

U.S. Department of Agriculture Forest Service JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 <i>(Instructions on Reverse)</i>		1. WORK PROJECT/ACTIVITY Trail Bridge Inspection	2. LOCATION George Washington and Jefferson National Forests	3. UNIT All Units of the George Washington and Jefferson National Forests
JOB HAZARD ANALYSIS (JHA)		4. NAME(S) OF ANALYST(S) Tyler Beach	5. JOB TITLE Trail Bridge Engineer (A.T.)	6. DATE PREPARED 2024-03-07
Required Standards and General Notes:				
Required Personal Protective Equipment	Hard hat, long pants, long shirt, eye protection, gloves, sturdy footwear, high visibility vest			
Tools and Equipment	Fall protection – if needed.			
Available Training	Trail Bridge Inspection Training			
7. TASKS/PROCEDURES		8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE	9. ABATEMENT ACTIONS OR PROCEDURES Engineering Controls * Substitution * Administrative Controls * PPE	
General Travel To/From Bridge Location & Inspection Work		General Precautions	<ul style="list-style-type: none"> Wear proper safety equipment and protective clothing (hard hat, gloves, goggles, long sleeved shirts, pants) Wear sturdy footwear. Follow unit-specific Check-In and Check-Out procedures. 	
		Working Alone/ Communications	<ul style="list-style-type: none"> Go in and out of service with dispatch. Maintain contact with dispatch throughout the work day. Do not conduct inspections alone on a bridge over swift or deep water (Sec. 27.61 C(1)). Do not conduct inspections alone on a bridge that requires climbing. Do not conduct inspections alone when working in remote areas. Radios/cell phones/SPOTs should be charged, maintained, and carried into the field. 	
		Walking Surfaces	<ul style="list-style-type: none"> Watch for frosted, wet, uneven, or cracked surfaces. Wear proper footwear. 	
		Wading In Streams and Waterways	<ul style="list-style-type: none"> Wear hip boots or waders in water. Be attentive to your surroundings at all times. Do not enter streams where there is a chance of being overcome by the strength of the current. Walk slowly, ensure stable footing. Use a “walking stick” as needed to help steady self. Felt soled boot may be purchased as PPE because they are less slippery than rubber soled boots. Do not conduct inspections alone on a bridge over swift or deep water (Sec. 27.61 C(1)). 	

	Climbing Steep and Muddy Banks	<ul style="list-style-type: none"> ● Have proper footing before climbing on banks. ● Watch for slippery, muddy, or wet banks and holes.
	Using Inspection Equipment	<ul style="list-style-type: none"> ● Use caution when probing timber members with sharp pointed tools or sounding timbers and concrete with hammers.
	Carrying Equipment	<ul style="list-style-type: none"> ● Do not overload yourself. ● Make two trips if necessary. ● Use proper lifting and carrying techniques.
	Lifting	<ul style="list-style-type: none"> ● Learn and promote the use of proper lifting techniques to prevent back strains.
	Remote Areas	<ul style="list-style-type: none"> ● Ensure radio, SPOT, and/or cell phone contact is maintained with dispatch throughout the work day. ● Radios/cell phones/SPOTs should be charged, maintained, and carried into the field.
	Traffic	<ul style="list-style-type: none"> ● Wear a high visibility vest. ● Stay alert. ● Listen and look for traffic on trails and roads.
	Falls	<ul style="list-style-type: none"> ● Do not take unnecessary risks. ● Maintain balance while on bridges and steep slopes. ● Use fall protection when required.
Environmental Risks	Weather	<ul style="list-style-type: none"> ● Check forecast before heading into the field. ● Be alert to rapidly changing and dangerous weather situations such as windstorm, flash flooding, and lightening. ● Seek protection as needed.
	Sunburn	<ul style="list-style-type: none"> ● Wear long sleeves. ● Wear hard-hat with visor. ● Use sunscreen.
	Hot and/or Humid Weather	<ul style="list-style-type: none"> ● Know signs of heat exhaustion and heat stroke. ● Wear clothing suited for hot and/or humid weather and environment, layer clothing as needed. ● Take frequent breaks to cool down. ● Bring plenty of water and electrolytes (stay hydrated).
	Cold Weather	<ul style="list-style-type: none"> ● Know signs of hypothermia and frostbite. ● Wear clothing suited for cold weather and environment, layer clothing as needed. ● Take frequent breaks to warm up. ● Bring plenty of water and electrolytes (stay hydrated)
Biological	Bears	<ul style="list-style-type: none"> ● Be aware of the potential presence of a black bear. ● If encountered, back up and stay a safe distance away.
	Venomous Snakes	<ul style="list-style-type: none"> ● Use extra caution in areas where venomous snakes are known to be present. ● Look before placing hands or limbs in cracks, cervices, or areas where you cannot see.

		<ul style="list-style-type: none"> ● Do not provoke or handle snakes. ● Wear snake gators if preferred.
	Bee Stings, Spider Bites, Insect Bites	<ul style="list-style-type: none"> ● If allergic, inform supervisor and other members of inspection team of allergies, and carry medicine. ● Wear long sleeves and pants. ● Avoid scented lotions, colognes, perfumes, etc. ● Use insect repellent. ● Treat stings and bites immediately. ● Check for ticks upon returning to the office and in the evening. ● If work cannot be done because of bees, spiders, or other insects, leave work site and come back at a later date when they <u>a</u>re not present.
	Poisonous Plants	<ul style="list-style-type: none"> ● Wear long sleeve shirt and pants. ● Be able to identify poisonous plants and avoid them.
Chemical	Treated Wood	<ul style="list-style-type: none"> ● Wear gloves, goggles, long sleeve shirt, and pants when working around treated wood.
10. OFFICIAL SIGNATURE	11. TITLE	12. DATE

Previous edition is obsolete

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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:

- 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.
- 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.

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).
- 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:

SIGNATURE DATE

SIGNATURE DATE
