



# Ritt Kellogg Memorial Fund Registration

Registration No. 9XSX-4HC1Z  
Submitted Jan 4, 2016 1:19pm by Erica Evans

## Registration

Sep 1, 2015-  
Aug 31

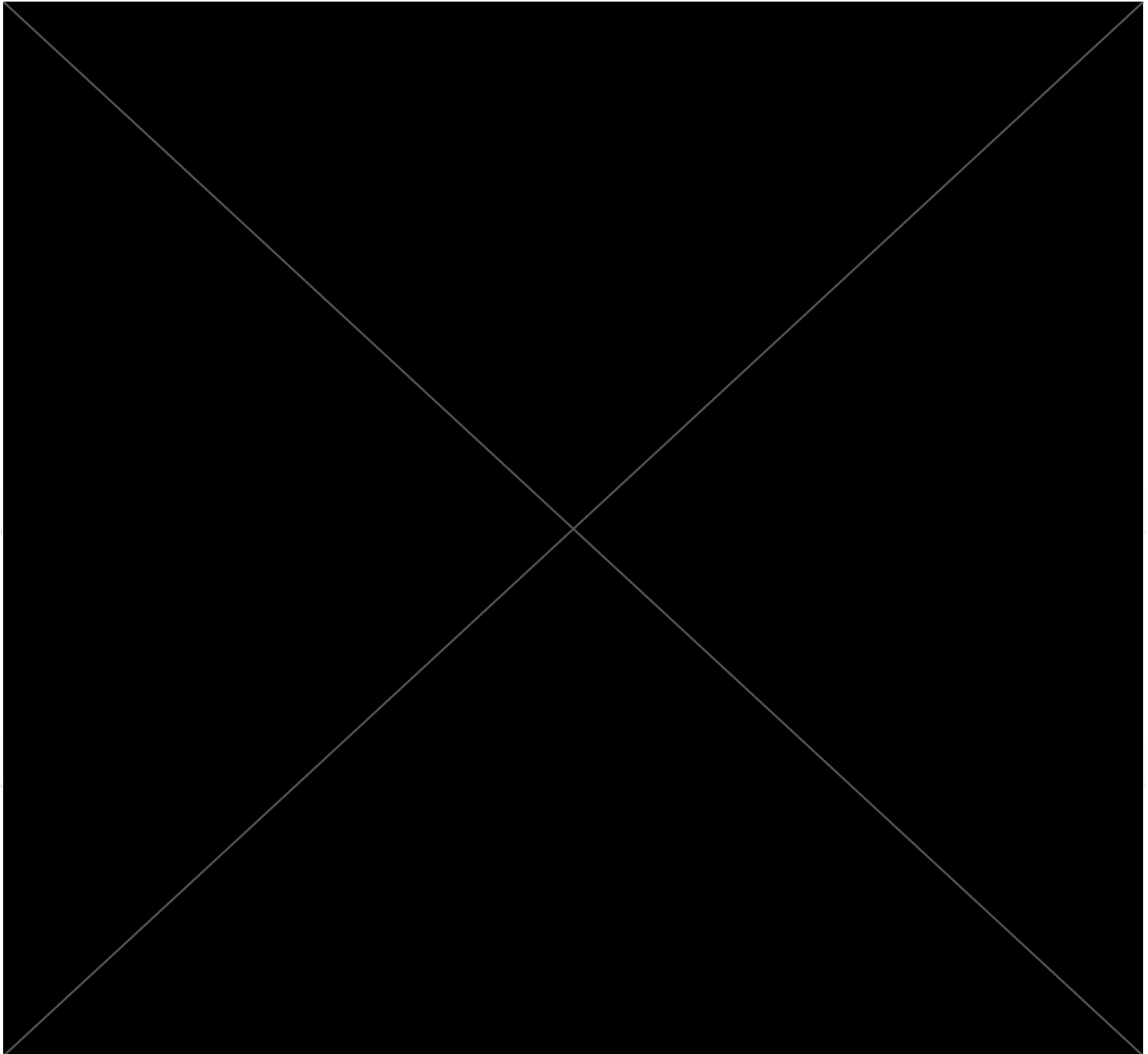
Ritt Kellogg Memorial Fund

### **RKMF Expedition Grant 2015/2016/Group Application**

This is the group application for a RKMF Expedition Grant. In this application you will be asked to provide important details concerning your expedition.

**Waiting for  
Approval**

## Participant



## I. Expedition Summary

### Expedition Name

Two Wheel Drive: Biking the Coast Mountains, British Columbia

### Objectives

As graduating seniors, we have both realized how important our time in the outdoors is to us. Being able to take an expedition such as this before we enter jobs and graduate programs will have three primary functions 1) to cement our commitment to outdoor and adventurous lifestyles through the unique opportunity this grant affords 2) to give us an opportunity to reflect on everything we have learned at Colorado College (both in and out of class) and 3) to perfect our skills of planning extensive multi-day expeditions.

### Location

This expedition will take us through the Coast Mountains of British Columbia where deeply incised fjords rise through temperate forests to high, wild and glaciated peaks. The remoteness and sheer natural beauty of the area places it among some of the most stunning wilderness in Western North America, as well as some of the wildest. Our route—composed of 4x4 tracks, forest service roads, horse trails, and singletrack hiking and biking trails—will take us south through remote stretches of vast wilderness encompassing the Shulaps, Camelsfoot, Chilcotin and Potato Ranges

### Departure Date

Aug 9, 2016

### Return Date

Sep 2, 2016

## Days in the Field

18

## Wilderness Character

Depending on terrain, we will be able to cover ~15-40 miles a day on our bikes- which will enable us to get deep into the heart of the Coast Mountains. The area we will be riding through is a stunning combination of high peaks, glacial lakes, fjords and pristine streams and lakes. Preparedness will be crucial to this expedition, where a broken bike could necessitate several days of hiking. We are excited to start this expedition in the middle of wild British Columbia and immerse ourselves in the remote trails, rivers and lakes that crisscross the landscape. We will be connecting established trails, 4x4 and forest service roads, which will allow us to access primeval remote, and pristine wilderness areas devoid of permanent human inhabitation.

While there has been debate about the role of bikes in backcountry settings, we believe that biking with the proper respect and equipment is a totally unique backcountry experience that can be just as respectful as climbing, hiking or skiing. Biking allows us to move farther and faster, permitting us to access parts of the backcountry that we would never be able to hike into without an airdrop. This expedition allows us to easily cover over 500 miles of ground in twenty days, something that would be impossible on foot or on skis. This expedition will necessitate food drops, and while we recognize that we will be exposed to civilization during these, we also know the difficulty of carrying more than 20 pounds of food on a bike over passes. We will pick up three food drops over the course of this trip. We will attempt to minimize our contact with established settlements as much as possible during these transactions so as not to remove ourselves from the wild places we are traveling through.

## II. Participant Qualifications

### Participants' Graduation Date

Erica Evans- May 2016

Maxwell Conlon- May 2016

### Medical Certifications

- Erica Evans- May 2016, will be re-certing WFR through WMI beginning January 11
- Maxwell Conlon- May 2016, will be taking WFR at Colorado College through WMI beginning January 4

### Does your group have adequate experience?

Yes

### Training Plan

Our training plan contains several aspects, and will vary for both members of the group. Maintenance of biking skills and physical fitness is tantamount, as well as experience working with bikes and riding on loaded bikes. Navigational skills will also be essential on this expedition, as we will be connecting trails rather than riding an established signed trail.

The first component of our plan is physical fitness. We are both physically fit, endurance athletes. However, we recognize that doing any repetitive activity for two weeks will take its toll on the body. As a result, we have both started to increase our biking mileage (as much as weather permits). We currently ride about 50-100 miles a week. Ideally, we would like to continue building on this into the spring, reasonably increasing our mileage (100+ miles a week). However, we recognize that weather and other factors might limit this, and are therefore prepared to supplement this training with running and weight cross training.

Another component of this expedition is experience working with bikes. Max is a skilled bike mechanic, while Erica can repair most major field issues, she is planning on spending time at the Colorado College Bicycle Cooperative where Max currently serves as the manager throughout the spring to refine and learn skills for bike repair

and maintenance.

We will be riding with frame packs and setups that we have previously not utilized. To prepare for this, we will train on local trails with loaded bikes a few times in the spring to practice riding with weight. We are also planning on doing a long distance loaded dry run on the Kokopelli trail (a 150m trail outside of Moab) in April to ensure that our setups are working correctly. This trip will also help us decide where to set our shocks before the trip. Riding with a load changes the dynamic rebound of a bike and requires some adjustments specific to being loaded.

While we will be riding for the majority of this trip, there are segments of trail where we will be pushing our bikes for several miles over terrain that is not bikeable. The main preparation for this will be general physical fitness and awareness of our physical limitations. Pushing bikes can be frustrating because you cover less mileage, and can sometimes be more exhausting than riding. We will practice moving with loaded bikes, lifting them over obstacles and navigating with them prior to leaving on this expedition. We are also bringing tools so that if necessary we can remove our pedals for long sections of hiking.

### III. Expedition Logistics, Gear and Food

#### Travel Plan

While we may be in different locations due to summer plans and jobs, we are planning on leaving Denver on the 9th of August. We will transport our gear and bikes in Erica's Subaru Outback, which is equipped with two Thule roof bike racks. Food purchasing will take place in Colorado before departure. We will start our drive to Vancouver early on the morning of the 14th. We are planning on taking I-25N to I-80W, which we will follow to I-84W. Outside of Washington we will exit onto I-82W, which connects, to I-90W to Interstate 405 N to I-5N, on which we will cross the Canadian Border. I-5 turns into BC-99, which we will follow to Vancouver. From Vancouver we will follow Google Maps directions to the Harrison Hot Springs Trailhead. We will break up the drive into two days, stopping to sleep in our tents in Three Islands State Park just off I-84 near Mountain Home, Idaho. Driving is an inherently dangerous task, and therefore we will be very careful to switch out drivers and rest. If necessary, we can stop and stay with friends or family in Salt Lake City, Boise, or Seattle. Once we are in Vancouver (on the 11th of August), we will park our vehicle at the Harrison Hot Springs trailhead, pack our bikes and gear into boxes and take a shuttle to the Vancouver International Airport, where we will catch a flight to Anahim Lake. In Anahim Lake we will purchase bear spray and white gas at the local trading post before departing. Our route will take us back to our vehicle, and we will drive back to Colorado via the same route at the end of the trip.

#### Expedition Itinerary

[Itinerary.pdf](#) (15MB)

Uploaded Jan 4 9:44am by Erica Evans

**Appendix A**

#### Re-Ration Plans

Yes. We will re-ration three times during the expedition using by mailing food ahead and picking it up and coordinating with lodge owners to bring food to lodges closer to the trail. The three main drops are in Nemaiah Valley (175 miles), Tyax Resort (308 miles) and Lillooet (410 miles). Each food drop contains enough food up to the day of the next drop, and an additional dinner in case of setbacks or emergency. The food drops in Lillooet and Nemaiah Valley we will mail to ourselves before setting out. Canadian post offices will hold mail for up to two weeks, and therefore we will mail packages slightly before our departure to ensure they arrive. Our food drop at Tyax Resort we will mail directly to the resort, therefore we can avoid detouring off route to pick up food. For a breakdown of food cost and amounts see attached food list.

#### Food Storage

We will protect our food from wildlife by being vigilant about bear hangs and kitchen cleanup. Kitchen areas will be located at least 100 yards from camp sites, while hangs will be positioned at least 10 feet above the ground and 4 feet from a vertical support (per USFS recommendations). We will hang food and dishes in dry bags with the tops rolled to add an extra degree of protection. We will be riding through heavily forested areas, so locating trees for bear hangs should not be a problem. We will be bringing an 8-10L bear canister or bear bag, and will store our food in this to prevent odors and smells from attracting bears to our campsite. Kitchen areas and food will be kept away from

waterways, game trails and other areas frequented by bears.

### Food List

[Food List.pdf](#) (38KB)

Uploaded Jan 3 10:07pm by Erica Evans

**Appendix B**

### Equipment List

[Equipment List.pdf](#) (43KB)

Uploaded Jan 3 9:09pm by Erica Evans

**Appendix C**

### Are all expedition members familiar with LNT principles?

Yes

### Plan for Minimizing Impacts

#### Plan ahead and prepare

We have spent an extensive amount of time planning for this expedition, both to ensure that this expedition goes smoothly, as well as to make sure we treat the areas we will be traveling through with the proper respect. Because we will be traveling on bikes, it is essential we know where we are, and stay on the appropriate trails so not to damage pristine areas. We will take appropriate precautions to make sure we can remove our trash, and set up our route with little to no bushwacking.

#### Travel and camp on durable surfaces

We are connecting a series of different trails, forest service roads, and 4X4 track. We have spent time preparing for this by looking at imagery, talking to cyclists who have ridden in the area and by looking at maps to decide which road systems are best for us to ride on. Choosing campsites will be an important part of our LNT process, and we will try to minimize pulling our bikes off trail. All campsites will be at least 200ft from rivers or streams. In high use areas we will use previously designated campsites. In pristine areas we will attempt to disperse as much as possible.

#### Dispose of waste properly

Prior to departure, we will repackage all our food to minimize waste. We will reuse bags to transport waste out, and we will dispose of waste (if possible) at our three food pickups to minimize weight. Microtrash will also be an important concern, and we will make sure to sweep our cook sites at night and in the morning. We will dig catholes 200 ft from trails, waterways and campsites on low angle surfaces. Catholes will be dug 6-8 inches deep and 4-6 inches wide.

#### Leave what you find

We will leave everything we find. We will be bringing a digital camera on this expedition to document our experiences without taking pieces of nature. We will also be respectful and leave any First Nations Artifacts that we find along the trail, and be respectful when passing through First Nations land.

#### Minimize campfire impacts

Our plan is to cook all food on our MSR Whisperlite stove and therefore we are not planning on having campfires. If we do decide to have a fire we will minimize campfire impacts by only having fires in designated and established fire rings (these might be present at horsepacking camps). If we do have a fire we will bury cooled ash and charcoal, and will not leave rock rings.

#### Respect wildlife

We will respect wildlife by maintaining safe distances and never feeding animals. This includes accidentally leaving food at camp for animals to find, we will be vigilant about collecting trash and food when camping. Bears and moose are present in this area, and we will take appropriate precautions by being loud, alerting them of our presence and

following bear hang procedures.

### **Be considerate of other visitors**

We recognize that the areas we will be traveling through have been inhabited by a variety of people. Noise level will be kept at a volume to deter bears but not disturb other patrons of the wilderness. This route will take us through First Nations Land, as well as a few remote hamlets. We will make sure to be very respectful when passing through these areas (see Cultural Concerns section below).

### **Cultural Concerns**

As with most wilderness trips in British Columbia, we will be travelling across land rich in the history of First Nations Tribes. This will be especially true on the northern section of the route around Chilko, Taseko and Tatlayoko Lakes, which have long been home to the Xení Gwet'in people of the Tsilquot'in Nation. We will also be passing through St'át'imc Territory as we ride along the Fraser River south towards Lillooet. Both nations have close ties to the land and a respect for the earth. We will seek to replicate this approach along the entire route. At our third food resupply in Nemaiah Valley we will likely directly interact with the Xení Gwet'in people at their local post office where we will be sure to thank them for allowing us on their land and demonstrate our commitment to respectfully interacting with their culture. This expedition presents a unique opportunity for cultural learning, yet we realize that we are visitors on land sacred to First Nations communities and thus temper all actions with respect for their way of life.

### **Land Management**

Outside of the Vancouver Metro Area, British Columbia is a patchwork of Provincial Parks, Protected Areas, and small towns often separated by hundreds of miles. Our route will take us nearby or through all three. While bicycles are allowed in all Provincial Parks and Protected areas we will be traveling through, it is not uncommon to encounter trails restricted to biking traffic. We have planned our route with these restrictions in mind and will avoid traveling on trails designated as hiking only. Permits are not required for traveling through Provincial Parks and Protected Areas in British Columbia, but the importance of trail etiquette, especially for cyclists, is emphatically stressed. We are well aware of the expectations for cyclists in natural areas and will act accordingly. This includes carrying a bear bell, yielding to pedestrian and equestrian traffic, and staying in control at all times. Below is a list of all managed land areas we will encounter on our route:

Sasquatch Provincial Park  
Nahatlatch Lake Provincial Park and Protected Area  
South Chilcotin Provincial Park (Spruce Lake Protected Area)  
Tsýl-Os Provincial Park

## **IV. Risk Management**

### **Objective Hazards**

**Bears-** we will be traveling through areas that contain all three types of bears: black bears, brown bears, and grizzly bears. Due to the dangerous nature of these animals, bear safety will be paramount. Erica has spent time and worked in bear country in Glacier National Park, the Bitterroot Range, Uinta Mountains, Yellowstone and Grand Teton National Parks, as well as in various locations in Colorado. Max has hiked in bear country on the Olympic Peninsula in Washington State and worked in Alaska where he practiced bear protocol and learned how to best avoid bear encounters.

**Creek crossing-** we will have to cross several creeks during the course of this ride. Our decision to do this expedition in August was determined heavily by flow levels in the stream crossings to minimize risk. Becee and Tyaughton creeks present especially difficult crossings during high flow; therefore we decided to plan this expedition for August, when streams will be lower.

Traffic- while most of the area we will travel through is fairly remote, there will be sections of road where we might encounter traffic in the form of ATVs, horses and the occasional car. (Highway 20, Main St in Lillooet, Rockwell Dr. near Harrison Lake) where we might encounter traffic in the form of horses, ATVs, and the occasional car.

Weather- as we will be removed from civilization, inclement weather poses a large risk. A fast moving thunderstorm in an unprotected area could be deadly. Being caught unprepared in the elements is equally hazardous.

### **Subjective Hazards**

Bike breakdown- our bikes are our lifelines on this expedition. We need them to operate correctly and efficiently because any issue or breakdown would occur far away from any repair shop.

Personal injury/illness- as with any activity, which involves travel at higher speeds, mountain biking presents an opportunity for personal injury, either by falling off the bicycle or colliding with trail obstacles. Being injured on an expedition of this length could have devastating consequences and small injuries can be cumulative, leading to larger setbacks. Illness in the backcountry is also a serious consideration.

Group dynamics- we contemplated increasing the number of people on this trip, however after much consideration we decided that we felt more comfortable on a trip of this nature with a smaller group. While being alone with one other person for an extended period of time in can be daunting, we are confident that our complementary skill sets and personalities will balance out most issues.

### **Hazard Mitigation**

Bears- prior to departure, we will check reports pertaining to presence of bears in the area, and will be prepared to reroute if bears appear to be an issue. To avoid contact with bears in the first place, we will attach bear bells to ourselves, and sing and talk loudly when traveling. We will both carry canisters of bear spray in easily accessible locations, and a spare canister will be kept in group gear. We will always stay together. While separation can occur while biking we will take extra precaution to avoid this, and will always bike in a group. Awareness of surroundings will also be crucial here- we will keep our eyes peeled for signs of bear activity, such as scat, claw marks or tracks. If we see or startle a bear we know that we will NEVER run from a bear. We are also aware that bear spray may not be able to stop a charging bear and are cognizant of the risks involved. If we see a bear, we will stop, and back away slowly, never turning our backs on the bear. We will never approach a bear, and if we see a bear we will make a wide detour, avoiding eye contact and keeping it in view (this will be our protocol with all wildlife). If a grizzly bear attacks, we will play dead until the animal leaves the area. If a black bear attacks we will try to retreat from the area, while defending ourselves with branches, bear spray or rocks. We will never attempt to climb trees to get away from black bears, as they can be adept climbers. If a bear gets into our food we will leave the area as safely and rapidly as possible, and leave the food. If we need to use bear spray on a bear we will spray the animal in the face, or spray a fog as a barrier. If bears come into our camp, we will make loud noises and spray bear spray to make it clear the bear is unwelcome. We will be traveling through this area during the salmon run, which is a large attraction for grizzlies and something we need to be aware of when crossing streams or traveling near waterways. Bear hangs will be placed 100 or more yards away from tent sites, and cooking areas will be located appropriate distances (100+ yards). We will be vigilant about placing cosmetics, soap and personal effects in hangs to avoid confrontation with bears. Bear hangs will be placed at appropriate locations and heights, and we will be bringing an odor proof bear bag or bear canister.

Creek crossing- when we cross creeks we will try to push our bikes across, and if creek conditions are high, we may have to carry our bikes on our backs. We will hold our bikes downstream from our bodies so that we can easily release them if we fall. Any creek crossing will be taken seriously. For the most part, we will be crossing creeks at established fords. However, we will scout upstream and downstream whenever we cross a creek. We will also practice crossing creeks with loaded bikes a few times before we depart to practice with the additional weight. If we encounter

a crossing where we cannot wheel our bikes across, we are prepared to set up a haul system to pull bikes across.

Traffic- in areas where traffic might be an issue we will follow appropriate protocol to avoid collision and injury. When encountering horses, we will stop, get off our bikes and pass slowly and steadily after the rider gives us the go-ahead. When passing hikers we will slow down to speed of hiker, alert the hiker and pass slowly with the expectation we many need to stop. When riding on forest service roads we will be prepared for ATV and vehicle traffic, and always ride on road shoulders and wear bright colors for visibility.

Weather- to protect ourselves against weather, we will make sure to check forecasts before departure. We will also always be aware of the changing conditions when we are riding, and be cognizant of weather changes when we are approaching high points and passes. Making sure we layer correctly, and avoid overheating when riding will also be an important component of our safety and comfort on this ride.

Bike breakdown- Since our bikes are so important to the operation of this expedition, we will practice repairing common issues before we depart. We will both be bringing 25-40 liter packs in case of a major breakdown, which would necessitate a hike out. Since well-functioning bikes are so important, we will make sure to clean and maintain our bikes every day at camp, checking for any mechanical issues, removing dirt and grease from moving parts, and identifying minor issues before they can become major problems. We will also be carrying an extensive supply of tools and spare parts to address all repairs we might encounter. Before departing, we will tune both of our bikes in order to reduce in the field repair, as well as practice with repairing bikes in the event of an issue.

Personal injury/illness- Un order to avoid personal injury we will make conservative decisions on the trail. We recognize that the extreme remote nature of this expedition increases the stakes, and we will always ride in control. If obstacles arise that seems too steep or dangerous, we will opt to walk our bikes around them, rather than ride them. We will never be on the bike without a helmet, bike gloves and glasses. Checking in with each other will also be a crucial part of staying healthy. Often soreness and strain can go unnoticed until forced to check in with an outside source. Therefore, we will make sure to debrief at the end of every ride to confirm we are in tip-top shape. We have lower mileage days built into our schedule to allow for some recovery during the trip. If needed we can alter the itinerary if we feel we need a break. To avoid illness we will practice clean camping procedures, such as frequent hand washing and water purification to avoid gastrointestinal issues. If illness does arise, we will use our WFR training to the best of our ability and are prepared to evacuate if serious illness occurs.

Group dynamics- We are aware of possible issues that could arise from being on a two-person trip. In order to mitigate any personality conflicts we will make sure to check in with each other about how we are feeling about mileage/injury or just general well being. Because we wrote this grant together we are equally knowledgeable about the area, our itinerary and evacuation routes, which we feel increases the overall safety factor of the trip.

### **Special Preparedness**

Erica has allergies. She will carry Benadryl on her person at all times, as well as two up to date Epi pens in easily accessible locations.

Max has occasional knee pain. Ibuprofen will be brought to mitigate this.

### **Emergency Preparedness**

We have broken our evacuation plan down by days relative to the nearest emergency services. Self-sufficiency and risk management will be key to facilitating a smooth evacuation from the backcountry. Our plan for an evacuation will depend on the type of emergency we are facing. If we need a rapid evac, we will use our SPOT device to contact search and rescue, or attempt to dial 911. If this fails, the uninjured member of the group will attempt to hike to a ridge



or high point for better service. We would then discuss an appropriate pick up location, and attempt to relocate ourselves, if possible, to facilitate an easy pickup. In an instance of serious injury accompanied by equipment failure, the uninjured party would stabilize the patient to the best of their ability, and ride or walk out to the closest point of contact listed in our emergency resources. If we need to stage a non-rapid evacuation, we would walk or bike out to the locations listed in our evacuation plan. We will always follow established evacuation routes listed in our itinerary, and will not attempt to bushwack or use unknown trails to cut time. These locations either have medical services, or vehicles able to transport us to definitive medical care.

Days 1-2- Front country emergency procedures

Day 3- Anahim Lake

Day 4- Anahim Lake (early in the day) or Tatla Lake (late in the day)

Day 5- Tatla Lake

Day 6- Bracewells Alpine Wilderness Adventures (Tatlayoko Lake)

Day 7-Tsylos Park Lodge/Chilko Airstrip

Day 8- Nemaiah Valley

Day 9- Nemaiah Valley

Day 10- Taseko Lake Lodge

Day 11- Taseko Lake Lodge

Day 12-17- Tyax Resort

Day 18- Lillooet

Day 19- Lillooet

Day 20- Lillooet, Lytton

Day 21- Lytton, Keefers, Inkitsaph

Day 22- Keefers, Bear Creek Provincial Park Offices

Day 23- Harrison Hot Springs

Day 24-25- Front country emergency procedures

## Emergency Resources

Below is a list of the emergency resources that are along the route. In the event of an emergency necessitating an evacuation we would immediately evacuate to one of the following locations, and if necessary hike to a nearby ridge and attempt to call ahead on a mobile phone. If we are in a situation requiring a rapid evacuation we will contact search and rescue through our SPOT device.

We will carry these emergency numbers on a laminated sheet.

### **Anahim Lake (On route, beginning point of trip)**

Anahim Lake Nursing Station

250-742-3336

Anahim Lake Airport

Kappan Mountain Forest Service Road

250-742-2364

### **Bella Coola (Off Route, 88 miles west of Anahim Lake)**

Bella Coola General Hospital

1025 Elcho St, Bella Coola, BC V0T 1C0

250-799-5635

### **Tatla Lake**

West Chilcotin Health Centre

16452 Hwy 20, Tatla Lake, BC V0L 1V0

250-476-1114

West Chilcotin Search and Rescue  
16665 Hwy 20, Tatla Lake, BC V0I 1V0  
250-476-1154

**Williams Lake (Off route, 138 miles east of Tatla Lake)**

Central Cariboo Search and Rescue  
1110A North MacKenzie Ave, Williams Lake, BC V2G 4E9  
250-398-5445

**Tatlayoko Lake**

Bracewells Alpine Wilderness Adventures  
Tatlayoko Lake, BC V0L 1W0  
778-786-0926

**Chilko Lake**

Tsylos Park Lodge (Wilderness Lodge at north end of Chilko Lake, staffed in summer)  
250-483-4368

**Nemiah Valley**

First Nations reserve and ranching community inhabited in summer

**Taseko Lake**

Taseko Lake Lodge (Wilderness Lodge at Taseko Lake, staffed in summer)

**Gold Bridge (11 miles off route)**

Tyax Wilderness Resort and Spa  
1 Tyaughton Lake Rd, Gold Bridge, BC V0K 1P0  
250-238-2221

**Lillooet**

Lillooet Hospital & Health Centre  
951 Murray St, Lillooet, BC V0K 1V0  
250-256-4233

Lillooet and District Rescue Society  
250 256-0191

**Lytton (2 miles off route)**

St. Bartholomew's Health Centre  
531 Main St, Lytton, BC V0K 1Z0  
250-455-2221

Lytton Medical Clinic  
533 Main St, Lytton, BC V0K 1Z0  
250-455-2202

Lytton Fire Rescue  
Lytton, BC V0K 1Z0  
250-455-2669

**Harrison Hot Springs (end of route)**

Harrison Hot Springs Resort & Spa  
100 Esplanade Ave, Harrison Hot Springs, BC V0M 1K0

604-796-2244

**Vancouver (off route, 81 miles east of Harrison Hot Springs)**

Vancouver Search and Rescue  
6862 Yew St, Vancouver, BC V6P  
604-219-8374

North Shore Rescue  
147 East 14th St, North Vancouver, BC, V7L 2N4  
9-1-1

Vancouver General Hospital  
899 W 12th Ave, Vancouver, BC V5Z 1M9  
604-875-4111

## V. Budget

### Budget

[Budget.pdf](#) (36KB)

Uploaded Jan 4 1:17pm by Erica Evans

**Appendix D**

### Transportation

\$976.96

### Food and Fuel

\$563.60

### Maps and Books

\$84.85

### Communication Device Rental

None!

### Permits/Fees

None!

### Gear Rentals

\$110.94

### Total Funding Request

\$1548.98

### Cost Minimization Measures

We have taken as many measures as possible to reduce expenditures for this expedition. We will be using personal gear, and borrowing gear from friends when possible. We own much of the expensive gear necessary to make this expedition possible (bike racks, bikes, backpacks, stoves and personal gear) and therefore the expenses for this expedition will ultimately be for gas, food, flights, and maps. We are planning on donating all maps back to Colorado College Outdoor Education. We debated about how to get to Vancouver, but ultimately decided to drive to save on both airfare and transportation costs for our bikes and gear. Driving and taking a shuttle to the airport is half the price that flying would have been. Food for this expedition will be bought in bulk when possible both to reduce the total price of the expedition, as well as to minimize the amount of packaging we will be using. We knew this trip would require food drops, and therefore we tried to cut costs in other places since the cost of shipping food is expensive. Most of the bike supplies and tools we will bring on this expedition we already have, and we decided against including the cost of

bike tubes, patch kits and extra spokes into this grant because these are items we use and would purchase anyway. We considered chartering a float plane for a drop off for this trip, however we decided against it due to the proximity of the airport at Anahim Lake, and to reduce costs since chartering a flight would have been very expensive.

## VI. Expedition Agreement

### Expedition Agreement



**Appendix E**

## Appendix A

**Day 1-** Meet in Denver, drive to Three Islands State Park, ID

- Gear check, pack vehicle. Aim to be on the road before 10am (food drops will be mailed prior to departure).

**Day 2-** Drive to Harrison Hot Springs

- Repack bikes into boxes. Camp at trailhead.

**Day 3-** Harrison Hot Springs to Wawa Lake (Distance: 7 miles), (Initial Elevation: 3631ft - Final Elevation: 3756ft, Maximum Elevation: 3800ft), [Total Mileage: 7 miles]

Route: Kappan Mountain Rd (unpaved) to Highway 20 (paved) to Christenson Rd (unpaved) to Highway 20 (paved) to Kappan Mountain Rd (unpaved) to Beef Trail Rd (unpaved)

- Take shuttle to Vancouver Airport, fly to Anahim Lake Airport.
- Upon arrival to Anahim Lake unpack and reassemble bikes.
- Ride to Anahim Lake Trading store where we will purchase bear spray and fuel.
- Retrace route to Anahim Lake Airport and continue along Kappan Rd to intersection with Beef Mountain Trail Rd. Turn left and camp near Wawa Lake.
- Evacuation: Anahim Lake.

**Day 4-** Wawa Lake to Unnamed Lake (40 mi) (3756ft - 4008ft, max: 4053ft) [47 mi] Beef Trail Rd (unpaved) to Charlotte Lake Rd (unpaved) to Hooch Rd (unpaved) to Highway 20 (paved) to One Eye Lookout Forest Service Road (unpaved)

- Follow several roads across terrain with little elevation change including a 20 mile stretch along Highway 20 (one of the few paved sections of the route) and arrive at an unnamed lake where we will camp for the night.
- Potential Hazards: It is likely that we will encounter an occasional car on Highway 20, see Traffic section of Hazard Mitigation.
- Evacuation: Anahim Lake, Tatla Lake.

**Day 5-** Unnamed Lake to Cochin Lake (29 mi) (4008ft - 3393ft, max: 4142ft) [76 mi] One Eye Lookout FSR (unpaved) to Smokey Lake FSR (unpaved) to Wr Graham Rd (unpaved) to Highway 20 (paved) to Tatlayoko Lake Rd (unpaved)

- Continue along One Eye Lookout FSR and follow several subsequent roads into Tatla Lake. Travel south along Tatlayoko Lake Rd and set up camp near Cochin Lake.
- Evacuation: Tatla Lake.

**Day 6-** Cochin Lake to Chesi Creek (25 mi) (3393ft - 4258ft, max: 4258ft) [101 mi] Tatlayoko Lake Rd (unpaved) to Tullin Mountain Trail

- Continue south along Tatlayoko Lake Rd to junction with Tullin Mountain Trail which will take us into the Potato Range where we will encounter the first climbs of the expedition. From Tatlayoko Lake we will climb 1500 feet over 10 miles to our campsite or the night near Chesi Creek.

- Evacuation: Bracewell's Alpine Adventures.

**Day 7-** Chesi Creek to Tsuniah Lake (26 miles) (4258ft - 4235ft, max: 6776ft) [127 mi]

Tullin Mountain Trail to Chilko-Tsuniah Trail to Tsuniah Lake Trail

- Today we will ride exclusively on trail and climb into the heart of the Potato Range (2500 feet elevation gain over 10 miles). Following the climb we will descend to the north shore of Chilko Lake. We will continue onto the Chilko-Tsuniah Lake Trail which reaches a junction with the Tsuniah Lake Trail near Tsuniah Lake FSR. We will camp near Tsuniah Lake.
- Potential Hazards: Creek crossings, see Creek Crossing section of Hazard Mitigation.
- Evacuation: Tsylos Park Lodge/Chilko Airstrip.

**Day 8-** Tsuniah Lake to Unnamed Lake (20 mi) (4235ft - 3946ft, max: 4376ft) [147 mi]

Tsuniah Lake Trail to Chilko Lake FSR (unpaved)

- High mileage yesterday with intensive trail riding so keeping mileage low today although terrain is relatively flat.
- Evacuation: Nemaiah Valley.

**Day 9-** Unnamed Lake to Taseko River (40 mi) (3946ft - 4266ft, max: 4725ft) [187 mi]

Chilko Lake FSR (unpaved) to Nemaiah Valley Rd (unpaved) to Taseko Lake Rd (unpaved)

- Flat terrain today with low mileage previous day, therefore we will ride 40 miles today. We will stop at the Nemaiah Valley Post Office today to resupply.
- Evacuation: Nemaiah Valley

**Day 10-** Taseko River to Upper Taseko Lake (30 mi) (4266ft - 4380ft, max: 4726ft) [221 mi]

Taseko Lake Rd (unpaved) to Taseko Lake Trail to Taseko Lake Road (unpaved)

- Another high mileage day takes us to Upper Taseko Lake along a combination of unpaved roads and trails. The terrain continues to be flat as we travel our last miles through the lake system that includes Tatlayoko, Chilko, Tsuniah, and Taseko Lakes.
- Evacuation: Taseko Lake Lodge.

**Day 11-** Upper Taseko Lake to Warner Lake (20 mi) (4380ft - 6110ft, max: 7881ft) [241 mi]

Taseko Lake Road (unpaved) to Taylor Pass Trail to Warner Pass Trail

- We will ride a short section of Taseko Lake Road before arriving at the junction with Taylor Pass Trail. The trail climbs along the Taseko River before intersecting with Warner Pass Trail, which will take us into the South Chilcotin Provincial Park. We will climb 3500 feet over 18 miles with an especially steep section leading up to the summit of Warner Pass. From the

top of the pass we will descend to Warner Lake where we will camp for the night.

- Evacuation: Taseko Lake Lodge, Tyax Resort.

**Day 12-** Warner Lake to Tyaughton Creek (12 mi) (6110ft - 5496ft, max: 7650ft) [253 mi]

Warner Pass Trail to Deer Pass Trail to Tyaughton Creek Trail

- Descend from Warner Lake to junction with Deer Pass Trail. Climb to Deer Pass (7650 feet) over 3.25 miles and descend to junction with Tyaughton Creek Trail. Camp along Tyaughton Creek. Low mileage today because of significant climb over Deer Pass.
- Potential Hazards: Creek crossings.
- Evacuation: Tyax Resort.

**Day 13-** Tyaughton Creek to Big Creek (15 mi) (5496ft - 5779ft, max: 7337ft) [268 mi]

Tyaughton Creek Trail to Lorna Pass Trail to Big Creek Loma Trail (trail) to Elbow Pass Trail to Big Creek Trail

- Tyaughton Creek trail climbs gradually for 2 miles, gaining 500 feet in elevation before the junction with the Lorna Pass Trail. Here we encounter another steeper climb (2000 feet over 2 miles) that takes us to Lorna Pass (7337ft). We will descend to Lorna Lake whereupon we will travel due north on the Big Creek Lorna Trail and continue riding downhill. After 2.5 miles we will turn onto the Elbow Pass Trail and ride to the junction with the Big Creek Trail which after a short climb will take us downhill to our camp along Big Creek near the junction with the Relay Creek Trail. Like yesterday, low mileage today because of significant climbing.
- Potential Hazards: Creek crossings.
- Evacuation: Tyax Lodge.

**Day 14-** Big Creek to Spruce Lake (22 mi) (5779ft - 5149ft, max: 6490ft) [290 mi]  
Relay Creek Trail to Relay Creek FSR (unpaved) to Tyaughton Creek Trail to Spruce Creek Trail

- From camp we will immediately climb to 6490 feet over 2 miles and then begin a long descent, which will continue onto Relay Creek FSR. Following the turnoff onto Tyaughton Creek Trail the path again leads uphill, gradually taking us up 500 feet over 8 miles. We will continue to climb on the Spruce Creek Trail until reaching 5153ft and then descend to Spruce Lake where we will camp for the night.
- Potential Hazards: Creek crossings.
- Evacuation: Tyax Lodge.

**Day 15-** Spruce Lake to Cinnabar Creek (20 mi) (5149ft - 3980ft, max: 7208 ft) [310 mi]

Spruce Lake Main Trail to High Trail to Frieberg Trail to Tyaughton Lake Road (unpaved)

- We will ride along the shore of Spruce Lake on Spruce Lake Main Trail before climbing 2000ft over 3 miles to reach Windy Pass (7208ft) on High Trail. After riding downhill to the valley floor we will again climb (1000ft, 2 miles) before a long descent to the junction with Frieberg Trail. After 1.5 miles and a small climb (<500 feet), the trail will drop us at Tyaughton Lake Road. A 1-mile ride will bring us to our next food drop at Tyax Resort. After resupplying we will ride 2 miles north on Tyaughton Lake Road and camp near Cinnabar Creek.
- Evacuation: Tyax Lodge.

**Day 16-** Cinnabar Creek to China Head Mountain (35 mi) (3980ft - 6720ft, max: 7051ft) [345 mi]

Tyaughton Lake Rd (unpaved) to Mud Creek FSR (unpaved) to Poison Mountain FSR (unpaved) to China Head Mountain FSR (unpaved)

- Gradual climb along Tyaughton Lake Rd to junction with Mud Creek FSR. Continue to climb on Mud Creek FSR to turnoff for Poison Mountain Rd, which will take us to the junction with China Head Mountain Rd. Continue until base of China Head Mountain. Higher mileage day with 3000+ feet of climbing, but should be doable because it is all on forest road.
- Evacuation: Tyax Lodge.

**Day 17-** Rest day, hike China Head Mountain [345 mi]

- We have built in a rest day to follow the previous day of higher-mileage riding with significant climbing. We are planning to hike China Head Mountain (7004ft) to keep active.
- Evacuation: Tyax Lodge.

**Day 18-** China Head Mountain to Leon Creek (32 miles) (6720ft - 3394ft, max: 6720ft) [367 mi]

China Head Mountain FSR (unpaved) to West Pavillion FSR (unpaved)

- Continue along China Head Mountain FSR, turn right at fork with Big Bar FSR onto West Pavillion FSR. Gradual downhill all day (3400ft elevation loss) to crossing at Leon Creek. We will camp here for the night.
- Evacuation: Lillooet.

**Day 19-** Leon Creek to Slok Camel FSR (30 mi) (3944ft - 1042ft, max; 4152ft) [397 mi]

West Pavillion FSR (unpaved)

- Continue on West Pavillion Rd and after a short climb to reach 4152 feet descend to Fraser River (2000 feet elevation loss). We will ride along Fraser River for another 20 miles until we stop for the night near the junction with Camel Slok Rd, just north of Lillooet.
- Evacuation: Lillooet.

**Day 20-** Slok Camel FSR to Inkoiko Creek (36 mi) (1042ft - 1123ft, max: 1471ft) [433 mi]



West Pavillion FSR to Moha Rd (paved) to Main St (paved) to Texas Creek Rd (paved) to Texas Creek Rd (unpaved) to North Spencer Rd (unpaved)

- Ride on West Pavillion Rd as it first becomes Moha Rd, then Main St. Take Main St into Lillooet and resupply at Post Office. Ride south across bridge over Seton River and continue on Texas Creek Rd. Texas Creek Rd becomes North Spencer Rd, which we will follow until the crossing at Inkoiko Creek where we will camp. Another day of flat riding on unpaved roads, high mileage.
- Potential Hazard: Traffic.
- Evacuation: Lillooet, Lytton.

**Day 21-** Inkoiko Creek to Francis Lake (40 mi) (1123ft - 1109ft, max: 1280ft) [473 mi]

North Spencer Rd (unpaved) to South Spencer Rd (unpaved) to Keefers Rd (unpaved) to Nahatlatch River FSR (unpaved)

- The terrain continues to be very flat as we ride along the Fraser River. We will pass Lytton, which lies across the river and through the small communities of Keefers and Inkitsaph before turning west on Nahatlatch River FSR which will take us to our camp near Francis Lake.
- Evacuation: Lytton, Keefers, Inkitsaph.

**Day 22-** Francis Lake to Big Silver Creek (32 mi) (1109ft - 240ft, max: 3861ft) [505 mi]

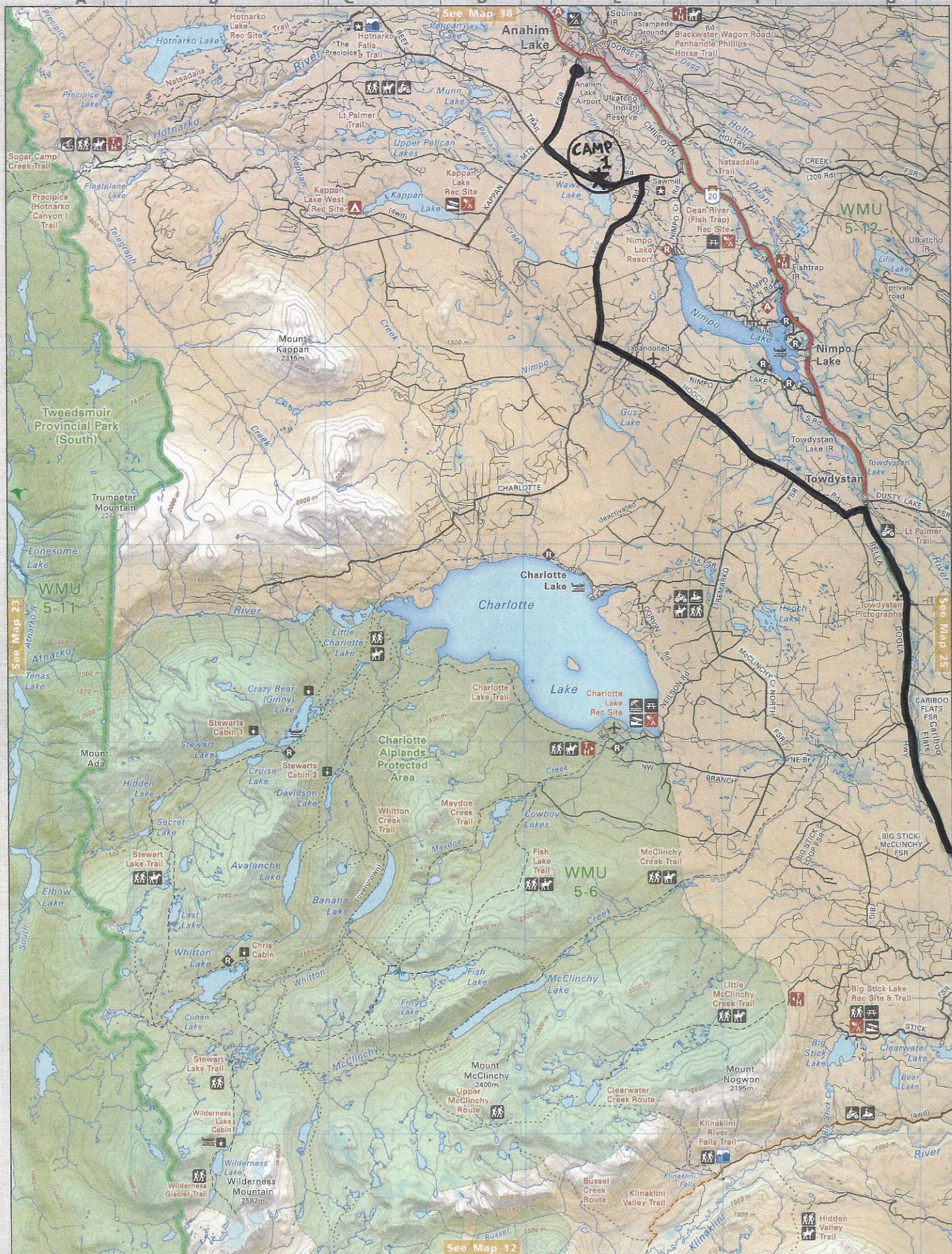
Kookipi Creek FSR (unpaved) to Shovel Creek FSR (unpaved) to Big Silver Main FSR (unpaved) to Harrison East FSR (unpaved)

- From Francis Lake Kookipi Creek FSR climbs gradually through the Lillooet Ranges reaching 3861 feet over 15 miles. The road then descends to Big Silver Creek where we will set up camp.
- Evacuation: Keefers, Bear Creek Provincial Park Offices

**Day 23-** Big Silver Creek to Harrison Hot Springs (30 mi) (240ft - 71ft, max: 1202ft) [535 mi]

Harrison East FSR (unpaved) to Rockwell Dr (paved)

- Ride along Big Silver River south and continue straight at fork with Hornet Creek Main FSR. Ride along the east shore of Harrison Lake through Bear Creek and stay on the road as it becomes Rockwell Dr. Continue on Rockwell Dr into Harrison Hot Springs and return to car. Repack vehicle and begin return drive.
- Potential Hazards: Traffic on Rockwell Dr
- Evacuation: Harrison Hot Springs



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7

See Map 23

See Map 25

See Map 12

See Map 38

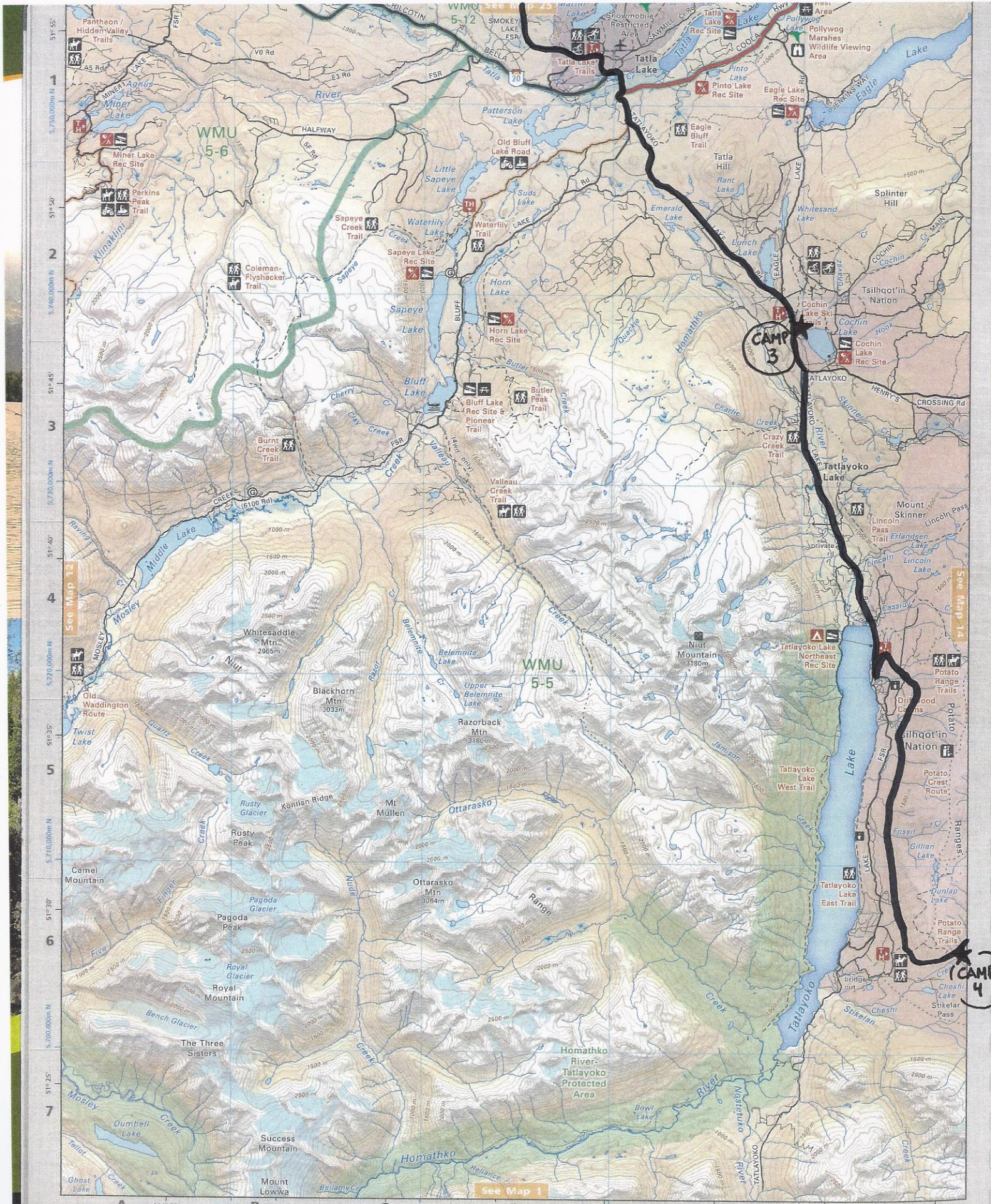
125° 40' A 320,000m E 125° 35' B 125° 30' 330,000m E 125° 25' C 125° 20' 340,000m E 125° 15' D 125° 10' E 125° 05' F 125° 00' G 360,000m E

5,810,000m N 52° 25'  
5,800,000m N 52° 20'  
5,790,000m N 52° 15'  
5,780,000m N 52° 10'  
5,770,000m N 52° 05'  
5,760,000m N 52° 00'

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5  
6  
7



123° 00' A 124° 55' B 124° 50' C 124° 45' D 124° 40' E 124° 35' F 124° 30' G 124° 25' 124° 20'



CAMP 3

CAMP 4

WMU 5-6

WMU 5-5

See Map 1

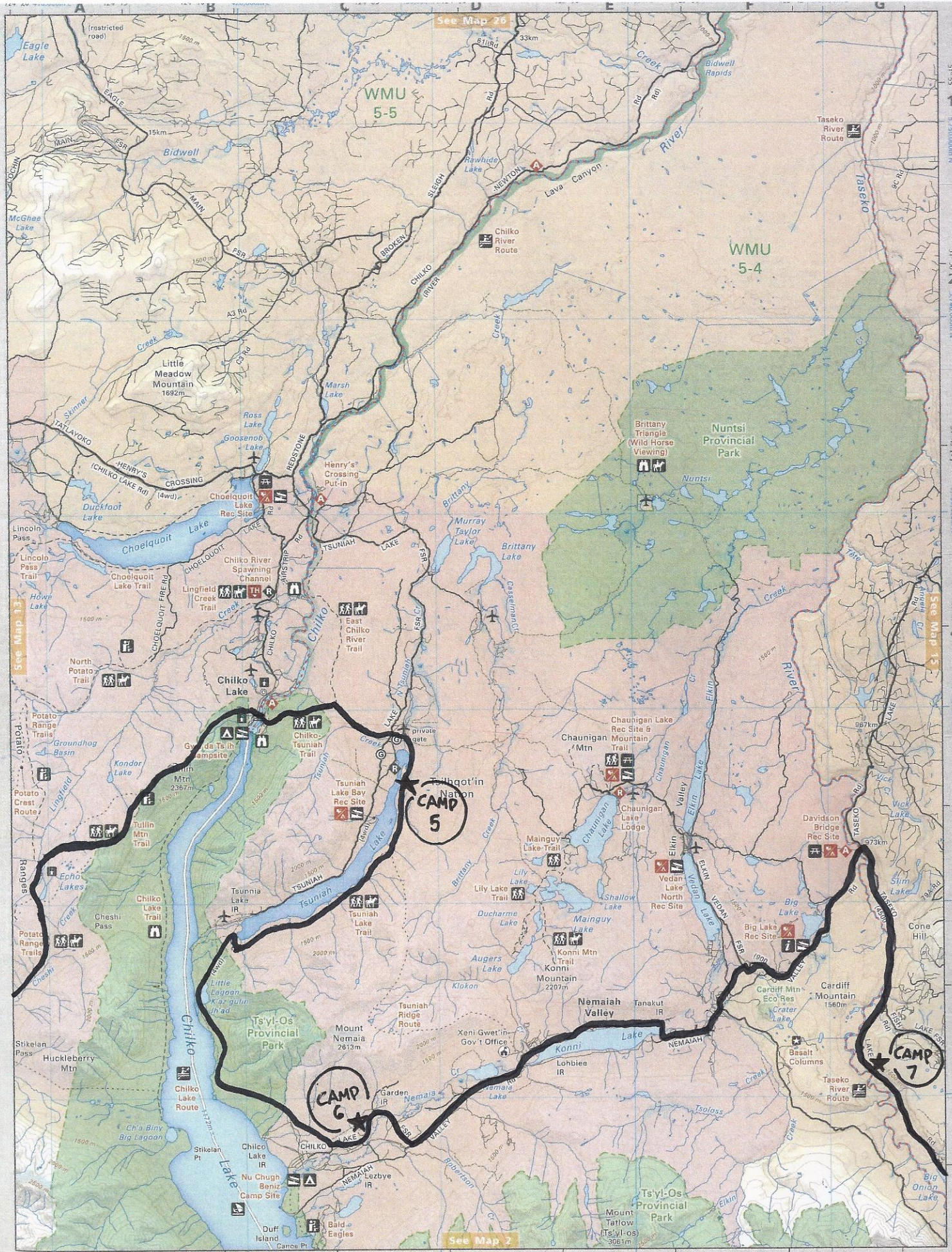
See Map 12

See Map 14

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7

A 124° 55' 370,000m E B 124° 50' C 124° 45' 360,000m E D 124° 40' E 124° 35' 390,000m E F 124° 30' G 124° 25'

Map labels include: Pantheron / Hidden Valley Trails, Miner Lake, SMOKEY LAKE FSR, Tatlayoko Lake, Bluff Lake, Middle Lake, Upper Belamite Lake, Razorback Mtn, Mt Mullen, Royal Mountain, Homathko River-Tatlayoko Protected Area, Tatlayoko Lake Northeast Rec Site, Tatlayoko Lake West trail, Tatlayoko Lake East Trail, and various trails like Sapeye Creek Trail, Bluff Lake Rec Site, and Horn Lake Rec Site.



See Map 29

WMU 5-5

WMU 5-4

CAMP 5

CAMP 6

CAMP 7

See Map 2

See Map 13

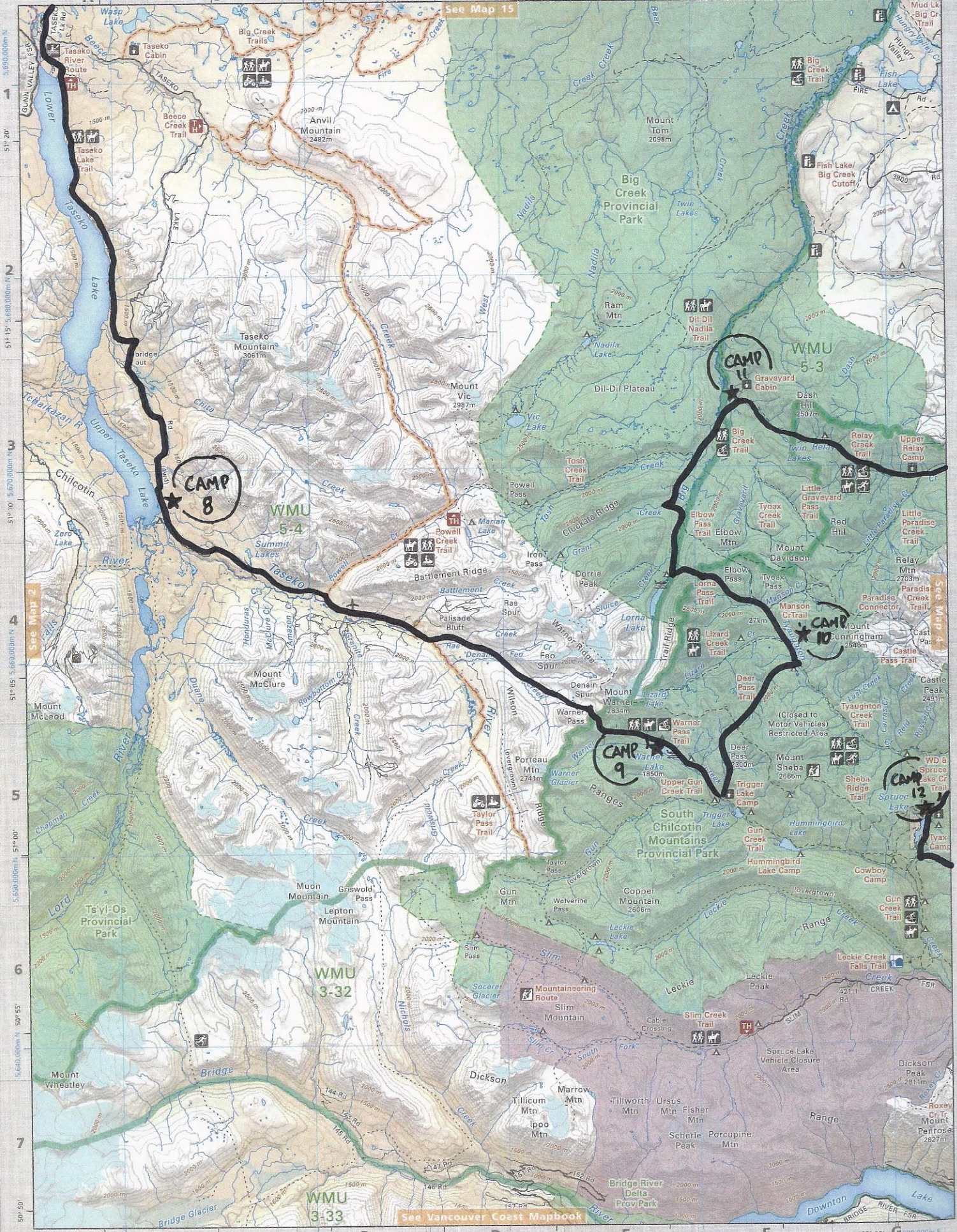
See Map 13

1  
2  
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7  
55° 15'  
55° 30'  
55° 45'  
56° 00'  
56° 15'  
56° 30'  
56° 45'



See Map 15

See Vancouver Coast Mapbook



51° 20' N  
51° 15' N  
51° 10' N  
51° 05' N  
51° 00' N  
50° 55' N  
50° 50' N

WASP LAKE  
TASEKO RIVER ROUTE  
TASEKO LAKE  
TASEKO MOUNTAIN 3061m  
ANVIL MOUNTAIN 2482m  
MOUNT TOM 2098m  
BIG CREEK PROVINCIAL PARK  
CHILCOTIN MOUNTAINS PROVINCIAL PARK  
MOUNT WHEATLEY  
MOUNT SHEBA 2665m  
MOUNT MCGLEOD  
MOUNT WARDEN 2834m  
MOUNT DENNIS 2745m  
MOUNT SHERBURN 2548m  
MOUNT DICKSON 2811m  
MOUNT PENROSE 2627m

CAMP 8

CAMP 11

CAMP 9

CAMP 10

CAMP 12

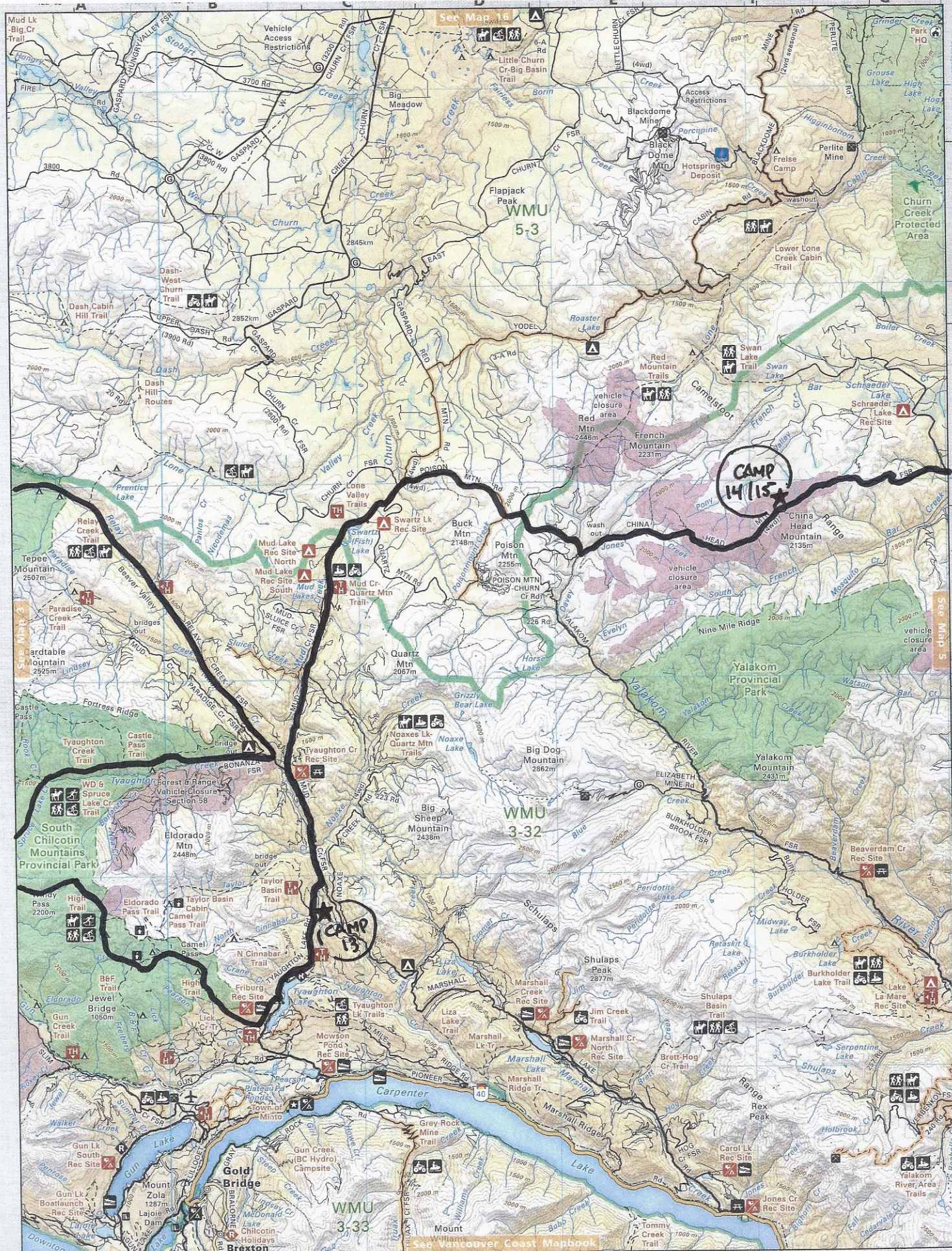
WMU 5-4

WMU 5-3

WMU 3-32

WMU 3-33

WASP LAKE  
TASEKO RIVER ROUTE  
TASEKO LAKE  
TASEKO MOUNTAIN 3061m  
ANVIL MOUNTAIN 2482m  
MOUNT TOM 2098m  
BIG CREEK PROVINCIAL PARK  
CHILCOTIN MOUNTAINS PROVINCIAL PARK  
MOUNT WHEATLEY  
MOUNT SHEBA 2665m  
MOUNT MCGLEOD  
MOUNT WARDEN 2834m  
MOUNT DENNIS 2745m  
MOUNT SHERBURN 2548m  
MOUNT DICKSON 2811m  
MOUNT PENROSE 2627m



See Map 16

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

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51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

51°40'00" N, 115°15'00" W

CAMP 14/15

CAMP 13

WMU 5-3

WMU 3-32

WMU 3-33

See Map 5

See Vancouver Coast Mapbook





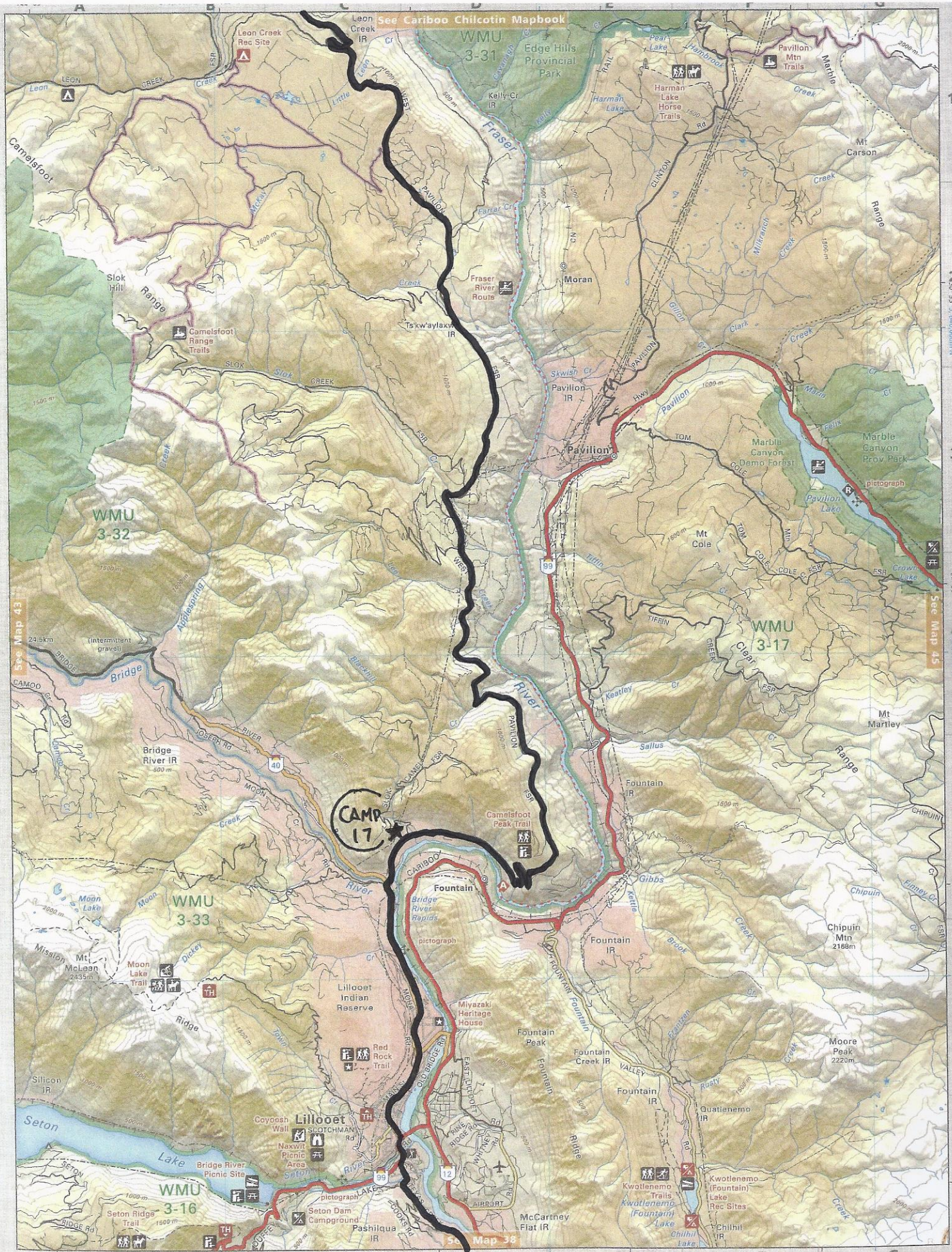
See Map 17

See Map 4

See Map 6

CAMP 16

See Vancouver Coast Map



See Cariboo Chilcotin Mapbook

WMU 3-31

WMU 3-32

WMU 3-17

WMU 3-33

WMU 3-16

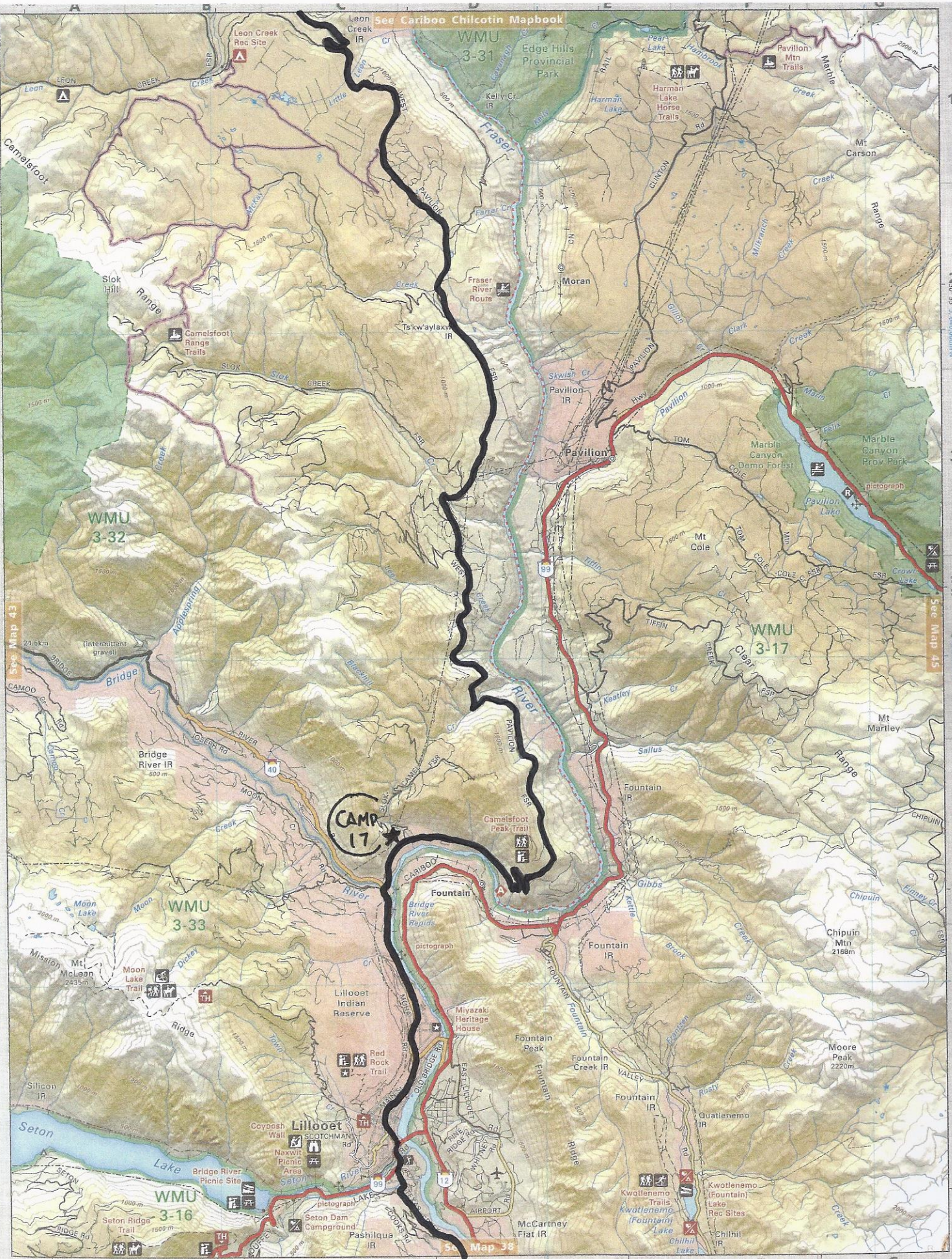
CAMP 17

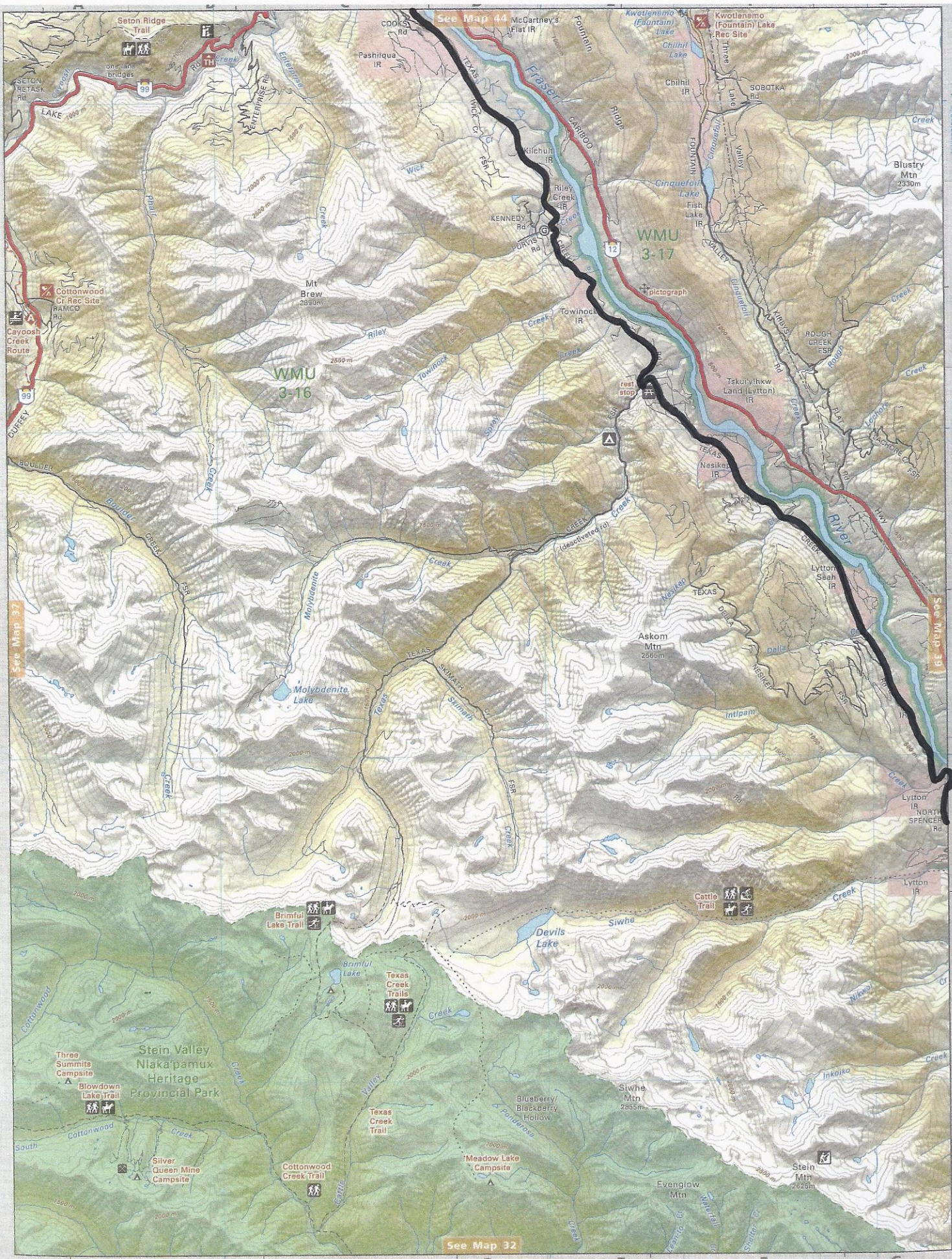
Map 38

See Map 43

See Map 45

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7





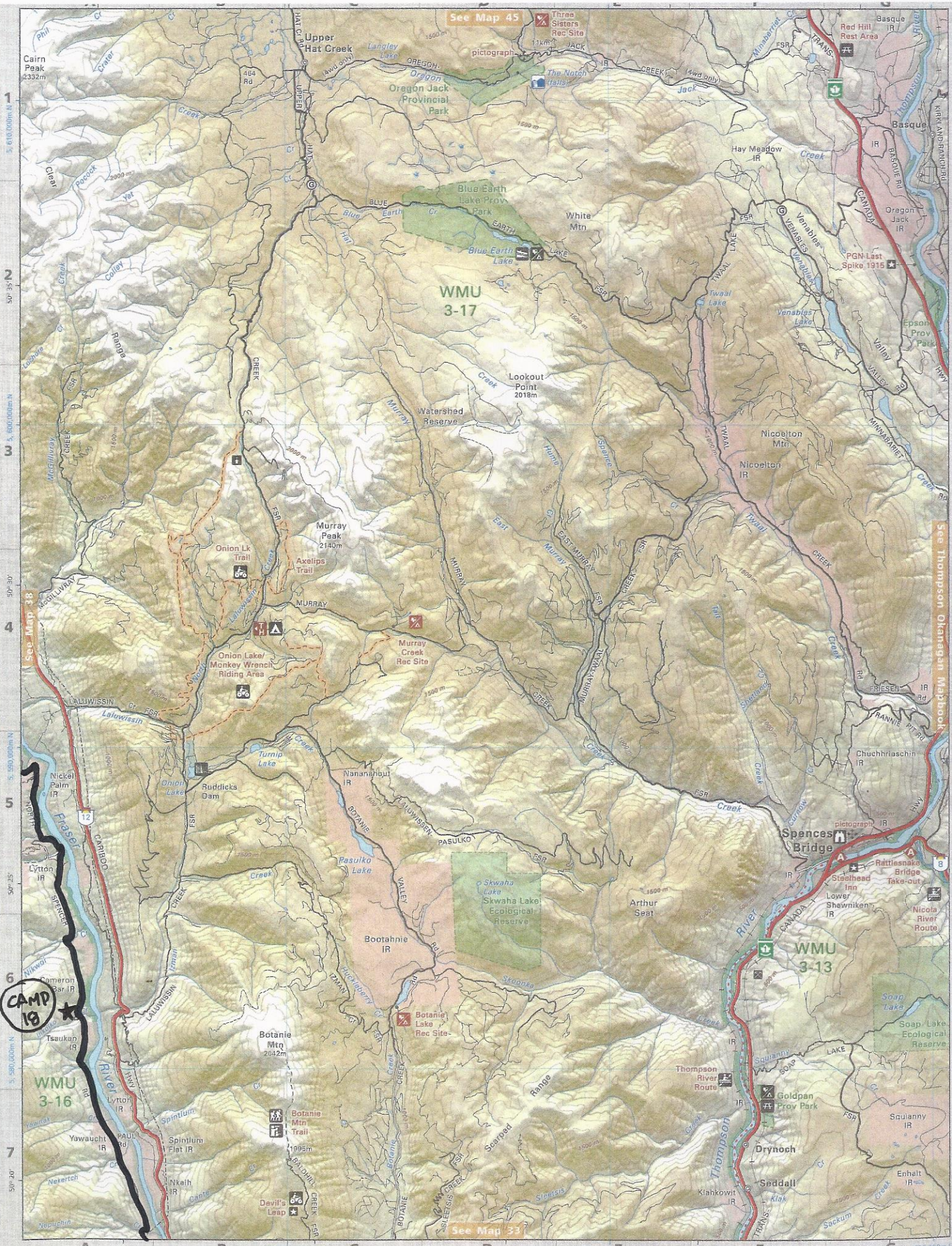
See Map 32

See Map 37

See Map 44

1  
2  
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7  
N 49° 00' 00" W  
N 50° 00' 00" W  
N 51° 00' 00" W  
N 52° 00' 00" W  
N 53° 00' 00" W  
N 54° 00' 00" W  
N 55° 00' 00" W

133° 00' 00" A 131° 00' 00" B 129° 00' 00" C 127° 00' 00" D 125° 00' 00" E 123° 00' 00" F 121° 00' 00" G  
580 000 m E 590 000 m E



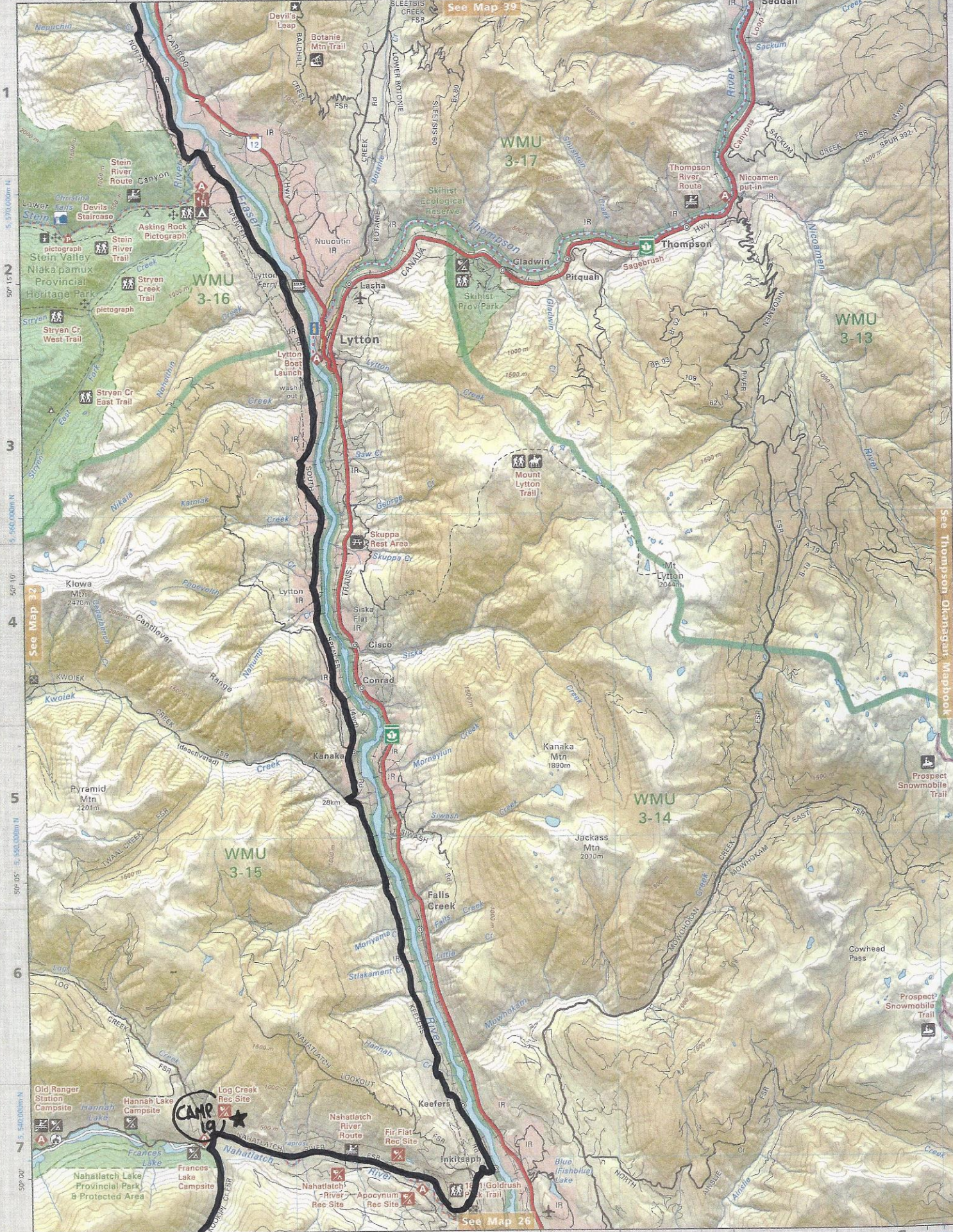
See Map 45

See Thompson Okanagan Mapbook

See Map 37

1  
2  
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7

A 121° 40' B 690,000m E 121° 35' C D 121° 30' E 610,000m F 121° 25' G 620,000m



See Map 39

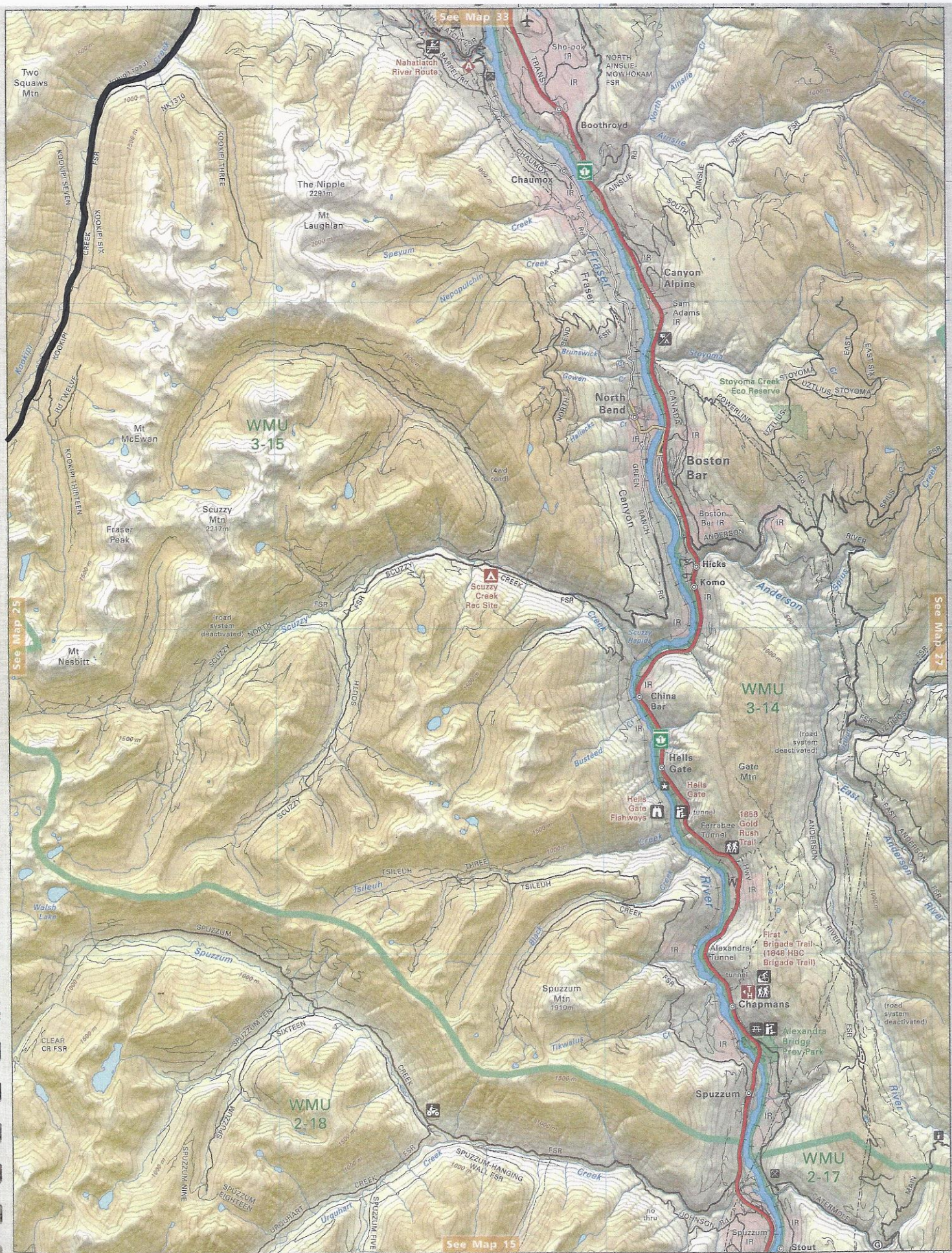
See Map 32

See Map 26

See Thompson-Okanagan Mapbook

54° 15' 00" N  
54° 00' 00" N  
53° 45' 00" N  
53° 30' 00" N  
53° 15' 00" N  
53° 00' 00" N

G 121° 20' 00" W



See Map 33

See Map 25

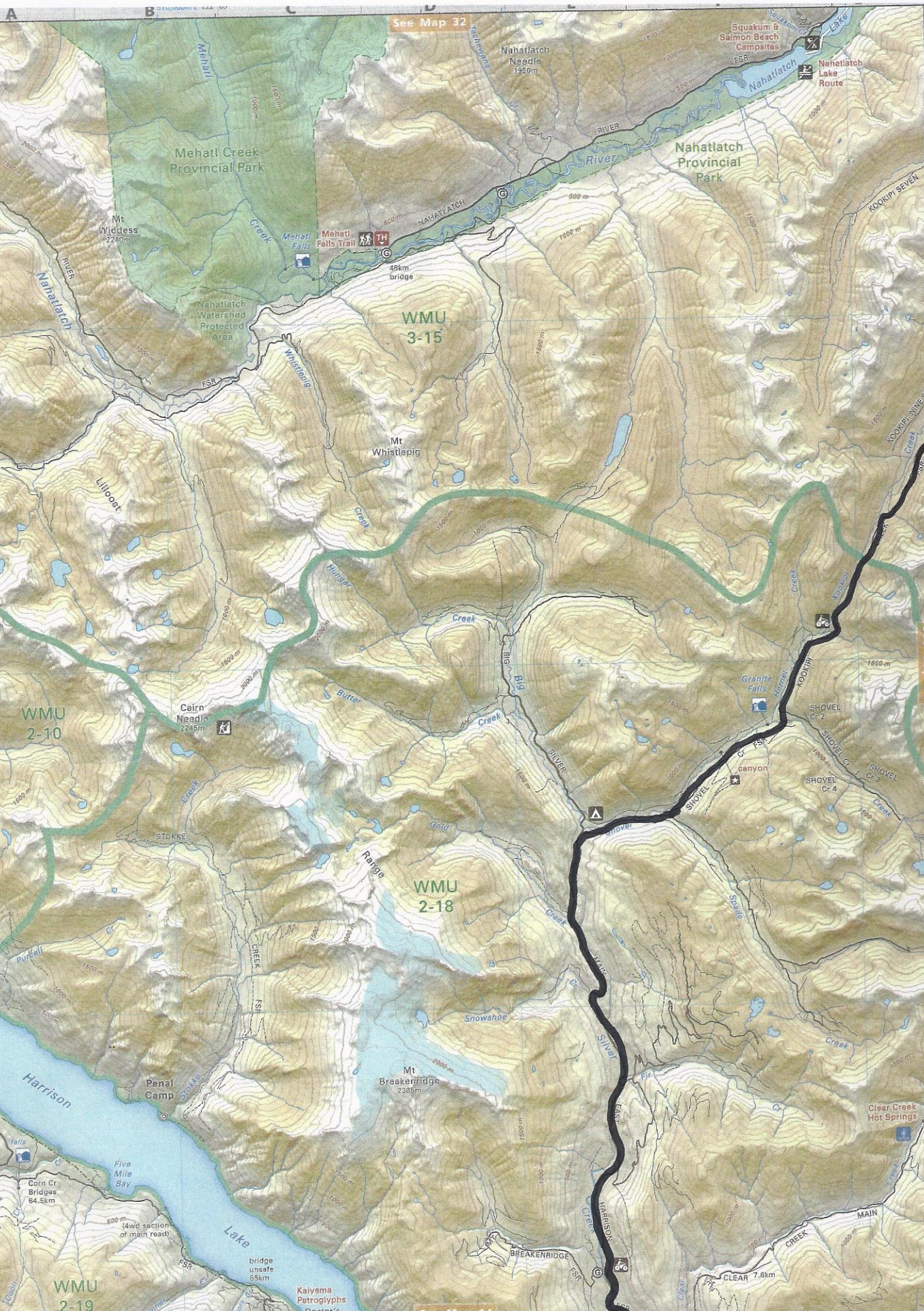
See Map 27

See Map 15

A 121° 40' B 121° 35' C 121° 30' D 121° 25' E 121° 20' F 121° 15'

1  
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4  
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7

122° 05'



1  
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5  
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7

49° 55'  
49° 50'  
49° 45'  
49° 40'

See Map 32

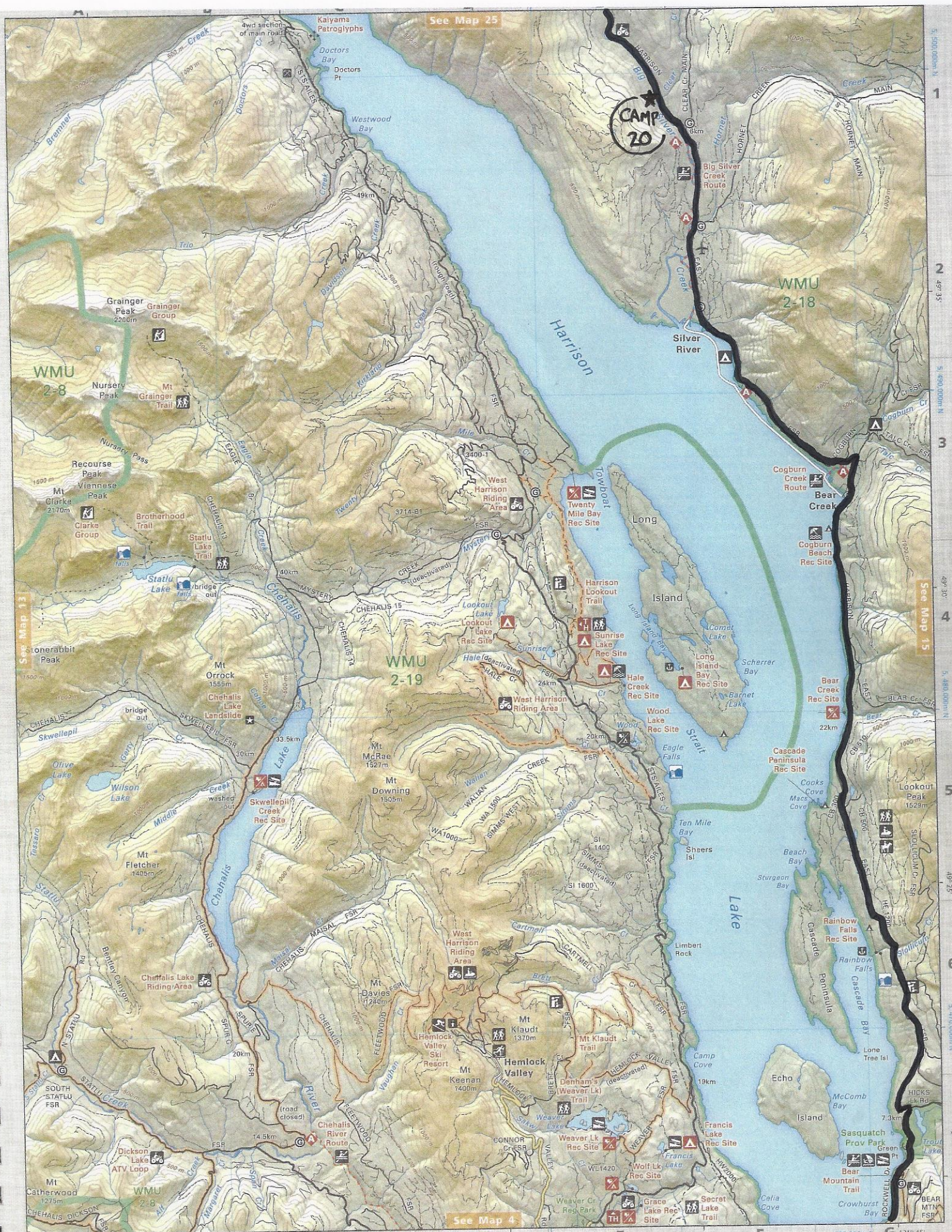
See Map 24

See Map 26

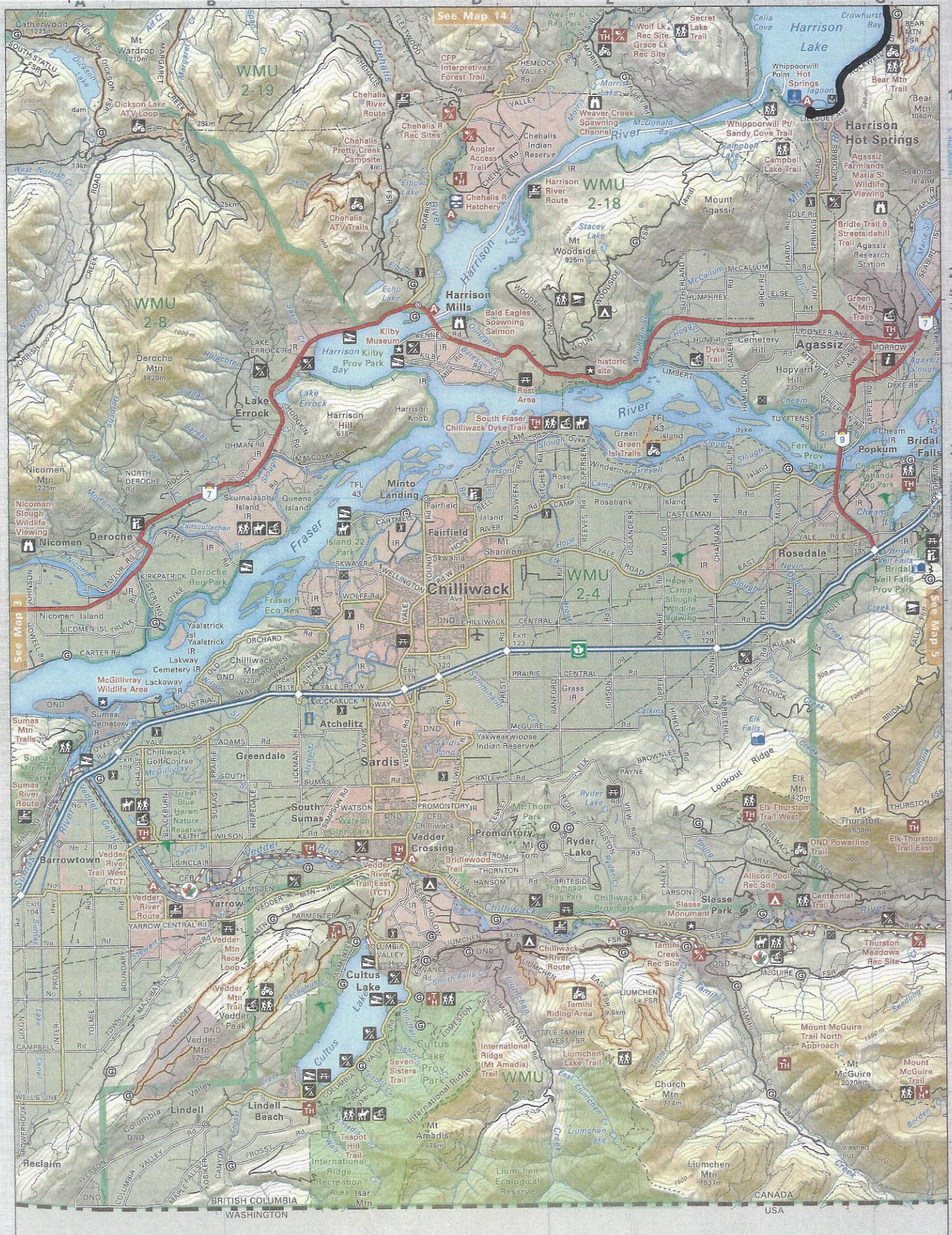
See Map 14

121° 50'

590,000m E C 41° 45'







## Appendix B

\*assuming 3000-3300 calories a day  
1.7-1.8lbs/person/day  
(453g/lb.), (4cal/gram)

|                                   | lbs. | cost/lb. | total item cost |
|-----------------------------------|------|----------|-----------------|
| <b>BREAKFAST (0.4 person day)</b> |      |          |                 |
| Oatmeal                           | 4    | 2.5      | 10              |
| Pancakes                          | 5    | 1.5      | 7.5             |
| Hash browns                       | 4    | 6.99     | 27.96           |
| Coffee                            | 0.2  | 4.98     | 0.996           |
| Tea                               | 1    | 1.78     | 1.78            |
| Brown sugar                       | 1    | 1.05     | 1.05            |
| <b>LUNCH (0.5 person day)</b>     |      |          |                 |
| Peanut/almonds                    | 3    | 7.98     | 23.94           |
| Summer sausage                    | 1.5  | 9.5      | 14.25           |
| Jerky                             | 1.5  | 6.68     | 10.02           |
| Canned fish/dried fish            | 3    | 8.92     | 26.76           |
| Candy                             | 2    | 4.11     | 8.22            |
| Dehydrated hummus                 | 1.5  | 5.24     | 7.86            |
| Peanut butter/nutella             | 2.5  | 2.48     | 6.2             |
| Jelly                             | 1    | 2.54     | 2.54            |
| Dried fruit                       | 3    | 7.28     | 21.84           |
| Tortillas                         | 1.5  | 3.49     | 5.235           |
| <b>DINNER (0.5 person day)</b>    |      |          |                 |
| Pasta                             | 2.5  | 2.4      | 6               |
| Annie's                           | 4    | 6.75     | 27              |
| Instant rice                      | 1.5  | 1.39     | 2.085           |
| Dried soup mix                    | 3    | 10.4     | 31.2            |
| Polenta                           | 2.55 | 9.08     | 23.154          |
| Dried tomato powder               | 0.2  | 16.05    | 3.21            |
| Brownie mix                       | 0.25 | 1.77     | 0.4425          |
| Dried chili mix                   | 3    | 5.98     | 17.94           |
| Dried beans                       | 2.5  | 4.49     | 11.225          |
| Parmesan/dried cheese             | 2    | 10.25    | 20.5            |
| Tortillas                         | 1.5  | 3.49     | 5.235           |
| Oil                               | 1    | 0.83     | 0.83            |
| Dried sweet potatoes              | 1    | 12.31    | 12.31           |
| <b>SNACKS (0.1 person day)</b>    |      |          |                 |
| Gels                              | 0.3  | 21.31    | 6.393           |
| Ramen                             | 0.5  | 1.32     | 0.66            |

|         |     |      |       |
|---------|-----|------|-------|
| Bars    | 1.5 | 5.39 | 8.085 |
| Oranges | 1.5 | 1.2  | 1.8   |

**DRINKS (0.1 person day)**

|               |             |            |                 |
|---------------|-------------|------------|-----------------|
| Gatorade      | 1.5         | 2.65       | 3.975           |
| Powdered milk | 0.8         | 11.99      | 9.592           |
| Cocoa         | 1.5         | 4.96       | 7.44            |
| <b>TOTALS</b> | <b>68.3</b> | <b>n/a</b> | <b>375.2275</b> |

**SPICES**

- Salt
- Pepper
- Garlic
- Curry powder
- Chili
- Bullion
- Soy sauce
- Chili seasoning
- Hot sauce
- Onion

|                   |        |
|-------------------|--------|
| TOTAL WEIGHT      | 68.3   |
| TOTAL COST        | 375.23 |
| WEIGHT PER PERSON | 34.15  |

|                |        | <b>Nemaiah Valley</b> | <b>Tyax</b> | <b>Lillooet</b> |
|----------------|--------|-----------------------|-------------|-----------------|
| WEIGHT         | 22.17  | 17.46                 | 14.26       | 13.41           |
| SHIPPING COST  | n/a    | 65.75                 | 57.32       | 52.32           |
| TOTAL SHIPPING | 175.39 |                       |             |                 |

**TOTAL FOOD COSTS                      550.62**

## **Appendix C**

### **FIRST AID KIT (Modified from NOLS 5.0 kit)**

8 gauze dressing (4x4 & 2x2)  
3 dressing 3x4  
3 bandage (1 stockinette, 2 conforming gauze)  
8 fabric bandages (1x3)  
5 knuckle bandages  
1 roll athletic tape  
2 cotton tip applicator  
1 irrigation syringe  
1 pkg. wound closure strips  
1 povidone iodine  
2 pre cut moleskin  
6 antiseptic towelette  
4 triple antibiotic ointment  
2 topical adhesive (Skin-Tac)

### **Bleeding**

2 pair gloves  
2 trauma pad (8x10 & 5x9)  
1 dressing (4x4)  
1 sprain brace  
1 triangular bandage  
3 safety pins  
1 Ibuprofen (200 mg)

### **Medications**

4 Ibuprofen (200 mg)  
4 Acetaminophen (500 mg)  
4 Antihistamine (Diphenhydramine 25 mg)  
4 Diamode (Loperamide HCL 2mg)  
1 Aspirin (325 mg)  
2 After Bite Sting and Itch Relief Wipe

### **Instruments**

1 EMT shears  
1 tweezers  
1 pencil  
1 patient assessment form  
3 disposable thermometer  
1 medical form per participant

### **GROUP GEAR**

1 SPOT device (owned by Erica)  
1 GPS  
1 extra canister bear spray

- 1 trowel
- 1 p-cord (20 yards)
- 1 first aid kit (see contents list above)
- 1 steripen
- 6 extra batteries (AAA)
- 1 water filter
- 3 lighters
- 1 set backup matches (strike anywhere)
- 1 bottle Vaseline
- 1 bottle camp soap
- 1 sponge
- 1 bottle hand sanitizer
- 1 spatula
- 1 MSR Whisperlite stove
- 1 Whisperlite repair kit
- 3 20oz MSR fuel bottles (~2.25fl oz./day)
- 1 2-person three season tent
- 1 pole brace
- 1 seam repair kit
- 2 stuff sacks for food hangs
- 5 extra gallon Ziploc bags
- 1 patch kit for Thermarest
- 1 bottle sunscreen
- 1 bottle bug spray
- 1 tube toothpaste
- 1 bottle contact solution
- 1 8-10 L bear canister/bear bag
- 1 digital camera

**PERSONAL GEAR (per person)**

- 1 sleeping bag 0-20F
- 1 sleeping pad
- 1 microfiber pack towel
- 1 knife
- 1 headlamp
- 1 CamelBak reservoir
- 2 backup water bottle
- 1 set of laminated maps
- 1 compass
- 1 canister bear spray
- 1 plate/mug/utensil set
- 1 whistle

1 bear bell  
1 passport  
1 state issued ID  
1 mobile phone  
1 mountain bike  
cash

### **Luggage**

1 handlebar roll  
1 large seat pack  
1 frame pack  
1 medium-size backpack

### **Bike clothes**

1 helmet  
1 pair warm gloves  
1 pair bike gloves  
1 under-helmet warm hat  
2 padded shorts  
1 long sleeve cycling jersey  
1 short sleeve cycling jersey  
1 pair clipless MTB shoes  
2 pair cycling socks  
1 pair arm warmers  
1 wind breaker/rain coat  
1 thermal long underwear pants  
1 pair sunglasses  
1 pair clear riding glasses

### **Clothing**

1 pair camp shoes  
2 pair underwear  
1 down puffy  
1 pair rain pants  
1 rain jacket  
2 pair wool socks  
1 pair light hiking pants  
1 thermal shirt base layer  
1 fleece jacket  
1 toothbrush  
1 contact case  
2 pair contacts  
1 prescription glasses  
1 deodorant  
1 bottle prescription medication

## **BIKE REPAIR**

2 patch kit (sandpaper, cold vulcanizing glue, patches)

5 tubes

1 tire pump

3 tire levers

2 tires (Kevlar folding, 27.5)

1 tire plug kit

2 bottle sealant

1 shock pump

1 multitool (chain-break, hex keys, screwdrivers)

1 spoke wrench (combination)

12 spokes (2 per front wheel, 4 per rear wheel)

4 spoke nipples

1 cassette lockring tool

1 wrench

1 chain whip

4 masterlinks (2 9sp, 2 10sp)

2 small sections chain

1 masterlink pliers

1 needle nose pliers

3 spare shift cables

2 spare brake pad (1 ea.)

1 15ml cone wrench

2 extra M4/M5 bolts

3 extra cleat bolts

2 extra chainring bolts

1 pkg. Zip Ties

1 bottle chain lubricant

2 shop rags

3 ft. electrical tape

5 ft. Gorilla Tape

## **BIKE TRANSPORT**

2 pad spacers (for travel)

2 cardboard bike boxes

bubble wrap

padding

**Appendix D**

| <b>ITEM</b>    | <b>BREAKDOWN</b>  | <b>COST</b> |
|----------------|---|-------------|
| Transportation | Gas to and from Vancouver-2927.5, 21mpg, \$3/gallon for gas → \$418.14<br>Shuttle service from trailhead to airport → \$202.00<br>Flights (Vancouver to Anahim Lake) – \$178.41 per person → \$356.82 | \$976.96    |
| Food and fuel  | Cost of food → \$375.23<br>Shipping costs to food drops -(\$65.75 to Gold Bridge, \$57.32 to Nemaiah Valley and \$52.32 to Lillooet) → \$175.39<br>Fuel (2.25 oz/day x 18 days) → \$12.99             | \$563.60    |
| Maps           | Backroads Mapbook BC → \$31.95<br>Backroads Mapbook Caribou → \$35.95<br>Trail Ventures Chilcotin Map → \$16.95   | \$84.85     |
| Gear costs     | Bear spray (3 canisters)- \$36.98 apiece → \$110.94   | \$110.94    |

**TOTAL: \$1548.98 (ALL COSTS AND PRICES ARE IN USD)**