Cache County 1857

SPECIAL EVENT PERMIT   2018-16

All fees have been paid in full as required by this permit. This special event permit shall expire and be null and void at the conclusion of the event, if any conditions herein are breached, or if the permit is transferred to any other person, corporation, organization, or entity.

EVENT INFORMATION

Event Name: **Bear 100**

  Applicant: Doug Garrett

    Phone: 435-760-4303

    Email: dgarrett45us@yahoo.com

Event Date(s): **28-29 September 2018**

Event Type: Run/Race

Promoting Entity: Bear 100 Inc.

31 AUG 2018

Approved by: Land Use Authority   Date

CONDITIONS OF APPROVAL

1. All participants and volunteers shall comply with County Ordinance §8.40 governing special events.
2. Event organizers and runners need to allow access for emergency vehicles as required.
3. Event organizers must comply with the information as submitted in the Special Event application.

AGREEMENT OF ACCEPTANCE

As the applicant for the special event described above, I hereby agree to comply with all Federal, State, and County laws, ordinances, and regulations before, during and after the event. I further agree to indemnify and save harmless Cache County, its officers, agents, and employees from and against any and all claims resulting from the use of the premises by the Applicant, the Applicant's invitees, licensees, agents and employees. I agree to permit law enforcement personnel the free and unrestricted access to and upon the premises at all times during the event for all lawful and proper purposes not inconsistent with the intent of the permit.

I understand and agree that this permit may be revoked upon breach of any of the conditions herein or at the discretion of the authorized officer. I understand that this permit is not transferable and agree not to transfer my permit to any person, corporation, organization or other entity, and is only valid within the unincorporated county.

In Accordance with Title 8 Section 8.40 of the Cache County Ordinance, I hereby submit and certify that the above information provided is accurate and complete to the best of my knowledge.

9/6/2018

Accepted by: Applicant   Date

Page 1 of 1

DEVELOPMENT SERVICES DEPARTMENT
179 NORTH MAIN, SUITE 305
LOGAN, UTAH 84321

PHONE: (435) 755-1640 **FAX:** (435) 755-1987
EMAIL: devservices@cachecounty.org
WEB: www.cachecounty.org/devserv

CACHE COUNTY
SHERIFF'S OFFICE

D. CHAD JENSEN, SHERIFF

Matt Bilodeau, Chief Deputy
Brian Locke, Lieutenant
Doyle Peck, Lieutenant
Mike Peterson, Lieutenant

EMPATHY   FAIRNESS   INTEGRITY   PROFESSIONALISM   RESPECT   RESPONSIBILITY   TRUSTWORTHINESS

To: Cache County

From: Sgt. Greg Johnson

Date: August 8, 2018

Re: Bear 100

The Cache County Sheriff's Office has reviewed the event request for the "Bear 100" scheduled for September 28, 2018. It has been determined that the Sheriff's Office will not staff this event. Safety for the participants should be handled by the event sponsor. As far as the Sheriff's Office is concerned the permit for this event may be granted for this event.

Sincerely,

Sgt. Greg Johnson

Laurie Jones - Re: Special Event Bear 100

From: "J. Downs" <downs.jay@gmail.com>
To: Laurie Jones <Laurie.Jones@cachecounty.org>
Date: 8/30/2018 10:35 AM
Subject: Re: Special Event Bear 100

We are also good for this one as well

thanks

Jay

On Wed, Aug 29, 2018 at 3:13 PM, Jay Downs <Jay.Downs@cachecounty.org> wrote:

---------- Forwarded message ----------
From: Laurie Jones <Laurie.Jones@cachecounty.org>
To: Jay Downs <Jay.Downs@cachecounty.org>
Cc:
Bcc:
Date: Wed, 29 Aug 2018 15:13:19 -0600
Subject: Special Event Bear 100
Hi Jay,
It looks like I'm also missing Bear 100 review.
Thanks,
Laurie Jones
Permit Technician
Cache County Development Services
435.755.1640

Laurie Jones - Re: SEP Bear 100

From:	Heidi Flansberg <hflansberg@brhd.org>
To:	Laurie Jones <Laurie.Jones@cachecounty.org>
Date:	8/3/2018 8:58 AM
Subject:	Re: SEP Bear 100

Laurie,

A mass gathering permit from the health department is not required for this event; however, temporary food service permits are required for each of the aid stations where food is served to the runners. I will contact the organizer of the event to let them know that temporary food service permit applications will be due for each of the aid stations.

Please let me know if you have any additional questions or concerns.

Sincerely,
Heidi

Heidi Flansberg, LEHS
Environmental Health Scientist
Bear River Health Department
817 West 950 South
Brigham City, Utah 84302
435-695-2061 office
435-723-6747 fax
hflansberg@brhd.org

On Wed, Aug 1, 2018 at 4:47 PM, Laurie Jones <Laurie.Jones@cachecounty.org> wrote:
> Good Afternoon,
> Please do your appropriate department review for the Bear 100 to be held September 28-29, 2018. Please send your reviews back asap. FYI the application is 66 pages long.
> Thanks,
>
> Laurie Jones
> Permit Technician
> Cache County Development Services
> 435.755.1640

CACHE COUNTY FIRE DISTRICT

TO: Laurie Jones
FROM: Jason Winn
DATE: 8/2/2018
SUBJECT: Bear 100

The review of the special events application for the Bear 100 has been completed. The only Fire District issue is access to the wildland area in the event of a wildland fire. Event organizers and runners need to allow access for emergency vehicles as required.

There are no other fire safety issues noted

After talking to Joel Merritt at road department he said their isn't anything from the road department that will effect this event.

Sent from my iPad

Laurie Jones - Re: SEP Bear 100

From:	Paul Berntson <fishpb64@gmail.com>
To:	Laurie Jones <Laurie.Jones@cachecounty.org>
Date:	8/1/2018 4:50 PM
Subject:	Re: SEP Bear 100

Go ahead and RUN with it.
Paul

On 1 August 2018 at 16:47, Laurie Jones <Laurie.Jones@cachecounty.org> wrote:

Good Afternoon,

Please do your appropriate department review for the Bear 100 to be held September 28-29, 2018. Please send your reviews back asap. FYI the application is 66 pages long.

Thanks,

Laurie Jones
Permit Technician
Cache County Development Services
435.755.1640

Laurie Jones - Re: SEP Bear 100

From: Skarlet Bankhead <sbankhead@providence.utah.gov>
To: Laurie Jones <Laurie.Jones@cachecounty.org>
Date: 8/6/2018 9:00 AM
Subject: Re: SEP Bear 100

No comments from Providence.

On Wed, Aug 1, 2018 at 4:47 PM, Laurie Jones <Laurie.Jones@cachecounty.org> wrote:
> Good Afternoon,
> Please do your appropriate department review for the Bear 100 to be held September 28-29, 2018. Please
> send your reviews back asap. FYI the application is 66 pages long.
> Thanks,
>
> Laurie Jones
> Permit Technician
> Cache County Development Services
> 435.755.1640

--
Skarlet Bankhead
Administrative Services Director
Providence City
164 North Gateway Drive
Providence UT 84332
sbankhead@providence.utah.gov
435-752-9441 Office
435-753-1586 Fax
435-994-0966 Cell

Cache County 1857

DEVELOPMENT SERVICES DEPARTMENT
BUILDING | COUNTYWIDE PLANNING | ENGINEERING | GIS | PLANNING & ZONING

APPLICATION: SPECIAL EVENT PERMIT

Date Received:	By:	Receipt #:	Check #:	Amount:
7/26/18	L Jones	# 11638	8632	$50.00

EVENT INFORMATION

Event: __Bear 100 Endurance Trail Run__ Type: __Endurance Trail Run__

Dates with starting/ending times: __9/28/18 6:00 a.m. - 9/29/18 6:00 p.m.__

AGENT/CONTACT INFORMATION

Agent/Contact: __Doug Garrett__ Email: __dgarrett45us@yahoo.com__

Phone: __435-760-4303__ Mailing Address: __151 S 100 W PO Box 544 Millville, UT 84326__

Name of Promoting Entity: __Bear 100, Inc__

ACKNOWLEDGMENT

In accordance with Title 8 Section 8.40 of the Cache County Ordinance, I hereby submit and certify that the information contained in this application is accurate and complete to the best of my knowledge.

Douglas G Garrett 7/5/2018
Applicant Date

Application Deadline: Completed application forms must be submitted to the Cache County Development Services Office forty-five (45) calendar days before an event is scheduled to take place. This allows sufficient time for evaluation of the application. Late applications shall be denied unless the applicant demonstrates that compliance with the 45 day deadline was impractical or impossible due to the nature of the event. A special event permit application may be approved and a permit issued to the applicant by the Director upon approval by all the agencies specified in Section 8.40.40.

Authority: Cache County has no authority to approve permits for events other than in the unincorporated area of Cache County. Permits issued by Cache County apply only to the unincorporated area of the county, and if an event crosses into a municipality within Cache County or across the county line, applicants should determine if a permit is necessary in the other jurisdiction.

Right to Deny: Cache County reserves the right to deny permit applications for proposed special events which may pose, or have posed a significant danger or threat to the public health, welfare or safety, or which may result in unreasonable inconvenience or cost to the public. In the event the application is denied, the applicant may appeal to the Cache County Executive.

DEVELOPMENT SERVICES DEPARTMENT
179 NORTH MAIN, SUITE 305
LOGAN, UTAH 84321

PHONE: (435) 755-1640 FAX: (435) 755-1987
EMAIL: devservices@cachecounty.org
WEB: www.cachecounty.org/devserv

APPLICATION CHECKLIST

A complete application must include the following unless specified otherwise:

1) ☑ Completed application form and application fee ($50 – no refunds) submitted 45 days prior to event. Additional fees for services provided by the Sheriff's Office, emergency services, or others may apply.

2) ☑ Proposed location, including a plat or map of the proposed area to be used, including any barricade, street route plans or perimeter/security fencing.

3) ☑ Total number of participants: Estimate must include event staff, participants, and spectators.

4) ☑ Public health plans, including plans for culinary water supplies, solid waste collections and disposal, and waste water (toilet facilities).

5) ☑ Proof of insurance in conformance with the County Ordinance 8.40.050(F) minimums: $1,000,000 each occurrence, $2,000,000 general aggregate, and $100,000 property damage.

6) ☑ Fire prevention and emergency medical services plans.

7) ☑ Security plans and/or law enforcement response.

8) ☑ Admission fee, donation, or other consideration to be charged or requested.

9) ☑ Plans for parking

10) ☑ *If* the event will be held on private property, a current taxation certification for that property.

11) ☑ Further information may be required by staff, other departments and agencies, and/or the Board/Committee/Council that reviews the application based on the proposed event.

PROJECT REVIEW PROCESS

- The applicant is encouraged to meet with staff prior to the deadline date to discuss the project and ensure that the information submitted is sufficient to provide a complete review of the project.

- After the application is accepted, information packets are sent to various departments, agencies, and affected municipalities that provide comments and/or approval for the proposed event to the Director of Development Services.

- In some instances a pre-event meeting may be held with planning staff and representatives from the departments and agencies that provide comments on the project review. Any issues present on a project will be discussed with the appropriate department or agency.

- A draft permit is made available to the reviewing agencies, affected municipalities, staff, and the applicant.

- Following agency/department review and approval, and correction of any outstanding concerns/issues, the permit can be issued.

10 Tabs for Bear 100 Communications & Operations Plan Package – Booklet Flow

(This document includes proper printed order with filename listed as Footer Info on all files.)

After this doc is "The Bear 100 Communications & Operations Plan" TOC

Tab 1 – General Information

General Information

Aid Station Volunteers for the Bear 100

Key Personnel Contact Info

Tab 2 - Maps/Trail Management/Markings

Bear 100 Mile Race Overview (color)

Bear 100 Trail Course Directions-Logan to Bear Lake (in detail)

Topos of Race-Start-Finish

Bear 100 Profile Graphics-Elevation Gains-Losses (color)

Driving Directions to Aid Stations

Marking the Bear 100 Course

Tab 3 - Volunteers & Aid Station Functions

Volunteers for the Bear 100

Aid Station Volunteers for the Bear 100

Tab 4 - Public Awareness/Media/Security & Law Enforcement

Bear 100 Community Involvement and Notification

Media-type Ad Example

Traffic Control (There needs to be permissions for this file – document not printed)

Tab 5 - Emergency Medical Plan

Emergency Medical Plan

Helicopter Landing Areas

Tab 6 - Radio Communications

Radio Communications Guide

Tab 7 - Public Health

Waste Management and Cleanup

Tab 8 - Permits Plan

Permits Bear 100

Tab 9 - Insurance & Sanctions

Insurance Certs Folder containing either applications or scanned permits

Tab 10 – Appendix

Front Cover

Cover (Color)

Spine (WIP)

10 tabs for Bear 100 Communications & Operations Plan Booklet

The Bear 100 Communications & Operations Plan

(Consider this a light TOC with a short synopsis of all the parts.)

Welcome to the Bear 100 Communications & Operations Plan. This document will help anyone interested to understand the workings of the Endurance Race. Each segment below has a brief synopsis of that specific segment with a hyperlink that will take you to the living document related to each of the segments. The printed document has all links printed. If granted permission to view online, simply Click the segment you wish to browse and then click the hyperlink associated with the specific segment you wish to review. Enjoy!!

General Information

This segment lays out a brief history of the Bear 100 Endurance Run with links to current year entrants, info about the runners, the course, Aid Stations along the way and other pertinent info.

Key Personnel Contact Info

Contact info for the Race Director, Assistant Race Director, Aid Station Coordinator, Ham Radio Coordinator, and EOC (Emergency Operations Center) personnel are listed in this area.

Race Logistics

This segment is one of the larger ones. This segment

Maps/Locations/Routes

Overview Topo of Bear 100

This is a topo map of the entire course showing the start of the race at Gibbons Park in Logan Utah, finishing at Fish Haven Idaho.

Bear 100 Trail Course Directions - Logan to Bear Lake (in detail)

This is Trail directions for runners from start to finish. It is detailed to assist the runners in following the course markings placed on the trail.

View Race Topos Start to Finish (18-pages)

This is an 18-page document showing topographic images of the full Bear 100 Course. This shows from start to finish the course and all of the Aid Stations located along the course with their mile marker information.

Profile Map of Race Showing Elevation Gain/Loss

The Profile Map shows the elevation gain and loss on each leg of the course. The map specifically names major landmarks and other important names of local area terrain and gives runner or observer a quick glance at the upcoming terrain and expectations.

Driving Directions to Aid Stations

Trail Management/Markings/Put Up/Removal

Marking the Bear 100

This document explains to the volunteers the rules and methods of course markings that volunteers will use and follow for the Bear 100. It identifies the sections of the course to be marked, identifies the person or persons marking that section, any special requirements or expectations for a particular segment of the course, including night-markings, reflectors, etc.

Volunteers-300+

This segment gives ideas of the types and numbers of overall Bear 100 Volunteers.

14 Aid Stations-Function

Documentation for all Aid Station Volunteers are given here. Specifics of what is expected for most volunteers is laid out in this segment.

Security & Law Enforcement

Traffic control Bear 100

Public Health

Waste Facilities

This document refers to locations of USFS and/or Private Restrooms and or other facilities including locations where Porta-Potty's (Portable Toilets) need to be set up. It describes the locations of permanent private restroom facilities as being:

3 Private Locations: Gibbons Park – Start (Logan City) Beaver Mountain Ski Area, and Preston Watts Cabin – Finish (Fish Haven Idaho).

6 USFS permanent facilities are at the following: Richards Hollow, Right Hand Fork, Temple Fork, Tony Grove, Franklin Basin, and Beaver Creek Campground (Idaho).

6 Porta-Potty's needed at the following locations: Leatham Hollow, Cowley Canyon, Franklin Basin (too far away for runners), Logan River, and Ranger Dip

Emergency Medical Plan

This segment covers responsibilities of all medical personnel working with the Bear 100. Duties of the Medical Director, Aid Station First Aid Personnel, where the Medical Hub of the Race is located, how Search and Rescue Units are alerted, notified, and on stand-by as well as the medical facilities that could possibly be impacted by emergencies coming from the Bear 100. More details can be found by going to the main segment of the Emergency Medical Plan. If the emergency merits a helicopter, coordinates for each Aid Station are given in multiple locations, including directly below.

Helicopter Landing Zones
(Includes driving directions which may help necessitate reasons for flying in)

For quick reference, helicopter landing zones have been identified in this main segment (See Below)as well as following the above link. The coordinates to each Aid Station are given in this document. Pilots flying helicopters will be in direct contact with Net Control in route, and will land where appropriate considering Safety First of all involved.

Potential Helicopter Landing Sites
The following are Aid Station GPS Coordinates.
Aid Station 1 Mt Logan (41.728219 -111.799172 @ Mile 10.52)
Aid Station 2 Leatham Hollow (41.643000 -111.706719 @ Mile 19.66)
Aid Station 3 Richards Hollow (41.661857 -111.663979 @ Mile 22.50)
Aid Station 4 Cowley Canyon (41.726685 -111.617048 @ Mile 29.98)
Aid Station 5 Right Hand Fork (41.774911 -111.609929 @ Mlle 36.92)
Aid Station 6 Temple Fork (41.835200 -111.592798 @ Mile 45.15)
Aid Station 7 Tony Grove (41.894910 -111.642579 @ Mile 51.84)
Aid Station 8 Franklin Basin (41.933473 -111.570195 @ Mile 61.48)
Aid Station 9 Logan River (41.960564   -111.591511 @ Mile 68.6)
Aid Station 10 Beaver Mountain (41.968073 -111.541259 @ Mile 75.85)
Aid Station 11 Gibson Basin (42.027192 -111.555261 @ Mile 81.18)
Aid Station 12 Beaver Creek (42.021804 -111.529070 @ Mile 85.25)
Aid Station 13 Ranger Dip (42.007279 -111.488889 @ Mile 92.20)
Aid Station 14 Finish (42.038833 -111.375167 @ Mile 99.46)

Radio Communications Guide

This nine-page document describes in great detail the role of Ham Radio Operators in the coordination of race events as they progress throughout the 36-hour endurance run. The document outlines the tracking of all runners throughout the race and includes any communications necessary to coordinate inter-agency communications and/or responses to any situation that may occur during the event.

Public Awareness/Media

community involvement

The Bear 100 involves approximately 300+ volunteers, most of them from Cache Valley to help work numerous events and parts of the race. Assistance from the Downtown Alliance and the Cash Valley Travel Council, the Valley Channel and the Herald Journal are some of the institutions assisting in advertising the Bear 100 Endurance Run.

Permits Plan

Permits Bear 100

The Bear 100 Endurance Run

The Bear 100 Endurance Run [Print Version - go to http://bear100.com/] began in 1999 with 17 runners as a race totally confined to Idaho. In 2007 the race was changed to 75% in Utah and the final 25% in Idaho. The Bear 100 Endurance Run is held annually on the last Friday and Saturday of September from 6 AM on Friday morning with a closing time of 6 PM Saturday evening. The race goes from Gibbons Park, Logan Utah to Fish Haven, Idaho via some of the most beautiful mountain trails in all of Northern Utah. Recent years brings 300 runners (maximum capacity with huge waiting list) to Cache Valley.
Runners come from all over the world to participate in the Bear 100 Endurance Run. If you would like to view the entrants for the current year of 2015, click here. [Print Version - Entrants not included, but go to following to review entrants: (http://ultrasignup.com/entrants_event.aspx?did=29920)]

Aid Stations for the Bear 100 Endurance Run are manned by volunteer personnel. There are a total of 14 Aid Stations along the route, all of which are less than 10 miles apart after Aid Station #1. Aid Stations, along with their mileage are located along the route as follows:

1. Logan Peak-10.52
2. Leatham Hollow-19.66
3. Richards Hollow-22.50
4. Cowley Canyon-29.98
5. Right Hand Fork-36.92
6. Temple Fork-45.15
7. Tony Grove-51.84
8. Franklin Basin TH-61.48
9. Logan River-69.54
10. Beaver Lodge-75.82
11. Gibson Basin-81.12
12. Beaver Creek-85.25
13. Ranger Dip-92.20
14. Finish Line-100.00

Approximately 300 Aid Station Volunteers are assigned specific duties during the race. Please refer to "Aid Station Volunteers for the Bear 100" document for specific duties [Print Version - document included]. As Aid Station Windows of Service increase in length, different shifts of volunteers work to accommodate the runners. Bear 100 Aid Stations are manned by ordinary volunteer personnel, nurses, EMTs, and other endurance athletes.

Trails for the course are marked prior to the race, approximately one week prior to the event. The Race Committee commits to have trail markings removed off the course within one week of the completion of the race.

Waste facilities are provided and maintained mainly by the USFS at the following locations:
Richards Hollow, Right Hand Fork, Temple Fork, Tony Grove, Franklin Basin TH, and Beaver Creek Campground. Private waste facilities are available at Beaver Mountain Ski Area and the Finish Line.

The Bear 100 race is almost exclusively on trails, either single-track or four wheeler trails. The race does cross a major highway (Hwy 89) at Temple Fork. The Utah Highway Patrol controls traffic during the entire time runners cross the Highway 89.

Aid Station Volunteers for The Bear 100

The work of all aid stations is "Customer Service". Our intent and goal should be to serve every runner the very best we can in as timely a manner as possible. There are 13 Aid Stations for the Bear 100 Race. Early stations have a short window of service time and will experience large groups of runners at one time. Later stations may need groups of personnel divided into shifts to accommodate runners coming through all night. Any aid station should have a minimum of at least 5 volunteers per station or shift and earlier aid stations should consider having as many as 12 volunteers. The TOC will allow you to jump to any place in the document. Press Ctrl + Home from any place in the document to be taken to the top of document and TOC.

Contents

Basic Aid Station Roles/Assignments
(Rotate positions as needed)

- Two or more dedicated to serving/helping runners with beverages and food (more for early aid stations)
- At least 2 people dedicated to drop bags
- Runners need to be checked in and out. This is most often done by Radio Communications Personnel. We're all one team. Help each other out as needed.
- At least one person who can take over First Aid when necessary
- At least one person who can leave aid station to get to injured/sick runner on trail
- Traffic Nazis in congested areas

Aid Station Top priorities:
(May vary in order depending on the situation or scenario)

Water and Other Beverages

- Make sure you have enough water; As a general rule of thumb, approximately 10 gallons/40 runners; Temperature will be the main factor in water consumption;
- Sports drink – Mix generally at manufacturer's more diluted strength. Example: 1 Bag or can (approximately 32 Servings/Scoops) in a 5 gallon container makes the Heed slightly on the diluted side. Mix well!!
- Beverages – Cold, pour small amounts into cups with identifying can in front or back of row. Label or ID anything you can (**Bold and Obvious**), especially Heed and Water to lessen confusion
- Ice – Depending on the temperature at race time, you may need lots of ice. Consider at least 2 20-pound bags as a starting spot.

Drop Bags

- Organize in orderly fashion, 100's 200's, etc. in columns
- Order ascending or descending
- Protect as much as possible from elements
- Set aside drop bags that have been used by runners that have already gone through

General Foods
(Please display all available foods so runners can make quick choices. Also, only serve food to runners, their pacers and your Aid Station Volunteers.)

- Instructions for Cooked Potatoes – Bake or boil (usually easier) until tender (fork in easily), cool to stop cooking, warm as needed when runners come through, or serve with salt warm or cold; [Redmond Sea Salt recommended as salt of choice]
- Broth or broth-based soup (ALL Aid Stations > 3)
- Heat/prepare all soups on as-need basis
- Keep vegetarian dishes separate from animal-based products
- Vegetarian soup
- Non-vegetarian soup (at least one soup needs to be non-tomato, non-cream)
- Meat or meat-based (and vegetarian) sandwiches/wraps, etc.
- Salty foods
- Sweet foods
- Fruit: melons, bananas, oranges, strawberries, etc.
- Gels (disperse as needed, not all at once)
- Instant (or real) coffee and provision for making/heating
- At least a few energy drinks

Specialty Foods
This is where you have the ability to "put your own stamp" on your aid station. Be prepared for whatever the runner might want that is not in the list above.

Supplies: Check and Re-Check Your List
(Make sure nothing is left off when you are packed to go. Use provided manifest or make your own, checking off each item (including estimated quantities).

- Some facility for heating quantities of water
- Chairs, blankets/space blankets
- Some form of shelter, may vary on location and accessibility, but a place to warm, sleep, and rest
- Two or more cots with items for warmth
- Towels/Paper Towels
- First Aid Kit w/ Adequate Supplies including Band-Aids
- Quality bandage supplies
- Duct tape
- Provide some form of shade (canopy)
- Coolers to keep things from spoiling
- Ice (amount depends on time-of-day and current race temperature)
- Divide what BEAR gives and what Captains purchase or bring

Closing of Aid Station after last runner is through

At the conclusion of the aid station time-frame, and after the last runner has been accounted for, please make some notes of the following:

- How much of any items was needed or used
- Items liked and disliked
- Anything that ran short
- Get unused food items and drinks to Finish Line As Soon As You Can (mainly pop & chips) Perishables can be taken home with you.
- Ensure all runner's drop bags are at Finish Line in a timely manner as possible (some runners leave as soon as they can after finishing the race)
- All race infrastructure items should be to Leland Barker's Farm by the Monday after the race **(Please do not leave these items at the Finish.)**

Signage/glow sticks/etc.

- Visually ID your Aid Station
- Day & Night Stations, mark entry and exits
- Scope out parking options for crews and others ahead of time to eliminate usage conflicts

Campfire, etc.

- Obey all Forest Service Rules regarding Campfires
- Supply your own wood/fuel to burn

First Aid Guidelines:

It is recommended that you have someone who really knows First Aid at your station, preferably one or more EMT's. Provide the best care possible to each runner needing help. Get more information on any condition likely to occur, depending on weather, heat or cold, etc. Be prepared to deal with:

- Heatstroke (daytime glazed eyes, serious goofiness, too high or too low body temp)
- Hypothermia (uncontrolled shivering, frequent stumbling, vague or slurred speech)
  Consider "umbles": fumble, mumble, stumble, bumble, tumble
- Prolonged vomiting (Needs to be a DNF – DNF = Did Not Finish)

- Significant blood loss (Needs to be a DNF – DNF = Did Not Finish)
- Watch for anyone with excessive water (not beverage) consumption (> 32 oz.) which can lead to hyponatremia (deficiency of sodium in the blood)

Designate a First Aid Area

- Have a good First Aid Kit with Thermometer
- Blankets, cots, sleeping bags
- Other supplies as needed (see above)
- Reserve some clean water for the first aid area

Ultrarunning Basics

- Food intake: +200 (but no more than about 450) calories/hour
- Liquid intake: 20 - 32 oz./hour (daytime) 16 - 24 oz./hour (nighttime)
- Electrolytes (varies a lot from runner to runner)
- Caffeine is widely used to promote fat metabolism
- Some runners nap for a few hours; most run all night

Runner Tips

- Runners often experience stomach shutdown (bloating, belching, muscle cramps, low energy) after consuming too many calories too quickly or drinking insufficient water. This condition can be reversed by slowing down and drinking up to 24 oz. of plain water. Ginger chews or ginger ale often helps.
- Many runners experience glutamate depletion (glutamate is a primary neurotransmitter)--foods high in MSG (Ramen noodle broth, etc.) can prevent/reverse this

Aid Station Locations and Approximate Window of Service Time

Aid Station #	Location/Mileage	Window of Service		
		By	Until	Firm Cutoff
1	Logan Peak 10.52	6:30 AM	9:30 AM	
2	Leatham Hollow 19.66	8:30 AM	12:00 PM	
3	Richards Hollow 22.50	9:00 AM	2:00 PM	
4	Cowley Canyon 29.98	11:00 AM	4:00 PM	
5	Right Hand Fork 36.92	12:00 PM	6:00 PM	
6	Temple Fork 45.15	1:00 PM	9:00 PM	
7	Tony Grove 51.84	2:30 PM	12:00 AM	2:00 AM
8	Franklin Basin TH 61.48	4:00 PM	3:00 AM	5:00 AM
9	Logan River 69.54	5:30 PM	6:00 AM	8:00 AM
10	Beaver Lodge 75.82	6:30 PM	10:00 AM	11:00 AM
11	Gibson Basin 81.12	8:00 PM	1:00 PM	2:00 PM
12	Beaver Creek 85.25	9:00 PM	3:00 PM	3:00 PM
13	Ranger Dip 92.20	10:00 PM	4:30 PM	4:30 PM
Note: No Drop Bags at Logan Peak and Gibson Basin				

Key Personnel Contact Info

Leland Barker - Race Director
Phone: (435) 563-3647 Work
Email: bear100man@hotmail.com or
        bear100man@gmail.com

Ron Stagg - Assistant Race Director/Trail Maintenance Coordinator
Phone: (435) 563-3348 Home
Phone: (435) 232-8140 Cell
Email: ronstagg123@gmail.com

Wayne Moore - Aid Station Coordinator
Phone: (435) 563-6330 Home
Phone: (435) 750-3146 Work
Phone: (435) 760-3871 Cell
Email: wmoore@batc.edu
        trailrunnermoore@gmail.com

Ted McArthur - Radio Communications
Phone: (435) 770-9169 Cell
Email: ac7ii@comcast.net

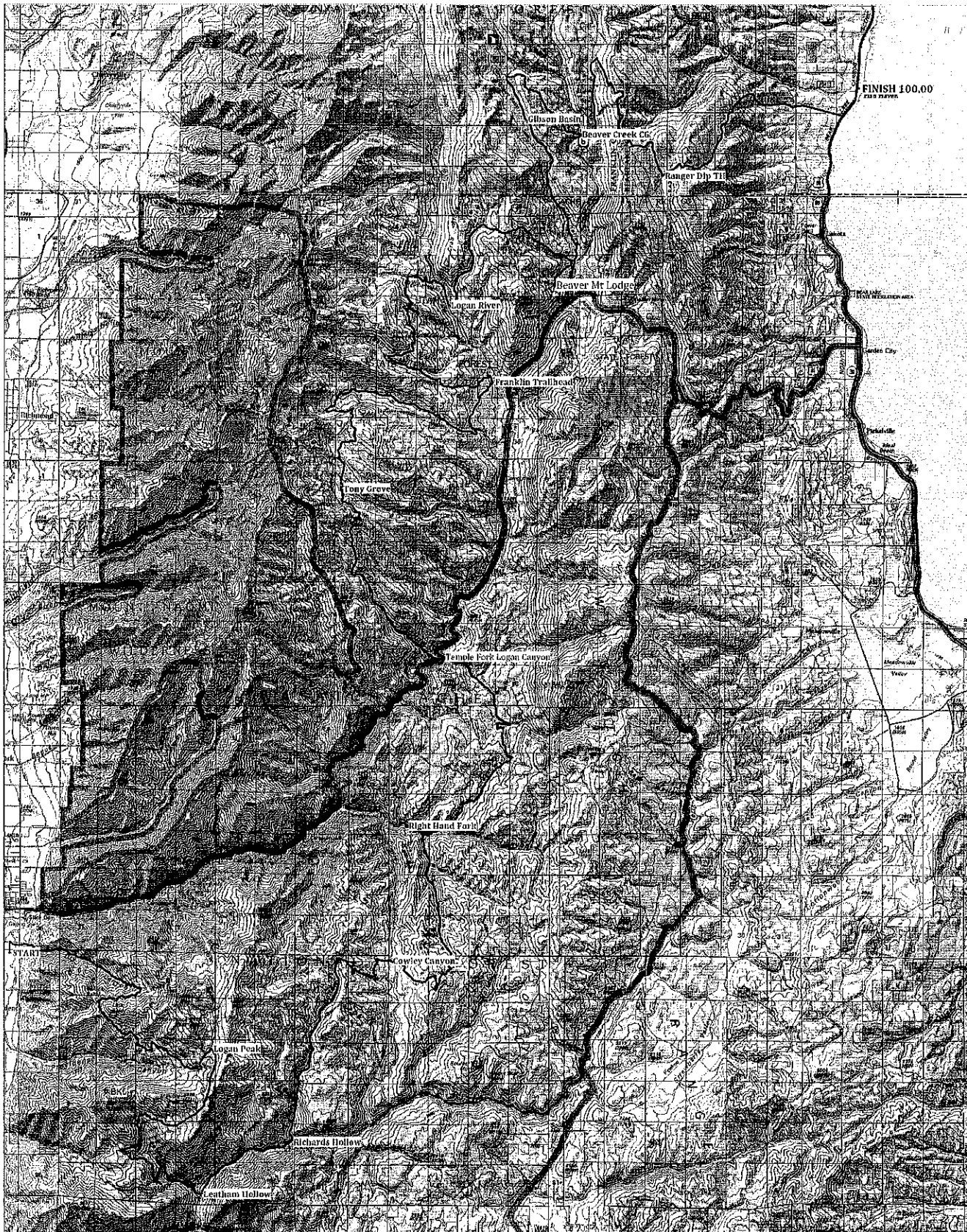Warren Wilde - Franklin County Idaho Emergency Operations Center (EOC) Coordinator
Phone: (208) 8521332 Home
Phone: (208) 2211408
Email: wwilde@digis.net

° BK1
111° 48' 19.896" W
42° 3' 56.296" N

111° 20' 24.892" W
42° 4' 6.658" N

FINISH 100.00

Gibson Basin
Beaver Creek CG
Ranger Dip TH

Beaver Mt Lodge

Logan River

Franklin Trailhead

Garden City

Tony Grove

Temple Fork Logan Canyon

Right Hand Fork

START

Cowley Canyon

Logan Peak

Richards Hollow

Leatham Hollow

41° 37' 41.877" N
111° 48' 0.188" W

41° 37' 50.112" N
111° 20' 16.566" W
° BK2

0 ½ 1   2   3   4   5   6   7   8 Miles

0   5,000 10,000   20,000   30,000   40,000 Feet

0 1 2 3 4 5 6 7 8 9 10 Kilometers
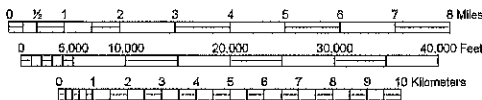
19'   merican Datum; UTM grid zone 12
Ge   / BigTopo7 (www.igage.com)
Map   .ed from USGS Quads: Preston 100K; ID,WY,UT Logan 100K; UT,WY,ID

BigTopo Map

Bear 100 Trail Course Directions - Logan to Bear Lake

- **Start at Hyrum Gibbons/Mount Logan Park (41.728219 -111.799172)
  to Aid Station #1 Logan Peak @Mile 10.5 (41.694741 -111.702498)**

The race begins at Hyrum Gibbons Park, 1400 East, 350 South, in Logan, Utah. From downtown Logan (Highway 89 and Center Street), turn east at Center Street in Logan. In about a mile the road goes up a steep hill, and then curves to the left, heading north. At this point it has become Mountain Road. Continue until you reach 25 North, then turn right, heading east. Follow this road to 1400 East, and then turn right (south). The park and start area will be on your left (east) shortly after you turn. The race leaves the park to the north along 1400 East. It then turns east (right) on 25 North until it reaches pavement end at the mouth of Dry Canyon. This is a rocky dirt road, which turns into a trail about ¼ mile up. Follow this trail up the canyon about 3 miles. There will be a trail that cuts off to the right. Take it. This is the South Syncline Trail. It goes around Little Baldy and then becomes an ATV trail. There is a piped spring on this trail with a trough if you need to refill. The trail goes in and out of aspen and conifers and then, after a steep climb, reaches the first aid station, Logan Peak, at Mile 10.5.

- **Aid Station #1 Logan Peak @Mile 10.5 (41.694741 -111.702498)
  to Aid Station #2 Leatham Hollow @Mile 19.6 (41.643000 -111.706719)**

From the aid station go south on the dirt road to Millville Pass, where you begin a gradual rocky descent toward Millville Canyon. Ferry Spring provides reliable water along this stretch. Soon you will be overlooking the gorge of Leatham Hollow as you traverse its slopes. The relief is impressive. At 15.2 miles you will see a sign for the Leatham Hollow trail on your left. Take it. Descend through the conifers on this very runnable trail all the way to the next aid station.

- **Aid Station #2 Leatham Hollow @Mile 19.6 (41.643000 -111.706719)
  to Aid Station #3 Richards Hollow @Mile 22.4 (41.661857 -111.663979)**

Follow the dirt road up the canyon 3 miles.

- **Aid Station #3 Richards Hollow @Mile 22.4 (41.661857 -111.663979)
  to Aid Station #4 Cowley Canyon @Mile 29.9 (41.726685 -111.617048)**

Stay on the main trail going up Richards Hollow for about 5 miles. You come to a fence, then soon the trail splits. You take a sharp right, and climb up for 6/10 of a mile to a road. Turn right and this road drops you down for 1 ½ miles to another spring on the left, just 1/3 of a mile before the aid station. The aid station #4 sits in a shallow pass at the top of Cowley Canyon.

- **Aid Station #4 Cowley Canyon @Mile 29.9 (41.726685 -111.617048)
  to Aid Station #5 Right Hand Fork @Mile 36.9 (41.774911 -111.609929)**

Head southeast on the dirt road. In 1/10 of a mile the road splits. Go left. Follow this road up and over a ridge for about 2 ½ miles, then take a left onto the first trail you come to (about ½ mile past the ridge). This trail takes you down Ricks Canyon. Soon a trail cuts in from the right. Stay left, and cruise down the canyon for about 3 miles, where you see the Steel Hollow trail come in from the right. Continue straight down the canyon and in a little less than a mile you come to the main canyon, and a trail split. Go left, down the canyon ½ mile to the aid station.

- **Aid Station #5 Right Fork @Mile 36.9 (41.774911 -111.609929)**
  to Aid Station #6 Temple Fork @Mile 45.2 (41.835200 -111.592798)

Go back up the canyon. Stay left at the trail junction ½ mile up and go up Willow Canyon. In 8/10 of a mile farther the main trail veers left, and then you come to a gate in another 3/10 mile. In another half mile, the trail splits. The main trail cuts right. Take the right hand trail and in 3/10 mile you see the Ephraim Trail to the right. Continue straight up the trail. In 2/3 of a mile you go right at the trail split, then a quick left at the next. Then you come to a gate. Go through the gate, leaving it the way you found it, and stay right (straight) at the next split. Soon you come to a road. Take a left onto the road and in ½ mile you reach Mud Flat. Descend down the Temple Fork road (forest road 007) for about a mile until you see a distinct trail at a sharp angle to your right. (This will be right before you hit a hairpin turn and the road begins to climb). Take the trail straight east. It will take you to a bridge (north) and a good ATV trail down to a parking lot. Leave the lot going down canyon, now on the Temple Fork road (gravel) to the aid station at the junction with Highway 89.

- **Aid Station #6 Temple Fork @Mile 45.2 (41.835200 -111.592798)**
  to Aid Station #7 Tony Grove @Mile 51.8 (41.894910 -111.642579)

Go down the paved entrance to parking lot and cross HWY 89. In about 30 feet you will see a trail climbing the road cut southwest. Take it. This cutoff climbs around a shoulder to the Blind Hollow Trail. Begin climbing this trail northwest. At 3 ½ miles up the trail you take a right at a post in a wet meadow and head up past Hansen Pond (mud hole). Soon you come to a T with a sign. Go left. In 1.2 miles more you come to another T and a brand new sign. Follow this sign right to Tony Grove. In 7/10 of a mile, after the switchbacks through the pines, you come out in the open and cross a trail. Continue straight and soon you come to a campground. Go left up through the campground. As the paved road curves right, stay straight on a very wide trail (boulders prevent vehicle access), then veer right towards the lake. You will run along the right side of the lake on a trail over a dam, and come to the parking area and the aid station.

- **Aid Station #7 Tony Grove @Mile 51.8 (41.894910 -111.642579)**
  to Aid Station #8 Franklin Trailhead @Mile 61.5 (41.933473 -111.570195)

Head north on the White Pine Trail. In 3/10 you come to a sign. Follow it right to White Pine. In about 2 1/4 miles you come to a ridge, and then drop down into White Pine Canyon. In about a mile you come to a bridge. Shortly after the bridge you take a right, heading down the canyon. In a little over 3 miles you come to a trail split. Turn left, crossing a stream, and ascend north to a pass full of Mules Ear

daisies. Cattle braid the trail in this area, but the trails rejoin after the meadow. Run downhill to the north through a very large field of Mules Ear, and then through some aspen. Soon you will reach a beaver pond—go left to a plank bridge. You have arrived at the aid station.

- **Aid Station #8 Franklin Trailhead @Mile 61.5 (41.933473 -111.570195)**
  to Aid Station #9 Logan River / Steep Hollow @Mile 69.6 (41.960564 -111.591511)

Head north out of the aid station on a dirt road. Soon you will reach a trail, which splits after about 100 yards to the left. Go left. You will soon cross the stream and go into the trees. After about 0.3 miles the trail meets up with a better trail at a T. Go right. You are now on the Steam Mill trail. The next mile is steep and rocky. Then the trail moderates as it goes to the north side of the ridge in big conifers. The trail crosses to the north side of the stream and follows the stream. In 3.6 miles out of the aid station you reach a fainter trail coming in at 120 degrees from the northeast. Look for it; it is 100 yards before the main trail crosses the stream. (If you cross the stream and see the old rusty steam mill boiler, you have gone too far). Take this trail NE until it reaches a pass and heads N through sage and underbrush. The trail goes into conifers above a sink and skirts the sink. Bowl and ridge, bowl and ridge, you move N. At one point the trail splits—take the upper split. If you miss this, do not panic. You will soon reach a lone conifer, and if you are below it you will hit a T. Go up. In 30 feet you will catch the upper split you should have taken. Continue N until you reach the Steep Hollow road. Turn right, down this road, to the Franklin Basin road. Then turn right down this road 0.8 miles to the Logan River Aid Station.

- **Aid Station #9 Logan River / Steep Hollow @Mile 69.6 (41.960564 -111.591511)**
  to Aid Station #10 Beaver Mt Lodge @Mile 75.9 (41.968073 -111.541259)

From the aid station cross the river. It's easier during the race than in July—you might even keep your feet dry. Follow the Peterson Hollow trail to a point about 2.6 miles from the aid station. Look right. You will see a very wide drainage coming in from your right, sage on the south face, conifers on the north. This is your destination. A very good trail follows the bottom of the drainage, but the junction is very faint. Bear for the drainage bottom and the trail will become apparent. Go over a distinct pass and descend the trail, skirting to the north of Beaver Mt ski area and Long Hollow. About 100 yards before reaching the Sink Hollow road and the TH, turn right on a cutoff trail through the woods to the Beaver Mt access road. Take the road to the lodge, south of the lower parking lot.

- **Aid Station #10 Beaver Mt Lodge @Mile 75.9 (41.968073 -111.541259)**
  to Aid Station #11 Gibson Basin @Mile 81.3 (42.027192 -111.555261)

Leave the Beaver Mt Lodge area and head east on an ATV road. This will eventually parallel a paved access road going north (not the same one you came in on), and then will intersect that road. Cross the pavement to the Sink Hollow road (4WD, then an ATV trail). In a couple miles you come to the Utah/Idaho border. Celebrate if you wish or if you like beer. In another 2 or more miles you come to Gibson Basin and the aid station.

- **Aid Station #11 Gibson Basin @Mile 81.3 (42.027192 -111.555261)**
  to Aid Station #12 Beaver Creek Campground @Mile 85.4 (42.021804 -111.529070)

Run along the right side of the Basin for over a mile, then take a right onto a trail that cuts up and into the trees in a southeasterly direction. You are in the mouth of the Bear! Try not to die as the trail swings south and goes up a steep hill. Once over the top of the hill it is mostly downhill to the next aid station, partly on smooth trail, and partly on rocky trail. Step lightly on the bears' teeth (rocks) and you just might survive. After the trail swings to the east you come to Beaver Creek and the aid station.

- **Aid Station #12 Beaver Creek Campground @Mile 85.4 (42.021804 -111.529070)**
  to Aid Station #13 Ranger Dip Trail @Mile 92.3 (42.007279 -111.488889)

Head east on the dirt road for about 2 miles, then take a right onto a trail that cuts back up to the top of the ridge. Stay on the main trail and in a couple miles you will get your first glimpse of Bear Lake, off to the left. You will also see Beaver Mountain Ski Resort to the south, plus White Pine canyon and Logan Peak—everything you just ran through (if it's daylight). In a couple more miles you are in the open sagebrush, and you will come to a road. Go left, heading east. Listen for bugling elk. You climb up over a hill and drop down to see the Fish Haven Trail take off to the left. You will not take this trail! You will veer right on the road and in about a mile come to the aid station.

- **Aid Station #13 Ranger Dip Trail @Mile 92.3 (42.007279 -111.488889)**
  to Finish Line Fish Haven @Mile 99.5 (42.038833 -111.375167)

You follow the Ranger dip trail for about 5 miles as it takes you up probably the steepest hill of the race, Ranger Dip Liftoff, to a nice windy trail for a while on top of the hill. You head northeast for a while, getting better and better glimpses of Bear Lake. Then you drop down, quite steeply, to the east toward Bear Lake. About 2 miles from the finish you come to a road. Head east down this road for a mile or so, then take a left onto the highway around Bear Lake. There is a trail that parallels the road on the west side. Run along the trail until it ends, then soon you will pass Gladys' Place. At Gladys' Place carefully cross the highway, then cross over to the east side of the road heading north. About one hundred yards north of Gladys' Place you will come across a white fence on the East side of the highway. At the north end of the white fence, turn right into the pathway next to the lawn area and head to the finish line.

- **Finish Line Fish Haven on Bear Lake @Mile 99.5 (42.038833 -111.375167)**

You have finished the Bear 100! Relax and on Saturday afternoon enjoy the food provided at the finish line area.

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START

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Logan Peak
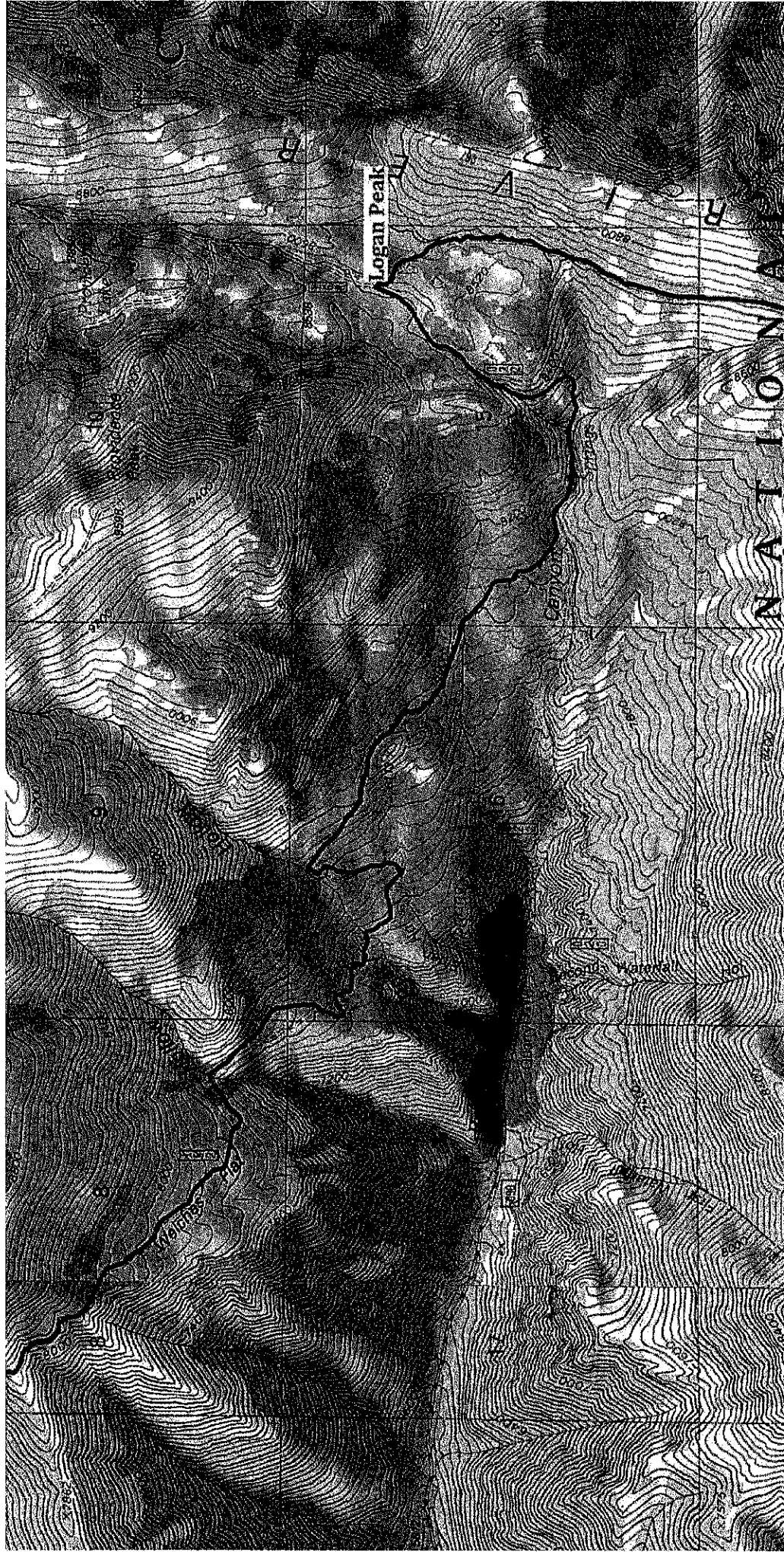
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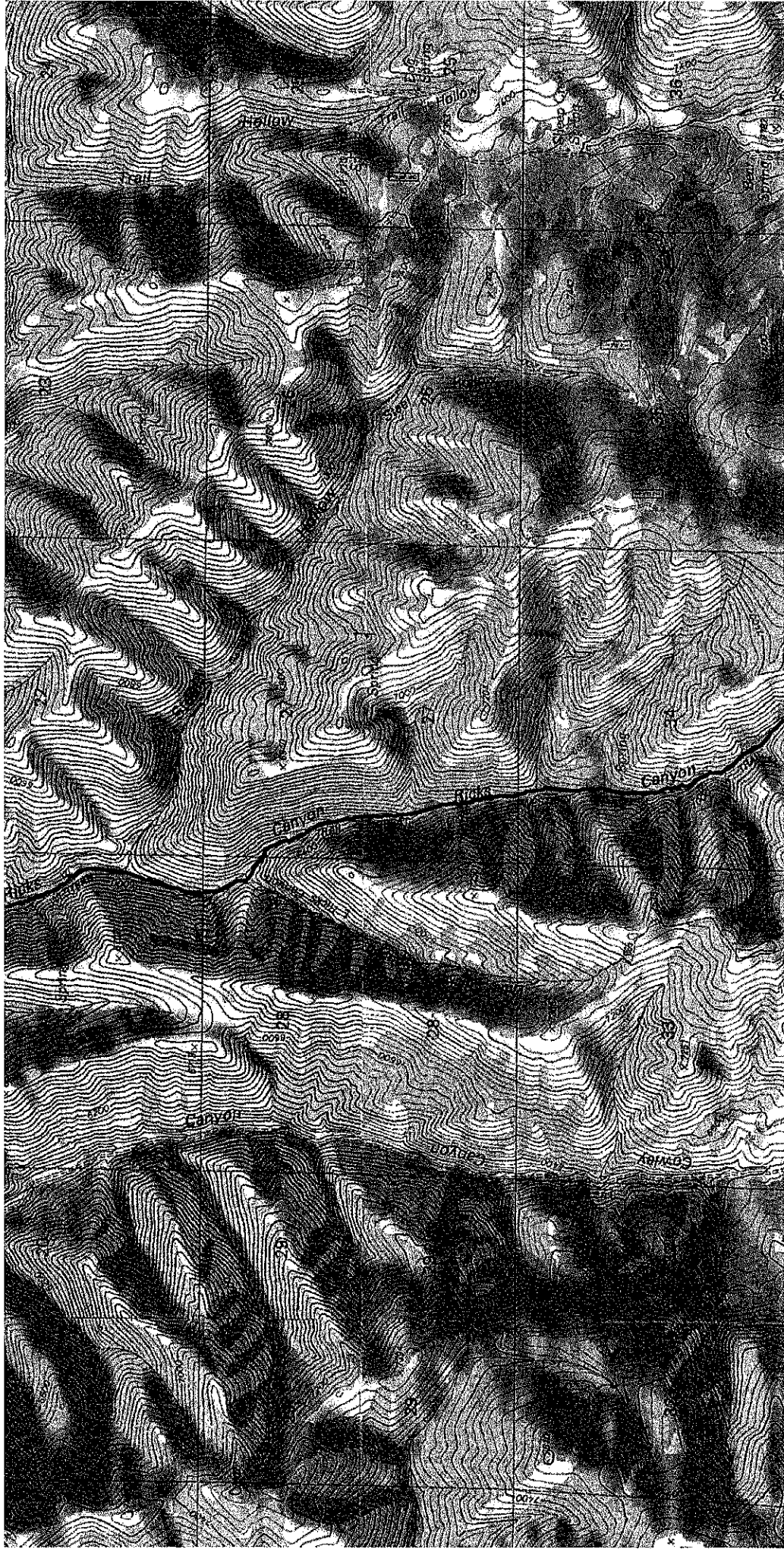
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Right Hand Fork

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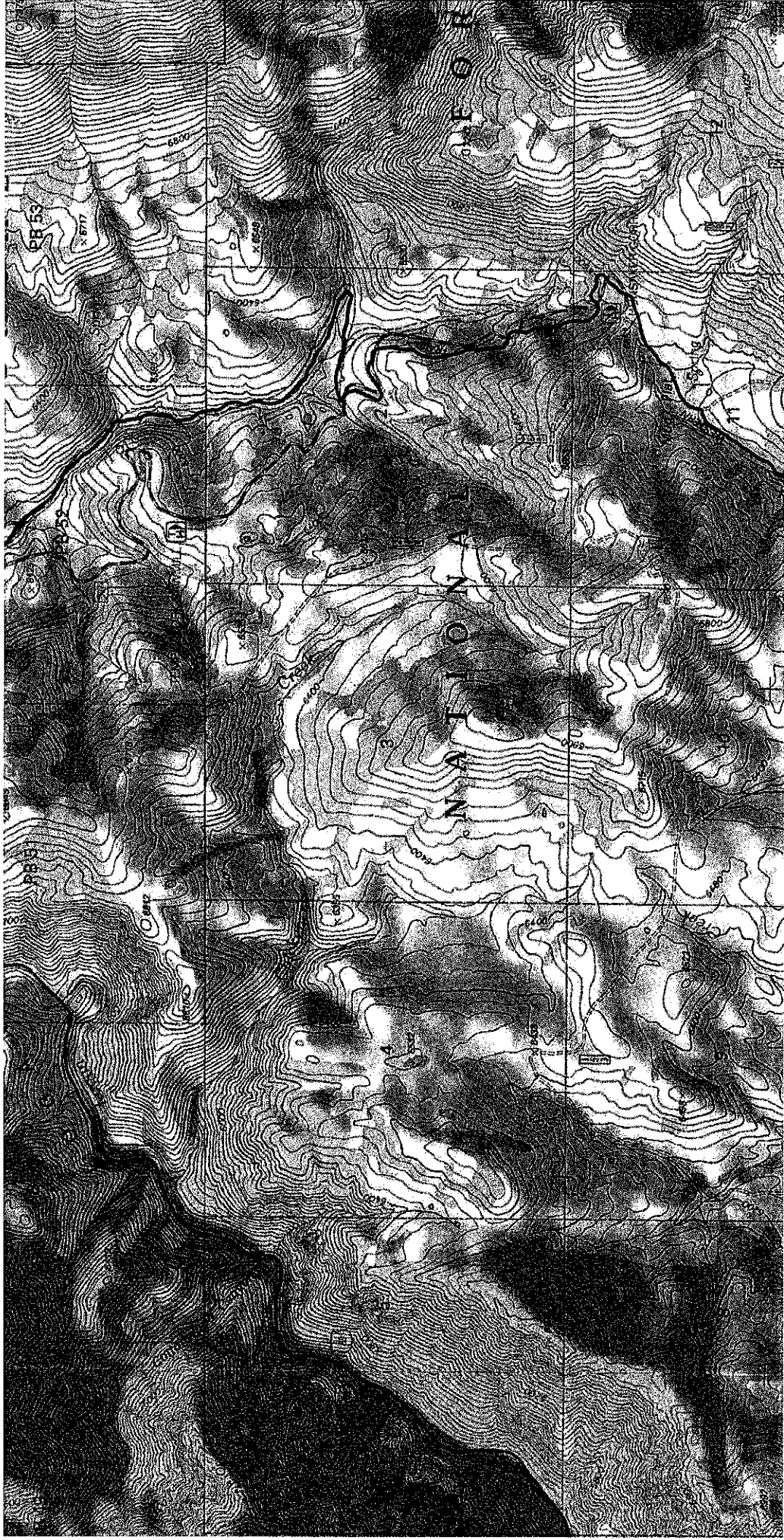
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Temple Fork Logan Canyon

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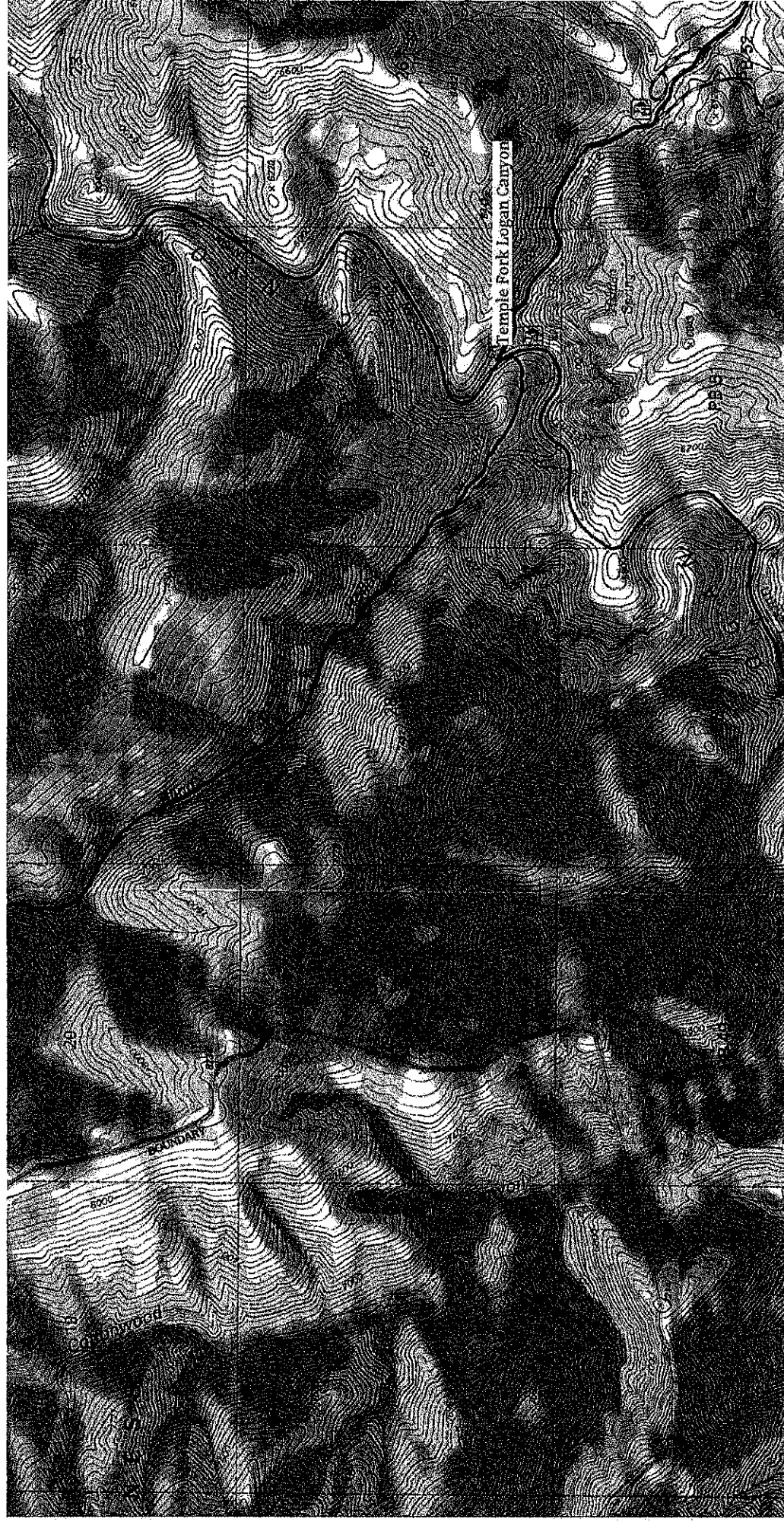
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Tony Grove

BACK COUNTRY

1° 39' 48.486" W
90" N

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Logan River

Franklin Trailhead

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Beaver Mt Lodge

Logan River
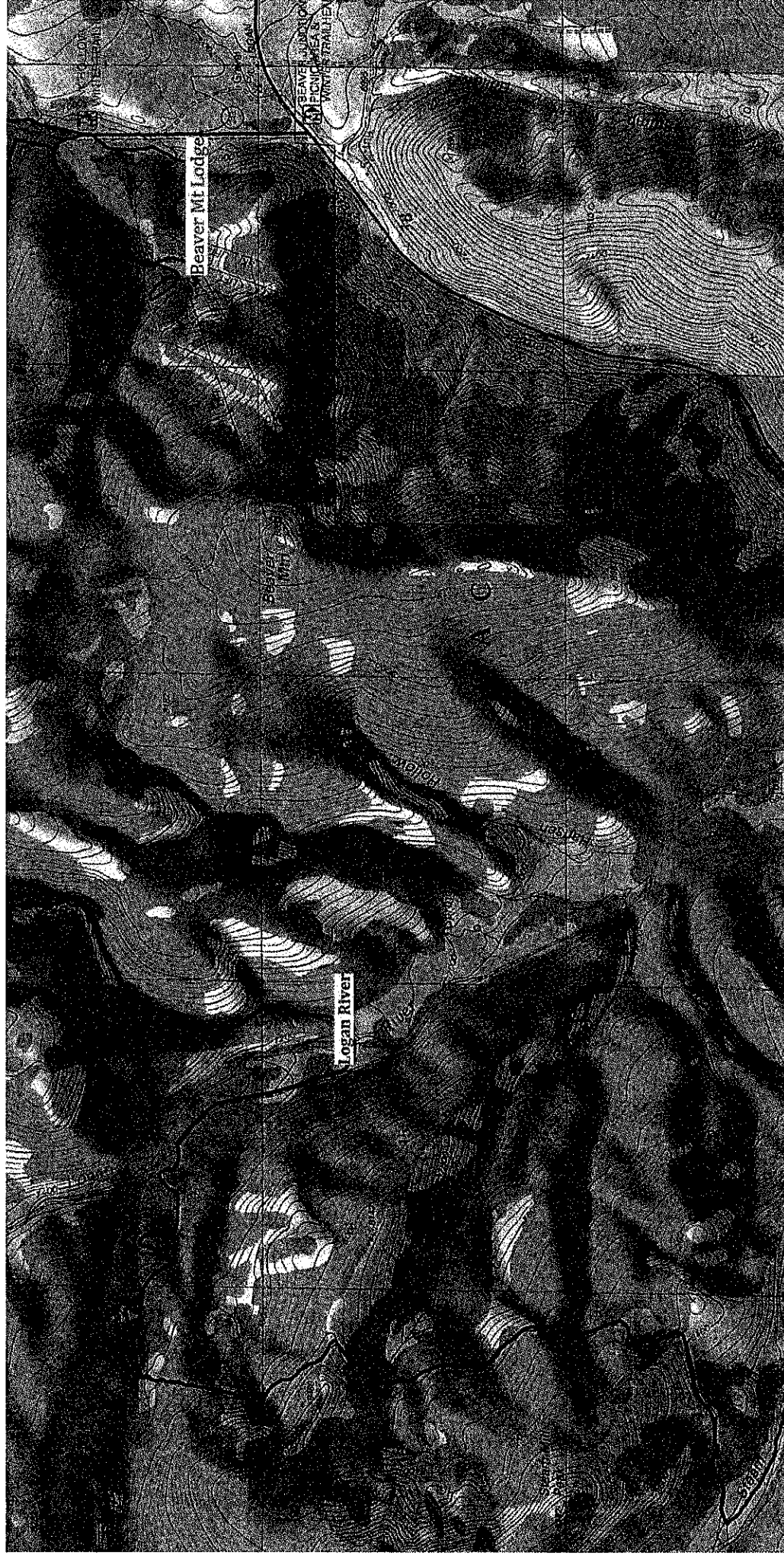
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Beaver Mt Lodge

Logan River
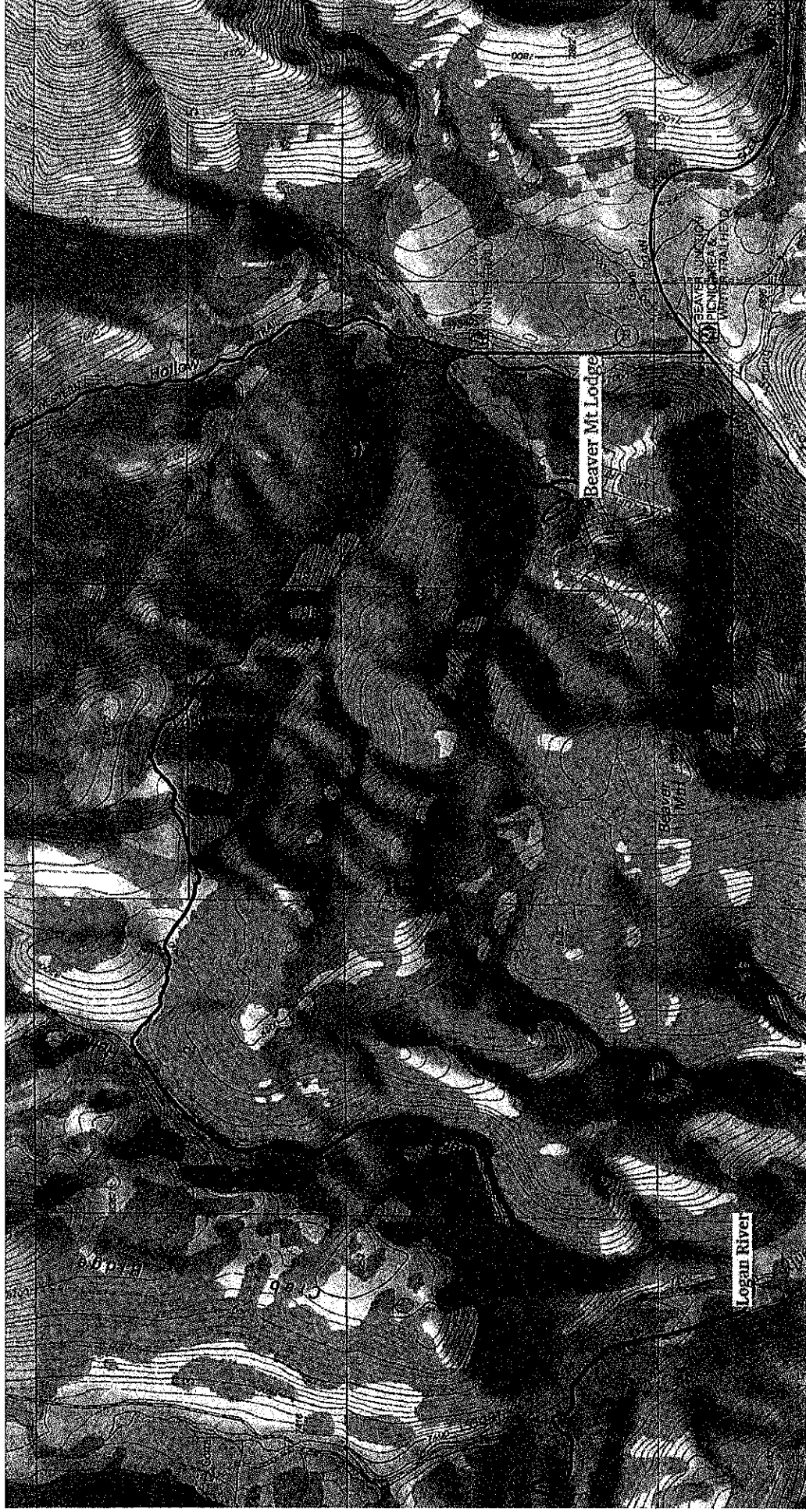
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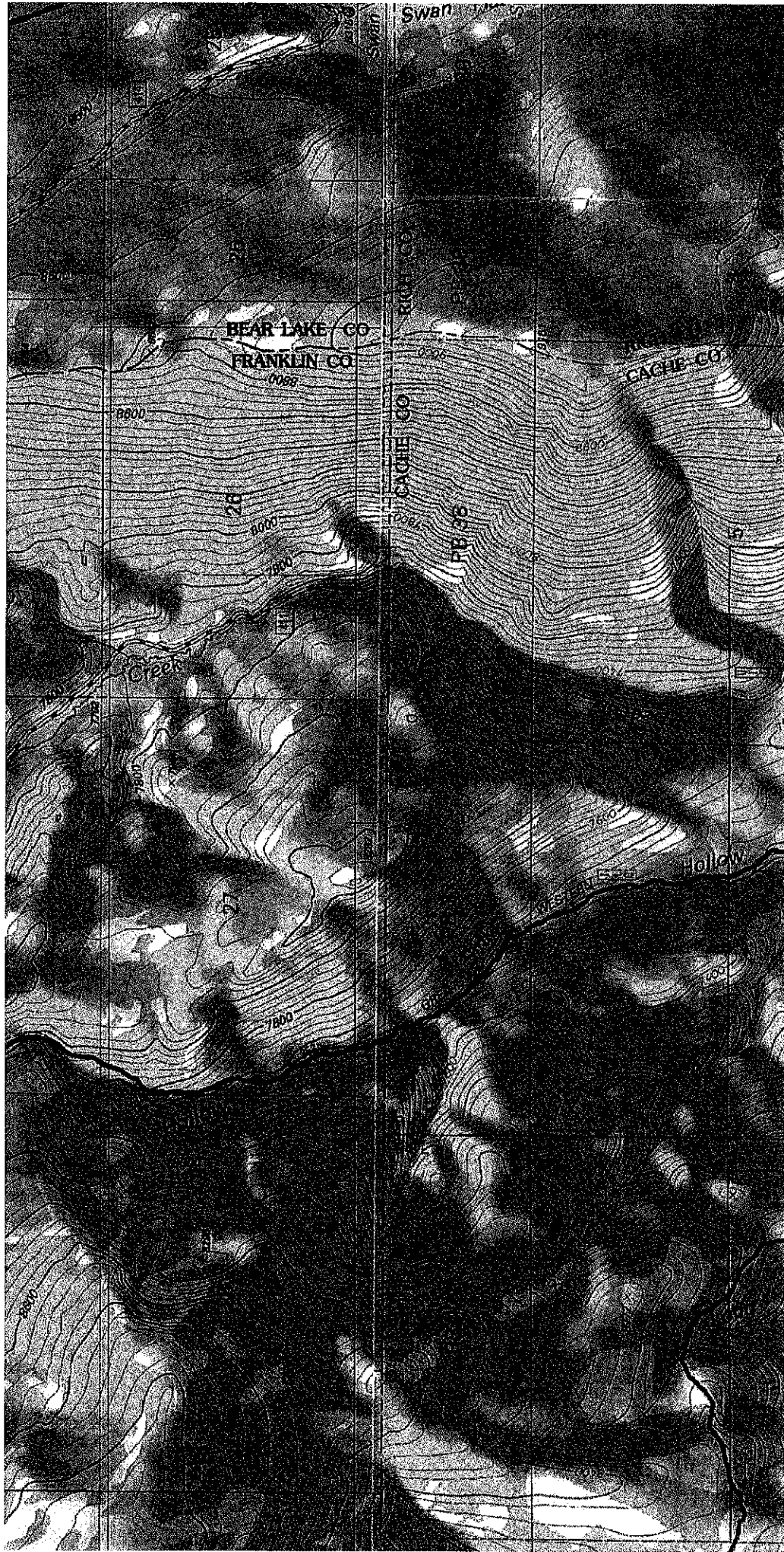
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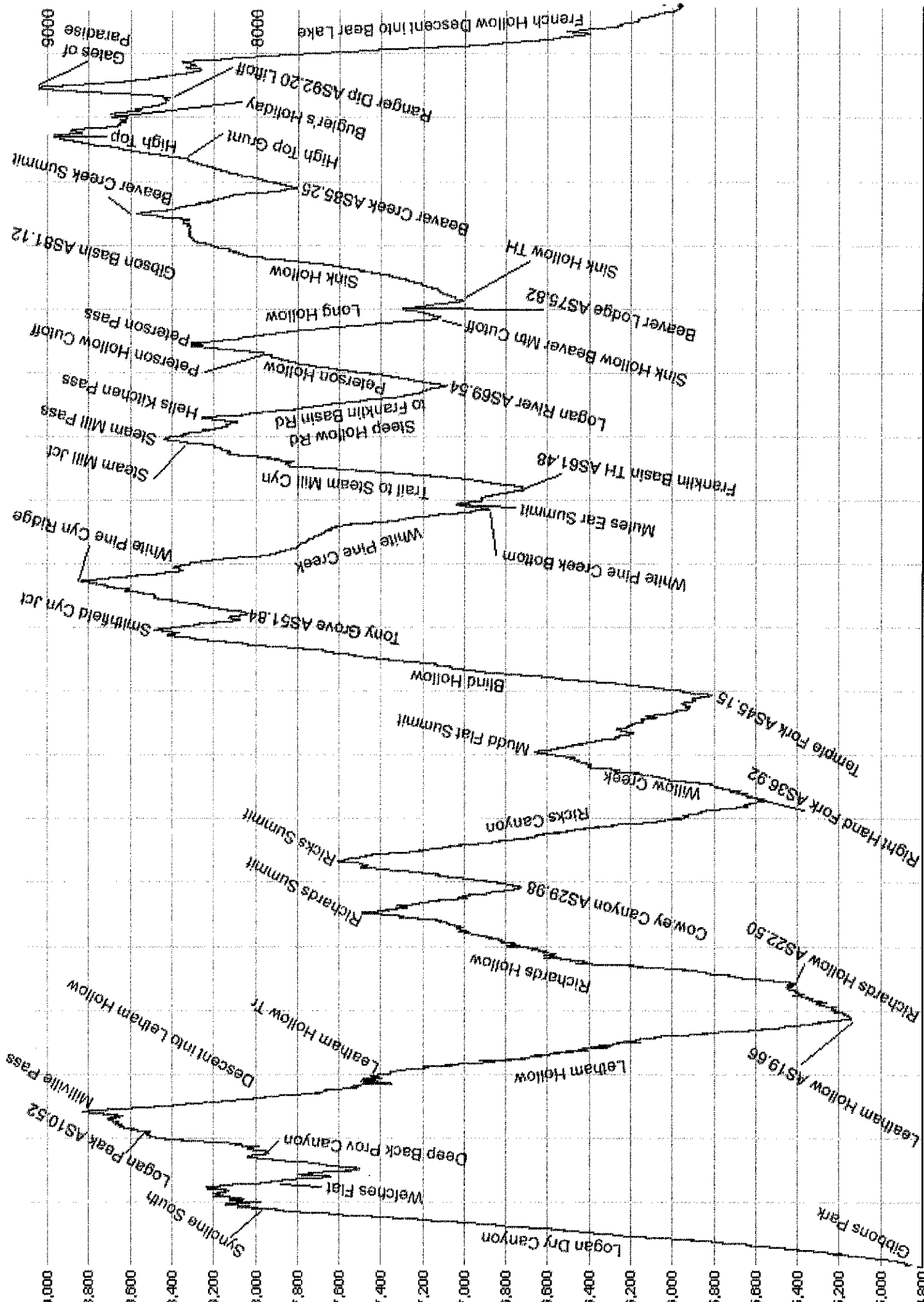
Bear 100 2011

Elev Gain 1111 Ft; Climb 26726 Ft; Drop -25615 Ft; Max Elev 9046 Ft; Min Elev 4848 Ft; Map Dist 98.843 Mi; Ground Dist 99.689 Mi

Gates of Paradise

French Hollow Descent into Bear Lake

Ranger Dip AS92.20 Liftoff

Bugler's Holliday

High Top

High Top Grunt

Beaver Creek Summit

Beaver Creek AS85.25

Gibson Basin AS81.12

Sink Hollow TH

Sink Hollow

Long Hollow

Beaver Lodge AS75.82

Sink Hollow Beaver Mtn Cutoff

Peterson Pass

Peterson Hollow Cutoff

Peterson Hollow

Hells Kitchen Pass

Logan River AS69.54

Steep Mill Pass

Steep Hollow Rd to Franklin Basin Rd

Steep Mill Jct

Trail to Steep Mill Cyn

Franklin Basin TH AS61.48

Mules Ear Summit

White Pine Cyn Ridge

White Pine Creek

White Pine Creek Bottom

Smithfield Cyn Jct

Smithfield AS51.84

Tony Grove AS51.84

Blind Hollow

Mudd Flat Summit

Temple Fork AS45.15

Rghт Hand Fork AS36.92

Willow Creek

Ricks Canyon

Ricks Summit

Richards Summit

Cowey Canyon AS29.98

Richards Hollow

Richards Hollow AS22.50

Leatham Hollow AS19.66

Leatham Hollow Tr

Leatham Hollow

Descent into Leatham Hollow

Millville Pass

Logan Peak AS10.52

Deep Back Prov Canyon

Welches Flat

Snowline South

Logan Dry Canyon

Gibbons Park

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AID STATION LOCATIONS

- **Aid stations location and cut-offs are as follows: (Actual Cutoff times Starting at Tony Grove)**
  - **Aid Station 1 Mt Logan (41.728219 -111.799172 @ Mile 10.52):**
    - **4 Wheel Drive only.** Access only for Aid Station members no Support vehicle Allowed. Go to Logan, and then go up Logan Canyon about 9 miles, and turn right at Right Hand Fork. You go about a mile and turn right onto a dirt road that takes you up 4 miles to Cowley Canyon Junction. Then at the intersection make a right turn follow the main road to where The Providence road meets the main road. this is Feed Station 1.
  - **Aid Station 2 Leatham Hollow (41.643000 -111.706719 @ Mile 19.66):**
    - Go south from Logan (left fork heading out of town) to Hyrum, turn left and go up Blacksmith Fork Canyon. Turn left about 5 miles up the canyon at the Left Fork of the Blacksmith sign. It's about 1 mile on dirt road. Crews may crew here.
  - **Aid Station 3 Richards Hollow (41.661857 -111.663979 @ Mile 22.50):**
    - Access only for Aid Station members no Support vehicle Allowed. Go south from Logan (left fork heading out of town) to Hyrum, turn left and go up Blacksmith Fork Canyon. Turn left about 5 miles up the canyon at the Left Fork of the Blacksmith sign. It's about 1 mile on dirt road. Crews may crew here. It is another 3 miles up the dirt road to the Richards Hollow station. RUNNER SUPPORT CREWS ARE NOT PERMITTED AT RICHARDS HOLLOW. The road is rough, narrow and dusty. Crew your runner at Leatham.
  - **Aid Station 4 Cowley Canyon (41.726685 -111.617048 @ Mile 29.98):**
    - Go to Logan, and then go up Logan Canyon about 9 miles, and turn right at Right Hand Fork. You go about a mile and turn right onto a dirt road that takes you up 4 miles to Cowley.
  - **Aid Station 5 Right Hand Fork (41.774911 -111.609929 @ Mile 36.92):**
    - From Cowley, go back down 4 miles and go right, just past the Girl Scout Camp. It is less than a mile on dirt road to the trailhead and aid station at Right Fork. If you just want to go to Right Fork, go up Logan Canyon about 9 miles, turn right at Right Fork, go left at the fork in about a mile, and it is less than a mile to the station.
  - **Aid Station 6 Temple Fork (41.835200 -111.592798 @ Mile 45.15):**
    - From Right Hand Fork, go back to the Logan Canyon Highway, and turn right. Go about 5 miles up the Canyon to the Temple Fork road. The station is right there. DO NOT PARK ON HIGHWAY 89 AT TEMPLE FORK. You will be cited by the Highway Patrol. Park either in the lot or along the dirt road that the runners will be descending.
  - **Aid Station 7 Tony Grove (41.894910 -111.642579 @ Mile 51.84; Cut off time Saturday 7:00 AM):**

- From Temple Fork, go up the Logan Canyon Highway about 5 miles to the Tony Grove turn (left). It is 7 miles on paved road to the aid station at Tony Grove Lake.
  - **Aid Station 8 Franklin Basin (41.933473 -111.570195 @ Mile 61.48; Cut off time Saturday 9:00 AM):**
    - From the Tony Grove turn in Logan Canyon, continue up the Canyon about 3 miles to the Franklin Basin road, turn left, go about ¼ mile on dirt road and turn left. It's just past the bridge. It's another ¼ mile to the aid station. Parking at Franklin Basin Road will be staged. Please follow parking monitors' instructions.
    - **Aid Station 9 Logan River (41.960564   -111.591511 @ Mile 68.6; Cut off time Saturday 11:00 AM):**
    - Because of concerns the Forest Service has raised with impact, and for runners' safety, the Steep Hollow/Logan River aid station will no longer be accessible to crew. Pacers and crew may attend to their runners at Franklin Basin Road aid station or at Beaver Mountain aid station. Crews attempting to attend to their runners along the Franklin Basin Road will subject their runner to disqualification. Please help us maintain a safe event that complies with our host's wishes.
  - **Aid Station 10 Beaver Mountain (41.968073 -111.541259 @ Mile 75.85; Saturday 12:30 PM):**
    - From the Franklin Basin road, go back to the Logan Canyon Highway, turn left and go about 3 miles to the Beaver Mountain left turn. It is about 1-½ miles up the paved road to Beaver Mountain. At this point you will enter a large parking lot, with a small lodge at the extreme end. Three flag poles are in front of the lodge. As you look at the lodge, go right, uphill. This is the road to the yurt. The yurt is about 200 yards up the hill. Dim your lights as you proceed to the yurt; you will be driving on the course against the race flow, and don't want to blind the runners.
  - **Aid Station 11 Gibson Basin (42.027192 -111.555261 @ Mile 81.18; Saturday 2:00 PM):**
    - **4 Wheel Drive only.** Access only for Aid Station members no Support vehicle Allowed Go up Logan Canyon Hwy 89 turn to the North at Beaver mountain turn off 243. Take Forest road 011 Beaver Creek road. Once into Idaho this road becomes Forest road 411 follow this main road for several miles. There is a intersection turn left on to Forest road 415 this follows the Creek. Then take the left at forest road 466. follow this road until you reach the GPS coordinates this will be in a flat area.
  - **Aid Station 12 Beaver Creek (42.021804 -111.529070 @ Mile 85.25; Saturday 3:00 PM):**
    - From Beaver Mtn, go back down ½ mile, turn left and head up Beaver Creek road (rough dirt) about 3 or 4 miles to the aid station.
  - **Aid Station 13 Ranger Dip (42.007279 -111.488889 @ Mile 92.20; Saturday 4:30 PM):**

- From Beaver Creek, go back down to the Logan Canyon Highway, and turn left. It is about 3 miles to the Swan Flat road. Turn left onto this dirt road, and go about 5 miles, take the right fork, and there will be the aid station at the trailhead.
  - **Finish (42.038833 -111.375167 @ Mile 99.46; Saturday 6:00 PM):**
    - Go back the way you came from Ranger Dip AS to highway 89. Turn left, over the summit, and down to Bear Lake at Garden City. At Garden City turn left (north) on Highway 89. Cross into Idaho, and in about 3 miles you will reach Fish Haven. On the left you will see a restaurant called Gladys's Place. The finish is 100 yards further on the right (east), next to the lake and in an area with a large yard and bowery.

Trail Marking

The Bear 100 is one of the best races in the nation for its trail marking. Very few people get off course. This is an achievement that we are very proud of. Every year we have volunteers mark the course. Some of the sections can take up to 8 hours to mark making it a time consuming job. On race day we have people going ahead of the runners making sure that the flagging has not been removed. We cover some of the more troublesome areas and make sure that runners won't get lost. The aide stations all have flagging and glow sticks to mark any trouble spots that show up during the race. We ask that the flagging is removed within 3 days after the race. Enclosed are the instructions given to the volunteers on how to mark the course.

Marking the Bear 100 Course

Course marking is an art, especially for nighttime portions of a race. People use different strategies to mark courses, and not all runners agree about what they want.

Plastic survey flagging is the standard way to mark courses. For the Bear 100, we will be using a three-color system:

-Neon pink flagging for the main parts of the course, spaced about 150-200 yards apart on trails, about ¼ to ½ mile apart on roads, and visible along the course shortly beyond any side trail or road that ISN'T taken

-Yellow flagging and pink flagging tied together on the inside of the course junction turns and 10-30 yards before those turns. (It is not necessary to use any yellow flagging if the course continues straight through a junction.)

-Blue flagging to designate the wrong direction(s) at junctions

At night, flagging is most visible if it is two feet or less above the ground. For daytime portions of the course, some runners like to see flagging at head height or higher on tree branches that are visible from some distance; others like to see it near the ground along the side of the trail. It is usually best to use a mix of both. You can tie 18 inches of flagging to small branches on trees or to the tops of clumps of tall grass or sage. For variety, occasionally tie 12 inches around a small piece of wood or rock and drop it along the side of the trail. A single overhand knot is sufficient to secure flagging, except when tying flagging around tree trunks or large branches; in which case you need a double knot.

To make night time part(s) of the Bear 100 course more visible, we use ½ inch by 3 inch high-intensity reflectors in addition to survey flagging. In the beam of a headlamp, high-intensity reflectors are visible from a wide range of angles and considerable distance (100-150 yards). The reflectors are intended to emulate glow sticks, so they should be mounted vertically. We want reflectors located near every second piece of flagging because cattle and elk often eat flagging, and vandals sometimes remove the flagging. When removing course marking during daylight after the race, it is however much easier to find reflectors if there is flagging nearby.

There are three different ways to put up reflectors:

-Attached vertically with an ordinary staple (NOT a staple gun) or push pin to a tree trunk that is visible from some significant distance back along the trail. This is by far the best way

-Attached vertically with a twist tie to the top of a shrub or clump of weeds in open areas where there are no trees

-A three-way reflector hung by a piece of survey flagging from a high branch in places where the reflector needs to be visible from multiple directions (this is one exception where reflectors should be attached to flagging)

Make certain a reflector is always easily visible in the direction of the course at any junction. You can do this using one horizontal reflector on the turn side of the vertical reflector.

After the race, please remove flagging and reflectors from your part of the course within 3 days (ideally right after the race). You can discard the flagging, but save the reflectors (they're re-usable) and return them with the rest of the unused flagging materials.

Thank you and have fun!

TRAIL MARKING BEAR 100				
SECTION	MARKED BY	DATE	PHONE	RACE DAY RE-CHECK
Start to Leathem			###-###-####	
Leathem to Richards				
Richards to Cowley				
Cowley to Right Hand Fork				
Right Hand Fork to Temple				
Temple to Tony Grove				
Tony Grove to Franklin Basin Trailhead				
Franklin Basin Trail Head to Logan River				
Logan River to Beaver Lodge				
Beaver Lodge to Gibson Basin				
Gibson Basion to Beaver Creek				
Beaver Creek to Ranger Dip				
Ranger Dip to Fish Heaven				

TRAIL MARKING REMOVAL BEAR 100				
SECTION	REMOVED BY	DATE	PHONE	RACE DAY RE-CHECK
Start to Leathem			###-###-####	
Leathem to Richards				
Richards to Cowley				
Cowley to Right Hand Fork				
Right Hand Fork to Temple				
Temple to Tony Grove				
Tony Grove to Franklin Basin Trailhead				
Franklin Basin Trail Head to Logan River				
Logan River to Beaver Lodge				
Beaver Lodge to Gibson Basin				
Gibson Basion to Beaver Creek				
Beaver Creek to Ranger Dip				
Ranger Dip to Fish Heaven				

Volunteers for the Bear 100

It takes many people to cover the Bear 100 Race. Volunteers work segments of the 36-hour Endurance Run. Willing volunteers contact the Race Dir. and request opportunities to serve. Advertisements in the local newspaper, radio and TV stations bring additional help to the race. Injured runners who cannot participate in the run volunteer as well. Local organizations and schools/colleges volunteer large numbers of helpers and even equipment if needed or requested. Generally, there are as many volunteers as there are runners. The following is a generalization of the approximate number of people who served in various capacities in the following.

Radio Communication 90+
Net Control 15+
Trail Marking/Marking Removal 30+
Aid Station Operators 30
Aid Station Volunteers 150-200+
Medical Personnel 30+
Transportation Personnel 10+
Drop Bag Coordinators 20+

There are 14 Aid Stations on the Bear 100 most often run by an Aid Station Captain and Co-Captain. These seasoned workers delegate tasks to all of the volunteers, coordinate shifts, etc. so that the volunteers have as good of time serving as possible. "Many hands make light work", so volunteers go out of their way to ensure there is a safe and enjoyable environment in which to work and serve.

Aid Station Volunteers for The Bear 100

The work of all aid stations is "Customer Service". Our intent and goal should be to serve every runner the very best we can in as timely a manner as possible. There are 13 Aid Stations for the Bear 100 Race. Early stations have a short window of service time and will experience large groups of runners at one time. Later stations may need groups of personnel divided into shifts to accommodate runners coming through all night. Any aid station should have a minimum of at least 5 volunteers per station or shift and earlier aid stations should consider having as many as 12 volunteers. The TOC will allow you to jump to any place in the document. Press Ctrl - Home from any place in the document to be taken to the top of document and TOC.

Contents

Basic Aid Station Roles/Assignments
(Rotate positions as needed)

- Two or more dedicated to serving/helping runners with beverages and food (more for early aid stations)
- At least 2 people dedicated to drop bags
- Runners need to be checked in and out. This is most often done by Radio Communications Personnel. We're all one team. Help each other out as needed.
- At least one person who can take over First Aid when necessary
- At least one person who can leave aid station to get to injured/sick runner on trail
- Traffic Nazis in congested areas

Aid Station Top priorities:
(May vary in order depending on the situation or scenario)

Water and Other Beverages

- Make sure you have enough water; As a general rule of thumb, approximately 10 gallons/40 runners; Temperature will be the main factor in water consumption;
- Sports drink – Mix generally at manufacturer's more diluted strength. Example: 1 Bag or can (approximately 32 Servings/Scoops) in a 5 gallon container makes the Heed slightly on the diluted side. Mix well!!
- Beverages – Cold, pour small amounts into cups with identifying can in front or back of row. Label or ID anything you can (**Bold and Obvious**), especially Heed and Water to lessen confusion
- Ice – Depending on the temperature at race time, you may need lots of ice. Consider at least 2 20-pound bags as a starting spot.

Drop Bags

- Organize in orderly fashion, 100's 200's, etc. in columns
- Order ascending or descending
- Protect as much as possible from elements
- Set aside drop bags that have been used by runners that have already gone through

General Foods
(Please display all available foods so runners can make quick choices. Also, only serve food to runners, their pacers and your Aid Station Volunteers.)

- Instructions for Cooked Potatoes – Bake or boil (usually easier) until tender (fork in easily), cool to stop cooking, warm as needed when runners come through, or serve with salt warm or cold; [Redmond Sea Salt recommended as salt of choice]
- Broth or broth-based soup (ALL Aid Stations > 3)
- Heat/prepare all soups on as-need basis
- Keep vegetarian dishes separate from animal-based products
- Vegetarian soup
- Non-vegetarian soup (at least one soup needs to be non-tomato, non-cream)
- Meat or meat-based (and vegetarian) sandwiches/wraps, etc.
- Salty foods
- Sweet foods
- Fruit: melons, bananas, oranges, strawberries, etc.
- Gels (disperse as needed, not all at once)
- Instant (or real) coffee and provision for making/heating
- At least a few energy drinks

Specialty Foods
This is where you have the ability to "put your own stamp" on your aid station. Be prepared for whatever the runner might want that is not in the list above.

Supplies: Check and Re-Check Your List
(Make sure nothing is left off when you are packed to go. Use provided manifest or make your own, checking off each item (including estimated quantities).

- Some facility for heating quantities of water
- Chairs, blankets/space blankets
- Some form of shelter, may vary on location and accessibility, but a place to warm, sleep, and rest
- Two or more cots with items for warmth
- Towels/Paper Towels
- First Aid Kit w/ Adequate Supplies including Band-Aids
- Quality bandage supplies
- Duct tape
- Provide some form of shade (canopy)
- Coolers to keep things from spoiling
- Ice (amount depends on time-of-day and current race temperature)
- Divide what BEAR gives and what Captains purchase or bring

Closing of Aid Station after last runner is through

At the conclusion of the aid station time-frame, and after the last runner has been accounted for, please make some notes of the following:

- How much of any items was needed or used
- Items liked and disliked
- Anything that ran short
- Get unused food items and drinks to Finish Line As Soon As You Can (mainly pop & chips) Perishables can be taken home with you.
- Ensure all runner's drop bags are at Finish Line in a timely manner as possible (some runners leave as soon as they can after finishing the race)
- All race infrastructure items should be to Leland Barker's Farm by the Monday after the race
  (Please do not leave these items at the Finish.)

Signage/glow sticks/etc.

- Visually ID your Aid Station
- Day & Night Stations, mark entry and exits
- Scope out parking options for crews and others ahead of time to eliminate usage conflicts

Campfire, etc.

- Obey all Forest Service Rules regarding Campfires
- Supply your own wood/fuel to burn

First Aid Guidelines:

It is recommended that you have someone who really knows First Aid at your station, preferably one or more EMT's. Provide the best care possible to each runner needing help. Get more information on any condition likely to occur, depending on weather, heat or cold, etc. Be prepared to deal with:

- Heatstroke (daytime glazed eyes, serious goofiness, too high or too low body temp)
- Hypothermia (uncontrolled shivering, frequent stumbling, vague or slurred speech)
  Consider "umbles": fumble, mumble, stumble, bumble, tumble
- Prolonged vomiting (Needs to be a DNF – DNF = Did Not Finish)

- Significant blood loss (Needs to be a DNF – DNF = Did Not Finish)
- Watch for anyone with excessive water (not beverage) consumption (> 32 oz.) which can lead to hyponatremia (deficiency of sodium in the blood)

Designate a First Aid Area

- Have a good First Aid Kit with Thermometer
- Blankets, cots, sleeping bags
- Other supplies as needed (see above)
- Reserve some clean water for the first aid area

Ultrarunning Basics

- Food intake: +200 (but no more than about 450) calories/hour
- Liquid intake: 20 - 32 oz./hour (daytime) 16 - 24 oz./hour (nighttime)
- Electrolytes (varies a lot from runner to runner)
- Caffeine is widely used to promote fat metabolism
- Some runners nap for a few hours; most run all night

Runner Tips

- Runners often experience stomach shutdown (bloating, belching, muscle cramps, low energy) after consuming too many calories too quickly or drinking insufficient water. This condition can be reversed by slowing down and drinking up to 24 oz. of plain water. Ginger chews or ginger ale often helps.
- Many runners experience glutamate depletion (glutamate is a primary neurotransmitter)--foods high in MSG (Ramen noodle broth, etc.) can prevent/reverse this

Aid Station Locations and Approximate Window of Service Time

Aid Station #	Location/Mileage	Window of Service		
		By	Until	Firm Cutoff
1	Logan Peak 10.52	6:30 AM	9:30 AM	
2	Leatham Hollow 19.66	8:30 AM	12:00 PM	
3	Richards Hollow 22.50	9:00 AM	2:00 PM	
4	Cowley Canyon 29.98	11:00 AM	4:00 PM	
5	Right Hand Fork 36.92	12:00 PM	6:00 PM	
6	Temple Fork 45.15	1:00 PM	9:00 PM	
7	Tony Grove 51.84	2:30 PM	12:00 AM	2:00 AM
8	Franklin Basin TH 61.48	4:00 PM	3:00 AM	5:00 AM
9	Logan River 69.54	5:30 PM	6:00 AM	8:00 AM
10	Beaver Lodge 75.82	6:30 PM	10:00 AM	11:00 AM
11	Gibson Basin 81.12	8:00 PM	1:00 PM	2:00 PM
12	Beaver Creek 85.25	9:00 PM	3:00 PM	3:00 PM
13	Ranger Dip 92.20	10:00 PM	4:30 PM	4:30 PM
Note: No Drop Bags at Logan Peak and Gibson Basin				

Bear 100 community involvement and notification

Every year the Bear 100 has hundreds of volunteers, most of them from Cache Valley. It is estimated that it take about 1 volunteer for each runner. These volunteers help mark the trails and remove these markings, help at aid stations along the way, the Bear 100 has 14 aid stations, giving needed support, food, water and first aid. Most of these volunteers hear about the race through friends, work colleagues, and notices placed in the local newspaper. Without these volunteers the Bear 100 would not happen, Thank You.

We have partnered up with the Downtown Alliance and the Cache Valley Travel Council to help advertise the race through their websites, calendars and all other ways that they can. We will have brochures about the valley placed in the race packets along with some discounts to local merchants and restaurants.

Through Facebook pages and other social media outlets we keep in contact with all who care to follow.

The Valley Channel is going to do some promotional spots before the race along with the Herald Journal sport section.

We are proud to have the pre-race meeting at Merlin Olsen Park this year making it easier for the racers and inviting local residents to attend the pre-race meeting.

The Bear 100

The 17th running of the Bear 100, a 100 mile foot race through the Wasatch-Cache National Forest, from Logan, UT to Fish Haven, ID, will be Sept. 25th, and 26th 2015. Runners from all over the world will gather in Cache Valley to run this popular event, which began in 1999. There were 14 finishers out of 17 starters in the inaugural event, and the race has grown since then to become one of the largest in the country. There were 167 finishers last year, which was 8th most in the country, according to Stan Jensens' Run 100's site.

Part of the attraction of the Bear 100 is the stunning beauty of the Wasatch-Cache National Forest with the fall colors in full display. The Bear 100 also ranks in the top 5 of popular 100's in the way of difficulty, and 100 mile runners like the challenge. As if 100 miles isn't enough, add over 42,000 feet of elevation change, and you are put to the test.

The volunteers for the Bear 100 have been the lifeline that makes the race a success. The race couldn't exist without them, and they do an outstanding job of taking care of the runners' needs. So, if you happen to be in the mountains east of Logan this September, and you run across these people, runners or volunteers, don't think they're crazy. Applaud their effort, and do what you can to help. Even if it's just leaving the course markings in place during the race, that would be appreciated, possibly even life saving for the runners. After the race, if you want to help with course marking removal, go ahead. You can contact race management at www.bear100.com for more info.

Medical Director or Medical Race Advisor
Aid Stations First Aid Personnel
Medical Hub of the Race
Search and Rescue Units Alerted and/or Notified
Medical Facilities That Could Be Impacted by Runners or Any Other Emergency
Helicopter Landing Areas

Medical Director or Medical Race Advisor

The Medical Race Advisor will be on duty during the race to field questions and concerns from medical personnel in the field, namely Nurses, EMTs and Paramedics.

Possible Duties or Assignments of Medical Director

- Be 1st line of defense or line of contact for EMT's, Nurses and other First Aid Personnel Assisting with the Bear 100
- Be available during the race via Ham Radio communications with Net Control, Aid Stations, and Race Director
- If possible, be on location in the mountains for a goodly portion of race, traveling with Ham Radio Operator in 4WD vehicle
- Be able to communicate with any Medical Personnel from the race regarding condition of patient(s), including practical and best practices of care depending on conditions and location
- If possible, visit some of the 14 Aid Stations in person, observe conditions and advise personnel
- Other duties the Medical director should feel necessary

Aid Stations First Aid Personnel

All Aid Stations will have varying First Aid Personnel available to help and assist in anything from First Aid to more serious emergencies. The gamete of First Aid Personnel ranges from AHA Certified CPR and First Aid Trained Personnel (Specifically for Endurance Runners), to EMT's, Paramedics and Nurses. Most Aid Station Captains have been at least trained in Basic First Aid for Endurance Athletes, with some of them being EMT's as well.

First Aid Kits will be available at all Aid Stations with supplies to handle most common situations. In many areas, specially designated First Aid Tents will be set up to handle most situations that occur on the race. If any situation deems more attention than the personnel at the Aid Station feels comfortable, then communications to the Medical Race Advisor will occur in a timely manner.

Medical Hub of the Race

The Medical Hub of the Race will be concentrated at Beaver Mountain Ski Area Ski Patrol Lodge. This is the Aid Station located at mile 75.85 of the Race. It is strategic to multiple access points along the race course. Ham Radio Operators are in constant communications with each Aid Station and can receive pertinent information from the Medical Control Officer.

Search and Rescue Units Alerted and/or Notified

The Bear 100 Race Committee and/or Net Control (Franklin County Emergency Operations Center [EOC] notifies Cache County Sheriff's Department (Utah) and the Franklin County Sheriff's Department (Idaho) Search and Rescue Units of the race event in a timely manner so that additional personnel could be on call for on duty as needed.

Any Emergency could originate from any location on the 100 mile run for runners and/crew members assisting runners. Hospitals or other First Responder Groups could be notified by the public if cell phone access is available.

All communications of an emergency nature related to the race would get routed from Aid Station Ham Radio Personnel to Net Control and from Net Control to First Responder Units, Hospitals and other emergency notifications. In the case of an extreme emergency where evacuation of any person was needed via helicopter, Net Control would coordinate all actions of this nature. GPS Coordinates of any Aid Station can be found in a number of documents. Two very important docs that give Aid Station GPS Coordinants are "Bear 100 Aid Station Directions" and the "Radio Communications Guide" pages 3-5. Helicopters will land where they choose for theirs and others safety. Net Control will handle all communications with any First Responder Unit or helicopter.

Medical Facilities That Could Be Impacted by Runners or Any Other Emergency

Any emergency originating from the Bear 100 Endurance Run should be coordinated from original source to closest Aid Station, then to Net Control. Net Control will handle all contacting of any emergency facility needed. The following facilities could be impacted depending on the nature of the emergency.

- Logan - Logan Regional - 500 East 1400 North, Logan., 435 716-1000
- Preston - Franklin County Medical Center - 44 N. 100 E., 208-852-0137
- Garden City Clinic 325 West Logan Road Garden City, 435-946-3660
- Montpelier - Bear Lake Memorial Hospital - 164 S. 5th Street, 208-847-1630

Helicopter Landing Areas

Potential Helicopter Landing Sites would be near where Aid Stations are located. The following are Aid Station GPS Coordinates.

Aid Station 1 Mt Logan (41.728219 -111.799172 @ Mile 10.52)
Aid Station 2 Leatham Hollow (41.643000 -111.706719 @ Mile 19.66)
Aid Station 3 Richards Hollow (41.661857 -111.663979 @ Mile 22.50)
Aid Station 4 Cowley Canyon (41.726685 -111.617048 @ Mile 29.98)
Aid Station 5 Right Hand Fork (41.774911 -111.609929 @ Mile 36.92)
Aid Station 6 Temple Fork (41.835200 -111.592798 @ Mile 45.15)
Aid Station 7 Tony Grove (41.894910 -111.642579 @ Mile 51.84)
Aid Station 8 Franklin Basin (41.933473 -111.570195 @ Mile 61.48)

Aid Station 9 Logan River (41.960564   -111.591511 @ Mile 68.6)
Aid Station 10 Beaver Mountain (41.968073 -111.541259 @ Mile 75.85)
Aid Station 11 Gibson Basin (42.027192 -111.555261 @ Mile 81.18)
Aid Station 12 Beaver Creek (42.021804 -111.529070 @ Mile 85.25)
Aid Station 13 Ranger Dip (42.007279 -111.488889 @ Mile 92.20)
Aid Station 14 Finish (42.038833 -111.375167 @ Mile 99.46)

Bear 100 Radio Communications Bible

Table of Contents

Purpose

Welcome to the Bear 100 Amateur Radio Operators Bible for those providing Communications and Runner Times to each Aid Station, Runner location throughout the course and Coordination of Medical resources in and out of the race course. Amateur radio operators and volunteers provide valuable service in supporting the Bear 100 and its approximately 300 Ultra-Marathon runners. This document contains vital information for those providing support to this event.

Important Dates

Wednesday, August 19, 2015 - Aid Station Volunteers Winlink training. *Required of all support personnel that will be in the field.*

Wednesday, September 9, 2015 - Orientation and training meeting. *Required of all support personnel that will be in the field.* First time volunteers at 6:00 PM and veterans at 7:30 PM. Cache County Sheriff's Office Complex.

Wednesday, September 16, 2015 - Home station training for the volunteers that are putting logs into the Database.

Thursday, September 24, 2015 - Pre-Race Briefing is the Thursday before the race at Merlin Olsen Central Park, Logan, Utah, at 4:00 pm.

Friday, September 25-26, 2015 - Bear 100
Aid Station Operators in positions and set up ready to operate at least one hour before your assigned runners are to arrive to your Station.

Bear 100 Support Overview

As a radio operator for the Bear 100, you will provide an important community service. The objectives are:

1. Help the runners and their support/families have a safe and enjoyable event.
2. Record and transmit runner in and out times from Aid Stations to ensure all runners are accounted for.o
3. Provide event radio communications to and from all aid stations and other designated locations.
4. Become the eyes & ears of the race, assisting event organizers, race officials, and public safety officers.
5. Locate and connect runners with their support crews and families.
6. Call for medical assistance when needed.
7. Test and sharpen communications skills.
8. Have fun!

2015 Bear 100 Support

- **Each Communications Support person must complete and submit a waiver form.**
- Bring plenty of paper, pens and/or pencils with sharpener to log runner and other event information. (note: pens often do not work in cold weather.)
- The Amatuer Radio operators that are assigned to aid stations and finish line must able to have equipment and the skills to to provide Voice Radio Communications, Packet Radio type e-mails (D-Star, Winlink, Computer) to run the Bear 100 logging program for Windows and a power source that can last during the assigned time period for each Station.
- **Start line procedures (Hyrum Gibbons/Mt Logan Park 41.728219 -111.799172)**
  - There is limited parking at the Hyrum Gibbons/Mt Logan Park. Additional parking is located to the West across the street, but NO OVERNIGHT CAMPING is allowed. Check in with net control on the 146.640 (Valley Floor) Repeater.
  - Start Line personnel need to be on site and set up by 5:30am. Check in with Net Control. Introduce yourselves to the Race Director who is usually at the Start Line. The minimum number of Start Line Communications support operators is three: two for checking in runners and one to start the race. Equipment needed: table, radio, lighting, something to write with, pen and/or pencil with sharpener. Radio Start Line will be responsible to print out the start list of runners, assist in checking in runners, and use the recorded data to fill in Google Drive spreadsheet for DNS (did not start). When data has been entered, contact Net Control to

verify their receipt of the data.

- ○
- ○ Locate the designated vehicle where drop bags will be deposited so you can tell runners as they check in.
- ○ Runners start all together at Hyrum Gibbons/Mt Logan Park at 6:00am. VIEW START LINE TIME AND DIRECTIONS HERE.
- ○

- **Aid Station Accessibility**
  - ○ There are some aid stations that are not crew accessible. More on that later. *The pre-race meeting is the Thursday before the race at Merlin Olsen Central Park, Logan, Utah, at 4:00 pm.
  - ○ Also aid station 4 could be accessed by any vehicle if the roads are dry. It is dirt road and a little bumpy, but if they are careful, your crew can make it there. Please don't have them come to all of the aid stations. Pick maybe 3 or 4, and do tell them to drive slowly and carefully. Some places are narrow and steep. We want them to arrive safely. You will be required to be weighed at two of these aid stations.
  - ○ With over 250 runners, parking at some of the aid stations will be limited. Please limit yourself to one crew vehicle, to arrive no earlier than 30 minutes before your runner. This will prevent conflicts with other forest users, reduce traffic, and enhance everyone's experience. This policy applies to the following aid stations: Leatham Hollow, Right Hand Fork, Temple Fork, and Franklin Basin Road. We hope this solution to our parking woes will work well. If the 30-minute limit is not followed, and conflicts occur, we risk losing our special use permit with the Forest Service (worst case). At best we will be required to limit crew access to these

aid station outright or use a shuttle system. So be a good neighbor and take care of the Bear.
- ○ Bear 100 course maps and compressed images for download are located <u>HERE</u>.
- **Aid stations location and cut-offs are as follows: (Actual Cutoff times Starting at Tony Grove)**
  - ○ **Mt Logan (41.728219 -111.799172 @ Mile 10.52):**
    - ■ **4 Wheel Drive only.** Access only for Aid Station members no Support vehicle Allowed. Go to Logan, and then go up Logan Canyon about 9 miles, and turn right at Right Hand Fork. You go about a mile and turn right onto a dirt road that takes you up 4 miles to Cowley Canyon Junction. Then at the intersection make a right turn follow the main road to where The Providence road meets the main road. this is Feed Station 1.
  - ○ **Leatham Hollow (41.643000 -111.706719 @ Mile 19.66):**
    - ■ Go south from Logan (left fork heading out of town) to Hyrum, turn left and go up Blacksmith Fork Canyon. Turn left about 5 miles up the canyon at the Left Fork of the Blacksmith sign. It's about 1 mile on dirt road. Crews may crew here.
  - ○ **Richards Hollow (41.661857 -111.663979 @ Mile 22.50):**
    - ■ Access only for Aid Station members no Support vehicle Allowed. Go south from Logan (left fork heading out of town) to Hyrum, turn left and go up Blacksmith Fork Canyon. Turn left about 5 miles up the canyon at the Left Fork of the Blacksmith sign. It's about 1 mile on dirt road. Crews may crew here. It is another 3 miles up the dirt road to the Richards Hollow station.<u>RUNNER SUPPORT CREWS ARE NOT PERMITTED AT RICHARDS HOLLOW</u>. The road is rough, narrow and dusty. Crew your runner at Leatham.
  - ○ **Cowley Canyon (41.726685 -111.617048 @ Mile 29.98):**
    - ■ Go to Logan, and then go up Logan Canyon about 9 miles, and turn right at Right Hand Fork. You go about a mile and turn right onto a dirt road that takes you up 4 miles to Cowley.
  - ○ **Right Hand Fork (41.774911 -111.609929 @ MIle 36.92):**
    - ■ From Cowley, go back down 4 miles and go right, just past the Girl Scout Camp. It is less than a mile on dirt road to the trailhead and aid station at Right Fork. If you just want to go to Right Fork, go up Logan Canyon about 9 miles, turn right at Right Fork, go left at the fork in about a mile, and it is less than a mile to the station.
  - ○ **Temple Fork (41.835200 -111.592798 @ Mile 45.15):**
    - ■ From Right Hand Fork, go back to the Logan Canyon Highway, and turn right. Go about 5 miles up the Canyon to the Temple Fork road. The station is right there. <u>DO NOT PARK ON HIGHWAY 89 AT TEMPLE FORK.</u> You will be cited by the Highway Patrol. Park either in the lot or along the dirt road that the runners will be descending.
  - ○ **Tony Grove (41.894910 -111.642579 @ Mile 51.84; Cut off time Saturday 7:00 AM):**
    - ■ From Temple Fork, go up the Logan Canyon Highway about 5 miles to the Tony Grove turn (left). It is 7 miles on paved road to the aid station at Tony Grove Lake.
  - ○ **Franklin Basin (41.933473 -111.570195 @ Mile 61.48; Cut off time Saturday 9:00 AM):**
    - ■ From the Tony Grove turn in Logan Canyon, continue up the Canyon about 3 miles to the Franklin Basin road, turn left, go about ¼ mile on dirt road and turn left. It's just past the bridge. It's another ¼ mile to the aid station. Parking at Franklin Basin Road will be staged. Please follow parking monitors' instructions.
  - ○ **Logan River (41.960564 -111.591511 @ Mile 68.6; Cut off time Saturday 11:00 AM):**
    - ■ Because of concerns the Forest Service has raised with impact, and for runners' safety, the Steep Hollow/Logan River aid station will no longer be accessible to crew. Pacers and crew may attend to their runners at Franklin Basin Road aid station or at

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Beaver Mountain aid station. Crews attempting to attend to their runners along the Franklin Basin Road will subject their runner to disqualification. Please help us maintain a safe event that complies with our host's wishes.

- **Beaver Mountain (41.968073 -111.541259 @ Mile 75.85; Saturday 12:30 PM):**
  - From the Franklin Basin road, go back to the Logan Canyon Highway, turn left and go about 3 miles to the Beaver Mountain left turn. It is about 1-½ miles up the paved road to Beaver Mountain. At this point you will enter a large parking lot, with a small lodge at the extreme end. Three flag poles are in front of the lodge. As you look at the lodge, go right, uphill. This is the road to the yurt. The yurt is about 200 yards up the hill. Dim your lights as you proceed to the yurt; you will be driving on the course against the race flow, and don't want to blind the runners.
- **Gibson Basin (42.027192 -111.555261 @ Mile 81.18; Saturday 2:00 PM):**
  - **4 Wheel Drive only.** Access only for Aid Station members no Support vehicle Allowed Go up Logan Canyon Hwy 89 turn to the North at Beaver mountain turn off 243. Take Forest road 011 Beaver Creek road. Once into Idaho this road becomes Forest road 411 follow this main road for several miles. There is a intersection turn left on to Forest road 415 this follows the Creek. Then take the left at forest road 466. follow this road until you reach the GPS coordinates this will be in a flat area.
- **Beaver Creek (42.021804 -111.529070 @ Mile 85.25; Saturday 3:00 PM):**
  - From Beaver Mtn, go back down ½ mile, turn left and head up Beaver Creek road (rough dirt) about 3 or 4 miles to the aid station.
- **Ranger Dip (42.007279 -111.488889 @ Mile 92.20; Saturday 4:30 PM):**
  - From Beaver Creek, go back down to the Logan Canyon Highway, and turn left. It is about 3 miles to the Swan Flat road. Turn left onto this dirt road, and go about 5 miles, take the right fork, and there will be the aid station at the trailhead.
- **Finish (42.038833 -111.375167 @ Mile 99.46; Saturday 6:00 PM):**
  - Go back the way you came from Ranger Dip AS to highway 89. Turn left, over the summit, and down to Bear Lake at Garden City. At Garden City turn left (north) on Highway 89. Cross into Idaho, and in about 3 miles you will reach Fish Haven. On the left you will see a restaurant called Gladys's Place. The finish is 100 yards further on the right (east), next to the lake and in an area with a large yard and bowery.

Aid Station Support:

- Once you arrive at your aid station, find a suitable location for your operation. If you are setting up at one location, it needs to be convenient for runners to check in and out with you. Set-up in an area where you can see the runners coming and leaving the aid station. It's important to identify all runner bib numbers as they leave the aid stations.
- **Once your Aid Station is set up, check in with Net Control on the Net Control frequency (Mt. Logan Repeater System Mt. Logan 146.72/146.12 Mhz Pl 103.5 VHF- 449.265/444.625 Mhz Pl 103.5 UHF or Red Spur 145.31/144.71 Mhz Pl 103.5 VHF).** The tactical call for each Aid Station is the word "Aid" and the station number - for example, "Aid 3" for Richards Hollow. Each runner is required to check in at each Aid Station. You may be asked to transport runners or items to the next Aid Station or a way to move it to the finish line.
- Weather at this time of year is typically cold. It is best to have some type of shade, shelter, and a source of heat. Bring appropriate clothing. Expect rain, snow, or sunshine. It could be all three in the same day. Temperatures at these elevations will be low once the sun goes down.

- Some of the stations require the use of a 4 wheel drive vehicle.
- Runner support vehicles are not allowed at every Aid Station, except to pick up runners dropping from the race. Report runner bib numbers and vehicle identification information for those parking in places that create dangerous situations or block the course. Runners must not be transported along the course by vehicle giving them advantage.
- For Runner safety, if they are out of the race (DNF) and especially for Medical Reasons, they may be transported. (This can be managed by the Aid Station Operators, Aid Station Food/Medical personnel, and Net Control)
- Print out the Bear 100 Aid Station Radio Support Checklist. In that checklist are forms and equipment lists necessary for each Aid Station.
- Using the Bear 100 logging software for Windows the Station operators will keep track of the runner in/out times.
- Using either Winlink or D-Star/D-Rats RF email the .csv file as often as you are able to.Using Winlink
- These e-mails must follow the correct naming Bear 100 File Naming Conventions These will be sent to a common e-mail address that will be accessed by a group of home based volunteers that will be in charge of uploading .csv files to the runner tracking database.
- All Station operators need to get from either the Net Control or the previous Station the up to date DNS/DNF (Did Not Start)/(Did Not Finish) List. With this list and the list of runners in and out times you compile at your station you need to update the DNS/DNF list and pass on any new DNF runners at our aid station to Net Control and the next Station.
- The Station must not be closed until you have reconciled the list and are assured that all runners have been accounted for.
- Each Station will also pass along a list of last 10 runners and the times they left your station so the next station have a idea as to who they are looking for as the last runners.

- **Cut-off Times**
  - All Aid Station personnel are to remain on-site until the last runner has been identified and has left the station. All runners must be accounted for before you or the Aid station personnel are excused.
  - The Cut-off times will be listed by the Race Organizers. See the Bear 100 Assignment spreadsheet for cut-off times. Runners that do not leave an Aid Station before the Aid Station Cut Off must be discouraged from continuing and told that they would not be part of the race and would have to make arrangements for their own support as we would not have the ability to continue to support them.
  - Finish Line - Race end is 6:00 pm Saturday at Fish Haven, Idaho.

- **Finish line and check out**
  - Finish Line will use Tactical call of "Finish Line"
  - Using the Bear 100 logging software for Windows the station operators will keep track of the runners finish times.
  - Using either Winlink or D-Star/D-Rats RF email the .csv file as often as you are able to.Using Winlink
  - These e-mails must follow the correct naming Bear 100 File Naming Conventions
  - Finish line will print out a list of finishers with elapsed time down to the second and turn into the race directors and award plaque makers.

- **Home stations**
  - Home stations will receive the .csv file that is transmitted via Packet Radio to the internet and use the .csv to Database converter.
  - Each home station will will be responsible for the date from a corresponding Aid Station. Files

will be transmitted from the Course Aid Station and then added to the race database. Stations from Tony Grove on will be split into 2 shifts because of the many hours of operation.

- **Net Control**

  Wil jointly with all facets of the Bear 100 Race organization to provide and maintain the communications necessary to help all runners get through the course and to know where each runner is at any specific Aid Station during the race. We also maintain communication with the Aid Station workers in case they have a problem develop with supplies or any other concern.

1. The Franklin County EOC is located in the basement of the Franklin County Courthouse and is dedicated to be able to function as the central location for Communications and essential Personnel that is needed to conduct any event, emergency or non-emergency. This is where the Bear 100 NET CONTROL is located.
2. For the Bear 100 race we set up and man 4 radios for Net Control. communication.
   a. 1- VHF radio tuned to Mt. Logan Amateur Repeater - 146.720.
   b. 1- VHF radio tuned to Sedgwick Peak Amateur Repeater – 146.800, which can be linked to Mt. Logan Amateur Repeater and the Merkley Amateur Repeater located North of Bear Lake.
   c. 1- Dual Band radio (UHF and VHF) that is capable of communicating on all Amateur frequencies and all public service frequencies, (Franklin County Sheriff's Office and S&R, Preston Police, Franklin County Fire Department, Franklin County EMS, Franklin County Medical Center and Life Flight).
   d. 1- VHF radio that is a backup radio.
3. Communication with Cache County Law Enforcement and First Responder groups is done via telephone, e-mail and/or Amateur Radio from Net Control.
4. Communication with Franklin County Law Enforcement and First Responder groups is done via radio, telephone or we can walk about 50 ft. and talk directly to Sheriff's Office Dispatch Center.
5. We have a minimum of two licensed Amateur Radio personnel on duty all the time from 0500 hrs Friday morning of the Bear 100 Race and until all racers are accounted for, which is generally about 1800-1900 hrs Saturday.
   a. 1 Amateur operator mans the primary radio and receives the runner's information as they pass through each Aid Station. This information comes to Net Control from the Amateur Radio communicators at each Aid Station.
   b. 1 Amateur operator operates any of the other radios, is a back-up to the primary operator and coordinates the activity in Net Control.
6. Being the Incident Command of the Radio communication of the Bear 100
   o Add the communicators in the field by helping supply Info:
     ▪ Pass Winlink traffic with DNS / DNF forms
     ▪ Keeping track of last 10 runners at each Station to be able to pass to next station.
     ▪ Making phone calls to emergency contact of runners to help with any info that may need to be passed.
     ▪ Using info obtained by the Database assist add Station in finding last known position of runner and times to help Aid Station Operator in getting Runner Support people in finding when there runner should be arriving at their location.
     ▪ Co-ordinate the Emergency personnel. (Search and Rescue, Forest Service, Sheriffs Dept. Medical or Air Support.) In the Event of a Search or Medical Incident.

- **Race Director** - Shadow
  - Operator will stay with Race Director to provide communications to and from the Race Director. Net control can be reached to make this communication from Parties outside of the Amatuer Radio group and Feed Stations will go through the Directed Net being controlled by Net Control.
- **Search and Rescue**
  - In the event of lost or injured runner there may be a the need to have Cache or Franklin County Search and Rescue respond. Make sure that all options have been exhausted before making the call. The call can be made by using the autopatch and dialing 911. If needed, work thru Net Control to make this request.
- **Documents and Forms.**
- Bear 100 Radio Support Checklist
- 2015 Volunteer Release Form
- Bear 100 Personal Item Checklist
- Bear 100 Runner DNF Form

Frequency List/Maps

- Frequency List

2015 Bear 100 Assignments

View the 2015 Assignments Here

Winlink Setup Instructions

- If you need help setting up your Radio for Winlink, you may contact Brandon Tibbitts, 208-220-6448, Tibbs327@gmail.com or Tyler Griffiths, 435-881-3834, tyler.griffiths@gmail.com

Medical Facilities

- Logan - Logan Regional - 500 East 1400 North, Logan., 435 716-1000
- Preston - Franklin County Medical Center - 44 N. 100 E., 208-852-0137
- Garden City Clinic 325 West Logan Road Garden City, 435-946-3660
- Montpelier - Bear Lake Memorial Hospital - 164 S. 5th Street, 208-847-1630

Finish Line

- Saturday afternoon all Volunteers are welcome to come to the finish line and the race will provide a dinner it finishes at 6:00 PM.

Awards Ceremony

- 6:00 PM - Finish Line, Fish Haven, Idaho. All Volunteers are welcome.

General Support Procedures

Safety First

- Your own safety and the safety of anyone else in the vehicle with you is a priority.
- Always wear your bright orange or yellow ANSI-approved safety vest if on a highway. If you are off highway it is best if you have some sort of ID that you are a licensed amateur radio operator.
- Wear your seat belt, drive safely, and obey all traffic laws.
- Ensure signage is clearly visible, on the canopy that you have setup in. Ask aid station volunteers or others to help ensure that all runners check in and out at your station. Pay particular attention to runners that may drop out at your location.
- The event spans a very long and tiring day. Please share the load taking breaks and take advantage of the double shifts.
- If driving to or from your station and you come across runners, stay at a safe distance until it is safe to pass them.
- In an emergency situation, call 911 with a cell phone if it works. If not, use the Mt. Logan repeater Autopatch. Do not place yourself or others in danger.
- Do not communicate sensitive information (particularly names or details of injured runners) over the radio.
- Injuries and Administering First Aid
    - If you encounter a runner with an injury, notify net control that there is an injury. Give your location and any information you can provide to locate the runner. Advise net control that you will evaluate the accident scene and provide additional information as soon as practical. Or pass on the info if it is information that is being passed on from a 3rd party.
    - Your own safety and the safety of anyone else in the vehicle with you is a priority. Make sure you are parked in a safe place. Evaluate the accident scene and if necessary secure it for safety for you and the patient.
    - Ask the runner if he/she needs medical assistance. Record the runners bib number, the time, location, and any medical assistance provided *or refused*.
    - Do not provide aid beyond your ability. If a runner is not responsive or acting strange due to a head injury, assume they need medical assistance. If a runner has significant bleeding, ask someone to help you get the bleeding stopped. If it is determined that one or more runners needs medical assistance, call 911 on the Autopatch (DTMF 911 on your Radio). Let the dispatcher know:
        - That you are a volunteer with the Bear 100.
        - You are on an amatuer radio.
        - State the emergency and injuries.
        - Give your location.
        - Stay on the line for additional instructions.
    - As soon as practicable, notify Net Control with an update on the accident, even if treatment is not necessary or is refused. If you are in a location that has no cell signal, use the ham radio to communicate the above information as appropriate to net control. If necessary, net control can communicate the accident information to 911. The most common injuries are road rash, sunburn, chafing, dehydration, muscle cramps, heat exhaustion, and hypothermia.
    - The Aid Station volunteers that are with you should have a Medical person on staff.
    - Keep written records of all accidents and medical situations, including times, locations, runner bib numbers, and other relevant details.

Radio Communications Procedures

- Traffic precedence
  - 1. Emergency traffic (e.g., need medical assistance)
  - 2. Safety communications (e.g., locating support vehicle, reporting of support vehicles who are hazards)
  - 3. Race communications (e.g., requesting runner transportation or support, asking race officials for clarification, reporting runners who have dropped out DNF's)
  - 4. Other communications
- Radio Communications Guidelines
  - Each station is assigned a tactical call sign (such as Aid 3, Net Control, Finish Line). Use tactical call signs for all communications. You must use your FCC-assigned call sign at least once every 10-minutes while actively conversing or at the end of a conversation or series of communications. You do not need to identify with your callsign with each transmission, but only every 10 minutes or at the end of a conversation.
  - Check-in/out w/ Net Control once your aid station is set-up and ready to go (e.g., "Net Control this is Aid 3 Richards hollow station operational")
  - Communications via any repeater are facilitated by net control. If you have a message for another vehicle or for an Aid Station, notify net control and he will either relay the message or coordinate you speaking directly to them.
  - Use the Station to Station frequency (147.520 Simplex), if possible, to communicate with nearby Stations. It's best to have dual band dual receive radio or 2 radios for this reason.

Waste Management and Cleanup

Start line: Gibbons Park, Logan Utah Public Restrooms and Porta Potties
Leatham Hollow: Porta Pottie
Richards Hollow: Forest Service Public Restrooms
Cowley Canyon: porta pottie
Right Hand Fork: Forest Service Public Restrooms
Temple Fork: Forest Service Public Restrooms
Toney Grove: Forest Service Public Restrooms
Franklin Basin: Forest Service Public Restrooms and Porta Potties
Logan River: Porta Pottie
Beaver Mountain: Public Restrooms at Beaver Mountain Ski Lodge
Gibson Basin: Porta Pottie
Beaver Creek: Forest Service Public Restrooms
Ranger Dip: Porta Pottie
Finish: Private Restrooms at the Resort (Fish Haven - Private Property)

All Aid Stations clean the area where they are assigned, working to leave the site cleaner than when they first arrived. Trash and other items will be removed in garbage bags and deposited in the proper waste management receptacles.