U.S. Department of Agriculture Forest Service		WORK PROJECT/ACTIVITY     Crosscut Saw Operation under 12-S	V-11080500-005	2. LOCATION Florida National Scenic Trail	3. UNIT NF's in FL
JOB HAZARD ANALYSIS (JHA)		4. NAME OF ANALYST		5. JOB TITLE	6. DATE PREPARED
References-FSH 6709.11 and -12		Shawn Thomas		FNST Administrator	02-07-2019
7. TASKS/PROC	8.HAZARD	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE			
Training Requirements Certification and Instructor Limits	Mandatory	• Successful completion of the MTDC Crosscut Saw Training course. • Certified in basic First Aid/CPR or an individual who is qualified is available in the project area and is not operating a saw.• An uncertified crosscut saw helper must have specific on-site instruction in tool handling and safety prior to assisting sawyer.• Crosscut operators shall adhere to any restrictions or limitations placed on them in certification. • Crosscut operators may only exceed the restrictions or limitations placed on their certification if they are under the supervision of a qualified individual who is certified at a higher level of saw operation.• For the purposes of training, additional individuals beside the saw operator may be allowed within the safety radius (21/2 times the height of the tree being felled) if under supervision of a qualified instructor.			
Personal Protective Equipment	Cuts, Eye Injuries	• The following proper PPE must be worn at all times: Appropriate Gloves, Hardhat, Long-sleeve shirt, Boots - should provide support to the ankle, be of heavy duty, cut resistant material (such as leather) and have non-skid soles. Eye Protection• An ax and adequate wedges are deemed safety equipment that must be available for all saw operations.			
Crosscut Saw General Crosscut Saw Transportation	Cuts	<ul> <li>Crosscut saws have only one operator who is entirely repsonsible for sawing even when a helper, or second sawyer, is used.</li> <li>Saws must have good working handles.</li> <li>Saws must be properly maintained, sharpened and in servicable condition.</li> <li>Ensure that saw is sheathed in when being transported.</li> <li>Handles should be removed if moving through thick vegetation to prevent snagging.</li> </ul>			
Size-up	Prevention of injury through scene size- up	<ul> <li>Determine natural lean and condition of tree (rot, splits, loose bark etc.) and the best direction to be felled. Be aware of other trees leaning into the tree being felled. Be aware of snags in the area. Do not cut during shifting, high, or gusty wind conditions.</li> <li>Clean materials away from the tree's base that may post a hazard. Avoid cutting above your shoulders. Before cutting, determine your primary and secondary escape routes to a predetermined safe area. Prepare your escape route by cutting all tripping hazards.</li> <li>Keep proper spacing between operators (atleast 2 1/2 tree lengths). If the identified tree can not be safely removed and presents a hazard, the area will be flagged off at a safe distance and an alternate mitigation used.</li> </ul>			
Felling Process	Bodily injury or death	• Only crosscut saw operators who have been certified a the appropriate level will conduct felling operations.• Follow proper felling procedures as outlined in MTDC crosscut course.• Initiate undercut at a level that ensures adequate footing and balance throughout cutting sequence.• Prior to starting the back cut, survey surrounding to make sure no one has entered the area within 2 1/2 tree lengths. A warning should be sounded as to your intended action (i.e. "tree coming down, side hill").• At the first sign of the tree committing to the undercut, proceed to safety zone.• No felling operations will be conducted at night or when the top of the tree is obscurred.			
Bucking/Limbing	Bodily Injury or cut	• Anticipate log tensions and compressions.• Watch for and carefully relieve tension on samplings and limbs with a series of small cuts to compression side.• Use caution when cutting limbs supporting logs off the ground.• Avoid cutting from the downhill side •Do not buck on steep slopes with people below.• Sound off intended action.			
	**	• Set a pace appropriate for the weather conditions.• Take frequent short breaks if necessary.• Stay alert at all times and watch your step.• Carry and drink plenty of water (up to 1 quart/hour if temperature is over 80).• Pay attention to your physical condition.• Observe team members for signs of dehydration and heat illness			
Fatigue and Heat Stress	Heat illness	Carry and drink plenty of water members for signs of dehydrati	(up to 1 quart/hour i	if temperature is over 80).• Pay attention	n to your physical condition. Observe team
11 00 10 10 10 10 10 10 10 10 10 10 10 1	illness	Carry and drink plenty of water members for signs of dehydrati	on and heat illness  Refer to the FNST	General Trail Maintenance JHA for haz orking in the backcountry, and also con	n to your physical condition.• Observe team zards and mitigation for environmental
Heat Stress See – Trail Maint Communication (	illness  JHA, Trailhead TCP), Emergen	Carry and drink plenty of water members for signs of dehydrati I Specific ey Response	(up to 1 quart/hour on and heat illness  Refer to the FNST hazards, hiking and w	if temperature is over 80). Pay attention General Trail Maintenance JHA for haze orking in the backcountry, and also controls.	rate and mitigation for environmental mmunication and emergency response
Heat Stress See – Trail Maint Communication ( ERP)	illness  JHA, Trailhead TCP), Emergen	Carry and drink plenty of water members for signs of dehydrati I Specific ey Response	on and heat illness Refer to the FNST azards, hiking and w	if temperature is over 80). Pay attention General Trail Maintenance JHA for haze orking in the backcountry, and also controls.	n to your physical condition.• Observe team zards and mitigation for environmental

## 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) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer 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:
  - 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. Work Leader
  - 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, and 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 frequencies.
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temperature).
- h. Topography.
- i. Number of individuals to be transported.

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j. Estimated weight of individuals 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			
Washington in Alberta			
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