

Identify Hazards		Assess Hazards			Risk Control Options	Residual Risk			Decision	Implement
7. Task	8. Hazard	9. Hazard Probability	10. Severity / Consequence	11. RAC	12. Identify hazard mitigations & abatement measures (press [alt + enter] to add a line)	13. Hazard Probability	14. Severity / Consequence	15. RAC	16. Task Necessary?	17. Hazard Control Assigned to:
Travel to the worksite on FS Trails	Trips, Slips and Falls	Possible	Moderate	Moderate	Wear proper footwear, long pants, gloves and long sleeve shirts. Carry tools on the down hillside of the trail with the cutting edge pointing down. Never carry over the shoulder. Use extra caution and pay attention to your footing.	Likely	Negligible	Moderate	YES	Supervisor
Travel to the worksite on FS Trails	Fatigue	Possible	Moderate	Moderate	Ensure that you are in appropriate physical condition to perform the required tasks in the location you are working. Consult with your doctor if you have a preexisting health condition that may limit your activities.	Almost Certain	Negligible	Moderate	YES	Supervisor
Use of hand digging tools during trail maintenance and construction activities.	Cuts Sprains and Strains Falls Impact Injuries Flying Debris Splinters	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>• Ensure the area is clear of overhead and upslope hazards prior starting work.</li> <li>• Ensure that crew members are never working above one another paying close attention to switchback trail areas.</li> <li>• Sheath or tape cutting tools when not in use.</li> <li>• Maintain a 10' space between individual workers swinging tools.</li> <li>• Ensure adequate overhead clearance when preparing to use swinging / cutting tools.</li> <li>• Keep tools sharp. Sharp tools require less force (strain) and are less likely to glance off of work surfaces.</li> <li>• Keep tool handles in good condition (immediately flag and remove from service tools with loose heads, and cracked or splintered hands).</li> <li>• With swinging tools always position your body such that glancing blows will not come in contact with your feet, or legs.</li> <li>• With swinging tools use the weight of the tool to accomplish the work not just applied force.</li> <li>• Always wear sturdy leather boots, hard hat, eye protection, long sleeve shirts and gloves when using hand tools.</li> </ul>	Unlikely	Moderate	Low	YES	Individual

# Risk Assessment Worksheet

1. Project/Incident/Work Activity: CFI Volunteer Trailwork Operations  
 2. Location: Dolores Ranger District San Juan NF  
 3. Specific Objective: Mitigate the risks associated with trail maintenance.  
 4. Name and Title of Preparer: Chris Bouton, Dolores RD Trails Manager  
 5. Date Prepared: Monday, June 15, 2020

6. Risk Decision Authority: The risk decision authority block should be signed after the worksheet is completed. Use the Risk Decision Authority matrix to determine the authorization required to sign in block 6.  
 Signature: \_\_\_\_\_ Title: District Ranger Date: 03/23/2022

Rock Work	Impact injuries to hands and Feet Sprains and Strains from lifting Impact injuries from falling or shifting rock	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>•When harvesting rock ensure that the area below is clear of people. Post lookouts on the trail if necessary to ensure the safety of the public.</li> <li>•Only handle rocks that you can comfortably manage. Get help for larger rocks. Never handle rocks that are at or near the limit of what you can lift.</li> <li>•Always "test lift" (slightly move) a load to judge its weight before actually lifting</li> <li>•Stand close to the object with feet in a stable position and lift with your legs by straightening the legs.</li> <li>•Never twist the upper body while lifting!!!</li> <li>•Get help for heavy loads.</li> <li>•When placing rock never mix hands and tools. ie. Never hold up a rock with a pick or pry bar while manipulating the rock or something near it with your hands.</li> <li>•Evaluate the project and determine if using a mechanical advantage system would be a safer way to complete the work. (Cabling and Rigging is covered under a separate RMA)</li> <li>•Always wear sturdy leather boots, hard hat, eye protection, long sleeve shirts and gloves when using hand tools.</li> </ul>	Possible	Moderate	Moderate	YES	Supervisor
Power tool use (drills, skill saws, and Saws-alls)	Cuts Puncture injuries	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>•Always wear sturdy leather boots, hard hat, eye protection, long sleeve shirts and gloves when using power hand tools.</li> <li>•Ask for further training if unfamiliar with the tools use.</li> <li>•Always use sharp drill bits and saw blades. Discard damaged blades and bits to ensure that they will no longer be used</li> <li>•Always position hands away from the cutting or drilling area. Use clamps to stabilize work pieces.</li> </ul>	Unlikely	Negligible	Low	YES	Individual
Chainsaw Use	Cuts, and blunt force injury	Possible	Critical	High	* All Chainsaw users must be currently certified and operate within their training per FSH 6709.11	Possible	Critical	High	YES	Line Officer
Spot / InReach Device, or other backcountry communications and check in / Check out.	Failure to Check in or out. Failure to communicate in an emergency.	Possible	Critical	High	<ul style="list-style-type: none"> <li>•Learn and follow the groups check in / out policy and share that plan with your FS representative. •Understand the uses and limitations of the devices you use.</li> <li>•Ensure the device is properly set up with current contact information</li> <li>•Understand the differences between the communication options and under what circumstances each should be used.</li> <li>•Avoid working alone while performing volunteer trail maintenance.</li> </ul>	Unlikely	Moderate	Low	YES	Individual
Field Operations	Dehydration	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>•Drink frequently throughout the day, consuming at least one gallon per day.</li> <li>•Maintain blood sugar and electrolyte balances.</li> <li>•Drink as much as possible at meals. Drink to replace fluids throughout the evening.</li> <li>•Carry enough water to meet hydration needs between reliable water sources. Never run out.</li> <li>•Avoid beverages with caffeine and alcohol. Drink only water, a sports drink, or diluted fruit juice.</li> </ul>	Unlikely	Moderate	Low	YES	Individual

Field Operations	Disorientation	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>• Carry and know how to use maps and orienteering equipment.</li> <li>• Monitor travel on a map, and note landmarks along the way.</li> <li>• Carry a basic survival kit and enough equipment to survive.</li> <li>• If lost, maintain position, call for assistance, and make camp. Don't panic, just wait patiently.</li> </ul>	Unlikely	Negligible	Low	YES	Individual
Field Operations	Lightning Strikes	Possible	Catastrophic	Extremely High	<ul style="list-style-type: none"> <li>• Do not use radios or other electrical devices during an electrical storm.</li> <li>• Take cover, but avoid the tallest objects.</li> <li>• Stand down for 30min after the sound of the last lightning strike that was heard with 30 sec of its associated flash.</li> <li>• Avoid ridge lines, hill tops, open spaces, rock outcrops, and other likely lightning targets.</li> <li>• Discard metal tools, backpacks with metal frames, and electrical devices during an electrical storm.</li> <li>• Be familiar with the weather forecast before heading out to perform work and take that information into consideration when making route decisions.</li> </ul>	Rare	Catastrophic	Moderate	YES	Supervisor
Field Operations	Altitude Sickness	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>• Be familiar with the symptoms of altitude sickness. If experiencing symptoms, descend immediately.</li> <li>• During acclimation, take frequent breaks, don't over exert, eat carbohydrates, and drink lots of water.</li> </ul>	Rare	Moderate	Low	YES	Individual
Field Operations	Hypothermia Hyperthermia	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>• Dress properly for altitude, weather, and climate of work area. Be prepared for worst-case weather.</li> <li>• Pack wet weather outerwear (waterproof). Stay dry.</li> <li>• Avoid cotton fabrics in cool, wet conditions. Instead, wear synthetics or wool.</li> <li>• Layer clothing to maintain a comfortable body temperature. Avoid getting too hot or cold.</li> <li>• Stay fit, drink lots of water, eat high-energy foods, get adequate rest, and take time to acclimate.</li> <li>• Always keep head and neck protected from the sun and cold.</li> <li>• Learn how heat and cold affect the body and how to regulate body temperature.</li> <li>• Be familiar with proper first aid techniques appropriate to hypothermia and hyperthermia.</li> <li>• In dangerous cases of hypothermia or hyperthermia, when safe, seek medical attention immediately.</li> </ul>	Unlikely	Moderate	Low	YES	Individual
Field Operations	Fatigue	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>• Take breaks, as needed, and get plenty of sleep at night. Avoid over exertion. Stick to the schedule.</li> <li>• Eat and drink well, particularly at high altitude.</li> <li>• Regulate body temperature. Avoid high heat and extreme cold.</li> <li>• Use extra care at the end of the day, when fatigue is most likely and trail accidents are most common.</li> </ul>	Likely	Negligible	Moderate	YES	Supervisor

Field Operations	Bee Stings Hornet Stings Wasp Stings	Possible	Moderate	Moderate	<ul style="list-style-type: none"> <li>•Be alert to hives in brush or hollow logs. Watch for swarms of lines of bees traveling one direction.</li> <li>•Inform supervisor of bee allergies and carry emergency medication at all times.</li> <li>•Avoid heavy or perfumed scents.</li> <li>•If attacked, shield the face and quickly leave the area.</li> <li>•Wear light-colored, long shirts and pants. Avoid wearing bright colors and metal objects.</li> <li>•Be familiar with proper first aid techniques appropriate to bee stings, including the use of Epi-pens.</li> <li>•If stung and having an allergic reaction, administer first aid and seek medical attention immediately.</li> </ul>	Rare	Moderate	Low	YES	Individual
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