



# RITT KELLOGG MEMORIAL FUND - EXPEDITION AGREEMENT

We have read and adhered to the Ritt Kellogg Memorial Fund criteria to the best of our ability as reflected in our proposal. We have written as concise and thorough a proposal as possible. We have enclosed all parts requested including the following:

- "RKMF Expedition Application - Group Application", including the following:
  - Statement on purpose of expedition
  - Plan for team to solidify technical skills prior to the expedition start
  - Day by day itinerary including maps, elevations, route topos, tide charts, etc
  - Detailed food list
  - Detailed equipment list (specifying contents of the first aid kit)
  - Leave no trace plan
  - List of hazards and associated risk management plans
  - Emergency evacuation plan (including contact info for nearby hospitals, etc
  - Itemized budget (note any cost saving efforts)
- "RKMF Expedition Application - Individual Questionnaire" for each team member. (Includes signed medical release, outdoor-skills résumé, references, and copies of WFR certification and other relevant training.)
- "Participant Acknowledgement and Assumption of Risks & Release and Indemnity Agreement", read and signed by each applicant and their parent (even if >18 years).

*I understand that if I receive a Ritt Kellogg Memorial Fund grant and I participate in a Ritt funded expedition or activity, I will be required to sign a Participant Acknowledgment and Assumption of Risks & Release and Indemnity Agreement. I acknowledge that this form is available for viewing on the forms page of [www.rittkelloggfund.org](http://www.rittkelloggfund.org).*

*Kiko Sweeney*

Signed: \_\_\_\_\_ Date: 1/6/2013

*Sophie Ohaus*

Signed: \_\_\_\_\_ Date: 1/6/2013

*Megan Masuret*

Signed: \_\_\_\_\_ Date: 1/6/2013

*Kati Voeller*

Signed: \_\_\_\_\_ Date: 1/6/2013

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

### III. Expedition Logistics, Gear, and Food

**Describe how expedition members will travel from home to the trailhead and back again.**

Kati Voeller will be in the Bellevue Washington area as her place of residence. Kiko will fly from the Anchorage International Airport on United Flight 1101 and arrive at Seattle International Airport at 5:00 AM. Kati will pick her up at a suitable time. Sophie and Megan will fly from the Connecticut/New York metro area into the Seattle airport on August 5th. An example of a flight we will take is: Delta flight Flight 161 leaving John F. Kennedy Airport at 3:00PM and arriving at Seattle at 6:25PM. Kiko and Kati will return to the airport to pick them up. Flight itineraries are below.

The morning of August 6th, Kati’s parents, David and Rebekah Voeller, will drive the group to Mount Rainier National Park to drop off food caches at two locations: South Mowich Lake and White River. The group will pick up the reserved permits at Longmire Wilderness Information Center on the 6th. The Voellers will then drop the group off at the Cougar Rock Campground in Longmire for the night and head out the next morning on the trail on August 7th. David and Rebekah Voeller will pick up the group on August 19th at Longmire.

Kiko will fly from Seattle to Colorado Springs on United Flights 282 and 6340 on the 20th in the evening. Megan and Sophie will travel to Denver on Alaska Airlines flight 672. It leaves Seattle at 11:20AM and arrives in Denver at 2:52PM. Flight itineraries are below.

Kati will be driving from Bellevue, WA to Colorado Springs after the expedition to return to Colorado College in the fall.

See attached flight itineraries.

**Kiko Anchorage-Seattle**

<b>from \$137</b>	Depart: 12:40 a.m. Mon., Aug. 5, 2013 Anchorage, AK (ANC)	Arrive: 5:00 a.m. Mon., Aug. 5, 2013 Seattle, WA (SEA)	Travel Time: 3 hr 20 mn	Award Miles/ Premier Qualifying*: 1,448 /100%	Flight: UA1101 Aircraft: Boeing 737-800 Fare Class: United Economy (G) Meal: Snacks for Purchase No Special Meal Offered. <a href="http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;class=G">http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;class=G</a>
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**Kiko Seattle-Colorado Springs**

from <b>\$153</b> 4 tickets at this price 	Depart: <b>4:00 p.m. Tue., Aug. 20, 2013</b> Seattle, WA (SEA)	Arrive: <b>6:04 p.m. Tue., Aug. 20, 2013</b> San Francisco, CA (SFO)	Flight Time: 2 hr 4 mn	Award Miles/ Premier Qualifying*: <b>678 /100%</b>	Flight: <b>UA282</b> Aircraft: <b>Airbus A320</b> Fare Class: <b>United Economy (G)</b> Meal: <b>None</b> <a href="http://www.united.com/web/en-US/apps/booking/flight/sea">http://www.united.com/web/en-US/apps/booking/flight/sea</a>
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					tView.aspx?lti=1&sg=0&class=G
<a href="http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;class=G">http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;class=G</a>	<b>Change Planes.</b> Connect time in San Francisco, CA (SFO) is 1 hour 26 minutes.				
	Depart: <b>7:30 p.m.</b> <b>Tue., Aug. 20, 2013</b> San Francisco, CA (SFO)	Arrive: <b>10:58 p.m.</b> <b>Tue., Aug. 20, 2013</b> Colorado Springs, CO (COS)	Flight Time: 2 hr 28 mn  Travel Time: <b>5 hr 58 mn</b>	Award Miles/ Premier Qualifying*: 963 /100% Total Award Miles: <b>1,641</b>	Flight: <b>UA6340</b> Operated by SKYWEST DBA UNITED EXPRESS. Aircraft: <b>Canadair Regional Jet 200</b> Fare Class: <b>United Economy (G)</b> Meal: <b>None</b> <a href="http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;csg=0&amp;class=G">http://www.united.com/web/en-US/apps/booking/flight/seatView.aspx?lti=1&amp;sg=0&amp;csg=0&amp;class=G</a>

Megan and Sophie New York-Seattle

\$250

 Delta

JFK 3:00p ▶ SEA 6:25p 6h 25m nonstop

Economy

Select

Delta
\$250

Details | Fares

[Save to My Trips](#)
[Pin](#)
[Email result](#)
[Print](#)

Close

✈

Depart

Mon, Aug 5 JFK to SEA – nonstop

6h 25m

✈

Delta – Flight 161

6h 25m

Take-off	Mon 3:00p	JFK	New York, NY
Landing	Mon 6:25p	SEA	Seattle, WA

[Economy ▼](#) | Boeing 767 (Wide-body Jet) | 6h 25m | 2414 miles | 9+ seats remain

Sophie and Megan Seattle-Denver

**\$250**



Delta

JFK 3:00p ▶ SEA 6:25p 6h 25m nonstop

Economy

Select

Delta

\$250

**Details** | **Fares**

[Save to My Trips](#)

[Pin](#)

[Email result](#)

[Print](#)

Close

✈ **Depart** **Mon, Aug 5** **JFK to SEA – nonstop** **6h 25m**



Delta – Flight 161

6h 25m

**Take-off** **Mon 3:00p** **JFK** New York, NY

**Landing** **Mon 6:25p** **SEA** Seattle, WA

[Economy](#) ▼ | Boeing 767 (Wide-body Jet) | 6h 25m | 2414 miles | 9+ seats remain

Date	Day	Start	End	Mileage	Elev Gain	Elev Loss	Water?
8/5/2013	A		Seattle	NA	NA	NA	NA
8/6/2013	B	Seattle	Longmire	NA	NA	NA	NA
8/7/2013	1	Longmire	Devil's Dream	5	2160	200	Yes
8/8/2013	2	Devil's Dream	Klapatchee Park	9.8	3300	2700	Yes
8/9/2013	3	Klapatchee Park	Golden Lakes	7.8	1480	1865	Yes
8/10/2013	4	Golden Lakes	Mowich Lake Cp	10.2	1687	2525	Yes
8/11/2013	5	Mowich Lake Cp	Ipsut Creek	5.6	0	2629	Yes
8/12/2013	6	Ipsut Creek	Mystic Camp	7.8	3470	200	Yes
8/13/2013	7	Mystic Camp	Granite Creek	5.5	1165	970	Yes
8/14/2013	8	Granite Creek	White River Cpg	7.2	500	2650	Yes
8/15/2013	9	White River Cpg	Summerland	6.7	2140	500	Yes
8/16/2013	10	Summerland	Nickel Creek	10.9	1970	5335	Yes
8/17/2013	11	Nickel Creek	Paradise River	11	2035	570	Yes
8/18/2013	12	Paradise River	Longmire	5.5	0	1085	Yes
8/19/2013	C	Longmire	Seattle	NA	NA	NA	NA
8/20/2013	D	Seattle					

## *Daily Discussion*

Day A: Kiko will arrive at the airport early in the morning. Kati will pick her up around 10 AM and they will proceed to shop for the trip and pick up rented gear from the REI in Seattle. Kiko and Kati will return to the airport in the evening to pick up Megan and Sophie. The group will sort gear and repackage food at the Voeller residence. In the evening the group will also conduct a gear check and medical interviews.

Day B: Wake up early for the drive to Mt. Rainier National Park. We will then drive to Mowich Lake Campground and White River Campground to drop off food and fuel resupply caches. The day will finish at Cougar Rock Campground in Longmire. Final gear check.

Day 1: With heavy packs, this will be one of our shortest days. Elevation gain is moderate with practically no elevation loss. Camp is a meadow near tree line.

Day 2: One of our tougher days. Significant elevation gain and loss over the course of almost 10 miles. Hiking will begin early in the day to allow for necessary water and snack breaks. We have two major ascents that finish just above tree line. At 5515ft, this represents one of our highest campsites, just above tree line.

Day 3: A moderate day. We will cover a fair amount of trail but not as much elevation change as the previous day. Once again, camp sits just above tree line.

Day 4: With light packs, this day will be hard but doable. The second half of the day consists of an ascent of 2525ft. We will begin the day early in order to take needed breaks. At Mowich Lake Campground we will pick up a food and fuel resupply.

Day 5: One of our easier days. Depending on weather patterns, we will have a later start in the day. Packs will be heavy with food. Camp is on a valley floor.

Day 6: This day is our most significant elevation gain, and we will begin the day early. Camp resides just below tree line at 5570 ft.

Day 7: An easier day follows the previous massive elevation gain. We will remain at higher altitudes and experience moderate increases in elevation. Camp sits in a meadow below tree line.

Day 8: A long day with significant decrease in elevation. The trail skirts above 6000 ft for several miles, then descends to 4300 ft. We will pick up our food and fuel cache at the White River Campground.

Day 9: Moderate elevation gain in the first portion of the day, followed by a burly 2000 ft climb with heavy packs. Camp resides just above tree line.

Day 10: Another very difficult day. We descend a total of 5335 ft of elevation. We will

hit the trail early in order to take many breaks. Lots of attention and care will be given to knees and other muscular-skeletal systems. Camp resides in a valley.

Day 11: The highest mileage day of the expedition with the last major climb of the trip. We will start the day early. Camp lies well below tree line.

Day 12: Last day on the trail and the easiest. We will take our time getting out of camp. All downhill to the take out at Longmire and Cougar Rock Campground.

Day C: Kati's parents will pick us up at Longmire. We will drive back to Seattle and return rented gear.

Day D: Begin traveling back to Colorado Springs.

## *Maps*

The maps included in this packet were obtained through a website that blogged a thru-hike expedition of the Wonderland Trail. The URL is listed below. The date of the expedition is unknown. The Wonderland Trail has been highlighted in yellow in order to easily discern the route. The maps appear to be custom USGS topographic maps, but due to the distortion created by uploading and downloading the file, an accurate scale of the maps is difficult to obtain. Furthermore, these maps do not provide much context for surrounding area, which could be useful for skills such as triangulation. However, we have corroborated the maps with USGS topos and they accurately depict the route with lots of detail, especially in terms of campsites and contour lines. Thus, we want to acquire four USGS quadrant maps of the Wonderland Trail so that we can collaborate the information given by both sets of maps to have a greater understanding of the trail. The maps we want to obtain are titled Golden Lakes, Mowich Lake, Mount Rainier East and Mount Rainier West. On the trail, the maps will be stored in gallon Ziploc bags in order to prevent water damage. After the expedition, these maps will be donated to the Ahlberg Gear House.

There is no custom map for Day 5, which starts at Mowich Lake Campground and ends at Ipsut Creek. The route highlighted will not be our route. However, the USGS topos depicts that section of the route.

<http://wonderland-trail.randsco.com/wonderland-trail-day00.html>

Day 1: Longmire-Devil's Dream

Day 11B Nickel Creek-Paradise

River

Day 12 Paradise River-Longmire

See Detail Map Lower Left

Footbridge washed out recently  
Had to hitch-hike to Narada Falls



# Day 2 Devil's Dream-Klapatchee



Golden Lakes

# Day 3 Klapatche Park-Golden Lakes



**Day 4 Golden Lakes-Mowich Lake**

**Day 5A Mowich Lake-Ipsut Creek**



# Day 6B Ipsut Creek-Mystic Camp

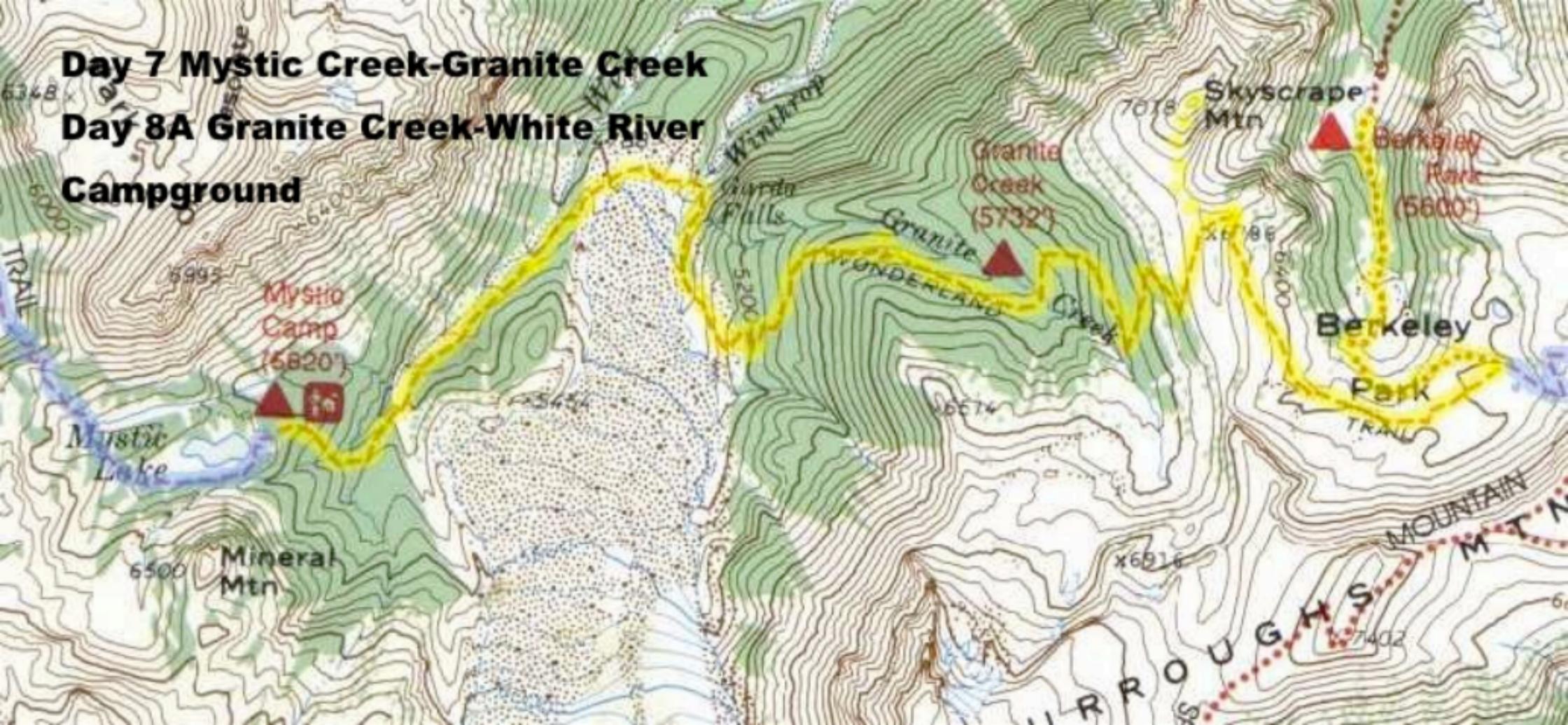


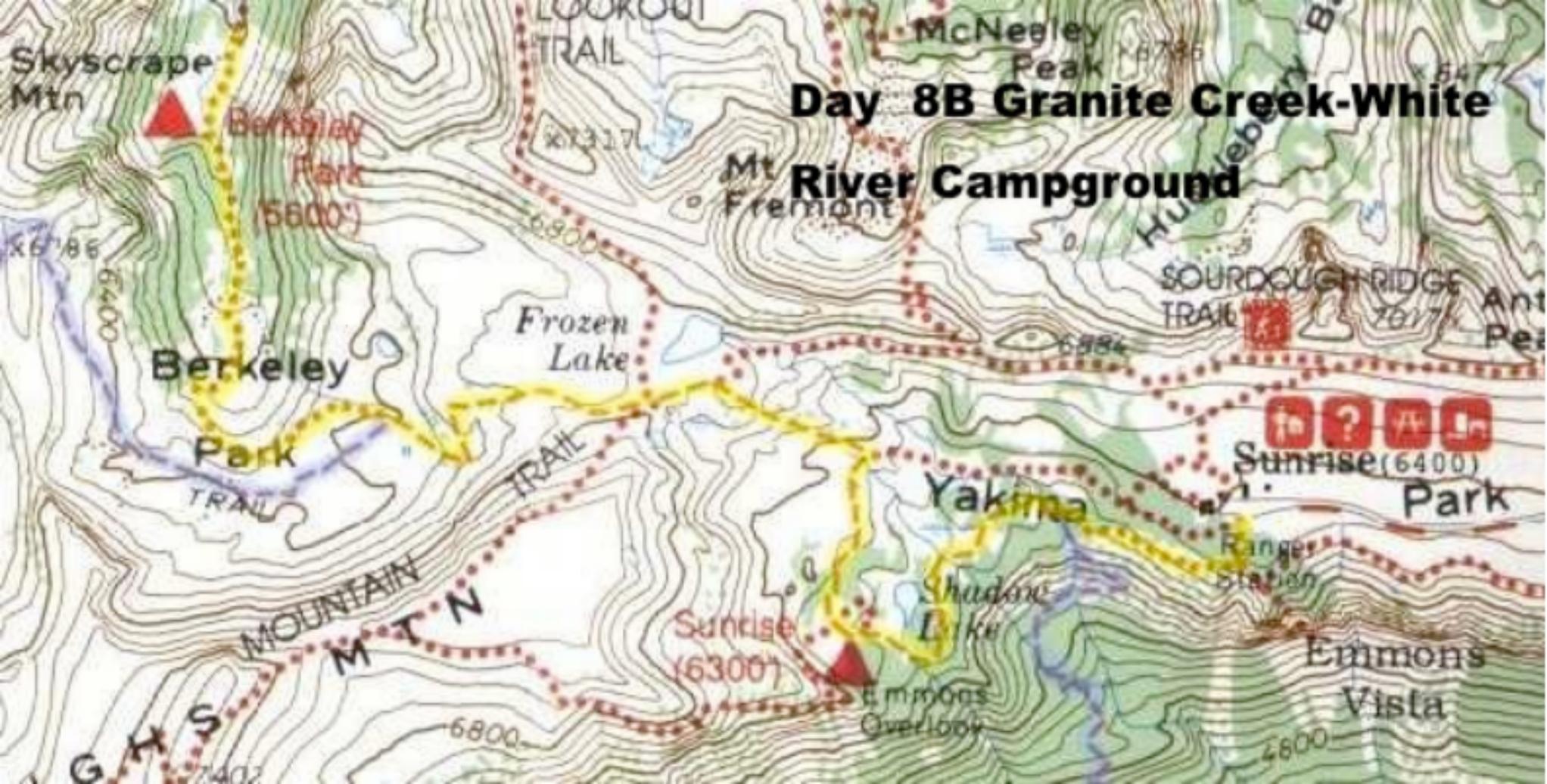
Eagle Roost  
(4700)

Cataract Valley  
(4700)

Mystic Camp  
(5620)

**Day 7 Mystic Creek-Granite Creek**  
**Day 8A Granite Creek-White River**  
**Campground**





# Day 8B Granite Creek-White

## River Campground

Berkeley

Park

Frozen  
Lake

Yakima

Sunrise (6400)

Park

Sunrise  
(6300)

Emmons  
Overlook

Emmons  
Vista

MOUNTAIN  
M T N

TRAIL

TRAIL

SOURDOUGH RIDGE  
TRAIL

LOOKOUT  
TRAIL

Skyscraper  
Mtn

Berkeley  
Park  
(5600')

McNeegley  
Peak  
(6736')

Mt.  
Fremont

Huckleberry  
Bl

Ant  
Pea

Ranger  
Station

Shadow  
Lake

G H S

6800

6884

6900

66786

6600

6317

547

4800

7402



Day 8C Granite Creek-White River Campground

Day 9 White River Campground-Summerland

Day 10A Summerland-Nickel Creek

Day 10B Nickel Creek

Yakima

Shadow Lake

Emmons Overlook

White River Campground (4232)

White River (4232)

Falls

Goat Island Mt. (7288)

Goat Island

Arwingan

Summerland (5900)

Meany Crest

Panhandle Gap

Glaciers

Ohanapecosh Park

Glaciers

Indian Bar Inlet (5000)

Whahaukapauken Falls

Gowlitz Park

# Day 10B Summerland

## Nickel Creek



# Day 11A Nickel Creek-Paradise

## River



**Attach a detailed, day-by-day itinerary, including maps, elevations, route topos, tide charts, etc., as appropriate. Don't just photocopy a guidebook, provide a discussion to demonstrate your understanding of the itinerary.**

**Describe the re-rationing plan below.**

We will receive two re-rations along the trail at South Mowich Lake Campground and White River Campground, our two non-wilderness sites on the trail. Since fuel cannot be mailed, we will drop off the caches upon arrival in the park. In order to prevent rodent infestation, we will store the resupplies in 5 gallon buckets. The labels for the caches are below. The resupply dropped off at the address Carbon River will be carted to the South Mowich Lake Patrol Cabin by a ranger and placed in the storage bin next to the cabin before the pick-up date. The cache dropped off at White River Ranger Station and dropped off at the campground before the pick-up date. We will need to provide our signatures on a pick-up sheet.

The directions to the resupply stations by car:  
see attached maps.

Permit Holder  
Permit Number  
South Mowich Lake  
10 August, 2013

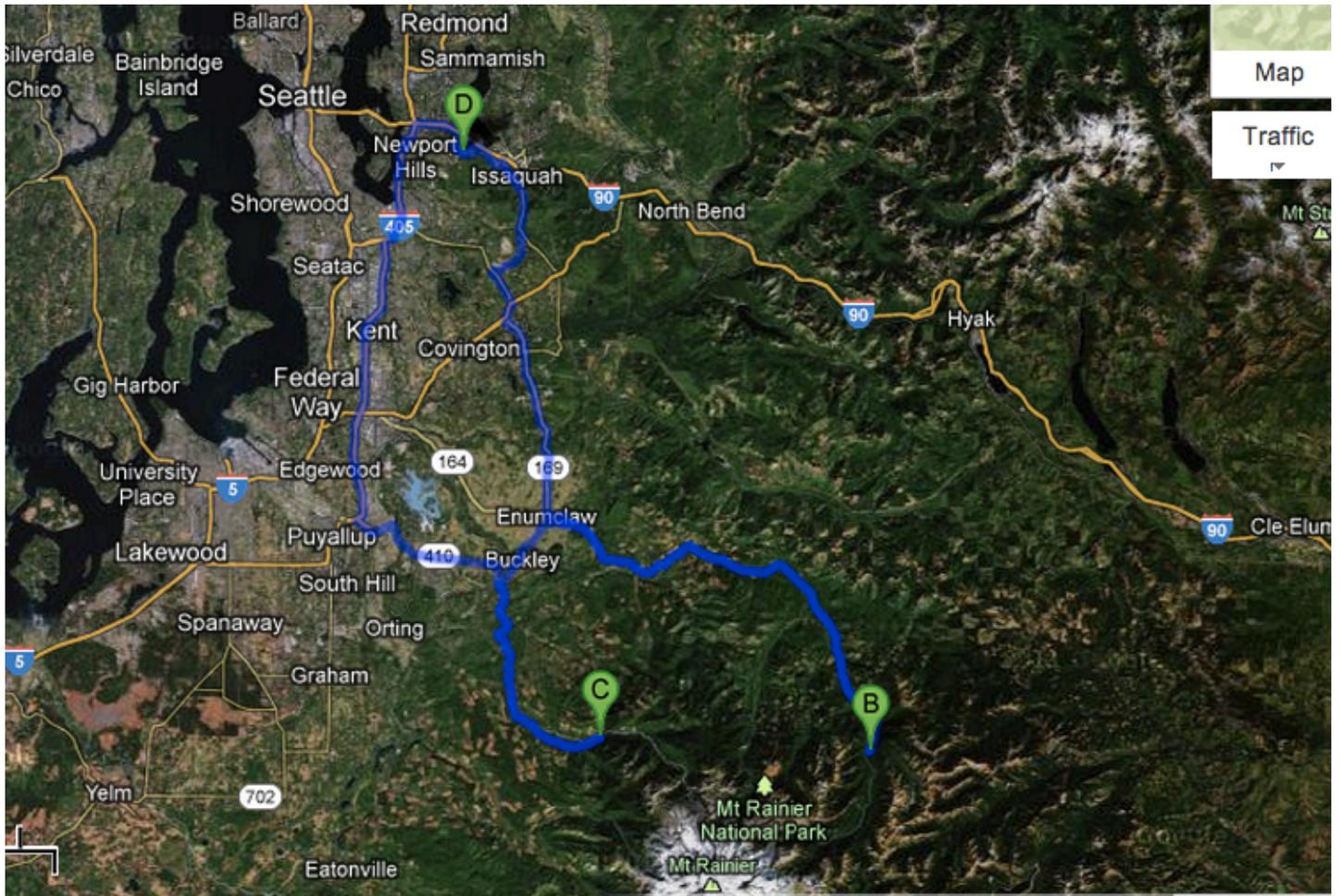
Permit Holder  
Permit Number  
White River Campground  
14 August, 2013

**Describe how you will prevent wildlife from getting into your food.**

The predominant wildlife threat to our food supply in this area are bears, but hikers are not required to carry bear canisters. Most designated campsites along the trail supply bear canisters for overnight food storage. In the event that a bear canister is unobtainable, we will designate one pack as the "food pack" for the evening and place this pack at least 100 yards away from the tent. In order to prevent rodents from getting into our food supply, we will place the pack as high off the ground as possible. We will also cover the pack with our cooking supplies, which will alarm the animals with the clanging pots or spatulas and cause them to leave our food site. We will also make sure that our kitchen is 100 yards away from our tent and the food storage location. Furthermore, we intend to abide by the Leave No Trace principles to remain safe. We will be sure to never leave food exposed in packs or campsites, and all trash will be placed into our personal trash bags to later be properly disposed.

**Attach a detailed food list and show how it meets the caloric needs of the expedition.**

Please see attached food list. The food is calculated for a daily diet between 4,500 and 5,000 calories. Since Kiko is Gluten and Dairy free there are some meals for which her meal is different, but for the most part we attempted to make the menu gluten and dairy free. The food is set up with specific breakfast and dinner menus, and a list of many different options for lunch. This is based off the idea that instead of having only one or two specific times to eat, we will make sure to continually consume calories throughout the day to ensure that we are maintaining our energy. In the Breakfast/Dinner food list there is a column that lists the extra servings. This extra food can be used for emergency food.



**Breakfast 1 ( Servings per Servings per Total Servinç Calories per | Price per uni**

Bagels	6	1.5	18	390	4.49
Corn Tortilla (f	16	4	16	180	1.25
Peanut Butter	25	1 (2 for kiko)	12	190 (380 Kiko	5.09
Honey	16	2	32	120	2.99
Total Calories				<b>700 (680 Kiko)</b>	

**Breakfast 2 (have 4 times)**

Oatmeal	30	2	24	300 (no Kiko)	4.99
Granola	7	1	12	210 (no Kiko)	3.99
G.F. Granola (f	11	2	8	240 (only Kiko	5.99
Raisins	13	0.5	8	65	4.99
Craisins	7	0.5	8	65	3.99
G.F. Oatmeal (	6	2	8	400 (for kiko)	5.99
Total Calories				<b>640 (770 Kiko)</b>	

**Breakfast 3 (have 2 times)**

Pancake Mix	15	2	12	300	4.69
Corn Tortillas (	16	4	8	180	1.25
Peanut Butter	25	1 (2 for Kiko)	12	190 (380 for k	5.09
Chocolate Chip	19	0.5	16	45	2.89
Honey	16	2	16	120	2.99
Total Calories				<b>653 (725 Kiko)</b>	

**Breakfast 4 (have 2 times)**

Cinnamon Roll	12	2	12	627	
2 cup brown sugar					1
8 tsb butter					3.49
2 tsb yeast					2.09
3.5 G. F. flour					1.99
3.5 Flour					3.47
Total Calories				<b>627</b>	

**Breakfast Average Calories****655****Breakfast Average Calories (Kiko)****700.5****Extras**

Hot Chocolate	43	1	48	80	7.49
Tea	20	1	48	0	2.5

**Dinner 1 (have 2 times)**

	Servings per Dinner	Servings per Dinner	Total Servings	Calories per Serving	Price per Unit
Rice	9	1	16	170	2.69
Beans	13	2 (3 kiko)	32	260 (390 kiko)	3.95
Cheese	10	2	24 (not including)	240 (no kiko)	3.69
Canned Chickpeas	5	1.25	20	56.25	3.79
Flour Tortillas	8	1	16	120 (no kiko)	2.29
Corn Tortillas (for kiko)	16	2	8	90 (for kiko)	0
<b>Total Calories</b>				<b>846.25 (706.25 Kiko)</b>	

**Dinner 2 (having 4 times)**

Quinoa	8	2	32	320	5.59
Peanut Butter	25	1.5	24	285	5.09
Raisins	13	0.25	4	32.5	4.99
Craisins	7	0.25	4	32.5	3.99
<b>Total Calories</b>				<b>670</b>	

**Dinner 3 (have 2 times)**

Pasta	8	2	12	400	1.59
G.F. Pasta (for kiko)	4	2	4	410	3.29
Pesto	5	1	4	25	1.25
Maranara sauce	2.5	1	4	50	1.25
Cheese	10	2	12	240	3.69
Corn Tortilla (for kiko)	16	2	8	90	1.25
<b>Total Calories</b>				<b>665 or 690</b>	
				<b>(525 or 550 for Kiko)</b>	

**Dinner 4 (have 2 times)**

Thai Kitchen Imitation Shrimp	3	1	8	170	3.15
Flour Tortillas	8	2	32	240	2.29
Corn Tortillas (for kiko)	16	2	8	90	1.25
Cheese	10	2.5	15	300	3.69
Peanut Butter	25	2	4	380	5.09
<b>Total Calories</b>				<b>710 (640 for Kiko)</b>	

**Dinner Average Calories**

**722.81**

**Dinner Average Calories (Kiko)**

**635.31**

**Spice Kit**

Salt					1.5
Pepper					2.5
Cinnamon					2.5

Garlic Powder	1.79
Chili powder	2.99

**Combine Average Calories**

**1377.81**

**Combine Average Calories (Kiko)**

**1335.81**

**Total Price**

**240.47**

**Total Price**

13.47  
1.25  
5.09  
5.98

4.99 (6 extra)  
7.98 (2 extra)  
5.99 (3 extra)  
4.99 (5 extra)  
7.98 (6 extra)  
11.98 (4 extra)

4.69 (3 extra)  
1.25 (8 extra)  
0 already budgeted for in other meal  
2.89 (2 extra)  
2.99

1  
0 Budgeted for in lunch list  
2.09  
1.99  
3.47

14.98 (38 extra)  
7.5 (12 extra)

**Total Price**

5.38 (2 extra)  
11.85 (3 extra)  
11.07 (6 extra)  
15.16  
4.58  
0 Already budged for, extra from breakfast)

22.36  
5.09  
0 Already budgeted for, extra from breakfast  
0 Already budgeted for, extra from breakfast  
0 Already budgeted for, extra from breakfast (still have 2 extra)

3.18  
3.29  
1.25  
2.5  
3.69 (still 4 extra)  
1.25 (8 extra)

9.45 (2 extra)  
9.16  
0  
7.38 (9 extra)

1.5  
2.5  
2.5

1.79  
2.99

<b>Lunches</b>	<b>Servings per</b>	<b>Servings per</b>	<b>Total Servinç</b>	<b>Total Calorie</b>	<b>Price per Uni</b>
Almonds	16	0.66	32	5,440	6.99
Cashews	16	0.66	32	5,120	8.55
Peanuts	16	0.66	32	5,440	3.89
Raisins	13	0.81	39	5,070	4.99
Craisins	7	0.58	28	3,640	3.99
Dried Apple	11	0.68	33	3,960	5.99
Dried Mango	3	0.375	18	2,340	3.49
Cliff Bars	12	0.5	24	5,760 (no Kikk	14.25
Laura Bars	1	1.83	22	5060 (only Kik	1.39
Nature Valley	6	0.75	36	6,840	3.29
Gummy Bears	5	0.52	25	3,750	2.49
Fruit Leathers	30	0.625	30	2100	15.99
Dark Chocolat	13	1.35	65	13,650	6.59
Gold Fish	28	1.55	42	5,880 (no kikk	8.49
Yogurt Covere	6	0.75	36	6840	4.49
Peanut Butter	25	1.56	150	28,500	5.09
Jelly	31	1.29	62	3,100	2.89
Summer Susa	4.5	0.375	18	3420	2.99
Nutella	20	0.83	40	8,000	7.49
Gatorade	35	2.18	105	5,250	5.49
Banana Chips	13	0.81	39	7,020	2.49
Carrots	5.5	0.45	22	550	2.49
Oranges	1	0.33	16	992	1
G.F. Nut-thins	4	0.33	16	2,080	2.99
Corn Tortillas (	16	4	48	2,160 (only Ki	1.25
Butter	32	2.66	96	9600 (no Kiko	3.49
Olive Oil	50	1.05	50	6,000	9.49

**Total Calories per person per day:**

**3279.625**

**Total Calories per person per day (Kiko):**

**3291**

**Total Price:**

\$426.34

**Overall Totals**

**Daily Average Calories:** 4657.44

**Daily Average Calories (Kiko):** 4626.81

**Overall Total Price:** \$666.81

**Total Price**

13.98  
17.1  
7.78  
14.97  
15.98  
17.97  
20.94  
28.5  
30.58  
19.74  
12.45  
15.99  
32.95  
16.89  
26.94  
15.27  
5.78  
11.96  
14.98  
16.47  
7.47  
9.96  
16  
11.98  
3.75  
  
10.47  
9.49  
426.34

*Gear*

Rented items will be retrieved from the REI in Seattle located at 222 Yale Ave N. They can be reached at: (206) 223-1944.

\*USGS topos and fuel are not included in the total purchases due to their budget space within the grant

	Qty.	Source	Total Price	Personal Items	Qty.	First Aid Kit	Qty.	Source
						Kit / storage box	1	Kiko
Sat phone	1	LINK**	\$50	Pack	1	Epinephrine solution		TDB
USGS quads map	4	Buying	\$51.8	Rain cover	1	Sterilized needles		Kiko
Custom topos	10	in packet		Sleeping bag	1	Gauze	2 rolls	Kiko
Compass	1	Kiko		Stuff sack	1	Band aids (varied sizes)	20	Kiko
4-person tent	1	Seattle REI	\$168	Sleeping pad	1	ACE bandage	3	Megan
Fly	1	REI	(included w/te	Utensils	1	Sam splint	1	Kiko
Ground tarp	1	Kiko		Plate	1 or 2	Ibuprofen		Kiko
Camp stove	2	REI	\$98	Mug	1	Tylenol		Kiko
Fuel bottle 30fl	3	BUY (REI)	\$48-\$60	Waterbottle or camelba	2	Benedryl		Kiko
Lighter	2	Megan		Headlamp	1	Second skin/Mole skin		Kiko
Matches	1	Megan		Extra batteries	2	Medical tape	4 rolls	Kiko
Candle	1	Megan		Hiking socks	6 pairs	Iodine tablets		Kiko
Pots (w/lids)	2	Megan		Sturdy hiking boots	1	Sterilizing pen for water	1	Sophie
Frisbee	1	Kiko		Camp shoes	1	Antibacterial cream		Kiko
Trowel	1	Kiko		Long underwear	4	Sterilizing wipes		Kiko
Itinerary	4	Sophie		Hiking pants	1 or 2	Maxi pads	5	Sophie
Medical forms	4	Sophie		Shorts	1 or 2	Povidine-iodine (1%)		Kiko
Water Pump	1	Kiko		Base layer (ie: under ar	2	Irrigation syringe (60 cc)	1	Kiko
Pan	1	Megan		Dry fit shirt	2	Safety pins	5	Megan
Spatula	1	Megan		Thin fleece	1	Scissors	1	Megan
Big spoon/ladle	1	Megan		Light jacket	1	Tweezers	1	Megan
Knife	1	Megan		Waterproof rain jacket	1	Rubber gloves	8	Kiko
Leather gloves	1 pair	Kiko		Waterproof rain pants	1	CPR face mask	1	Kiko
Cord	10 ft	Kiko		Insulating jacket or ves	1	Emergency information nu		Megan
Deck of cards	1	Sophie		Gloves	1	SOAP note pages (blank)	6	Megan
Bananagrams	1	Megan		Warm cap	1	Pens	2	Megan
UL123 Batteries	5 sets	BUY (Amazon)	\$25	Bandana	2	Flashlight	1	Megan
Bear spray	4 cans	BUY (REI)	\$220	Personal medications		Extra batteries	2	Megan
Fuel	4 quarts	BUY (REI)	\$51.8	Toothbrush	1			
				Toothpaste	1			
**Link: https://				Hand sanitizer	1			
				Pocket knife	1			
				Emergency whistle	1			



**Attach a thorough equipment list, including the detailed description of the contents of the First Aid kit.**

Please see attached equipment list. Rented items will be retrieved from the REI in Seattle located at 222 Yale Ave N. They can be reached at: (206) 223-1944.

See attached Equipment List.

**During our expedition, the group will follow the Leave No Trace Principles as carefully as possible. Listed below are each principle and how they apply to our expedition:**

Plan Ahead and Prepare: Through the grant process, the group has created highly detailed logistics, menus, gear list, risk management program, and emergency plan. Emergency contacts, plan, and medical histories will be carried in the field in a waterproof bag. Before entering the backcountry, the group will thoroughly review all of the paperwork, go through a gear check and have medical interviews. We will also ask rangers in Mt. Rainier National Park for up to date trail and campsite conditions.

Travel and Camp on Durable Surfaces: All of our hiking takes place on well-defined trail. If we do hike off-trail, the group will travel in a dispersed manner in order to decrease the impact our presence creates in one area. All of the campsites we intend to stay at are well established. However, if one area looks particularly overused (trash, very defined tent site, fire pit, etc) we will choose a site that appears less impacted and try to reverse the signs of overuse to the best of our abilities. On the contrary, if a tent site appears very new, we will choose another spot in order to avoid too much human impact. Cross-country zone camping is not permitted along the Wonderland trail. However, if camping in a non-regulated space due to safety reasons such as lighting, wildlife or other travelers becomes necessary, we will choose a suitable site 200 ft from trails, lakes and streams. We will not scrub away brush in any particular area, and we will use circular pieces of foil under Whisperlight stoves to prevent a scar.

Minimize Campfire Impacts: We will not be making fires on this expedition because there is fire ban within Mount Rainier National Park. This is the safest and most guaranteed way to minimize our campfire impacts.

Leave What You Find: During our trip we will not take anything with us other than pictures and memories. This includes not engraving trees or rocks, rearranging rocks, picking flowers, gathering rocks or any other artifacts that we may come across, and altering the campsite that we choose to occupy.

Respect Other Visitors: The group recognizes that we are not the only ones on the trail and that people frequent this type of setting for its innate peace and tranquility. We will be cognoscente of our volume levels, campsite locations and give anyone passing by a friendly hello. Also, if we are traveling downhill and come upon hikers traveling uphill we will stand just off to the side of the trail to let them pass.

Respect Wildlife: In addition to other people along the trail, we understand that the park is home to a variety of wildlife. We are purchasing a book on the plants native to the area so that we can better understand how to interact with them. In terms of animal-life, we know the dangers of approaching or feeding any wild animals. The group will be sure that all campgrounds, resting spots, and bathroom breaks take place away from locations with many plants and obvious habitats. We realize that this is their home and that they too contribute to the beauty of the park.

Dispose of Waste Properly: We will respect the Leave No Trace principles in disposing our waste properly within Rainier National Park-- “pack it in, pack it out.” To minimize food waste and trash, we will repackage our food before the expedition and have planned our meals accordingly. All resulting waste will be packed out. The trail campsites in Rainier National Park will have pit or composting toilets for our use. In cross-country zones we will follow cathole methods depositing and disguising human waste in holes 6-8 inches deep, 4-6 inches in diameter and 200 ft away from trails, camps, and water sources (streams, lakes, etc).

**Are there cultural considerations for the expedition area? Yes No If “yes”, describe how you will address those concerns.**

We will be entering a National Park, for which we need a reservation for a group permit. These permits will be acquired upon receiving the grant. In order to ascertain a reservation for a permit, we must fill out a “Wilderness Reservation Request Form.” This form can be submitted anytime after March 15th. Since reservations fill up quickly and we have a very specific itinerary, the group shall submit the request form before April 1st, the date on which rangers begin to review reservations. All requests submitted before April 1st will be processed in a random order, while reservation requests received later will be reviewed and accepted based upon the date they were received. The reservation request form must be faxed or mailed to the Longmire Ranger Station in black ink. We will receive a confirmation of the reservation two weeks after April 1, with which we can pick up our permit at the Longmire Ranger Station. The reservation fee is \$20. If we need to make any changes to the reservation we will need to pay an additional fee of \$20.

The request form can be accessed at:

<http://www.nps.gov/mora/planyourvisit/upload/wildclimbcampresv-form-sep11-fillable-savable.pdf>

The request form can be submitted to:

Mount Rainier National Park  
ATTN: Longmire WIC  
Longmire Warehouse  
Longmire, WA 98397  
Fax: 360-569-6519

## **IV. Risk Management Plan**

List the anticipated hazards of your expedition and explain how they will be evaluated, avoided and managed. Discuss the technical skills your expedition members have to handle anticipated hazards. **NOTE:** Failure to identify major hazards and how they will be managed may result in denial of funding.(Attach more pages if necessary.)

### *Pre-Trip*

Gear check: While still in Seattle, we will have a group gear check to make sure that everyone has packed all the items necessary for the trip. If anyone does not have an item, it will be written on their

hand. If someone is missing three items, the next missing object will be written on their forehead. This is a great incentive to make sure everyone is prepared for the trip. Any missing items will be acquiring and checked again before entering the backcountry.

**Medical Interviews:** All members will partake in an up to date medical summary of their current state of health. We will go over any previous injuries, energy levels, fitness level, menstrual cycle, medications, and any other relevant medical concerns.

**Satellite Phone:** All members of the group will become familiar with the use of the satellite phone in case of emergency on the trail. All members will know exactly where the phone is at all times.

**Contact Numbers:** We will call all of the numbers listed on our emergency contact sheet before entering the backcountry.

**Staying Found:** In order to prevent any group members from getting lost on the trail, we will practice “staying found” protocol. First, all members of the group will review map and compass skills together before entering the backcountry and will be very familiar with maps of the trail. Every member of the group will also bring at least one piece of brightly colored apparel, such as a bandana, in order to be easily seen from a distance. Along the trail, we will frequently chart our distance traveled and location on the maps.

As a group, the most likely place we will get lost is if and when we travel over snow. If snow travel is necessary, we will constantly take bearings, use landmarks and move slowly to make sure we stay on the correct path. If lost in a valley, we will ascend a ridge in order to gain better landmarks for triangulation.

When separating from the group for activities such as pooping, the individual will provide a return time. If she does not return within 15 minutes of her estimated time, the rest of the group will begin a preliminary search. One member of the group will stay in the last location the lost member was seen while the other two travel with the first aid kit in the last direction she went. The two parties will schedule an appropriate return time since all members will have a watch. If she is missing for more than four hours, we will use the satellite phone to contact Search and Rescue to coordinate a large-scale search. The lost individual knows to stop where she is and use her whistle to signal her location to other group members. If appropriate the group member will travel to a higher point in order get a larger awareness of her surroundings. The lost group member will use her best judgment on how to stay warm and conserve energy.

**Conditions:** The group will frequently call the ranger station or check online to monitor any changes in trail and camping conditions.

### *Wildlife – Bears, Mountain Goats, Rodents, Mountain Lions*

**Bears:** Black bears reside in Mt. Rainier National Park. However, sightings of the bears have become rather rare in the park due to an increased presence of people. We will always travel in at least packs of two in order to appear more threatening to the bear. If we see a black bear, group members will start singing, shouting, clanging rocks and pans or any other means of making noise to warn the bear of our presence. No member of the group will run away if they see a bear, at the risk of turning into an object of prey. If a very close encounter with a black bear occurs, each group member will be carrying bear spray in an easily accessible spot in her pack. We will familiarize ourselves with the proper way to use bear spray before entering the backcountry. The spray will be taken out of packs at the first sighting of a

bear and used when the bear is within 20 or 30 feet. If the bear comes within ten feet of us or if the wind increases the risk of spraying ourselves, we plan to play dead by laying face down with our hands covering our necks to protect the spine and stomach. If no other options are available, we will fight back, aiming towards the face and nose.

Mountain Goats: Mountain goats have been known to be aggressive in the Pacific Northwest. In 2010, a mountain goat attacked and killed a hiker in the Olympic Peninsula. In order to avoid confrontation with a mountain goat, like with bears, group members will maintain a polite level of noise in camp and on the trail. Mountain goats are not afraid to approach humans. Thus, if we spot a mountain goat we will give him or her a wide berth to prevent a charge.

Rodents: Mt. Rainier National Park has a large population of rodents due to irresponsible care by visitors. Following Leave No Trace protocol, we will pack all of our trash in and out of the park. During the nights, we will store our food and other odorous items in our “food pack,” suspended as high off the ground as possible, to prevent entry by rodents.

Mountain Lions: Although sightings are extremely rare, there is a presence of mountain lions (or cougars) in this park. Abiding by Leave No Trace principles will keep the group safe from any mountain lions because there will be no sight or scent of food near our campsites.

### *Wildlife – Flora*

Berries: Fruits such as blueberries and huckleberries will be in season at the lower elevations of the Wonderland Trail during our expedition. In order to prevent ingestion of a harmful plant, we will identify the plant in at least two respects before consumption. In order to identify the plant, we have included Flora of the Pacific Northwest in our budget. We will use this highly rated book to identify plant species, especially edible berries and weeds, along the trail. After the expedition, the book will be donated to the Ahlberg Gear House.

False Hellebore: False Hellebore is a common Pacific Northwest plant that grows in Mount Rainier National Park during the summer months. This stalky plant with massive leaves, sometimes known as ‘elephant ear,’ thus appears to be the perfect backcountry toilet paper. However, when applied directly to the skin can cause a rash. In order to prevent such an event we will identify false hellebore as soon as possible and avoid contact with the plant. For group members who have not seen false hellebore before, Flora of the Pacific Northwest will be a good educational resource on the plant.

### *Camp Life*

Plan for the Day: Every day the group will come up with a “plan for the day.” This will take into account waking times, camp breakdown, hiking times, pre-planned trail breaks, dinner, and bed times. By having a “PFT” all members of the group will know what specifically needs to be accomplished for the day and when. PFTs will be discussed at dinner and breakfast.

Stoves: Several measures will be taken in camp in order to prevent burns. First of all, Whisperlight stoves will not be filled to the brim with white gas. We will fill the canisters to the dotted lines marked on the bottles to prevent over-pressurization. Fuel canisters will always be carried at the bottom of a backpack in order to prevent contamination of the food supply in case of a spill. We will create a “cooking zone” with nearby objects or by word of mouth so that other group members do not walk too

close to the stove or pass objects over the cooking area. When using the stoves, all individuals interacting with the Whisperlight will wear close-toed shoes. In case hot or boiling water spills, the group member will have a layer of protection against the harmful water. A member of the group will always be watching the stove when it is lit. This individual will be seated in an athletic manner, such as on one knee, in order to quickly react in case of a hot spill or explosion. We will have a pot grip on the trip to remove lids, pots, and pans off the heat in order to prevent burns. As a backup measure, we have included a pair of leather gloves on the gear list that can also be used to remove hot items off the stove.

**Knife Safety:** All members of the group will carry a pocketknife that can be used for daily tasks, such as cooking. In order to prevent injury by knife, we will follow certain knife safety protocols. First of all, any individual using a knife will be seated and communicate the presence of an open knife to the rest of the group. Cuts will always be made away from the body and out of the vicinity of the body, such as the lap. When handing a knife to a fellow group member, the knife will be passed with easy access to the handle and the blade facing down.

**Fire:** We will not be making fires on this expedition to a fire ban within Mount Rainier National Park.

**Water Purification:** We will carry several methods of water purification in order to prevent waterborne illnesses such as cryptosporidium, giardia, and other forms of bacteria. Our primary tool for sterilization will be a SteriPen Adventurer Opti. It takes two CR123 batteries, which last for 50 one-liter treatments. It purifies one liter in 90 seconds through ultraviolet light. We will bring ten replacement batteries, which is five sets of replacements (250 liters). The group will also bring a water pump that filters out harmful particles in water. If both the SteriPen and water pump fail, we will carry iodine in the med kit and stash a 50 tablet bottle in each of the two resupply caches. When using iodine, we will treat one liter of water with 2 tablets of 20mg of tetraglycine hydroperiodide and let the water sit for 30 minutes. We will also burp the water bottles to make sure all water is clean and safe to drink. When cooking meals, water will be heated until a rolling boil is present for at least one minute. If and when we need to boil water above or around 6500 ft, we will make sure a rolling boil has occurred for at least three minutes, as recommended by the Center for Disease Control.

### *Medical*

**Personal Maintenance:** Although we will be working as a group to ensure that everyone remains healthy, each individual is responsible for personal hygiene and maintenance. This means that each group member must use hand sanitizer especially after going to the bathroom, before meals, and after handling any medical situations. We will have sufficient socks to prevent against ailments such as trench foot, and we will regularly change our socks when we notice they become damp. Another important aspect of personal maintenance is to prevent infections by making sure that we always have clean underwear.

Each group member will have her own toothbrush, nail clippers, and necessary medications. As a group we will make sure that everyone is tending to her personal maintenance, and if we suspect that someone is not adequately addressing her needs, we will confront that individual in private.

**Blisters:** Blisters will perhaps be the greatest medical nuisances throughout this expedition due to the demanding terrain. We will be prepared with moleskin, Band-Aids, and second skin to ease any blisters that arise. Additionally, we intend to take preventative measures by alerting the group of “hot spots” during the earlier portions of the trail, and taking the necessary time each morning to avoid any bunched socks in our boots.

**Hypothermia:** One of the greatest risks along the Wonderland Trail is hypothermia caused by wet, chilly weather. In order to prevent hypothermia group members will not utilize cotton base layers that will not dry when wet. Also, everyone will have an extra set of dry clothes in the event of getting wet. Sleeping bags are critical pieces that must be kept dry in order to prevent and reserve hypothermia. Thus, all group members will use a waterproof sleeping bag stuff-sack or line the stuff sack with a trash bag.

**Heat:** We are aware that summer expeditions increase the probability of encountering heat stroke, exhaustion, and dehydration. Thankfully, our WFR classes will have properly prepared us to recognize the signs, symptoms, and differences between each of these problems. Each member will have at a minimum, two camelbacks or two-liter water bottles, and we intend to have frequent water breaks throughout the day (*see exhaustion*). Each time we break to drink water we will also consume a bit of trail mix, dried fruit, or granola bars to avoid exhaustion due to inadequate fueling. Our meals are all pre-planned and calorically sufficient to support this degree of physical expenditure. Furthermore, we know that a long day of hiking facilitates going to bed early and sleeping soundly through the night so that we have energy for the following day. Lastly, if anyone exhibits signs of heat stroke, we will immediately find shade and a water source to cool the rising temperature of the body.

**Allergies:** Before leaving we will conduct medical interviews so that we are aware of not only the other group members' allergies but also the type of reaction that ensues. If an allergic reaction occurs during this expedition, we are equipped and certified to administer epinephrine with a sterilized needle. For minor allergic reactions we additionally have Benadryl. Evacuations plans will be constructed based on the severity of the reaction.

**Water:** We have located which portions of the trail have water sources, and we will be sure to purify water from the cleanest source (*see water purification*).

**Wounds:** All wounds will be treated in the field unless its depth and location prove to be outside of our WFR skill set. We will pack exposed wounds to limit bleeding and make sure that it heals from the bottom of the wound to the top. We have povidone iodine to clean the area in addition to purified water for irrigation of the wound. Band-Aids, gauze, and medical tape are all included in our First Aid Kit.

**Exhaustion:** The Wonderland Trail is known as one of the most difficult long trails in North America. This is generally due to the massive elevation gains and losses. Furthermore, our daily mileage averages out to be approximately 8 miles, with the longest day being almost 12 miles. In order to prevent debilitating exhaustion, we will begin our days early so that we have plenty of time to reach our next camp and plenty of time to sleep to be energized for the next day. An early start will allow us to take several critical water, snack and lunch breaks along the trail. We will divvy up group gear and food equally by weight but if a group member is struggling another group member will not hesitate to lighten the load. Similarly, if a group member feels it is necessary to take a break, the group will do so. Packs on water breaks will be critical along with quick gorp consumption to avoid exhaustion due to inadequate fueling. Lastly, our meals are all pre-planned and calorically sufficient to support this degree of physical expenditure.

### *Weather*

**Rain:** August represents one of the warmest and driest months on the Wonderland Trail. The temperatures average from a high of 70s to a low of mid 20s. However, rain often occurs in August, due to the presence of Mt. Rainier and the temperature nature of the ecosystem. In order to prevent risk

generated by cold and wet conditions, all participants will carry a waterproof jacket and pants in an accessible spot within their pack. If rain seems imminent, we will put on rain coats. Similarly, if the weather is hot and group members are sweating profusely, upon entering camp group members will change into another dry, wicking layer of clothing.

**River Crossing:** Early in the season, rangers build log bridges across most creeks and rivers throughout the trail. However, major snow or rain seasons may wipe out previously constructed log bridges. Nisqually River, Kautz and Pyramid Creeks, the south and north forks of the Mowich River, and the west fork of White River are the rivers in which this often occurs. At Longmire Ranger Station, we will ask park rangers about current water level and bridge conditions. If we come upon a washed out bridge, we will look up and downstream for a safe place (low, slow flow, no major water features nearby) to cross. Having chosen a spot, we will remove boots to cross the water. If a group member has water shoes as camp shoes, they will cross the river wearing that shoe. However, group members with no water shoes will keep socks on to avert damage to the feet and don a dry pair to continue hiking. We will unbuckle backs so that if we fall our load can easily be taken off to prevent drowning. We will use each other, trekking poles or large walking sticks to help balance ourselves while crossing the river.

**Snow:** While snow travel is highly unlikely on the Wonderland Trail in August, we still intend to be fully prepared. Before setting out on the trail, we will ask park rangers about conditions, specifically any place on the trail where snow still resides. As discussed in *Maps*, we will be carrying USGS topos and custom topos, with which we can pinpoint our location on the trail. If necessary, we will use the USGS topos to triangulate our location and take bearings with a compass to get a better idea of the likelihood of snow. We will also use trekking poles or walking sticks to aid with balance. Snow travel is slow, which we will take into our consideration for our plan for the day.

**Sun:** Sun exposure will be a constant hazard during the expedition. To prevent sun burns, we will be carrying two bottles of sunscreen above SPF 30, and we will apply the lotion each morning and reapply it after lunch. Every member of the trip will also bring and wear sunglasses throughout the to protect our eyes. The highest elevation we will reach on the trail is the Panhandle gap at 6750 ft, which skirts a glacier extending off Mt. Rainier. Especially at this point in the hike, along with all other areas highly exposed to sunlight, we will take extra care to prevent burns.

**Lighting:** Lighting, while not common in Mt. Rainier National Park, is still a pertinent backcountry risk that demands preparation. If we are inclined to believe that there may be lightning one day, we will take note of the day to ensure that we will not be along ridges, alpine meadows, or other highly exposed areas during those times. We will also stay away from tall formations, such as trees or cliffs and utilize the “cone of protection” rule of thumb, which suggests that individuals stay at a distance relative to the highest point of the object. Some of our campsites reside very close to tree line. If such sites appear to be in danger of lighting, we will follow LNT protocol to find a safe site. If thunder follows lightning by less than 5 seconds we will disperse to safe distances (20 ft) and assume the lightning position. We will place a sleeping pad below our feet to squat upon. The less contact an individual has with the ground, the less likely they will experience a ground current shock. Lightning position will cease when the electrical storm has passed a safe distance away. If a member of the group is struck by lightning, we will follow our WFR protocols to treat them.

**Describe your self - evacuation plan in the event of an emergency. Discuss any technical skills your expedition members have to handle various self-evacuation scenarios. NOTE: Failure to thoroughly discuss evacuation plans may result in funding denial.**

By the time of our expedition, the entire group will have completed Wilderness First Responder. This certification enable us with the skill set to evaluate medical situations to the best of our knowledge and determine the necessary steps to solve the problem at hand. As Sophie Ohaus and Kati Voeller will have the most recent WFR certification, in the event of a medical emergency they will assume a leadership role, determine the necessary steps to resolve the situation, and delegate tasks to the group accordingly (assuming that they are not the ones injured). During our trip we will carry a satellite phone with us in the event we need to call Park Rangers to arrange an evacuation with Search and Rescue and give our exact location. Prior to the expedition, we will all know how to use the satellite phone. In the event our phone is not working and there is a Type II or III emergency, one person will stay with the injured member to stabilize her while the other two will travel to the nearest place with service. If the two members need to spend the night in the backcountry, these two will bring the necessary supplies such as food, water, maps, compass, etc and the exact location of the other members of the group. In the case that a helicopter would need to land to complete an evacuation, we will give Search & Rescue our precise coordinates and they can discern accordingly the appropriate landing spot.

We have based our assessment of emergency situations off of Colorado College Outdoor Education protocols. We will assess emergencies on a Type I-III basis.

#### Type I

A stable or unstable injury or an illness that requires an evacuation, but it can be conducted slowly and without external assistance. We will hike to the nearest ranger station while aiding the sick or injured individual. We will continually assess the condition of the injured person during the evacuation, and if their conditions worsen at any point, we will stop and reassess our plan accordingly. When we arrive at the station we will use the satellite phone to arrange transportation to hospital if necessary.

#### Type II

An unstable injury that requires a timely evacuation with external assistance, such as Search and Rescue. We will use the satellite phone to arrange evacuation plan with Park Rangers and Search and Rescue.

#### Type III

Loss of life or limb is imminent. Use satellite phone to request immediate medical assistance such as Search and Rescue or Life Flight.

The Type I evacuation routes are as follows. These distances are based on where the campsite for the night exists in relation to the most accessible ranger station, wilderness information center or other locations that can provide external aid.

<b>Day</b>	<b>Start</b>	<b>End</b>	<b>Mileage</b>	<b>Elevation</b>
1	Devil's Dream	Longmire	5	moderate
2	Klapatche Park	Longmire	11.8	extreme

3	Golden Lakes	Mowich Lake Cpg	10.2	mild
4	Mowich Lake Cpg	Mowich Lake Cpg	0	none
5	Ipsut Creek	Carbon River RS	2.9	moderate
6	Mystic Lake	Carbon River RS	4.9	moderate
7	Granite Creek	Sunrise RS	5.1	mild
8	White River Cpg	White River Cpg	0	none
9	Summerland	White River Cpg	6.7	moderate
10	Nickel Creek	Paradise	11	moderate
11	Paradise River	Longmire	5.5	mild
12	Longmire		0	none

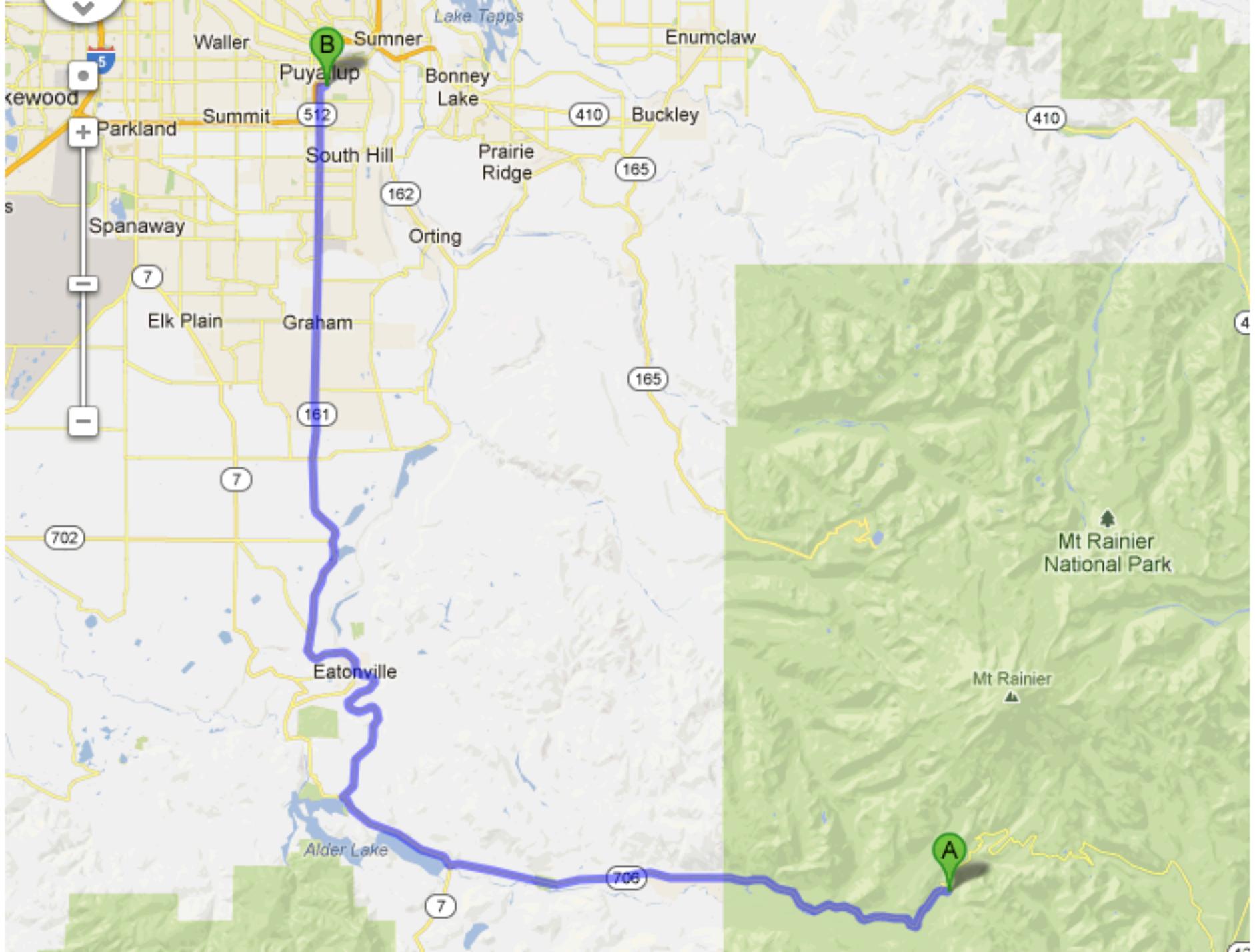
**List emergency resources available in the vicinity of your expedition (phone #s for ranger station, hospital, etc).**

Contact	Number	Tested?
Good Samaritan Hospital	(253) 697-4000	
WIC at Longmire	(360) 569-6650	
Carbon River Ranger Station	(360) 829-9639	
Sunrise Ranger Station	(360) 663-2425	
White River WIC	(360) 369-6670	
Park Headquarters	(360) 569-2211	
Paradise Guide House	(360) 569-6641	
Laurie Masuret	(908) 766-1719 home	
Tracey Ohaus	(860) 526-4305 home	
Barbara Mathews (Kiko)	(626) 233-7231 cell	
David Voeller	(206) 356-3441 cell	

**A** Longmire, WA

1. Head **northwest**  
About 52 secs go 0.3 mi  
total 0.3 mi
2. Turn left onto **Paradise Rd E**  
About 10 mins go 5.4 mi  
total 5.7 mi
3. Turn left onto **Washington 706/Paradise Rd E**  
Continue to follow Washington 706 go 14.6 mi  
total 20.4 mi  
About 25 mins
4. Continue onto **WA-7 N/Mountain Hwy E/National Park Hwy**  
About 7 mins go 4.9 mi  
total 25.2 mi
5. Turn right onto **Alder Cutoff Rd E**  
About 9 mins go 6.7 mi  
total 31.9 mi
6. Continue onto **Center St E**  
About 1 min go 0.5 mi  
total 32.4 mi
7. Turn right onto **WA-161 N/Washington Ave N**  
Continue to follow WA-161 N go 22.6 mi  
total 55.0 mi  
About 34 mins
8. Turn right onto **S Meridian**  
About 3 mins go 1.2 mi  
total 56.2 mi
9. Turn right onto **15th Ave SE**  
go 0.1 mi  
total 56.3 mi
10. At the traffic circle, continue straight to stay on **15th Ave SE**  
Destination will be on the left go 0.1 mi  
total 56.4 mi

**B** **MultiCare Good Samaritan Hospital**  
401 15th Avenue Southeast, Puyallup, WA 98372



We have also attached directions from Longmire to the nearest hospital. If we need to travel to the hospital from a different trailhead, we will use our previous directions from the cache sites to reach that point. If park rangers or visitors can provide quicker routes we will verify those directions on our phones and proceed to the hospital.

**List emergency communication devices you will be carrying. If none, explain why.**

We each will carry our cell phone, but the area is not known to have service, so we will also rent a satellite phone for emergencies. We are renting a satellite phone from [www.satellitephonestore.com](http://www.satellitephonestore.com). We are going to rent the Iridium 9505A which is priced at \$24.95 a week. We are only going to carry one satellite phone, but all members of the group will always know where to find it in the brain of a designated pack. We will decide which pack the phone will be in before we start our trip.

## **V. Budget**

Please see attached budget sheet.

*Describe what measures you have taken to minimize expenses.*

The group has minimized expenses in various ways. Kiko will be taking a red eye flight from Anchorage to Seattle. Since Washington is home for Kati Voeller, this eliminates additional expenses for flights, etc. While in Seattle the group will stay at the Voeller residence, which eliminates hotel, food, and gas expenses. We will also utilize the Voeller's cars, which will deduct rental, public transportation, and gas costs to and from Rainier National Park. While we tried to make most of our food gluten free, when the gluten free product we expensive we only budgeted enough for Kiko.

	Item	Quantity	Purpose	Cost	Total per section	Total
<b>Transportation</b>						
	Kiko's flight from Anchorage to Seattle on 8/5	1	Travel to trailhead	137		
	Kiko's flight from Seattle to CO Springs on 8/20	1	Travel to school	153		
	Sophie's flight from JFK to Seattle 8/5	1	Travel to trailhead	250		
	Sophie's flight from Seattle to Denver 8/20	1	Travel to school	159		
	Megan's flight from JFK to Seattle 8/5	1	Travel to trailhead	250		
	Megan's flight from Seattle to Denver 8/20	1	Travel to school	159		
					\$1108	
<b>Fuel</b>						
	MSR - SuperFuel 1 quart	4	Cooking on MSR stoves, extra to allow for spills	51.8		
					\$51.8	
<b>Maps and Books</b>						
	Golden Lakes Topo	1	Navigation	12.95		
	Mowich Lake Topo	1	Navigation	12.95		
	Mount Rainier East	1	Navigation	12.95		
	Mount Rainier West	1	Navigation	12.95		
	Plants Of The	1	Plant identific	16.13		
					\$67.93	
<b>Permits and Fees</b>						

	Camping Permit	1	Reservation fee	\$20.00		
	Park Entrance	2	Car entry fee	\$15.00		
	Cougar Rock Camp	2	Reservation fee	\$9		
					\$44	
<b>Gear Rental</b>						
	Satellite Phone	1 x 2 weeks	Emergency Communication	50		
	4-person tent	1 x 2 weeks	Shelter	168		
	Camp stove	2 x 2 weeks	Cooking	98		
					\$316	
<b>Gear Purchase</b>						
	Fuel Bottle 30fl oz	3	cooking	60		
	UL123 Batteries	5 sets	water purification	25		
	Bear Spray	4	risk management	220		
					\$305	
<b>Food</b>						
	Bagels	18	Nutrition, Breakfast	13.47		
	Corn Tortillas	16	Nutrition, Breakfast	1.25		
	Peanut Butter	12	Nutrition, Breakfast	5.09		
	Honey	32	Nutrition, Breakfast	5.98		
	Oatmeal	24	Nutrition, Breakfast	4.99		
	Granola	12	Nutrition, Breakfast	7.98		
	G.F. Granola	8	Nutrition, Breakfast	5.99		
	Raisins	8	Nutrition, Breakfast	4.99		
	Craisins	8	Nutrition, Breakfast	7.98		
	G.F. Oatmeal	8	Nutrition, Breakfast	11.98		
	Pancake Mix	12	Nutrition, Breakfast	4.69		

	Corn Tortillas	8	Nutrition, Breakfast	1.25		
	Peanut Butter	12	Nutrition, Breakfast	in other meal		
	Chocolate Chips	16	Nutrition, Breakfast	\$2.89		
	Honey	16	Nutrition, Breakfast	2.99		
	2 cup brown sugar	12	Nutrition, Breakfast	1		
	8 tsb butter	12	Nutrition, Breakfast	in other meal		
	2 tsb yeast	12	Nutrition, Breakfast	2.09		
	3.5 G. F. flour	12	Nutrition, Breakfast	1.99		
	3.5 Flour	12	Nutrition, Breakfast	3.47		
	Hot Chocolate	48	Nutrition, Breakfast	14.98		
	Tea	48	Nutrition, Breakfast	7.5		
	Rice	16	Nutrition, Dinner	5.38		
	Beans	32	Nutrition, Dinner	11.85		
	Cheese	24	Nutrition, Dinner	11.07		
	Canned Chick	20	Nutrition, Dinner	15.16		
	Flour Tortilla	16	Nutrition, Dinner	4.58		
	Corn Tortilla	8	Nutrition, Dinner	in other meal		
	Quinoa	32	Nutrition, Dinner	22.36		
	Peanut Butter	24	Nutrition, Dinner	5.09		
	Raisins	4	Nutrition, Dinner	in other meal		
	Craisins	4	Nutrition, Dinner	in other meal		
	Pasta	12	Nutrition, Dinner	3.18		

	G.F. Pasta	4	Nutrition, Dinner	3.29		
	Pesto	4	Nutrition, Dinner	1.25		
	manara sauce	4	Nutrition, Dinner	2.5		
	Cheese	12	Nutrition, Dinner	\$3.69		
	Corn Tortillas	8	Nutrition, Dinner	\$1.25		
	Thai Kitchen I	8	Nutrition, Dinner	9.45		
	Flour Tortillas	32	Nutrition, Dinner	9.16		
	Corn Tortillas	8	Nutrition, Dinner		in other meal	
	Cheese	15	Nutrition, Dinner	7.38		
	Peanut Butter	4	Nutrition, Dinner		in other meal	
	Salt		Nutrition, Dinner	1.5		
	Pepper		Nutrition, Dinner	2.5		
	Cinnamon		Nutrition, Dinner	2.5		
	Garlic Powder		Nutrition, Dinner	1.79		
	Chili powder		Nutrition, Dinner	2.99		
	Almonds	32	Nutrition, Lun	13.98		
	Cashews	32	Nutrition, Lun	17.1		
	Peanuts	32	Nutrition, Lun	7.78		
	Raisins	39	Nutrition, Lun	14.97		
	Craisins	28	Nutrition, Lun	15.98		
	Dried Apple	33	Nutrition, Lun	17.97		
	Dried Mango	18	Nutrition, Lun	20.94		
	Clif Bars	24	Nutrition, Lun	28.5		
	Laura Bars	22	Nutrition, Lun	30.58		
	Nature Valley	36	Nutrition, Lun	19.74		
	Gummy Bears	25	Nutrition, Lun	12.45		

	Fruit Leathers	30	Nutrition, Lun	15.99		
	Dark Chocolate	65	Nutrition, Lun	32.95		
	Gold Fish	42	Nutrition, Lun	16.89		
	Yogert Covered	36	Nutrition, Lun	26.94		
	Peanut Butter	150	Nutrition, Lun	15.27		
	Jelly	62	Nutrition, Lun	5.78		
	Summer Susa	18	Nutrition, Lun	11.96		
	Nutella	40	Nutrition, Lun	14.98		
	Gatorade	105	Nutrition, Lun	16.47		
	Banana Chips	39	Nutrition, Lun	7.47		
	Carrots	22	Nutrition, Lun	9.96		
	Oranges	16	Nutrition, Lun	16		
	G.F. Nut-thins	16	Nutrition, Lun	11.98		
	Corn Tortillas	48	Nutrition, Lun	3.75		
	Butter	96	Nutrition, Lun	10.47		
	Olive Oil	50	Nutrition, Lun	9.49		
					\$666.81	
						\$2559.54