**JOE HAZARD ANALYSIS (JHA): References-FSH 6709.11-12**

**1. WORK PROJECT/ACTIVITY:** General Trail Maintenance under 12-VI-11080500-005  
**2. LOCATION:** Florida National Scenic Trail  
**3. UNIT:** NF's in FL  
**4. NAME OF ANALYST:** Shawn Thomas  
**5. JOB TITLE:** FNST Administrator

**7. TASK**  
**8. HAZARD**  
**9. ABATEMENT ACTIONS:** Engineering Controls * Substitution * Administrative Controls * PPE

**Hiking on the Trail**
- Dehydration  
- Heat Illness  
- Contaminated Water

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<th>Dehydration</th>
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<td>Increase fluids on hotter days or during extremely strenuous activity. Drink as much as 1 quart of water per hour when temperature is above 80 degrees. Drink water from a municipal source, if none is available, use proper filtration/treatment methods including boiling for 1 minute, using a chemical treatment such as iodine tabs, or using a water filtration pump designed for the backcountry. Review map or ask crew leader about water sources, keeping in mind their seasonality. Observe team members for signs of dehydration and be able to recognize the signs and symptoms of heat cramps, exhaustion and stroke. Treat immediately once recognized. Take frequent breaks in the shade as a form of prevention. Remember that heat stroke is a medical emergency requiring evacuation.</td>
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**Work on the Trail**
- Surface Conditions Trail Hazards Carrying

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<td>Be aware of your surroundings and watch where you step. Look over dead limbs and dead hang-up limbs (widow-makers). Look for root sprung trees and snags. Be aware of and prepared for water crossings and swamps. When fording streams use a walking stick for an extra point of contact to provide stability. Dry your feet before you go to bed. Always sheath tools and carry them on the downhill side of the trail. The person carrying the crosscut saw, or pole saw should walk last. Wear protective clothing such as long-sleeve shirt, long pants, helmet, work gloves and eye cover to protect against heavy brush.</td>
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**Weather**
- Know the weather forecasts. You can experience rain, lightning, sudden flooding, extreme heat and extreme drops in temperature on the FNST. Be watchful throughout the day for changing weather. Take appropriate multi-season gear and additional clothing.

**Getting Lost Foot Damage Animals**
- Identify safe routes and local conditions. Hike in a group. Designate a meeting spot should someone become separated. 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. Wear appropriate hiking boots and socks. Take into account terrain, especially water, the work and the weather. Watch for snakes, under logs, shady areas or stream in open areas. Look before stepping over logs. Be able to identify venomous snakes. In case of a bite, provide first aid and seek medical attention immediately. Do not attempt to remove the venom by biting or cutting the area. Be "Hear Aware" and use proper food storage devices and techniques.

**Biting and Stinging Insects**
- Identify crew members with sting allergies and carry sting kits containing epinephrine. Be aware of potential for hives in brush or hollow logs, but also in the ground. Use appropriate insect repellants on skin and clothing. Clothing should fit tightly at wrists, ankles and waist. Tuck in shirt tails. Inspect your skin daily for ticks and insects, bathing or changing clothes after every work day. Remove embedded ticks properly and seek treatment promptly if tick-borne illness develops later.

**Poison Ivy Sumac**
- Identify crew members who are allergic and keep them out of work environments where plants are present. Educate crew members on how to identify poisonous plants. Wear gloves when working in brush. Be able to identify signs of a reaction, immediately treat skin and clothing.

**Sharp Tools Tool Use**
- Carry tools on the downside hill side with scabbard or cover on. Carry sharpened edge of tool downward and away from your body. Be aware of others around you and space yourselves when hiking. Do not carry tools on shoulders with the exception of crosscut. Properly maintain and care for tools. Keep tools sharp. Do not use a tool with a loose handle. Wear proper PPE at all times. Be aware of others working around you. Have firm footing and be balanced when swinging. Never throw a tool. When not in use, shield any sharp edges.

**Overhead**
- Watch for loose limbs. Be careful of standing dead trees and snags. Avoid working at any unsafe site. Ensure all crew members are aware of hazard.

**Hunting Season User Conflict**
- Wear Huerter's Orange during hunting season. Post signs near work sites to warn hunters of employee and crew locations. Reschedule jobs to work outside of hunting season dates when possible.

**Communication**
- **Phones / Radios**
  - Carry a cell phone with a fully charged battery, but be aware that cell phones do not work along many sections of FNST. Know the location of the nearest working land line and spot with cell phone reception. If available, carry a satellite phone. Radios are generally not available, but some agencies may be able to provide them. Ensure radio has properly programmed frequencies, is in working order, and has an extra set of batteries. Know repeaters and best locations to radio during an emergency. Know dispatch hours as they may not be regular evenings/weekends.

**Emerg. Response Check-In out**
- Be sure to leave your itinerary with someone that includes where you will be working and your expected return. Some agencies may be able to check-in and check-out after the project with a designated representative. Know the location of the closest hospital and the closest road interaction or easily identifiable meeting point where an ambulance can react. Inform crew members of these locations before beginning work activity. In an emergency situation call 911 FIRST, then contact designated FTA or Agency partner staff.

**10. LINE OFFICER / SIGNATURE**
**11. TITLE**
**12. DATE**

Previous edition is obsolete  

Forest Supervisor  
12/10/13  
(over)
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 6700.11 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. Work Leader

c. 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.

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).

c. 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.

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:

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