

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Eagle Scout Revegetation Project	2. LOCATION Tonto NF	3. UNIT Mesa RD
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	4. NAME OF ANALYST Daniel Bray revised by Matt Quinn	5. JOB TITLE Recreation Staff Assistant, Volunteer Coordinator	6. DATE PREPARED Revised 11/21/2019
<p>7. TASKS/PROCEDURES</p> <p>Vehicle Operation</p>	<p>8. HAZARDS</p> <ul style="list-style-type: none"> Fatigue, narrow, rough roads, poor visibility, mechanical failure, vehicle accidents, weather, animals on the road, vehicle parking accidents 	<p>9. ABATEMENT ACTIONS</p> <p>Engineering Controls * Substitution * Administrative Controls * PPE</p> <ul style="list-style-type: none"> Drive defensively at all times and know your limits. Always wear seatbelts and turn lights on. Obey speed limits and go slow around corners. Anticipate careless actions by other drivers. Use spotter when backing up. Stay clear of gullies and trenches, drive slowly over rocks Park well off roadways with a 300' sight distance in both directions. Set parking break and turn wheels into the curb or ditch. If working on roadway, always face oncoming traffic and wear bright safety vests. Keep vehicles maintained. Keep windows and windshield clean. Carry and use chock blocks, use parking break, and do not leave vehicle while it's running. Inform someone of your destination and estimated time of return, call in if plans change. Ensure that you have reliable communication. Carry extra food, water, and clothing. Stop and rest if fatigued. 	
<p>Backcountry Travel</p>	<p>Weather</p> <ul style="list-style-type: none"> Heat stress, exhaustion, or stroke, fatigue, dehydration, sun exposure Cold conditions, hypothermia, frostbite Contaminated water 	<ul style="list-style-type: none"> Be familiar with weather forecasts Take appropriate gear, you can experience rain, hail, snow, lightning, extreme heat, or flooding Be watchful throughout the day for changing weather <ul style="list-style-type: none"> Wear a non-reflective, well-ventilated, large brim hat. Use ample amounts of sunscreen on skin that is uncovered. Drink plenty of water, stay hydrated (8 oz for every 10 lbs. of body weight). Start early in the AM during cooler temperatures. Wear cool, protective clothing that provides UVA/UVB protection, including long sleeve shirt, long pants, full brimmed hat/helmet, and sunglasses. Rest regularly. Stretch all muscles at least once a day and spend extra effort on stretching sore or tight muscles. Prevent cramps by hydrating and consuming potassium (either by tablets or eating bananas). Don't forget to eat! Maintain blood sugar and electrolyte balance by eating regularly. Observe team members for signs of dehydration. Wear layers to protect from the cold. Wicking layers closer to body, insulating layers in the middle, weather proof clothing on the outside. Avoid cotton and stay dry. Use earmuffs, beanies, gloves, and thick socks. Maintain your energy level. Avoid exhaustion and over-exertion which causes sweating, dampens clothing, and accelerates loss of body heat and increases the potential of hypothermia. Maintain adequate fluid intake to avoid dehydration. 	

Foot Damage	<ul style="list-style-type: none"> • Wear appropriate hiking boots and socks, taking into account the terrain, work, and weather. Hiking boots should be properly fitted and worn in. Wool or other moisture wicking socks should be worn and liners are recommended. • If rubbing occurs or a warm spot is forming, let the crew know, stop, and take care of it. • Use athletic tape or moleskin to cover and pad raw areas. • If blister forms, it is best to keep intact and protect with moleskin. If continued rubbing will rupture blister, use a sterile needle to drain, apply antiseptic or antibiotic ointment, and cover. If blister tears, remove excess skin, clean thoroughly and regularly, apply ointment, and cover.
Getting lost	<ul style="list-style-type: none"> • Identify safe routes and local conditions • Hike in a group. Always know the whereabouts of fellow crewmembers. Have a system in place to keep track of everyone. • If one has to depart from the trail, advise the crew. • Make sure visual contact is kept at forks in the trail. • Avoid hiking in the dark. • Designate meeting spot should someone become separated. • Know where the destination is. • Carry a basic survival kit and enough equipment to survive. • If lost, maintain position, call for assistance, and make camp. Don't panic, just wait patiently.
Heavy Brush	<ul style="list-style-type: none"> • Wear protective clothing such as long sleeve shirt, long pants, work gloves, and protective eyewear. • Watch for others when discarding brush. Throw brush out of sight from the trail. • Lift knees high to clear obstacles.
Animals	<ul style="list-style-type: none"> • Be alert for wild animals such as mountain lions or bears; avoid females with young, males in rut, or animals that appear to be acting out of character. • Make your existence known; do not surprise or confront animals, especially those identified above. • Should you see a bear or mountain lion, slowly back away, do not run. • If you are attacked by a bear or mountain lion, do not run; stand and face the animal, do not crouch or bend over, appear larger by raising arms or opening jacket, fight back during an attack. • Be observant of snakes, especially in shady areas, under logs, and in tall vegetation.
Insects	<ul style="list-style-type: none"> • Recreation season is bee season, watch out for bee hives; flag site to warn others of its location; carry sting kit if you are susceptible to reactions • Identify crew members that are allergic and review steps to be taken if allergic reaction occurs • Always look before reaching into dark or blind areas • Clothing should fit tight in the wrists, ankles and waist; tuck in shirt tails. • Use insect repellent. • Search your body, especially hair and clothing, for ticks and insects on a regular basis. • Bathe and/or change clothes after each work day.
Carrying Tools	<ul style="list-style-type: none"> • Carry sharpened edge of tool downward away from your body. • Carry tools on the downhill side. • Be aware of others around you. • Do not carry sharp tools on your shoulder, except for a rock bar, crosscut, or pole saw. • Maintain safe walking distance between people (10 ft minimum). • The person carrying the crosscut saw, rock bar, or pole saw should walk last.

Working on the Trail

<p>Working with Tools</p>	<ul style="list-style-type: none"> • Stay alert and follow directions. If you don't understand, ask questions. • Use tools only for their designated purpose. For example, do not use a screwdriver as a pry bar or chisel, or a wrench as a hammer. Never throw a tool. • Properly maintain and care for tools. Inspect before use for signs of wear or breakage. • Keep cutting tools sharp. Check signs of mushroomed heads on chisels or hammers. Keep tools clean. • Wear eye protection when using chisels, hammers, saws, or any tool that can cause flying debris or dust. • Wear gloves when needed, such as when using shovels or cutting instruments. • Be aware of the surrounding environment and others working around you. Maintain 10 feet minimum between crew members. Check for falling rocks or trees nearby. • Have firm footing and be balanced when swinging tools. • Maintain tight grip on tool handle. • Clean area when completed with job. Shield any sharp edges when not in use. • Avoid working in the dark. • If unsafe practices are witnessed, speak up. Talk to the individual or inform the crew leader.
<p>Hikers</p>	<ul style="list-style-type: none"> • Inform other crew members when you see hikers on the trail. Work stops until the hikers clear the work area. • If a potential hazard exists, crew member can stand watch at safe distances and stop hikers until the hazard is cleared. • Ensure hikers have a clear path. • Place tools off the trail in a centralized location. • Keep shields on sharp edges when tool is not in use. • Communicate a clear path to the hikers.
<p>Hand and Foot Damage</p>	<ul style="list-style-type: none"> • Communicate when moving large or heavy objects. • Do not roll anything heavy when people are downhill. • Anticipate the roll or any loose object. • Watch for limbs and stubs on rolling trees
<p>Back Injury</p>	<ul style="list-style-type: none"> • Use proper lifting techniques; lift with the legs, hold objects as close to your body as practical, lift slowly and smoothly, do not jerk, keep your body straight, do not twist while lifting. • Do not attempt to lift objects that could be too heavy to be moved safely. Ask for assistance. • Use pry bar when practical. • Stretch periodically and stay hydrated.
<p>Fatigue</p>	<ul style="list-style-type: none"> • Take breaks, as needed, and get plenty of sleep at night. Avoid over exertion. Stick to the schedule. • Eat and drink well, particularly at high altitude. Maintain high level of physical fitness. • Regulate body temperature. Avoid high heat and extreme cold. • Use extra care at the end of the day, when fatigue is most likely and trail accidents are most common.

<p>Belligerent or dangerous people, assault or conflict, random acts of violence</p>	<ul style="list-style-type: none"> • Be nice to everyone, even those that are breaking the rules. • Refer those who have questions with Forest Service policy to your supervisor or the District Ranger. • When in doubt, get out! Quickly and quietly leave the area and seek help if a dangerous situation is suspected. • Watch for suspicious behaviors. If such behavior is noticed, leave the area. Don't take chances. • Always inform someone of work plans. Check in with a designated office daily, particularly if working alone. • Know how to get help quickly. 	<ul style="list-style-type: none"> • The Salt River Horses frequent developed recreation sites. A horses' first instinct is to run from danger, so be sure to stay out of their way. While horses are not by nature aggressive, they will charge or kick if they feel threatened. • Non-tame horses are territorial and can be aggressive towards other horses. Don't get caught between animals. • Maintain a safe (50 ft) distance from horses. • Drive slowly around the recreation site to avoid a collision. 	<ul style="list-style-type: none"> • The appropriate Personal Protective Equipment (PPE) for general trails and wilderness work includes long-sleeved shirts, long pants, and leather hiking boots with firm, flexible support, and non-skid or slip-resistant soles and heels when traveling off-trail. All of the above plus a hardhat, leather gloves, and eye protection are required when performing a trail work or other site maintenance work with tools. • The following PPE is required for backcountry travel: first aid kit, map and compass, matches or fire starter in weatherproof container, water or water purifier, extra food, flashlight with extra batteries/bulb, emergency communication device, eye protection and sunscreen, lightweight shelter and appropriate clothing for climactic conditions. Recommended PPE includes a GPS receiver, multi-purpose belt tool, whistle, and signal mirror.
<p>Horse Encounters</p>	<p>Personal injury, animal injury</p>	<p>Personal Protective Equipment</p>	<p>Emergency Response Plan</p>
<p>10. LINE OFFICER SIGNATURE</p> 	<p>11. TITLE</p> <p>District Ranger</p>	<p>12. DATE</p> <p>11/25/2019</p>	<p>15. DATE</p>
<p>13. LINE OFFICER SIGNATURE</p>	<p>14. TITLE</p>	<p>16. LINE OFFICER SIGNATURE</p>	<p>17. TITLE</p>
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Previous edition is obsolete (over)

