

**ESCI Field Camp**  
**Grande Ronde River Trip, 30 April - 9 May 2024**  
**ENVIRONMENTAL BRIEFING** (conducted 26 April 2024)

Environmental Hazards

Weather – cold, wet  
-- sun exposure  
Storms – rain, snow  
-- lightning  
-- flash floods  
-- high winds  
Darkness  
River -- cold water  
-- rocks, LWD  
-- fast currents, rapids  
-- holes/water reversals  
-- foot entrapment hazards  
-- drowning  
River banks -- unstable banks  
-- loose sediment  
Cliffs and ridges  
Trees -- falling limbs, “widowmakers”  
-- falling trees, snags  
Tripping hazards, exposed roots  
Wildlife – bears  
-- cougars  
-- elk & deer  
-- RATTLESNAKES  
-- cattle  
-- raccoons  
-- coyotes  
-- mice (& Hanta virus)  
-- TICKS  
Unstable slopes & trails  
Water contaminants – Giardia, GI parasites  
COVID

Human Hazards

Ego  
Poor communication  
Interpersonal conflict  
Unnecessary risk taking  
Navigation errors, getting lost  
Pre-existing (medical) conditions  
Allergies  
Dehydration  
Hypothermia  
Improper gear & improper use of gear  
Poor nutrition  
Improper food storage  
Sleep deprivation & fatigue  
Distraction & lack of focus  
Inadequate (or no) footwear  
Inadequate first aid: care, supplies  
Stoves & fuel bottles  
Hot water  
Knives  
Poor hygiene  
Fecal matter/excrement  
(i.e., contaminated hands as vector for illness)  
COVID & other illness/diseases  
Other people  
Substances; drugs & alcohol  
Campfires -- hot embers  
-- proximity to tents  
Private land owners  
-- armed w/ guns, potentially hostile  
Rafts -- large moving obstacles  
-- improper gear storage  
-- entrapment hazards (ropes, straps)  
-- overturned rafts: entrapment, impacts

(continued)

## Rules to separate environmental and human hazards

Morning and evening check-ins

Minimum group size away from camp = 3 (“away” = beyond vocal distance)

Camp boundary for individual activity = within vocal distance

Sign-out/in form in camp, for all group trips away from camp

Search party if group > 1 hour after return time

Proper food storage -- whenever away from food/camp

-- no food in tents

Hand washing/sanitizing after defecation and before entering river kitchen

All water for drinking or cooking to be filtered or boiled

Carry 1st aid kit during day hikes

Stoves off after use, esp. at night

Routine tick-checks

Follow group norms

Follow WWU policy: no drugs, alcohol

Rafts, on river:

-- wear PFD, whenever on boat not tied to shore

(also wear PFD when scouting rapids, during rescues)

-- properly rig/store gear on rafts (secure rigging and no loose straps, ropes, other hazards)

-- maintain boat order; do not pass lead raft or fall behind sweep raft

-- avoid foot entrapment risk:

DO NOT stand up in river, put feet down in water deeper than knee height

-- no exposed non-locking carabiners

Also consider:

Communicate environmental hazards to rest of group

Be prepared for weather, contingencies during day hikes -- bring 10 essentials, layers, rain gear

-- secure tent, gear before leaving camp

Emergency communication; carry on day trips away from camp -- Sat phone, InReach

Groover: deposit poo and TP only; no other substances (urine, wipes, etc.)

NO GLASS!