

Risk Assessment Worksheet	1. Project/Incident/Work Activity	2. Location
	Pacific Crest National Scenic Trail	Pacific Crest National Scenic Trail
3. Specific Objective	4. Name and Title of Preparer	5. Date
Trail Maintenance	Peter Bonsall - PCT Operations Specialist	04/08/2025

6. Risk Decision Authority: (Authority Signature Block) If block 15 is Moderate, High or Extremely High a higher level of authority needs to sign in this block.
 Signature/Date:

Assess Hazards					Identify Risk Mitigation Measures	Residual Risk				
7. Task	8. Hazard	9. Severity/Consequence	10. Hazard Probability	11. RAC	12. List all mitigation or abatement measures	13. Severity/Consequences	14. Hazard Probability	15. RAC	16. Necessary (Yes/No)	17. Hazard Control Assigned to:
Vehicle travel	Driving conditions and traffic	Critical	Unlikely	Moderate	Wear seat belts; training (defensive driver, etc.); defensive driving techniques; follow traffic laws; vehicle PMCS; Use spotter when backing; Adjust speed limit based on conditions; Stop and rest if fatigued.	Critical	Rare	Moderate	Yes	Every person on project
Communication	Lost contact with individuals or home station	Critical	Unlikely	Moderate	Utilize cell phones, satellite phones or other communication devices. Be aware that cell phones do not work in many areas of travel. Know the location of the nearest working landline and the nearest location for cellphone service. Best practice is to use agency compatible radios. Ensure radio has properly programmed frequencies and have an extra set of batteries before leaving on the trip. Know local repeaters and best locations to use radios during emergency. Know who is available on the radio, as agency staffing may be few or none after regular work hours and on weekends. Carry a map and compass. Identify safe routes and local conditions. Make sure visual contact is kept with others in your group at forks in the trail. Avoid hiking in the dark. Designate meeting spot should someone become separated. Check-in before project and check-out after project with designated tracker, which may be PCTA Regional Representative or federal agency staff.	Critical	Rare	Moderate	Yes	Every person on project
Emergency Response	Incident occurs requiring emergency response	Catastrophic	Unlikely	High	Ensure plans are in place prior to beginning of project. Share Trailhead Communication Plan (TCP) with PCTA Regional Rep, agency staff, and tracker. If Emergency Action Plan (EAP) is activated due to incident, contact PCTA and federal agency staff immediately. First aid kit. Volunteer Injury Instructions. Personal communication device. Map and compass. Matches/fire starter (waterproof container). Water or water purifier. Supply of food for 1-3 days. Flashlight or headlamp (extra batteries and bulb). Lightweight shelter and appropriate clothing for rapidly changing climatic conditions.	Critical	Unlikely	Moderate	Yes	Every person on project
Trail Maintenance	Struck by object; falling objects; snags, overhead hazards, trail hazards	Catastrophic	Unlikely	High	Wear appropriate PPE (appropriate headwear and footwear for the conditions). LCES! (Lookouts, Communication, Escape Routes, Safety Zones) Be aware of your surroundings and watch where you step. Look for overhead dead limbs, overhead dead hung up limbs (widow makers), root sprung trees and snags. Be watchful of loose limbs on trees. Be careful of dead trees. Avoid standing at an unsafe site. Be aware of water crossings, marshes, and altitude changes. When fording streams, use a walking stick and undo hip belt to avoid drowning.	Critical	Unlikely	Moderate	Yes	Every person on project
Trail Maintenance	Slips, trips, and falls	Catastrophic	Unlikely	High	Wear appropriate PPE & footwear; maintain situational awareness of conditions; avoid steep embankments, running down hills, and jumping/stepping over obstacles.	Critical	Unlikely	Moderate	Yes	Every person on project
Trail Maintenance	Dehydration and contaminated water sources	Catastrophic	Unlikely	High	Don't overdo it! Know your limits. Take frequent breaks. Drink plenty of water and fluids. Increase fluids on hotter days or during extremely strenuous activity. Observe team members for signs of dehydration. Review map for water sources, keeping in mind the seasonality of the water source. Use proper water filtration or treatment techniques when drinking from a non-municipal water source.	Critical	Unlikely	Moderate	Yes	Every person on project

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Trail Maintenance	Weather hazards	Catastrophic	Unlikely	High	Know the weather forecasts. Take appropriate gear. You can experience rain, hail, snow, lightning, or extreme heat. Be watchful throughout the day of changing weather. In the event of lightning stay out of the open, off ridge tops and avoid water and solitary trees. If you are unprotected in a lightning storm, with no escape, remove any metal objects from your body and crouch on a piece of non-conductive, insulating material (i.e. a foam sleeping pad, rope, or pack). If lightning is close, do not bunch, spread your group out or separate from your partner.	Critical	Rare	Moderate	Yes	Every person on project
Trail Maintenance	Animal and insect bites/stings	Critical	Unlikely	Moderate	Be observant of snakes which like to live under logs and shady areas. Be bear aware and use appropriate food storage devices. Be aware of potential predators (cougars, bears, dogs) in the area. Use insect repellent. Be aware of potential for hives in brush, rock crevasses, or hollow logs. Clothing should fit tight at the wrists, ankles and waist. Tuck in shirt tails. Search your body, especially hair and clothing, for ticks and insects on a regular basis.	Moderate	Unlikely	Low	Yes	Every person on project
Trail Maintenance	Contact with poisonous vegetation	Critical	Unlikely	Moderate	Know how to identify poisonous plants. Whenever the skin contacts a poisonous plant or noxious weed, wash the area with cold water within 1 to 3 minutes or as soon as possible. While working in the poisonous plant environment, do not use soap and/or hot water because they can remove the natural protective oils from your skin. Upon returning from the field, use rubbing alcohol to cleanse contacted skin.	Moderate	Unlikely	Low	Yes	Every person on project
Trail Maintenance (Tools)	Injury to personnel	Critical	Unlikely	Moderate	Carry tools safely as instructed by crew leader. Carry tools on the downhill side. Carry sharpened edge of tool downward away from your body. Be aware of others around you. Do not carry tools on your shoulder except rock bar, pole saw or crosscut saw. Maintain a safe walking distance between people (10 feet minimum). Always have sheaths on tools and carry them on the downhill side of the trail. The person carrying the crosscut saw, rock bar, or pole saw should walk last. Properly maintain and care for tools. Carry tool with scabbard on. Look around for hazards before swinging tools. Have firm footing and be balanced when swinging. Never throw a tool. When not in use, shield any sharp edges. Limb and peel logs on the opposite side of you. Keep tools sharp. Wear gloves and hard hat. Move large rocks by hand or with a lever or bar versus hitting with a tool. Maintain tight grip on tool handles. Be aware of others working around you. Do not use tools with a loose handle. Avoid working in the dark.	Critical	Rare	Moderate	Yes	Every person on project
Trail Maintenance (Encountering trail users and livestock)	Injury to personnel	Critical	Unlikely	Moderate	Inform crew members when you see trail users on the trail. Work stops until the trail users clear the work area. If a potential hazard exists, crew members can stand watch at safe distances and stop trail users until the hazard is cleared. Ensure trail users have a clear path. Communicate the clear path to trail user. Place tools off the trail in a centralized location. Keep shields on sharp edges when tool is not in use. Inform everyone when stock approaches. Talk to the rider to make contact and receive direction. Work stops until the stock has passed the work site. Stand off the trail on the downhill side. Place tools a safe distance away from the trail. Do not make sudden movements or loud noises. It may be helpful to take your hard hat off until animals pass. Listen and look for approaching stock. Remain calm and back away if animals become unruly.	Critical	Rare	Moderate	Yes	Every person on project

The Risk Assessment Worksheet (RAW) will identify the hazards associated with a project, incident or work activity assessing initial risk, mitigations and post mitigation risk (residual risk).

Block 1	Name of project, incident or work activity
Block 2	Location of project, incident or work activity
Block 3	Specific Objective
Block 4	Name and title of person preparing the Risk Assessment Worksheet
Block 5	Date that the preparer filled out the Risk Assessment Worksheet
Block 6	If block 16 is Moderate, Serious or Critical, Use the Risk Decision Authority matrix to determine the authorization required to sign in block 6. The intent is to brief the Risk Decision Authority on the Control Measures used to reduce risks. Note: if the person preparing the form signs this block, the risk in block 17 must be Minor or Negligible. Asses Hazards: See instructions for blocks 7-11
Block 7	Task: task to be assessed (Driving, tree falling, stream assessment, mop up)
Block 8	Hazards: Identify hazards (low visibility, overhead hazard, swift current, stump holes)
Block 9	Hazard Probability: Probability a hazard will be encountered during task. Select from drop down box.
Block 10	Severity/Consequence: Consequences should an event occur. Select from drop down box.
Block 11	Risk Assessment Code (RAC): When blocks 09 and 10 are populated a Risk Assessment Code (RAC) will be automatically assigned. Identify Risk Mitigation Measures: Identify mitigation and abatement measures in block 12
Block 12	List all mitigation or abatement measures: What mitigation or abatement strategies will eliminate or minimize residual risk (ex. engineering, administrative, PPE, Avoidance, education, etc.) Residual Risk: See instructions for blocks 13-17.
Block 13	Severity/Consequence: Severity/consequence following mitigation or abatement actions. Select from drop down box.
Block 14	Hazard Probability: Probability following mitigation or abatement actions. Select from drop down box.
Block 15	Risk Assessment Code (RAC): When blocks 13 and 14 are populated a RAC in block 15 will be automatically assigned. Fill out the risk questionnaire pop up and this will give you block 16.
Block 16	Necessary: Is the risk necessary following mitigation or abatement actions. Yes/No This will be auto-populated based on the answers provided on the risk questionnaire. If the answer is No, either develop additional or alternate mitigations, modifications, or do not accept
Block 17	Person or operational area assigned the abatement actions. This can be left blank.

Severity/Consequences

Catastrophic	Impact to objective (Imminent and immediate danger of death or permanent disability; major property or facility damage; loss of critical system or equipment).
Critical	Impact to objective (Permanent partial disability, temporary total disability; moderate environmental damage; extensive damage to equipment).
Moderate	Impact to objective (Hospitalized minor injury, reversable illness; minor damage to equipment, property or the environment).
Negligible	Impact to objective (First aid or minor medical treatment; little or no property or environmental damage).

Probability

Almost Certain	Continuously experienced.
Likely	Will occur frequently.
Possible	Will occur several times.
Unlikely	Remotely possible but not probable.
Rare	Improbable; but has occurred in the past.

Definitions

Probability	The likelihood or the chance of an event occurring.
Severity	The magnitude of impacts or consequences stemming from an event.
Consequence	The outcome or effect of an event or incident, usually evaluated with respect to objectives.
Severity /Consequence	Both terms are used interchangeably, both refer to the impact that a hazard could have on the objective.
Hazard	Any real or potential condition that can cause damage, loss, or harm to people, infrastructure, equipment, natural resources, property or objective.
Risk	Risk is "the effect of uncertainty on objectives" typically expressed as an estimate of the probability and severity/consequence of uncertain future events

Risk Assessment Matrix		Probability <i>Likelihood of Mishap if Hazard is Present</i>				
		Almost Certain (Continuously experienced)	Likely (Will occur frequently)	Possible (Will occur several times)	Unlikely (Remotely possible but not probable)	Rare (Improbable; but has occurred in the past)
Severity/Consequences <i>Consequence if Mishap Occurs</i>	Catastrophic (Imminent and immediate danger of death or permanent disability; major property or facility damage; loss of critical system or equipment)	Extremely High	Extremely High	Extremely High	High	Moderate
	Critical (Permanent partial disability, temporary total disability; moderate environmental damage; extensive damage to equipment)	Extremely High	Extremely High	High	Moderate	Moderate
	Moderate (Hospitalized minor injury, reversible illness; minor damage to equipment, property or the environment)	High	High	Moderate	Low	Low
	Negligible (First aid or minor medical treatment; little or no property or environmental damage)	Moderate	Moderate	Low	Low	Low

Severity/Consequences: Both terms are used interchangeably, both refer to the impact that a hazard could have on the objective. Should something go wrong, the results are likely to occur in one of these areas - Injury or Death, equipment damage, project/fire operations degradation, adverse publicity, environmental damage, property damage, etc.

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Moderate	Impact to objective (Hospitalized minor injury, reversible illness; minor damage to equipment, property or the environment).
Negligible	Impact to objective (First aid or minor medical treatment; little or no property or environmental damage).

Probability: The likelihood or the chance of an event occurring.

Almost Certain	Continuously experienced.
Likely	Will occur frequently.
Possible	Will occur several times.
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