U.S. Department of Agriculture Forest Service		1. WORK	PROJECT/ACTIVITY	2. LOCATION	3. UNIT
		Recreation Site Maintenance		Chattahoochee-Oconee NF	Blue Ridge District Chattooga District
				National Forests in North Carolina	Tusquittee District
JOB HAZARD ANALYSIS (JHA)		4. NAME OF ANALYST		5. JOB TITLE	6. DATE REVIEWED
References-FSH 6709.11 and -12					
(Instructions on Reve	(Instructions on Reverse)		a Ramey	District Recreation Manager	01/21/2020
7. TASKS/PROCEDURES	8. HAZARDS			9. ABATEMENT ACTIONS	
			Enginee	ering Controls * Substitution * Administration	ve Controls * PPE
A. Vehicles and Vehicle Travel		1. Sign out when leaving time of return. Radio a 2. Keep passenger area o 3. Inspect vehicle before schedule. 4. Wear seatbelts and sh 5. Defensive driving cour on a daily basis. 6. Be aware that driving o 7. If road conditions creatravel. Use radio, but o 8. Do not park vehicle wh 9. Use parking brake and 10. Check before backing, backing out of spaces, your danger when turn 11. A flashlight with extrause. 12. Follow empty trucks in 13. Watch for dust to indicate a logging truck o 14. Turn on headlights for 15. Be sure that windows 16. The driver is responsible.		ing station. Identify all personnel in vehicle, destination, vehicle used and estimated io ahead if you will be late returning to the station.  It is of vehicle clear of loose objects, and secure items in the bed when practical. One leaving the station. Utilize the Circle of Safety. Complete monthly PM Checks on a shoulder harnesses at all times when vehicle is in motion.  It is shoulder harnesses at all times when vehicle is in motion.  It is conditions can change abruptly and adjust driving techniques accordingly. It is reate an unacceptable hazard, delay travel or change mode of transportation and/or aut do not depend on it to keep you safe.  If where traffic, hazard trees or logging operations could damage it.  In did chock blocks when parking on inclines.  In g., choose a clear area, and use a backing guide (spotter) when possible. Avoid es, if at all possible use pull through, or back in with spotter whenever possible. Face turning around.  It is batteries and emergency triangles should be kept in the vehicle for emergency was in and loaded trucks out on high traffic roads when possible.  Indicate approaching traffic and drive to the far right of the road. Drive as to expect to keep the safe operation and maintenance of the vehicle.  It is required to drive the speed limit which may be below the flow of traffic on narrow	
B. Operation of UTVs	a. Personal in	jury or	i	pop cans can attract bees. Keep vehicle cleans safe operating procedures. Personal Protect	
	death	j j Oʻ	or SMF approved Motoro sleeved shirt.	cycle helmet, safety goggles, gloves, lace-up	n/non-skid boots, long pants, long
				as ATV/UTV operators will have successfully	•
			* *	on class (performance test) active rider train	_
				ve UTV and Trailer Towing qualification note	ed on the U.S. Government Motor
			Vehicle Operator's Ident		
			4. A review of safe ATV ope	rating procedures will be conducted prior to	o projects requiring the use of

C. Operation of Utility Vehicle (4 & 6 Wheel) – (Kaw. Mule, Gator, etc)  D. Loading/Unloading, Trailer Towing, & Transporting Utility Vehicles  E. Preparations for Use of UTV.	a. Personal injury or death b. damage to ATV c. damage to the truck d. damage to the trailer a. personal injury or death b. damage to equipment	ATVs/UTVs, including the appropriate JHA, FSM, owner's manuals, warnings and other industry and manufacturer's publications. Operators re-certify (3 yr. interval), and update (OF-346) by Qualified Examiner.  1. Adhere to standard and safe operating procedure including: Utility Vehicles equipped with Rollover Protection System (ROPS) and wear Seat Belts (OEM) manufacturer installed. Operators required to wear ANSI approved motorcycle helmet with chin strap secured, eye protection, gloves, lace up/non-skid boots.  1. All UTVs will be transported via trailer. When transporting, UTVs shall be in gear, parking brake set and secured in place with four weight-appropriate tie-downs. Trailer towing must have safety chains and properly working lights. Do not exceed trailer GVWR rating. Follow manufacturer guidelines when towing trailer.  2. Adhere to FSM 7130 and Driver-Operator Guide (EM-7130-2- Trailer Towing)  1. A pre-ride inspection shall be performed checking tires and wheels, controls and cables, lights and electrics (ignition switch, engine stop switch), oil and fuel, drive shaft, chain, and chassis.  2. Doing warm up exercises will help prevent muscle strain and injury.
	c. damage to the environment.	3. When refueling, allow machine to cool, avoid spills, refer to SDS.
F. Power Tool Use (Chainsaw; winch, augerbrush saw)		<ol> <li>Power tools will only be used by trained personnel over the age of eighteen.</li> <li>All potential sawyers are required to attend a saw-training course before operating and are only allowed to saw to their individual rating qualifications.</li> <li>The crew working with a power-tool operator must never approach unannounced. Make sure they see you and motion you over. Always approach from above on inclines. Keep at least two tree lengths between you and a feller. Keep a safe distance from an operating brush saw as it can throw material nearly 25 feet.</li> <li>Protective equipment must be worn at all times when operating a power tool. This includes hardhat, goggles and/or face shield, hearing protection, chaps, 8" high boots, a long-sleeve shirt, and gloves.</li> <li>Operators must be aware of the presence and location of other personnel and must yell out when a tree is coming down. Guards must be posted when necessary. The public within campgrounds must be made aware of any falling activities. Out of courtesy, do not start power tools within the campgrounds too early in the morning if campers are present.</li> <li>Sawyers must work with a spotter/assistant. No one is allowed to saw alone.</li> <li>All potential sawyers should be checked out by the supervisor prior to power tool use.</li> <li>If using a chainsaw winch, be sure to position self in a safe location.</li> <li>A chainsaw auger exerts strong torque. A loose grip on the trigger should be used to slow the speed and prevent injury.</li> </ol>
G. Hand Tool Use (Pulaski, Sanvic, Crosscut and other saws)		<ol> <li>Always carry tools on the downhill side when walking.</li> <li>Keep proper spacing, 10 feet minimum, between yourself and a co-worker when either is using a hand tool.</li> <li>Keep tools sharp to help prevent bounce-backs. Keep handles free of cracks and flaws, and make sure that tool-heads are secure on the handle.</li> <li>Do not swing tools toward your body. Be especially aware of ankle position when using a Pulaski.</li> </ol>

	<ol> <li>Maintain proper grip on tools. Handles can become extremely slippery in cold or wet weather.</li> <li>Wear eye protection, especially when using a Pulaski on rocky terrain. A hardhat and gloves are to be worn at all times.</li> <li>Keep proper body positioning when using crosscut saws. Do not stand below a tree on steep inclines. Use wedges to prevent saw from becoming pinched.</li> <li>Keep cover on crosscut when not in use. Saw teeth are extremely sharp.</li> </ol>
H. Foot Travel	<ol> <li>Wear 8" high (minimum) boots with non-skid soles.</li> <li>Be alert to all ground conditions such as the terrain, moss covered rocks and blowdown, decayed logs, staubs, stumps, and roots in the trail way.</li> <li>Many of the trails on the district are intersected by creeks. Select a crossing with extreme caution as wet rocks are extremely slick and often unstable, and logs used to crossare often very slick with peeling bark.</li> <li>Select each stepping spot carefully and do not shift body weight until you are sure that the spot is solid.</li> <li>Plan your route, if off the trail, to avoid any hazardous areas.</li> <li>Wear a long-sleeve shirt to prevent cuts and scrapes. A hardhat is to be worn at all times when in the woods.</li> <li>A large percentage of the work season is during the prime tick months. Try to avoid bright colors, use tick repellent, and check head and body daily.</li> <li>Keep spacing between you and co-worker to prevent being hit by a bent branch or limb.</li> </ol>
I. Lifting	<ol> <li>Use proper lifting technique: lift with the legs; hold objects as close to your body as; lift slowly and smoothly - do not jerk; keep body straight - do not twist while lifting; ask for assistance or do not attempt to lift objects that could be too heavy to be moved safely. Use a pry bar when practical.</li> <li>Wood material should be cut small enough to decrease its weight to an acceptable level.</li> </ol>
J. Rock Work	<ol> <li>Use proper lifting technique. See I.</li> <li>Do not remove rocks that could cause those above to become dislodged and come down. Hands /or body could suffer serious injury in such instances.</li> <li>Watch footing on talas slopes. Tripping or twisted ankles could occur.</li> </ol>
K. Animal Interaction	<ol> <li>Be alert for wild animals; especially bear and deer. Avoid females with young, males in the rut, or animals that appear to be acting out of character.</li> <li>Make your existence known. Do not surprise or confront animals, especially those identified above.</li> <li>If you are attacked, try to lie face down on the ground or curl up with hands clasped behind your neck. Play dead. Do not struggle or cry out. Do not attempt to fight, wrestle, or even physically restrain the animal.</li> <li>Should you see a bear, slowly walk away - do not run.</li> <li>Approach dogs at camps, trailheads, or on trails with extreme caution. If they are off leash remind the pets handler that Forest Service regulation requires all pets to be on a 6 ft leash (maximum) at all times in a developed recreation campground, trailhead, or developed trail. If necessary, require animals that are aggressive to be removed from the campground area or trail.</li> <li>Recreation work can expose you to bees and yellowjackets. Watch out for their nests. Flag site to warn others of its location. Carry sting swabs to ease the pain if stung, and a sting kit if you are susceptible to reactions.</li> </ol>

	7. Reduce speed when dark or dusk. Watch for deer and other animals on roadways.
L. Hunting Season	<ol> <li>Hunter orange safety vests will be worn during big game season to increase visibility.</li> <li>Trails with a high concentration of hunters should be avoided during hunting season. Trail work for these trails if known, should be scheduled prior to or after the main hunting seasons to avoid the hazard. If vehicles are present at the trailhead, select another pre-planned trail, if practical.</li> </ol>
M. Environmental Hazards Hypothermia:	<ol> <li>Be aware of potential for hypothermia which usually occurs on a cold, wet, windy day with temperatures at or above freezing. Utilize a rain jacket, if one is at your disposal, to hold in heat and to block the wind.</li> <li>Always anticipate bad weather, dress accordingly, carry warmer clothes, and carry protective gear.</li> <li>Pack extra food items of high calories to supplement between meals.</li> <li>Know the signs: drowsiness, shivers, disorientation, slowness.</li> <li>Carry a radio with you at all times and maintain contact with someone in your vicinity. Be to have extra batteries.</li> </ol>
Hot weather:	<ol> <li>Carry plenty of clean, pure water.</li> <li>Set a moderate pace and gradually slow down as temperatures increase. Schedule the hardest work during the cooler morning hours.</li> <li>Crew members may want to eat less. High protein and other foods increase metabolic heat production and water loss.</li> <li>As the temperature increases, give crew members needed rest periods to help prevent heat exhaustion. Rest in the shade when possible, and limit or avoid soft drink intake.</li> <li>Have table salt readily available.</li> <li>Avoid prolonged periods in the sun, and liberally use sunscreen.</li> </ol>
Snags:	<ol> <li>Use extreme caution when working in and around campgrounds because of snags.</li> <li>If snags are located in or around campgrounds flag the area to warn others and notify a sawyer to fell them as soon as safety permits.</li> <li>Always use required PPE when conducting felling operations. (See F-4 above)</li> </ol>
N. Allergies	<ol> <li>Advise supervisor, at a minimum, of any allergy problems. Preferably, all members of the crew should know about any such problems.</li> <li>Carry any necessary medication or kits for prevention or minimization of reactions.</li> </ol>
O. Stream Water	<ol> <li>Avoid drinking stream water if at all possible. Slow-moving water can contain bacteria that will cause uncomfortable stomach problems. If necessary, be sure a swift water flow can be seen for a long distance.</li> <li>Use a water-filtration system if one is available and it is necessary to drink from a natural water source.</li> </ol>
P. Acids, aerosol cans, fumes, paints etc. (Review SDS for applicable chemicals.)	Knowledge of the chemicals and supplies used in recreation is a must. Users should refer to the SDS to insure he/she understands the proper use of the various cleaning supplies & chemicals used by this shop   READ ALL LABELS ON USE AND WARNINGS BEFORE USE, BE FAMILIAR WITH ANTIDOTES & PRECAUTIONS.   Provide adequate ventilation, wear rubber gloves, goggles, and protective clothing when cleaning toilets and sinks.

Q. Confined areas, ladders, power tools, & wet floors.		1. Use care when in confined areas, assure ventilation & safe operating room for activities. Don't allow power cords to lay in puddles and use fiber glass ladders when using power tools. Be careful when on ladders and reaching or leaning or carrying heavy objects. It's better to have someone hand these to you.
R. Sign maintenance, sanding, painting, vehicular roadside traffic, splinters, spider/insect bites.		1. Use gloves, wear heavy boots, and other safety gear appropriate to the tasks. Get help to move heavy signs. Put out traffic cones and set hazard lights to flashing when on roadside. Be careful when reaching between double signs for bolts or nuts, there may be wasps, spiders or scorpions living there.
S. Transporting trash and/or hot wood coals		1. Wear gloves, use metal buckets or barrels to transport hot wood coals. Wet down coals and place in airtight containers before moving. Trash & trash bags & wood coals should never be hauled together in the same truck or trailer bed. Keep gasoline and other flammable items away from the coal barrel.
T. Field Work	Working in Remote Area	<ol> <li>Always practice Safety Awareness. Maintain visual, voice or radio contact with crew members</li> <li>Ensure portable radios are charged and functional</li> <li>Carry extra batteries as capacity is reduced in cold weather</li> <li>Monitor local weather before field activities begin</li> <li>Adhere to communication procedures as outlined in the Emergency Evaluation Plan at the end of the JHA</li> <li>Always sign out at office with location and time of your return</li> <li>Be aware of wild animals within your work location</li> </ol>
	Working Alone	<ol> <li>Sign out at district office and notify supervisor of planned destination and radio checks.</li> <li>Be aware of surroundings and hazards that may cause injury.</li> <li>Manage your time in order to get back to your base camp in adequate time before dark.</li> </ol>
	Field Safety	<ol> <li>Make sure you are wearing appropriate PPE per work being performed.</li> <li>Make sure you carry a First Aid Kit at all times with up to date supplies.</li> </ol>
	Encounters with the Public	<ol> <li>Always practice Situational Awareness. Be visible to the public by wearing uniforms when making contacts</li> <li>Always be aware of personal space and surroundings</li> <li>If the public becomes aggressive or physically threatening, leave the area immediately. Move a safe distance away and write down any pertinent information and contact law enforcement</li> <li>When the public has a concern, assess the situation and take appropriate action. Be as professional as possible, if you cannot answer the question, don't make it up. Give them the contact information necessary that pertains to their issue.</li> <li>There is safety in numbers. Try to travel in groups whenever possible</li> </ol>
U. Other jobs		Review JHA for Facilities Maintenance, and other JHAs as appropriate.
V. Safety Data Sheets (SDS)		REVIEW APPROPRIATE SDS BEFORE STARTING A PROJECT.

10. LINE OFFICER SIGNATURE	11. TITLE	12. DATE
	Blue Ridge District Ranger	
	Chattooga District Ranger	
	Tusquittee District Ranger	

## JHA Instructions (References-FSH 6709.11 and .12)

The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

## Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.

- **Block 7:** Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).
- **Block 8:** Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:
  - a. Research past accidents/incidents
  - b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.
  - c. Discuss the work project/activity with participants
  - d. Observe the work project/activity
  - e. A combination of the above
- **Block 9:** Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:
  - a. Engineering Controls (the most desirable method of abatement).
     For example, ergonomically designed tools, equipment, and furniture.
  - b. Substitution. For example, switching to high flash point, non-toxic solvents.
  - Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
  - d. PPE (least desirable method of abatement). For example, using hearing protection
    when working with or close to portable machines
    (chain saws, rock drills portable water pumps)
  - e. A combination of the above.
- **Block 10:** The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

**Blocks 11 and 12:** Self-explanatory.

## **Emergency Evacuation Instructions (Reference FSH 6709.11)**

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation)
- Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequency(s).
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temp).

DATE

- h. Topography.
- i. Number of person(s) to be transported

**SIGNATURE** 

j. Estimated weight of passengers for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

## JHA and Emergency Evacuation Procedures Acknowledgment

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

**SIGNATURE** 

DATE

Work Leader	
	-