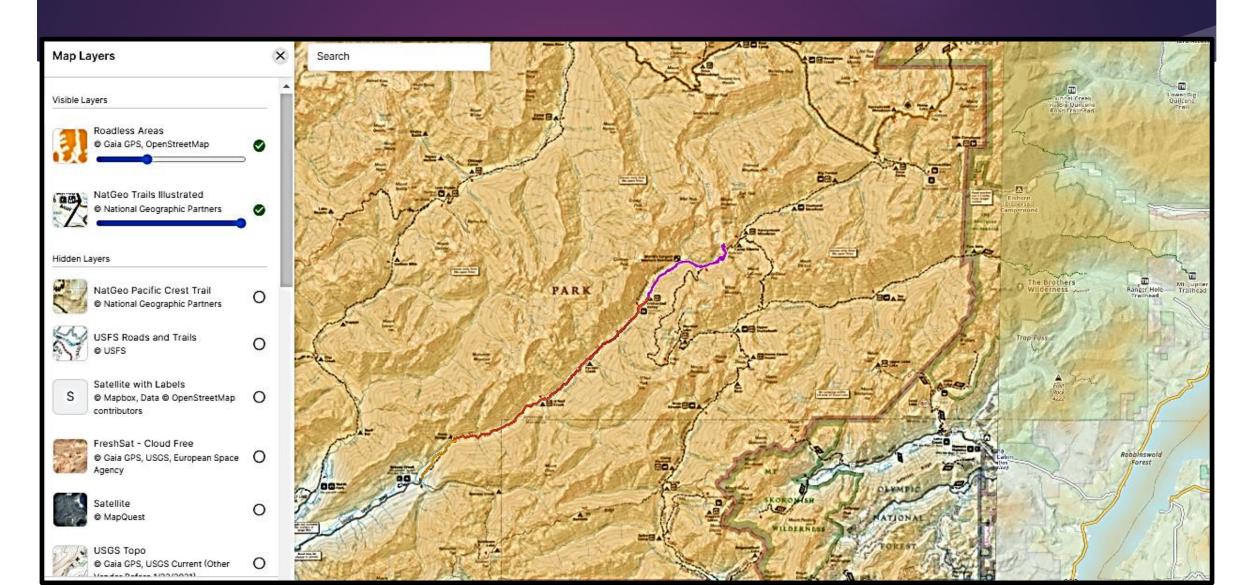
- ► Advantages: Can go up and back in two days, or include Anderson Glacier dayhike from Enchanted Valley on a third day
- ➤ Disadvantages: Transport from Seattle to Graves Creek and back (with Ranger Station check in) will require part of your in and out days unless you drive very early and very late



### Exploring our options

- 2. Plan to drive and start walking the same day likewise on the way back
  - Day 1 Graves Crk to O'Neill Creek: 6.6 mi, 2201' gain, 847 loss then day 2 O'Neill Creek to Enchanted Valley 6.1 mi, 2118' gain, 1532 loss.
    - Do Anderson Glacier (Adds 9.2 miles and 4280 ff gain and loss RT) in the afternoon with daypacks after reaching Enchanted Valley?
  - ▶ OR Day 1 Graves Creek to Pyrites Creek: 8.98 mi, 3038' gain, 2320 loss then day 2 Pyrites to Enchanted Valley 3.8 mi, 1238' gain, 708' loss shorter second day easier to tack on Anderson Glacier dayhike in the afternoon!
  - Day 3 Return: walk Enchanted Valley to O'Neill Creek, or to Pony Bridge (10.5 mi, 2493' gain, 3439' loss) then out early on day 4 (2.3 mi, 532' gain, 881' loss) and drive home the same day

## Emergency Exit Options?





### Emergency Exit Plan?

	Back To Starting	
<b>Exit Route</b>	TH	Best Exit?
From O'Neill Creek Camp	6.4 mi	6.4 mi to Graves Creek
From Pyrites Camp	8.8 mi	8.8 mi to Graves Creek
From Enchanted Valley	12.8 mi	12.8 mi to Graves Creek
		20.4 mi to Dosewallips road
		end??? Or better to head
From Anderson Glacier	23.1 mi	back to Graves Crk?



#### What's Next?

#### Once you've nailed your itinerary:

- Mark selected camps with map waypoints
- Mark reliable water supplies with map waypoints
  - Solid blue lines major water courses or lakes
- Mark alternative camp possibilities with map waypoints
  - > If permits required, then you have limited alternative camp options
  - > Look for flat topography, water source within reasonable walk. Avoid dense forest
- Save your waypoints to the same folder as your routes



#### What's Next?

#### Once you've nailed your itinerary (continued):

- Export to Caltopo to create printed maps
- Synch with Gaia app on your phone and download-save the map to use offline to navigate on the trail (only available to Gaia Premium users)



#### Disclaimer (another one?!)

None of these digital map databases are based on measurements on the ground – they come from other sources, particularly satellites.

- Elevation and trail locations can be somewhat to significantly off
- > Trails can also be washed out and/or re-routed; camps and even trailheads may be moved or destroyed.
- 'Casual' trails and boot paths that show on the database may not actually be visible on the ground

SO...use the tools with your eyes open – seek out trip reports before you go - carry a compass and be prepared to navigate in the field when your map and reality don't match!

## Questions on this section?



# Essentials of Trip Planning for Backpackers Gear Planning

- \*The key to having the essential gear while keeping your pack light is to:
  - > Be intentional and disciplined about what you bring
  - > Pack based on expected terrain and conditions and the objectives for your trip
  - Use a checklist to pack!
  - > Start assembling your gear at least a week ahead so that you can take your time (and inspect your gear)



# Essentials of Trip Planning for Backpackers Gear Planning - Objectives

# \*What's your primary objective? (fishing, climbing, photography vs. walking)

- If your focus is on enjoying camp and hobbies (fishing, photography, camp cooking, climbing), your pack will be heavier don't expect to go as far each day or in the same total timeframe
- If your focus is on covering distance, keeping your pack light will help you meet your objective with greater comfort and less risk of injury



#### What conditions do you expect where and when you plan to go?

- \* Daytime high and nighttime low temperatures
  - > Number and weight of baselayers, midlayers and other warm clothing
  - > Sleeping bag temperature rating; bring bag liner? pad R value
- \* Expected precipitation amount, duration, timing
  - Lightweight, less waterproof raingear vs. heavier more waterproof hard-shell
  - ➤ Rain pants? Umbrella?
  - Pack cover, dry sacks
- \* Terrain snow conditions: traction, gaiters, stiffer boots, poles; ice axe?
- \* Water availability, quality: water-carry capacity, treatment method

Gear Choices for Different Conditions



### Gear Planning – Build your personal gear list

#### Inventory your current gear by major category ("Base Kit"):

#### **CATEGORY**

- Clothing: Base layer (walking, sleeping);
   Midlayer (temp regulation); Outer layer (rain/wind protection)
- Footwear: Boots-shoes; insoles; socks
- Hydration: Carrying water; Treating water
- Sleep System: Shelter; Sleeping Bag; Sleeping Pad
- Cooking and Eating: Stove-pot; Eating utensils; Cleanup
- Food and Food Storage

#### **CATEGORY**

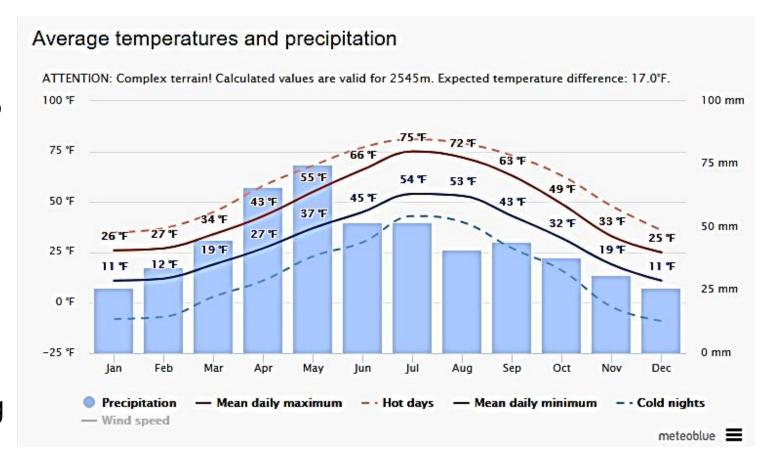
- Sanitation: Toileting; Bathing; Personal hygiene
- First Aid
- Small Essentials: Sun protection: Lighting; Navigation;
   Repair; Electronics and power
- Safety: Traction; Poles; Helmet; Handline; Emergency communication
- Packing: Pack; Pack protection; Pack organization
- Hobbies: Camera; Kindle; Fishing rod; Field guides



- Build a checklist from your total gear inventory
- For any given trip, mark on your checklist which gear items you will need and which you can leave behind given the length of the trip and the weather and terrain conditions you expect.

# Essentials of Trip Planning for Backpackers Example: Wind Rivers Highline in WY – 11 days, September

- Daytime highs in 60s to 70s
- Daytime lows in 20s to 40s
- Moderate chance of precip (PM thunderstorms)
- Could be snow but likely to melt fast
- Rugged very rocky sections
- Bears! (but bear cans not mandatory)
- Lakes and world class fishing



THE



# Essentials of Trip Planning for Backpackers Gear Planning – Finalize a trip-specific gear checklist

- Build a checklist from your gear list
- Mark on your checklist which gear items you will need and which you can leave behind given the length of the trip and the weather and terrain conditions you expect.
- Inspect your gear identify anything that needs to be replaced identify any essential gear gaps that need to be addressed.
- > USE YOUR GEAR CHECKLIST WHEN YOU PACK! See sample gear checklist!



# Essentials of Trip Planning for Backpackers Food Planning Fundamentals

- Short Trip? Short mileage with base camp? Love gourmet cooking at camp? → Food weight is a lower priority.
- o For longer trips (4+ days) and trips requiring a bear can, the weight and volume of your food will add up → Essential to make a food plan!
  - 1. Sufficient calories
  - 2. Food you love to eat
  - 3. Minimum weight and bulk



# Think of food as the fuel to power your trip. Plan for enough to get the job done.

- ➤ 300 to 600 calories per hour of vigorous walking with a pack is a good rule of thumb (2500-5000 cals for an 8 hour day)
  - more for bigger people, very strenuous, cold or high altitude trips, less for smaller people, less strenuous trips

Everyone is different! Work out for yourself how many calories YOU need for particular types of trips!



## How to get all those calories and keep your pack light??? Pack as many calories as you can into the fewest pounds of food!

→ By packing more calorie-dense foods, you can deliver your target daily calories in less than half the weight!!

#### This means...

- > Increasing the percentage of fat of the trail foods you carry
- > Reducing the water content of the trail foods you carry



# Essentials of Trip Planning for Backpackers Food Planning Fundamentals: Calorie Density

## A good calorie density target is 4.5 cals/gram, or 2000 calories per pound of food weight.

- ➤ 1.5-2.5 lbs/day (3000-5000 calories/day) to fuel a strenuous extended itinerary.
- > 1-1.5 lbs/day (2000-3000 calories/day) for shorter, lower-intensity trips

## Essentials of Trip Planning for Backpackers Making your food plan 1. Make a meal calendar

	TRAIL MEAL TALLY				
	BREAKFAST	LUNCH	SNACKS	DINNER	Meal-Days
First Carry	4	5	5	4	4.5
Resupply	6	6	6	5	5.75

THE MOUNTAINEERS

**Detailed trip calendar** 

# Essentials of Trip Planning for Backpackers Making your food plan 2. Build your food checklist

- > What are your favorite food options for each trail meal?
- > What is the serving size you are likely to consume?
  - Use the serving grams on the package label as a starting point
  - ❖ Weigh or measure it out on the counter adjust if you bring some home
- > How many calories are associated with each serving?
  - From package label as starting point
- > Make a checklist of the servings of each food you need to bring to satisfy your trail meal calendar.



#### 2. Sample food checklist - breakfast

Food	Serving (gms)	Calories
Via packet	1	0
Cocoa mix+Coffee creamer (4tsp)	37	180
Full-fat granola with nuts & fruit (3/4C)	93	433
Whole milk powder (1/4C)	30	144

This is the amount for a single day and meal.



### 2. Sample food checklist – lunch/snacks

Food	Serving (gms)	Calories
Almond butter (2T packet)	31	201
Jelly packet	10	35
Hard cheese (2 oz serving)	56	218
Oroweat english muffin 2 halves	59	134
Mustard and mayo packets	30	30
Macadamia nuts (2 oz)	34	253
Peanut or almond M&Ms (15 pcs)	36	203





### 2. Sample food checklist – lunch/snacks

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Almond butter (2T packet)	31	201
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Hard cheese (2 oz serving)	56	218
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Mustard and mayo packets	30	30
Macadamia nuts (2 oz)	34	253
Peanut or almond M&Ms (15 pcs)	36	203





### 2. Sample food checklist – dinner/dessert

	- 1	
Food	Serving (gms)	Calories
Instant cream soup mix (1 pkt)	25	90
Dehydrated dinner (1 svg dry)	100	455
Packaged Strawberry Harvest salad with dressing	85	160
Stonefire Naan bread (1 piece)	98	380
Jalapeno-cheddar wrap - large (1)	55	210
Almond Roca 3-pack	36	200
Keeblers Samoa cookies (3)	39	210

### 2. Sample food checklist – add # servings to pack

Dinner Example – First Carry				
			# Servings to	Total Gms to
Food	Serving (gms)	Calories	pack	Pack
Instant cream soup mix (1 pkt)	25	90	4	100
Dehydrated dinner (1 svg dry)	100	455	4	400
Packaged Strawberry Harvest salad with dressing	85	160	2	170
Stonefire Naan bread (1 piece)	98	380	2	197
Jalapeno-cheddar wrap - large (1)	55	210	2	111
Almond Roca 3-pack	36	200	3	108
Keeblers Samoa cookies (3)	39	210	0	0



### 2. Sample food checklist – add # servings to pack

#### Dinner Example – Resupply

			# Servings to Pack -	Total Gms to Pack -
Food	Serving (gms)	Calories	Resupply	Resupply
Instant cream soup mix (1 pkt)	25	90	5	125
Dehydrated dinner (1 svg dry)	100	455	5	500
Packaged Strawberry Harvest salad with dressing	85	160	0	0
Stonefire Naan bread (1 piece)	98	380	2	197
Jalapeno-cheddar wrap - large (1)	55	210	3	166
Almond Roca 3-pack	36	200	3	108
Keeblers Samoa cookies (3)	39	210	2	78



### Backpacking Trip Planning Clinic

2. Sample food checklist – pull it all together!

See food checklist example



#### THE MOUNTAINEERS

#### Essentials of Trip Planning for Backpackers

## 2. Build your food checklist – Check the bottom line and readjust!

	First Carry	Resupply
calories per day (check)	2567	2635
food weight per day (lbs) - check	1.4	1.3
average calories per gram for total menu	4.1	4.4

#### \* First carry:

- ▶ Good calories for strenuous itinerary at altitude
- Could boost calorie density for better weight efficiency (target 4.5 or higher) → 3/4 lb total food weight savings!

#### \* Resupply:

► Good calories, small opportunity to improve calorie density for weight efficiency



### Follow your plan!!

- ✓ Use your meal checklist when you pack!
  - ➤ Measure your portions when you pack → bring only what you need!
  - Take food out of its packaging to be sure it's the right amount for you (and to minimize trash)!
- Many people package their individual meals in separate bags for each day to make it easy to keep track.



## Don't forget to plan your fuel use!

### √ 1 oz of canister fuel will heat ~8 cups of water\*.

- How much water will you heat per day?
- > Use this ratio to determine how much fuel you will need
- > Share with others to get fullest use of whole canisters if you won't use a whole one by yourself.
- \* More fuel will be needed if windy, or at high altitude, or if water or air is very cold



## Key Take-Aways

- \* Choose a destination that fits your abilities and is safe during the time of year you want to go.
- \* Build a route plan based on your objectives, available time, terrain
  - Lots of great digital tools are available!
- **\*** Consider transportation logistics, emergency exit routes
- **☀** Understand the near-term weather and other trail conditions to expect − build your gear plan accordingly
- \* Make a food plan to ensure enough calories at least weight with food you love to eat



## Key Take-Aways (continued)

- **\*** Organize and archive the info you've created (shareable drives are handy)
- \* Don't forget to share your trip plan and contact info to your friends and family at home
- **\*** Consider your emergency communication options PLB, InReach



## Essentials of Trip Planning for Backpackers What's Next?

We will email a link to you to a google drive with the class recording, presentation pdf and all the handouts.