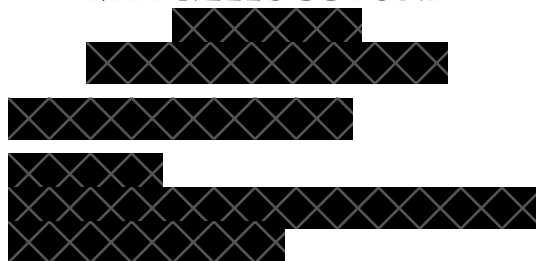




Registration Summary

RKMF Expedition Grant (GROUP APPLICATION)
2014/2015



**Ritt Kellogg Memorial Fund
Registration**

Registration No. WPQT-LS6FK
Submitted Jan 5, 2015 9:59pm

Registration

Oct 30, 2014-
Aug 31

Ritt Kellogg Memorial Fund

RKMF Expedition Grant GROUP APPLICATION

This is the group application for a RKMF Expedition Grant. If you have received approval, you may fill out this application as a group. In this application you will be asked to provide important details concerning your expedition.



Participant



I. Expedition Summary

Expedition Name

Thoreau and Thru Hiking

Objectives

On our proposed expedition we plan to thru hike the Colorado Trail beginning in Denver and ending in Durango. Along the way we will study Henry David Thoreau, reading one of his books, two of his essays, and several of his poems. Reading his works will take place during meals and at camp.

Location

We will begin in Denver and hike to Durango via the Colorado Trail, using the newly constructed Collegiate West Alternate route from sections 11-15.

Departure Date

Jul 10, 2015 12:00am

Return Date

Jul 9, 2015 12:00am

Days in the Field

30-35

Wilderness Character

The CT currently spans 485 miles across the most mountainous areas of Colorado, from Denver to Durango. It travels through eight major mountain ranges, seven national forests, and six wilderness areas. The trail's average elevation hovers around 10,347 feet above sea level, with its lowest point at 5,520 ft and its highest point at 13,240 ft. This trail encounters many different landscapes, including high alpine sections and dry desert-like sections. The trail is considered well marked and easy to follow by western trail standards. Although the CT is in the wilderness for the majority of the time, the trail does go near or through small towns periodically. As unfortunate as it is that we must come into contact with civilization and society during our trip, there are several benefits that stem from occasionally being close to civilization that we can take advantage of. First, this puts us in a better position to carry out an evacuation if it necessary. Secondly, this allows us to set up maildrops thus keeping our average pack weight down. This in turn allows us to hike the CT at a faster rate. As Ritt Grants are meant to be as wilderness-oriented as possible, we will attempt to limit our contact with others when we do contact civilization. It will be important for us to maintain our wilderness state of mind that we will be accustomed to being in when we do encounter civilization or even during interactions with other hikers on the trail.

II. Participant Qualifications

Participants' Graduation Date

Austin Martin '18

Lindsey Deringer '18

Genevieve Buzan '18

Medical Certifications

Austin Martin '18, taking WFR over half block 2015, taking EMT-Basic adjunct 2nd semester; will be W-EMT certified by time of trip

Lindsey Deringer '18, taking WFR over half block 2015, will be WFR certified by time of trip

Genevieve Buzan '18, taking WFR over half block 2015, will be WFR certified by time of trip

Does your group have adequate experience?

Yes

Training Plan

For our expedition we will prepare both by solidifying our technical/camping skills and also by preparing physically. Prior to the trip we will inspect each piece of gear we are to bring on the trail in order to ensure that everything is in proper working order, and we will also ensure that each of our members knows how to set up and fix each piece of gear. The two most important pieces of gear that will each member will need to be familiar with in both the set up and in repairing are the tent and the camp stove.

Although our busy block plan schedules will likely prevent us from being able to regularly workout

together, we will individually do our part to get into proper shape for the expedition. We will have a meeting to discuss the importance of preparing ourselves physically, and we will construct workout schedules for each individual in order for them to get fit on their own. These workouts will primarily consist of sustained cardio workouts, likely increasing incrementally in length leading up to the trip. These cardio workouts will be supplemented with core workouts.

We will go on at least one shakedown hike/backpacking trip in order to begin to become comfortable with camping with each other, and to discover how each individual functions together in our group. This will take place sometime this spring (spring 2015). Additionally, we will try our best to take a couple of backpacking trips during the beginning of our summer while we are each back home. Although our group members spend quite a lot of time together regularly, this shakedown hike that will take place this spring will be necessary and helpful to observe how we behave and interact with each other in a backcountry setting. Furthermore, on our training hike(s) we will pack our backpacks in a way that will simulate what we will experience on the trail.

III. Expedition Logistics, Gear and Food

Travel Plan

Expedition members will meet in Denver prior to trip in order to finalize gear and food. We will be dropped off at the Waterton Canyon trailhead by either Gen or Lindsey's parents [REDACTED]. We will also be picked up at the Junction Creek trailhead in Durango by either Gen or Lindsey's parents.

Waterton Trailhead address:

Waterton Canyon Trailhead

11300 Waterton Road

Littleton, CO 80125

Expedition Itinerary

July 10: Waterton Canyon to South Platte River

6:00am-arrive at Waterton Canyon Trailhead

6:30am-set foot on trail

Distance: 16.8 mi

Miles from Denver TH(by end of day): 16.8 mi

Elevation: 2,830 up/2,239 down

Segments: 1 (16.8 mi)

Notes: Camp above South Platte River; fill with water, last reliable on-trail water for 13 miles

July 11: South Platte River through Buffalo Creek burn area to Tramway Creek (Pike National Forest)

Distance: 16.6 mi

Miles from Denver: 33.4 mi

Elevation: 2,482 up/753 down

Segments: 2(11.5 mi), 3(5.1 mi)

Notes: Camp near Tramway Creek

July 12: Tramway Creek to the Brookside-McCurdy trail junction (Pike National Forest and Lost Creek Wilderness Area)

Distance: 16.3 mi

Miles from Denver: 49.7

Elevation: 3,000 up/700 down

Segments: 3(7.1 mi), 4(9.2)

Notes: Pass Brookside-McCurdy trail junction and camp near small tributary stream

July 13: Lost Creek Wilderness Area

Distance: 15.6 mi

Miles from Denver: 65.5 mi

Elevation: 1,000 up/1,700 down

Segments: 4(7.2 mi), 5(8.4 mi)

Notes: Camp near Johnson Gulch, seasonal stream nearby

July 14: Johnson Gulch to Michigan Creek

Distance: 16.5

Miles from Denver: 82 mi

Elevation: 1,500 up/800 down

Segments: 5(6.2 mi), 6(10.3)

Notes: Camp about 2.5 miles after intersection with Michigan creek

July 15: Michigan Creek to lodgepole forest

Distance: 17.2 mi

Miles from Denver: 99.2 mi

Elevation: 2,000 up/3,600 down

Segments: 6

Notes: Camp after fork in lodgepole forest

July 16: Lodgepole forest to Breckenridge RE-RATION #1 (5.2 mi into day) to Wheeler trail

Distance: 15.6 mi

Miles from Denver: 114.8 mi

Elevation: 3,700 up/2,300 down

Segments: 6(5.2 mi), 7(10.4 mi)

Notes: Re-ration in Breckenridge 5.2 miles into day. Free bus picks up at Gold Hill trailhead, one of our expedition members will ride bus to and from Breckenridge to pick up our package from the Fireside Inn. Load food into packs and prepare for a long climb (~3,500 ft). Camp after turning right on Wheeler trail (10.4 mi past Breck).

July 17: Wheeler Trail to Kokomo Pass

Distance: 16.5 mi

Miles from Denver: 131.3

Elevation: 2,400 up/2,500 down

Segments: 7(2.4 mi), 8(14.1 mi)

Notes: Scattered camping around treeline past Kokomo Pass

July 18: Kokomo Pass to Holy Cross Wilderness Area

Distance: 18.2 mi

Miles from Denver: 149.5 mi

Elevation: 1,800 up/1,900 down

Segments: 8(11.3 mi), 9(6.9 mi)

Notes: Camp near stream in Longs Gulch (.2 mi into Holy Cross wilderness area)

July 19: Longs Gulch to North Willow Creek

Distance: 15.5 mi

Miles from Denver: 165 mi

Elevation: 3,000 up/2,900 down

Segments: 9(6.7 mi), 10(8.8 mi)

Notes: Cross North Willow Creek and camp at campsite; water from Willow creek

July 20: North Willow Creek to Twin Lakes Village RE-RATION #2(7.1 mi into day) to Mount Elbert Power Plant

Distance: 15.5 mi (13.5mi+2mi)

Miles from Denver: 178.5 mi

Elevation: 700 up/2,200 down

Segments: 10(4.3 mi), 11(9.2 mi)

Notes: Re-ration at Twin Lakes General Store 10.2 miles into day. General store is 1 mile from trailhead(2 mi round trip). After loading packs, hike 3.3 miles and camp. This will put us 4.5 miles away from the Collegiate Alternate trail junction.

July 21: Mount Elbert Power Plant to Sheep Gulch

Distance: 15 mi

Miles from Denver: 193.5 mi

Elevation: 3,000 up/2,300 down

Segments: 11(4.5 mi), Collegiate West(CW) 1 (9.8 mi), CW 2(0.7 mi)

Notes: Long climb (3,000 vert) to top of Hope Pass 11.8 miles into day. Pass Sheep Gulch TH and camp near small creek

July 22: Sheep Gulch to Prospector Gulch

Distance: 16.7 mi

Miles from Denver: 210.2 mi

Elevation: 3,100 up/1,900 down

Segments: CW 2

Notes: Make several creek crossings and camp around Prospector Gulch

July 23: Prospector Gulch to Garden Basin TH

Distance: 16.9 mi

Miles from Denver: 227.1 mi

Elevation: 2,500 up/2,200 down

Segments: CW 2(7.8 mi), CW 3(9.1 mi)

Notes: Camp near small stream located 1.2 miles before reaching Garden Basin TH

July 24: Garden Basin TH to Hancock TH

Distance: 16.4 mi

Miles from Denver: 243.5 mi

Elevation: 2,900 up/2,900 down

Segments: CW 3(1.2 mi), CW 4(14.2 mi), CW 5(1 mi)

Notes: Camp ~1 mi past Hancock TH

July 25: Hancock TH to Monarch Ski Area

Distance: 15 mi

Miles from Denver: 258.5 mi

Elevation: 2,900 up/2,700 down

Segments: CW 5

Notes: Camp ~2 mi before Monarch Ski Area, low point in trail

July 26: Monarch Ski Area to Monarch Pass RE-RATION #3(1.7 miles into day) to Marshall Pass TH

Distance: 13.3 mi

Miles from Denver: 267.8 mi

Elevation: 500 up/1,100 down

Segments: CW 5(6.6 mi), 15(5.7 mi), 16(1 mi)

Notes: Re-ration at Monarch Crest store 1.7 miles into day. Sleep in, as store doesn't open until 8am. Store is located very close to Monarch Pass trailhead. After loading packs, continue for 4.9 miles to reach Junction with Segment 15.(8.6 miles into segment 15). End of Collegiate West route. Hike for 6.7 miles past junction and camp about 1 mile past Marshall Pass Trailhead.

July 27: Marshall Pass TH to Long Branch trail

Distance: 16.6 mi

Miles from Denver: 284.4 mi

Elevation: 1,500 up/1,300 down

Segments: 16(14.2 mi), 17(2.4 mi)

Notes: Be sure to fill up water near Cross Tank Seven Creek, as it is the last water source for 11 miles. Cross Long Branch trail and find a place to camp.

July 28: Long Branch trail to Headwaters of Lujan Creek

Distance: 16.8 mi

Miles from Denver: 301.2 mi

Elevation: 800 up/1,900 down

Segments: 17

Notes: camp near headwaters of Lujan Creek, use as water source

July 29: Headwaters of Lujan Creek to Ant Creek

Distance: 15.4 mi

Miles from Denver: 316.6 mi

Elevation: 300 up/800 down

Segments: 17(1.2 mi), 18(13.8 mi), 19(0.4 mi)

Notes: Dry camp, so be sure to fill with water at Los Creek, and then Monchego Creek.

July 30: Ant Creek to Steward Creek Trail

Distance: 19.1 mi

Miles from Denver: 335.7 mi

Elevation: 1,900 up/500 down

Segments: 19(13.3 mi), 20(5.8 mi)

Notes: cross small stream and camp at campsite just past it. This is approx. 1 mile before you reach Steward Creek trail

July 31: Steward Creek Trail to Snow Mesa

Distance: 16.4 mi

Miles from Denver: 352.1 mi

Elevation: 4,200 up/2,800 down

Segments: 20(6.9 mi), 21(9.5 mi)

Notes: camp in Snow Mesa, trail undulates in and out of small drainages

August 1: Snow Mesa to Ruby Creek

Distance: 16.8

Miles from Denver: 368.9 mi

Elevation: 2,000 up/2,000 down

Segments: 21(5.3 mi), 22(11.5 mi)

Notes: Water in ponds 0.5mi from trail/campsite

August 2: Ruby Creek to Cuba Gulch

Distance: 15.6 mi

Miles from Denver: 384.5 mi

Elevation: 2,800 up/2,000 down

Segments: 22(5.7 mi), 23(9.9 mi)

Notes: Campsite in small grassy meadow, water just past campsite

August 3: Cuba Gulch to Arrow and Vestal Peaks overview

Distance: 17.6 mi

Miles from Denver: 402.1 mi

Elevation: 1,300 up/3,800 down

Segments: 23(6 mi), 24(11.6 mi)

Notes: camp near ponds and views of Arrow and Vestal Peaks. Campsites on east side of pond.

August 4: Arrow and Vestal Peaks overlook to Molus Pass RE-RATION #4(8.6 miles into day) to Lime Creek tributary

Distance: 13.6 mi

Miles from Denver: 415.7 mi

Elevation: 2,800 up/1,200 down

Segments: 24(8.6 mi), 25(5 mi)

Notes: Re-ration at Molus Lake Campground 8.6 miles into day. Molus Lake Campground is located right off of the trail on US 550. Load packs, and continue 5 miles to campsite just before Lime Creek.

August 5: Lime Creek tributary to Bolam Pass Rd.

Distance: 15.9 mi

Miles from Denver: 431.6 mi

Elevation: 1,900 up/2,000 down

Segments: 25

Notes: Water and campsites at Celebration Lake, Bolam Pass Rd.

August 6: Bolam Pass Rd. to Corral Draw Trail

Distance: 13.8 mi

Miles from Denver: 445.4 mi

Elevation: 1,000 up/1,500 down

Segments: 26(10.9 mi), 27(2.9 mi)

Notes: Fill water 8.4 miles into Day, last reliable water source for 22 miles until Taylor Lake. Look for potential small water sources throughout day. Camp at campsites beyond Corral Draw Trail.

August 7: Corral Draw Trail to Taylor Lake

Distance: 16.5 mi

Miles from Denver: 461.9 mi

Elevation: 1,300 up/400 down

Segments: 27

Notes: camp near Taylor Lake, refill water, this will also be the highest elevation we will encounter on the trail

August 8: Taylor Lake to past Junction Creek

Distance: 12.7 mi

Miles from Denver: 474.6 mi

Elevation: 1,000 up/2,300 down

Segments: 27(1.2 mi), 28(11.5 mi)

Notes: camp 4.4 miles after crossing Junction Creek for final time. Water source at campsite, 200 ft below trail.

August 9: Past Junction Creek to Junction Creek Trailhead(Durango Terminus)

Distance: 10 mi

Miles from Denver: 484.6 mi

Elevation: 0 up/2,500 down

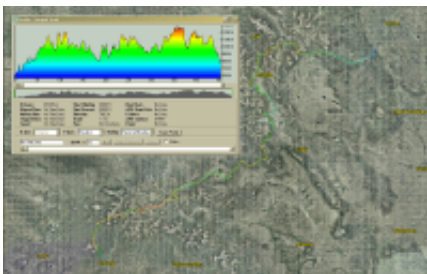
Segments: 28

Notes: Finish CT at Junction Creek Trailhead

Maps/Topos/Charts

[CT Overview Map.pdf](#) (6.7MB)

Uploaded Jan 5 by Austin Martin



[Screen Shot 2014-12-25 at 5.24.33 PM.png](#) (4.4MB, 2016x1274px)

Uploaded Jan 5 by Austin Martin

[Food List.pdf](#) (285KB)

Uploaded Jan 5 by Austin Martin

Re-Ration Plans

Because of the length of the trip, it will be necessary re-ration multiple times throughout the trip. We have constructed our itinerary to include four re-rations. Each re-ration will essentially mean picking up a package containing food and supplies that we will have sent to a particular location (also known as a maildrop). The first re-ration will supply us with food for 4 days, the second for 6 days, the third for 9 days, and the fourth for 5 days. We attempted to plan our re-rations to occur at locations that are trail-side or within reasonable walking distance. Unfortunately our first re-ration point (Breckenridge, Fireside Inn) will have to be accessed by taking a bus to the town of Breckenridge from the Gold Hill trailhead and back(8 miles roundtrip). The remaining re-rations are either trail-side or within reasonable walking distance from the CT. Each package will contain a particular number of meals, snacks, and stove fuel. The number of meals and their ingredients that will be included in each particular package is specified later in this application. Stove fuel can indeed be

shipped via ground transportation as long as the package is properly labeled. We will include fuel in our packages, and our packages will have appropriate labeling. All maildrop locations will be contacted prior to our trip in order to ensure that they will hold our package, and to ensure that their establishment will be open at the time and on the date that we are planning on passing through. Each of the locations that we have chosen are well known and used locations for maildrops for CT thru hikers. The particulars of each re-ration point are as follows:

#1)Our first re-ration will occur on day 7 in breckenridge (104.4 miles into trail) at the Fireside Inn. This Inn regularly receives and holds mail drop packages for CT thru hikers. In order to get to the Inn from the trailhead one of us will ride the free bus (number 970-668-0999) to and from the Inn. The Gold Hill trailhead is one of the stops that the bus makes, so our group member will be picked up right from the trail. We have deliberated over other options and this is the most reasonable. As unfortunate as it is that we have to interact with the outside world and with non-human powered modes of transportation, this is the easiest and most practical way for us to re-ration.

Website: firesideinn.com

Address: Fireside Inn

114 North French Street

(PO Box 2252)

Breckenridge, CO 80424-2252

TAKES MAILDROPS VIA UPS ONLY

Phone: 970-453-6456

#2) Our second re-ration will occur on day 11(4 days after Breck) at the Twin Lakes General Store. The owners of the general store are enthusiastic about hikers, and they gladly hold packages. They have a hiker box in front of their store(in case we have any extra goodies to donate), and they sell hiking equipment such as stove fuel. This store is only 1 mile from the trail, so we will make the hike to and from the store.

Website: <http://www.twinlakesgs.com/>

Address:Twin Lakes General Store

6451 E Hwy 82

Twin Lakes, CO 81251

Phone: (719)-486-2196

#3) Our third re-ration will occur on day 17(6 days after Twin Lakes) at a gift shop at Monarch Pass. This location is essentially right off the trail, and requires no additional transportation.

Address: Monarch Crest Inc.

24500 US 50

Salida, CO 81201

TAKES MAILDROPS VIA UPS ONLY

Phone: (719)-539-4091

#4) Our fourth and final re-ration will occur on day 26 (9 days after Monarch Pass) at the Molus Lake Campground.

Website: <http://molaslake.com/>

Location: US Hwy 550 between mile marker 65 and 66 Silverton CO 81433

Mailing Address: PO Box 250

Silverton CO, 81433

Phone:(970)-759-2218

Food Storage

We will follow all bear procedures, including raising our food and toiletries in a bear bag. While there are black bears on the CT, they are not known to be aggressive. These bears tend to stick to the valleys and are not habituated to backpackers like their High Sierra cousins. There are only a handful of reported bear sightings on the CT each year. However, once again we will be sure to follow all bear procedures, including following the bear-muda triangle camping pattern (in which we create a 100 m triangle between our campsite, our kitchen, and food storage) and raising bear bags. Although bear canisters are indeed an option, they are bulky and would quite frankly be overkill for our expedition needs.

Food List

Food list too large to copy and paste in this response box, food list is uploaded as file with maps and topos.

Equipment List

GROUP GEAR:

Sleeping

- 3-man tent w/footprint

Cooking/Cleaning

- stove (MSR Superfly)
- lightweight cooking pot w/lid
- lightweight frying pan
- spatula
- ladle
- CampSuds (1 bottle)
- small sponge
- 1 sharp non-folding knife

Navigation

- Delorum (tracker)
- area maps, compass

Toilet Kit

- hand sanitizer (2 small bottles)
- trowel
- toilet paper (6 rolls?)

Water Treatment

- Aquamira
- Katadyn Hiker Pro water filter w/extra filter
- 4 liter MSR water bag

Misc.

- bear cord-50ft of 3mm utility cord w/carabiner
- sunscreen (12 oz per person=36 oz)
- insect repellent (1 bottle)
- trash bags
- HEFTY compactor bags (to use as pack liners)
- Thoreau's works: Walden, On the Duty of Civil Disobedience, Walking, printed poems

INDIVIDUAL GEAR:

- internal frame pack (>60 liters) w/rain cover and pack liner (HEFTY garbage bag is sufficient)
- sleeping pad
- sleeping bag(<20 degree)
- headlamp w/extra batteries
- capacity to carry 4 liters of water (nalgenes, camelback)

Feet:

- hiking boots
- camp shoes
- wool socks
- gaiters(optional)

Eat:

- bowl or mug
- spoon or spork

Rain:

- rain jacket
- rain pants

Head:

- warm hat
- sun hat
- bandana(optional)

Eyes:

- eye glasses/contacts
- sunglasses

- long johns/warm base layer
- hiking clothing

Upper body clothing:

- short sleeve base layer
- long sleeve base layer
- insulate jacket (puffy)
- extra insulation layer
- light gloves

Lower body clothing:

- shorts
- hiking pants
- rain pants
- underwear

Misc.

- prescription medication/epipen
- personal hygiene items
- lip protection
- trekking poles (optional)
- camera

FIRST AID KIT:

Bandage Materials

- 8 - Bandage, Adhesive, Fabric, 1" x 3"
- 5 - Bandage, Adhesive, Fabric, Knuckle
- 2 - Bandage, Conforming Gauze, 3"
- 1 - Bandage, Stockinette Tubular, 1" x 4"
- 2 - Dressing, Gauze, Sterile, 2" x 2", Pkg./2
- 3 - Dressing, Gauze, Sterile, 4" x 4", Pkg./2
- 3 - Dressing, Non-Adherent, Sterile, 3" x 4"

Bleeding

- 2 - Gloves, Nitrile (Pair), Hand Wipe
- 1 - Instructions, Easy Care Bleeding

- 1 - Trauma Pad, 5" x 9"
- 1 - Trauma Pad, 8" x 10"

Blister / Burn

- 1 - Aloe Vera Gel with Lidocaine, 1 oz
- 2 - GlacierGel (Small Rectangular)
- 1 - Moleskin, Pre-Cut & Shaped (14 pieces)

CPR

- 1 - CPR Face Shield

Duct Tape

- 1 - Duct Tape, 2" x 5 Yards

Fracture / Sprain

- 1 - Bandage, Elastic with Velcro, 3"
- 1 - Bandage, Triangular
- 1 - Instructions, Easy Care Fracture & Sprain
- 1 - C-Splint™, 4" x 36"

Instrument

- 1 - EMT Shears, 4"
- 1 - Pencil
- 3 - Safety Pins
- 1 - Splinter Picker/Tick Remover Forceps
- 1 - Thermometer, Digital

Medical Information

- 1 - Comp. Guide to Wilderness & Travel Medicine
- 1 - Patient Assessment Form

Medication

- 4 - Acetaminophen (500 mg), Pkg./2
- 4 - Antihistamine (Diphenhydramine 25 mg)
- 1 - Aspirin (325 mg), Pkg./2
- 4 - Ibuprofen (200 mg), Pkg./2
- 1 - Instructions, Easy Care Medications

Other

- 2 - Plastic Vial, Flip-top, Large

Wound Care

- 6 - Antiseptic Wipe
- 2 - Cotton Tip Applicator, Pkg./2
- 1 - Instructions, Easy Care Wound
- 1 - Povidone Iodine, 3/4 oz
- 1 - Syringe, Irrigation, 20 cc, 18 Gauge Tip
- 1 - Tape, 1" x 10 Yards
- 2 - Skin Tac Adhesive, Wipes
- 3 - Triple Antibiotic Ointment, Single Use
- 1 - Wound Closure Strips, 1/4" x 4", Pkg./10

Leave No Trace

Yes, all expedition members are indeed familiar with all seven LNT principles. We will also have a discussion prior to setting foot on the trailhead about LNT, and how we will do our best to minimize our impact in order to preserve Colorado's wilderness for others.

Plan for Minimizing Impacts

As we will be re-rationing along the trip, we will have ample opportunities to dispose of any waste/recycling that we might have. We will attempt to buy dry goods in bulk prior to our trip in order to minimize packaging and waste. Each morning after packing up camp we will conduct a final sweep in order to pick up any microtrash, even if it is not ours. We will also pick up any trash found on the trail and pack it out.

Cultural Concerns

No, there are no cultural considerations for our expedition area.

IV. Risk Management

Hazard Mitigation Plan

As we will be hiking the CT from mid-July to mid-August, we will be right in the middle of monsoon season. This means there is potential for severe thunderstorms on a daily basis. Lightning will likely be our biggest danger on the trail. During this season, storms generally begin to brew around 1 or so in the afternoon. We are planning on having early starts daily (alarms set at ~4:30am) in order to get most of our hiking done before storms begin to brew. Each of our expedition members are familiar with lightning procedure, and we will review procedures before we set foot on the trail.

Another major hazard we could potentially face is the lack of water. There are a few sections of trail where we will go without water for fairly long distances, the longest being 22 miles. This potential hazard can be mitigated by having the capacity to carry a large amount of water. We will each have the capacity to carry 4 liters each, with one additional water container (4 liter capacity) for our group. We have researched our route, and have taken note where water sources are. There are indeed a couple of sections that will require us to carry extra water, and we will be prepared to do so. We have planned for the majority of our campsites to be near water sources for cooking purposes and to allow us to be full of water before we begin each day.

Evacuation Plan

In the event of an emergency that requires an evacuation we will begin by assessing our location, evacuation route options, and our physical capabilities of executing an exit strategy. First, we will decide whether or not the location we are currently at is safe enough to stay at while we come up with a plan. In situations in which we are not safe at our current location due to natural or artificial threats, we will immediately move to a

location at which we can take a moment to assess. Next, we will determine what we are physically capable of doing. If one member is injured, the other two members will split the weight of the injured member's pack in order to allow quicker movement of the team. In addition, all three members will have WFR certifications, and will act upon that knowledge post assessment of injury.

If an emergency does occur, it is likely to be medically related. The seriousness of a particular medical injury or emergency will directly dictate our course of action. If it is something that poses as a serious threat to the well-being of the individual expedition member, it may be necessary to abandon the expedition in order to get the individual to professional medical attention. The CT was designed and built with an access point at each end of all 28 segments, so it is possible or even probable that we as a team will be able to get the victim to an accessible point for rescue personnel. In a last-resort situation we may be forced to resort to using our DeLorme tracker to signal a rescue if we are unable to move the victim to one of these access points.

Once again, our response to an emergency will be totally dependent on the severity of it. We will be equipped with a expedition-grade first aid kit that will put us in a position to treat basic and minor injuries. However, even small injuries can lead to emergency situations. Having each taken WFR, we will be able to make rational decisions, and will think about how even a small injury could have drastic consequences.

Special Preparedness

Both Gen and Lindsey have had previous injuries, but will continue their physical therapy exercises before and during the trip. Apart from physical therapy, all members of the expedition will take measures to train for the CT; this training will reduce the risk of stress related injuries.

Emergency Resources

Although much of the CT runs through remote wilderness, the trail goes in and out of towns periodically. Usually with the presence of these towns comes the ability to use cell service. If there is a medical emergency and an E-VAC is deemed necessary, becoming in range of cell service is a real possibility. This would allow us to contact the local county Sheriff associated with the region in which we are currently in. If service is unable to be obtained by our mobile device, we can resort to using our DeLorme tracking device to signal an emergency, assuming the situation is one which necessitates it.

Segment	County	Sheriff Phone
1-3	Jefferson	303-277-0211
4-6	Park	719-836-2494
6-8	Summit	970-668-8600
8	Eagle	970-328-8500
9-11	Lake	719-486-1249
12-15	Chaffee	970-539-2596
15-20	Saguache	719-655-2525
21	Mineral	719-658-2600

21-23	Hinsdale	970-944-2291
24-25	San Juan	970-387-5531
26	Dolores	970-677-2257
27-28	La Plata	970-385-2900

Emergency Communication

On our trip we will be carrying a DeLorme tracking device. The DeLorme will be used to allow our location to be monitored, which allows for outside sources to warn us of any hazards (fires, floods, etc.) which may affect our trip. Carrying the DeLorme also allows us to signal an E-VAC to authorities as a last resort in a dire situation.

V. Budget

BUDGET

Food: **\$1,163.02 (not including tax)**

Gear:

- Tent Rental: \$60
- Aquamira: \$74.40
- Stove fuel: \$150 (\$15x10 canisters)
- DeLorme Service: \$40 (\$14.95 per monthX2 months+location pings)

UPS shipping: \$250

Fuel/Transportation: 336.5 (mileage from Denver to Durango) x \$0.6 (government estimation of reimbursement per mile) = \$201.90

TOTAL COST: \$1939.32

Transportation

\$201.90

Food and Fuel

\$1313.02

Maps and Books

0

Communication Device Rental

\$40

Permits/Fees

0

Gear Rentals

\$60

Total Funding Request

\$1,939.32

Cost Minimization Measures

The most significant cost in this expedition will be food. The first of the ways in which we have tried to minimize our food costs is by making a detailed plan of what exactly we need. The detailed plan reduces over-buying which both minimizes cost and potential waste of the trip. We also planned our final re-ration to use as much leftover food as possible, so as to not end the trip with any extra food (apart from hashbrowns and jelly). Buying our ingredients in bulk will also decrease the cost of our food, and decrease the amount of packaging used.

Our efforts to reduce cost also carried into the gathering of gear. Any gear that we do not already own we will first attempt to borrow from others. If we can't find someone who has the particular piece of gear will we rent it.

Food will be incredibly important to us while we hike. It will be necessary to receive the proper amount of calories necessary for our strenuous daily activity. It will also be necessary to ensure that we are receiving the proper amounts of carbs, protein, vitamins, and amino acids. Our plan is to have 7 “meals” per day: Breakfast, Snack, Snack, Lunch, Snack, Snack, Dinner. Endurance is most critically determined by maintaining carbohydrate/glycogen stores in muscles. Frequent snacking will be necessary to sustain energy levels for the long haul.

We will be going without meat on our expedition, so in order to obtain our protein we will need to consume at least four servings per day of dried beans, nuts, seeds, and dairy.

BMR(Basal Metabolic Rate): uses equation that takes into account height, weight, age, sex in order to calculate caloric needs. We used the website <http://www.bmi-calculator.net/bmr-calculator/>

Our thru hike will put us in the “extra active” category, so in order to calculate our daily caloric needs we have multiplied our individually calculated BMR’s by 1.9.

Caloric Calculations:

Austin- BMR: 1754.6	$1754.6 \times 1.9 = 3,333$ calories per day
Lindsey- BMR: 1359.1	$1359.1 \times 1.9 = 2,582$ calories per day
Gen- BMR: 1458.5	$1458.5 \times 1.9 = 2,771$ calories per day

Protein Calculations: body weight divided by 2.2 lb/kg x1.0

Austin-67g protein/day
Lindsey-55g protein/day
Gen-61g protein/day

One problem that some thru hikers encounter is not acquiring enough lysine from their foods while on the trail. Not acquiring enough lysine can cause fatigue, nausea, dizziness, loss of appetite, agitation, and anaemia. Lysine, which is an essential amino acid that serves as a building block for proteins, cannot be produced by the body. Because of this, it must be obtained through food or supplements. One quick way to ensure that you are getting enough lysine is to consume at least four servings of protein-rich foods.

Lysine Calculations: recommended 58mg lysine/gram of protein

Austin-3,886 mg lysine
Lindsey-3,190 mg lysine
Gen-3,538 mg lysine

Caloric Obtention:

Per Meal - Austin ~ 670 calories
Lindsey ~ 520 calories
Gen ~ 560 calories

Snacks(4 per day, total calories) - Austin ~ 335 calories
Lindsey ~ 260 calories
Gen ~ 280 calories

Stepping onto trail, packs will contain:

7 Breakfasts
7 Lunches
6 Dinners
Snacks

Breckenridge package will contain:

4 breakfasts
4 lunches
4 dinners
Snacks

Twin Lakes package will contain:

6 breakfasts
6 lunches
6 dinners
Snacks

Monarch Pass package will contain:

9 breakfasts
9 lunches
9 dinners
Snacks (1 cliff bar, 1 nature valley bar, 2 fruit leather wheat thins)

Molas Lake package will contain:

5 breakfasts
5 lunches
5 dinners
Snacks

Food Plan for Miles 0-104.4 (Estimated 6 days of hiking)

Food Item	Serving Size, Calories	Total Number of Servings	Units Needed	Cost	Leftovers (to be used in later)
Quaker Instant Oatmeal (40 oz)	½ cup (uncooked), 150 calories	30 servings/ container	*double servings 18 servings	\$3.98	12 servings
Great Value Powdered Milk	⅓ cup dry, 82 calories	32 servings/ container	6 servings	\$15.98	26 servings
Quaker Oats Honey & Almond Granola	½ cup dry, 200 calories	6 servings/ container	6 servings, 1 box	\$4.50	---
Scrambled Eggs Mix	11 grams, 60 calories	92 servings/ container	*triple servings 18 servings	\$26.64	74 servings
Hash Browns	31 grams, 110 calories	21 servings/ container	6 servings	\$8.17	15 servings
Great Value Creamy Peanut Butter	2 tbsp, 190 calories	35 servings/ container	9 servings	\$3.98	26 servings
Jelly	2 tbsp, 50 calories	45 servings/ container	9 servings	\$7.50	36 servings
Dried Mango	40.5g, 130 calories	4.5 servings/ container	6 servings	\$7.76	3 servings

Dried Apple	40g, 110 calories	3 servings/ container	6 servings	\$4.5 6	---
Dried Apricot	40g, 100 calories	4 servings/ container	6 servings	\$5.9 6	2 servings
Mixed Nuts	28g, 170 calories	26 servings/ container	15 servings	\$9.4 8	9 servings
Clif Bars	1 bar, ~240 calories	12 bars/box	21 bars	\$57. 12	3 bars
Nature Valley Bars	2 bar package, 180 calories	12 packages/ box	42 bars	\$19. 92	6 bars
Wheat Thins	31g, 140 calories	15 servings/ box	21 servings	\$7.7 6	9 servings
Mission Flour Tortillas (Large)	1 tortilla, 210 calories	16 tortillas/bag	18 tortillas	\$9.1 6	14 tortillas
Hummus Mix	14g, 45 calories	12 servings/ box	*double servings 12 servings	\$18. 96	---
Pita Bread	1 bread, 150 calories	6 servings/bag	6 servings	\$2.7 9	---
Carrots	9 carrots, 35 calories	10 servings/ bag	12 servings	\$5.9 6	8 servings
Dehydrated Black Beans	172g, 227 calories	4 oz/container	3 oz	\$3.9 5	1 oz (1 serving)

Tofu	85g, 100 calories	2.5 servings/ container	18 servings	\$17.5	---
Cheddar Cheese	---	---	2 8 oz. block	\$4.96	---
Instant Rice	44g, 160 calories	18 servings/ box	3 servings	\$2.44	15 servings
Pasta	56g, 200 calories	8 servings/ box	6 servings	\$7.50	---
Dehydrated Alfredo Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.64	---
Dehydrated Pesto Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.64	---
Macaroni and Cheese	85g, 330 calories	2 servings/ box	4 servings	\$5.32	---

Total Cost = \$269.13

Re-ration 1: Breckenridge (Estimated 4 days)

Food Item	Serving Size, Calories	Total Number of Servings	Units Needed	Cost	Leftovers (to be used in later)
Quaker Instant Oatmeal (40 oz)	½ cup (uncooked), 150 calories	30 servings/ container	*double servings 6 servings	---	6 servings
Great Value Powdered Milk	⅓ cup dry, 82 calories	32 servings/ container	6 servings	---	20 servings

Quaker Oats Honey & Almond Granola	½ cup dry, 200 calories	6 servings/ container	6 servings, 1 box	\$4.50	---
Scrambled Eggs Mix	11 grams, 60 calories	92 servings/ container	*triple servings 9 servings	---	63 servings
Hash Browns	31 grams, 110 calories	21 servings/ container	3 servings	---	12 servings
Great Value Creamy Peanut Butter	2 tbsp, 190 calories	35 servings/ container	3 servings	---	23 servings
Jelly	2 tbsp, 50 calories	45 servings/ container	3 servings	---	33 servings
Dried Mango	40.5g, 130 calories	4.5 servings/ container	6 servings	\$3.88	1.5 servings
Dried Apple	40g, 110 calories	3 servings/ container	6 servings	\$4.56	---
Dried Apricot	40g, 100 calories	4 servings/ container	3 servings	\$5.96	3 servings
Mixed Nuts	28g, 170 calories	26 servings/ container	15 servings	\$9.48	20 servings
Clif Bars	1 bar, ~240 calories	12 bars/box	12 bars	\$28.56	3 bars

Nature Valley Bars	2 bar package, 180 calories	12 packages/box	24 bars	\$9.96	6 bars
Wheat Thins	31g, 140 calories	15 servings/box	12 servings	\$3.88	12 servings
Mission Flour Tortillas (Large)	1 tortilla, 210 calories	16 tortillas/bag	9 tortillas	---	5 tortillas
Hummus Mix	14g, 45 calories	12 servings/box	*double servings 6 servings	\$18.96	6 servings
Pita Bread	1 bread, 150 calories	6 servings/bag	3 servings	\$2.79	3 servings
Carrots	9 carrots, 35 calories	10 servings/bag	8 servings	---	---
Cheddar Cheese	---	---	2 8 oz. block	\$4.96	---
Tofu	85g, 100 calories	2.5 servings/container	12 servings	\$12.50	---
Macaroni and Cheese	85g, 330 calories	2 servings/box	6 servings	\$7.98	---

Cumulative Total Cost = \$387.10

Re-ration 2: Twin Lakes (Estimated 6 days of hiking)

Food Item	Serving Size, Calories	Total Number of Servings	Units Needed	Cost	Leftovers (to be used in later)
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Quaker Instant Oatmeal (40 oz)	½ cup (uncooked), 150 calories	30 servings/ container	*double servings 12 servings	\$3.98	24 servings
Great Value Powdered Milk	⅓ cup dry, 82 calories	32 servings/ container	3 servings	---	17 servings
Quaker Oats Honey & Almond Granola	½ cup dry, 200 calories	6 servings/ container	3 servings, 1 box	\$4.50	3 servings
Scrambled Eggs Mix	11 grams, 60 calories	92 servings/ container	*triple servings 27 servings	---	36 servings
Hash Browns	31 grams, 110 calories	21 servings/ container	9 servings	---	3 servings
Great Value Creamy Peanut Butter	2 tbsp, 190 calories	35 servings/ container	6 servings	---	17 servings
Jelly	2 tbsp, 50 calories	45 servings/ container	6 servings	---	27 servings
Dried Mango	40.5g, 130 calories	4.5 servings/ container	6 servings	\$3.88	---
Dried Apple	40g, 110 calories	3 servings/ container	6 servings	\$4.56	---
Dried Apricot	40g, 100 calories	4 servings/ container	3 servings	\$5.96	3 servings

Mixed Nuts	28g, 170 calories	26 servings/ container	15 servings	---	5 servings
Clif Bars	1 bar, ~240 calories	12 bars/box	18 bars	\$57. 12	9 bars
Nature Valley Bars	2 bar package, 180 calories	12 packages/ box	36 bars	\$14. 94	6 bars
Wheat Thins	31g, 140 calories	15 servings/ box	18 servings	\$3.8 8	9 servings
Mission Flour Tortillas (Large)	1 tortilla, 210 calories	16 tortillas/bag	18 tortillas	\$4.5 8	3 tortillas
Hummus Mix	14g, 45 calories	12 servings/ box	*double servings 12 servings	\$18. 96	6 servings
Pita Bread	1 bread, 150 calories	6 servings/bag	6 servings	\$2.7 9	3 servings
Carrots	9 carrots, 35 calories	10 servings/ bag	12 servings	\$5.9 6	10 servings
Cheddar Cheese	---	---	2 8 oz. block	\$4.9 6	---
Tofu	85g, 100 calories	2.5 servings/ container	18 servings	\$17. 5	---
Pasta	56g, 200 calories	8 servings/box	6 servings	\$7.5 0	---

Dehydrated Alfredo Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.64	---
Dehydrated Pesto Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.64	---
Instant Rice	44g, 160 calories	18 servings/ box	6 servings	---	9 servings
Dehydrated Black Beans	172g, 227 calories	4 oz/container	6 oz	\$7.90	3 oz (1 serving)

Cumulative Total Cost = \$563.35

Re-ration 3 Monarch Pass (Estimated 9 days of hiking)

Food Item	Serving Size, Calories	Total Number of Servings	Units Needed	Cost	Leftovers (to be used in later)
Quaker Instant Oatmeal (40 oz)	½ cup (uncooked), 150 calories	30 servings/ container	*double servings 24 servings	---	---
Great Value Powdered Milk	⅓ cup dry, 82 calories	32 servings/ container	6 servings	---	11 servings
Quaker Oats Honey & Almond Granola	½ cup dry, 200 calories	6 servings/ container	6 servings	\$4.50	3 servings
Scrambled Eggs Mix	11 grams, 60 calories	92 servings/ container	*triple servings 27 servings	---	9 servings

Hash Browns	31 grams, 110 calories	21 servings/ container	9 servings	\$8.17	15 servings
Great Value Creamy Peanut Butter	2 tbsp, 190 calories	35 servings/ container	12 servings	---	5 servings
Jelly	2 tbsp, 50 calories	45 servings/ container	12 servings	---	15 servings
Dried Mango	40.5g, 130 calories	4.5 servings/ container	9 servings	\$7.76	---
Dried Apple	40g, 110 calories	3 servings/ container	15 servings	\$11.40	---
Dried Apricot	40g, 100 calories	4 servings/ container	3 servings	---	---
Mixed Nuts	28g, 170 calories	26 servings/ container	27 servings	\$9.48	4 servings
Clif Bars	1 bar, ~240 calories	12 bars/box 6 bars/box	27 bars	\$34.53	---
Nature Valley Bars	2 bar package, 180 calories	12 packages/ box	27 bars	\$9.96	3 bars
Wheat Thins	31g, 140 calories	15 servings/ box	27 servings	\$3.88	---
Mission Flour Tortillas (Large)	1 tortilla, 210 calories	16 tortillas/bag	24 tortillas	\$9.16	11 tortillas

Hummus Mix	14g, 45 calories	12 servings/box	*double servings 18 servings	\$18.96	---
Pita Bread	1 bread, 150 calories	6 servings/bag	9 servings	\$2.79	---
Carrots	9 carrots, 35 calories	10 servings/bag	9 servings +1 wild card	---	---
Cheddar Cheese	---	---	2 8 oz. block	\$4.96	---
Tofu	85g, 100 calories	2.5 servings/container	27 servings	\$27.5	---
Pasta	56g, 200 calories	8 servings/box	6 servings	\$7.50	---
Dehydrated Alfredo Pasta Sauce	18g, 90 calories	2 servings/packet	3 servings	\$3.64	---
Dehydrated Pesto Pasta Sauce	18g, 90 calories	2 servings/packet	3 servings	\$3.64	---
Instant Rice	44g, 160 calories	18 servings/box	6 servings	---	3 servings
Dehydrated Black Beans	172g, 227 calories	4 oz/container	6 oz	\$3.95	1 oz (1 serving)
Fruit Leather	1 piece, 35 calories	30 pieces/container	27 pieces +3 wild cards	\$34.51	---

Cumulative Total Cost = \$769.64

Re-ration 4: Molas Lake (Estimated 5 Days of hiking)

Food Item	Serving Size, Calories	Total Number of Servings	Units Needed	Cost	Leftovers (to be used in later)
Great Value Powdered Milk	1/3 cup dry, 82 calories	32 servings/ container	12 servings	---	---
Quaker Oats Honey & Almond Granola	1/2 cup dry, 200 calories	6 servings/ container	12 servings +3 wild cards	\$9.00	---
Scrambled Eggs Mix	11 grams, 60 calories	92 servings/ container	*triple servings 9 servings	---	---
Hash Browns	31 grams, 110 calories	21 servings/ container	*triple servings 9 servings	\$8.17	6 servings
Great Value Creamy Peanut Butter	2 tbsp, 190 calories	35 servings/ container	6 servings	---	---
Jelly	2 tbsp, 50 calories	45 servings/ container	6 servings	---	9 servings
Dried Mango	40.5g, 130 calories	4.5 servings/ container	9 servings	\$7.76	---
Dried Apple	40g, 110 calories	3 servings/ container	6 servings	\$4.56	---

Dried Apricot	40g, 100 calories	4 servings/ container	8 servings	\$5.9 6	---
Mixed Nuts	28g, 170 calories	26 servings/ container 15 servings/ container	21 servings	\$5.4 8	---
Clif Bars	1 bar, ~240 calories	12 bars/box 6 bars/box	15 bars +3 wild cards	\$34. 53	---
Nature Valley Bars	2 bar package , 180 calories	12 packages/ box	15 bars	\$4.9 8	---
Wheat Thins	31g, 140 calories	15 servings/ box	15 servings	\$3.8 8	---
Mission Flour Tortillas (Large)	1 tortilla, 210 calories	16 tortillas/bag	9 tortillas +2 wild cards	---	---
Cheddar Cheese	---	---	2 8 oz. block	\$4.9 6	---
Tofu	85g, 100 calories	2.5 servings/ container	15 servings	\$15. 00	---
Pasta	56g, 200 calories	8 servings/box	6 servings	\$7.5 0	---
Dehydrated Alfredo Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.6 4	---
Dehydrated Pesto Pasta Sauce	18g, 90 calories	2 servings/ packet	3 servings	\$3.6 4	---

Instant Rice	44g, 160 calories	18 servings/ box	3 servings (wild card)	---	---
Dehydrated Black Beans	172g, 227 calories	4 oz/container	1 oz (wild card)	---	---
Fruit Leather	1 piece, 35 calories	30 pieces/ container	30 pieces	\$31.46	---

Cumulative Total Cost = \$920.16

Misc Items:

Vegetable Oil - \$2.78

Butter - \$4.78

Seasoning - \$4.88

Coffee - \$19.76

Tea - \$14.88

Gatorade Mix - \$8.38

Trail Mix

Peanuts - \$8.94

M&Ms - \$9.72

Almonds - \$13.96

Pecans - \$9.98

Walnuts - \$10.88

Swedish Fish - \$9.96

Pumpkin Seeds - \$7.50

Sunflower Seeds - \$5.00

Coconut flakes - \$2.68

Tropical Dried Fruit Mix - \$13.68

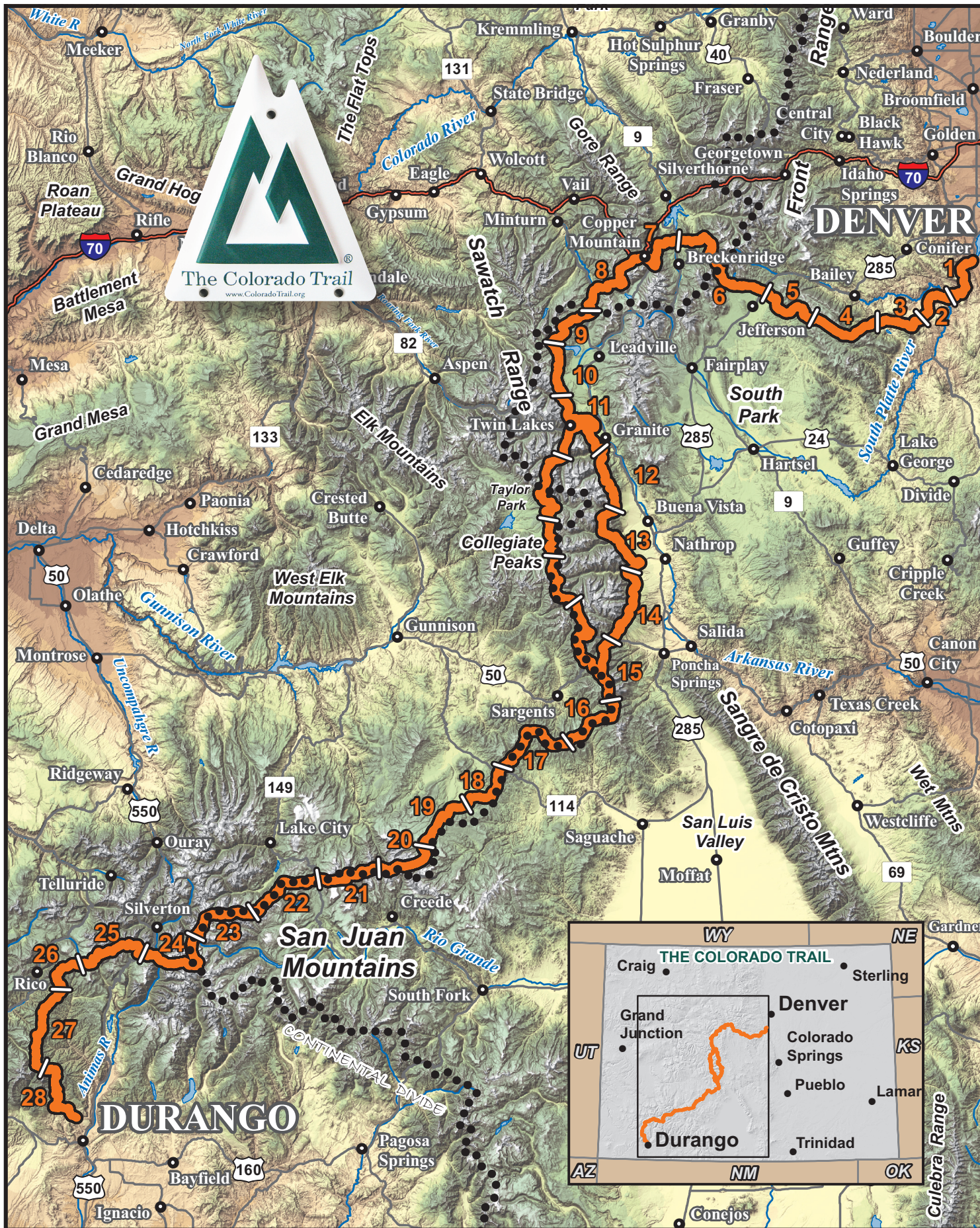
Chrunchies Freeze Dries Mixed Fruit - \$11.34

Emergency chocolate bars (4 each) - \$23.76

Re-ration fresh fruits/veggies - \$60

Total Food Cost = \$1,163.02 (not including tax)

*Rerations will also include additional equipment such as batteries, aquamira and sunscreen.



The Colorado Trail is built and maintained by volunteers, funded primarily through private contributions. We could use your help!

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