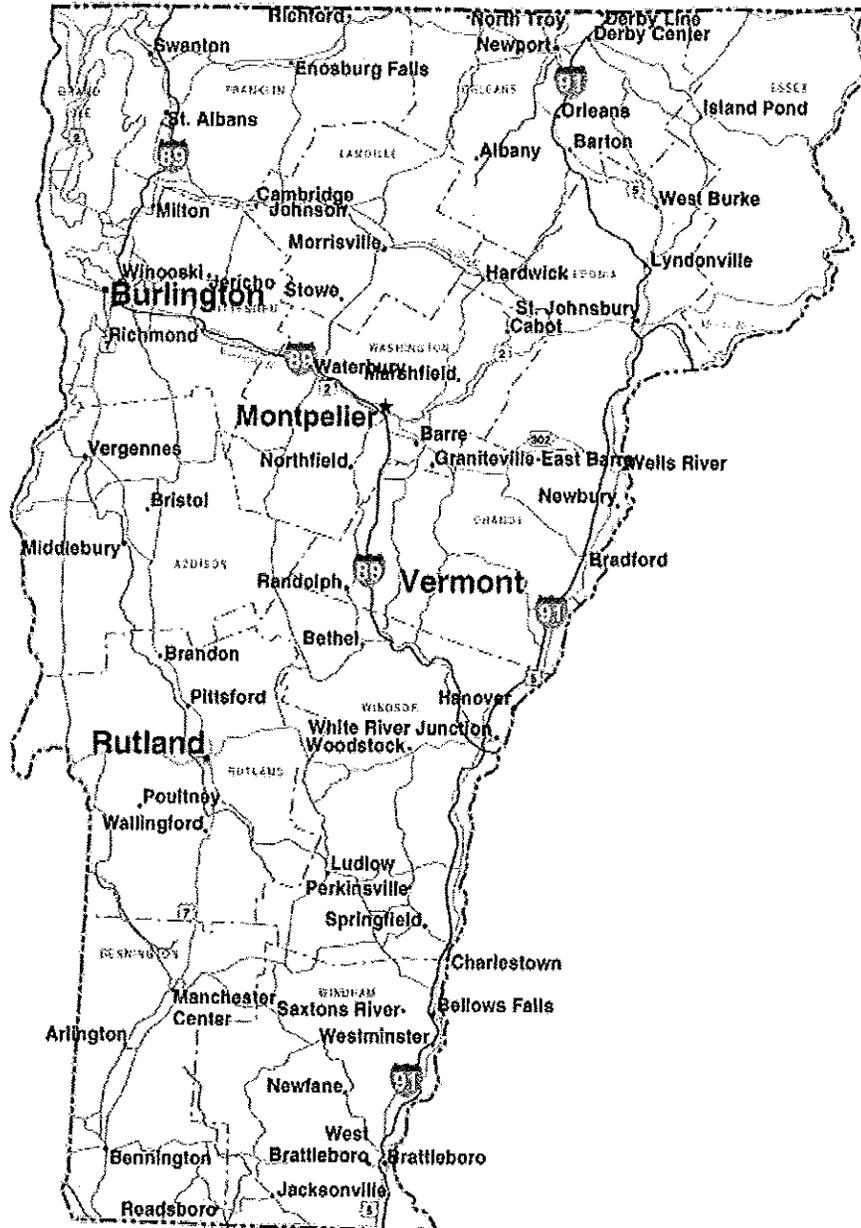


Working Over Water Safety Plan

Area: *Vermont*



Area Map

River Description:

These waterways are high and fast moving during heavy rain and in extreme flooding stage. The water level easily moves up and down rapidly without warning. During heavy rain or flooding work will not be done in waterway. While waterways are at normal state water is generally low and slow moving. Normal depth: Low 4inches - 2ft. High 2-12ft deep.

Water Hazards:

- Flooded or swollen drainage ditches, fields, creeks, streams and marshes
- Large debris such as logs, trees, vehicles, propane tanks, rocks, etc.
- Severe weather such as heavy rain, strong winds, lightning, etc.
- Downed power lines. If this occurs, contact the local utility company immediately. Do not enter the water!
- Swift or unpredictable currents and/or low water temperature.

If any of the following water conditions exists, the work operations will be delayed and the supervisor should be contacted for an alternate plan of action:

- Current makes standing difficult.
- A secure foothold cannot be established by the employee while they are in the water.
- Water is or becomes more than two feet deep or above the employee's knees.
- If the water depth cannot be determined.

Work to be Performed:

Bridge structure inspection, cleaning and structure maintenance or repair, new construction, roadway maintenance and repair, culvert cleaning and repair, sign installation, maintenance and repair.

Description of WOW Plan:

1. Plan Orientation

- 1.1. A Competent Person shall be assigned for the job site.
- 1.2. All personnel working as part of this project on arrival shall first have a tailgate safety talk on safety issues, MUTCD traffic plan, what is expected of each person, job assignment and work to be accomplished.

2. WOW Safety

2.1 Personnel

- 2.1.1 A minimum of two personnel shall be present if the water must be entered to perform a work operation.
- 2.1.2 Floatation vest shall be worn by all personnel while in the water, or within 6 feet of the water's edge. This procedure applies to any personnel who are potentially exposed to the hazard of falling into water that is of *sufficient depth for a life jacket to be effective* as protection from the risk of drowning. If water depth is not sufficient for a life jacket to be effective then personnel will not be required to wear one. *Exception – when 100% fall protection is supplied a life vest does not have to be worn.*
- 2.1.3 Hip boots (boots which do not extend above the crotch) may be used when working in water. Chest waders (boots which cover three-quarters of the body and terminate in the chest area) shall not be used!
- 2.1.4 Equipment belts, tools, or materials will not be worn or fastened to an employee while they are moving through or across water.

2.2 Equipment

- 2.2.1 While operating a piece of equipment in the water, operator must wear a seat belt. If equipment does not have a seat belt than operator shall wear a life vest at all times while both the operator and equipment are in the water. Regardless of the seat belt, when operator steps out of equipment still in the water operator shall wear a life vest until out of the water or back in the piece of equipment. *(If water depth is not sufficient for a life jacket to be effective then equipment operator will not be required to wear one.)*
- 2.2.2 While working with the Servi-lift personnel are not required to wear flotation devices while they are in the bucket and have been tied off with proper fall protection.

2.3 Fall Protection

- 2.3.1 All personnel that are 6ft above or higher of water/next lower level shall have a 100% fall protection.
- 2.3.2 All personnel within 6 feet of the edge or by railing that is 39 inches or lower shall have a 100% fall protection while on this structure. Personnel must have appropriate fall protection.
- 2.3.3 Appropriate fall protection is but not limited to full harness, 6ft lanyard, retractable lanyard, horizontal life line, orange fence, snow fence, railing (with kick board, middle rail and a top rail between 39-45 inches high).

3. Rescue/Emergency Plan

- 3.1. The competent person (CP) shall have a way of communicating an emergency to 911 (state radio, cell phone, etc.). The CP shall immediately call 911 in the event of an emergency. The CP cannot be assigned to the rescue crew.
- 3.2. The CP and rescue personnel shall be equipped or have immediate access to an air horn. At the sign of any emergency, the air horns will be sounded to alert all personnel on the site that an emergency exists.

- 3.3. Rescue Person(s) will be equipped with an air horn and or portable radio(s) and appropriate fitting flotation vest. Flotation Vest must be worn within 6ft of water's edge or in the water/boat.
- 3.3.1. **Water depth 2 inches to 1 ft.** - One Rescue person with a flotation vest, Rescue Buoy and Throw Rope will be in a ready status. The designated Rescue Person must remain in the immediate area so that they can quickly reach the fall victim (within 4 minutes). The Rescue Person may be assigned other tasks provided the tasks do not interfere with that person's ability to quickly reach the fall victim. (Rescue Person will not be assigned to traffic control operations!)
- 3.3.2. **Water depth 1 ft. to 2 ft.** - One to Two Rescue persons with a flotation vests, Rescue Buoy and Throw Rope will be in a ready status. If needed a boat appropriately outfitted with oars rescue buoy will be on site ready for use. If it is safe and faster to walk out to rescue then boat can stay at shore or used to carry victim back to shore. The designated Rescue Person must remain in the immediate area so that they can quickly reach the fall victim (within 4 minutes). The Rescue Person may be assigned other tasks provided the tasks do not interfere with that person's ability to quickly reach the fall victim. (Rescue Person will not be assigned to traffic control operations or other critical tasks!).
- 3.3.3. **Water Depth 2 ft. and over** - Boat appropriately outfitted with oars (motor will be used if oars are not sufficient for water conditions) rescue buoy and throw rope will be positioned on the shore BUT NOT IN THE WATER ready to be launched with a Rescue Team (2 personnel) with flotation vests. The designated Rescue Team must remain in the immediate area so that they can quickly reach the fall victim (within 4 minutes). The Rescue Team may be assigned other tasks provided the tasks do not interfere with that team's ability to quickly reach the fall victim. (Rescue Team will not be assigned to traffic control operations or other critical tasks!).
- 3.3.4. **Waterway width** - If waterway and/ or channel is 15 ft. or less and regardless of depth a boat will not be needed. (boat will not fit in waterway less than 15 ft. wide)
- 3.3.5. **If high or fast moving water conditions exist** - The work operations will be delayed and the supervisor should be contacted for an alternate plan of action. (*Meaning higher or faster than normal for waterway. Example flooding, snow run off*).
- 3.3.6. **Winter** - If there is a chance of personnel falling or breaking through the ice all rules that apply above shall be put into place. If at all possible, other means of work should be used so that there is no reason to be on or over the ice/water.
- 3.3.7. **Boat** - If water conditions exists such as the bottom of the boat and or the motor/prop of the boat drag, hit or damage the boat so that the effectiveness of the rescue will be reduced or ineffective. Then a boat will not be required.

4. Personnel/Equipment needed:

Minimum Water Depth requirements

2 inches – 1 ft.

1 Competent Person
1 Rescue person
1 or more throw rope
1 or more Ring Buoys w/ rope
2 Portable Radios/Air Horns
Approved Life Vest
Appropriate Fall Protection

1 ft. to 2 ft.

1 Competent Person
1-2 Rescue Person(s)
1 or more throw rope
1 or more Ring Buoys w/ rope
2 Portable Radios/Air Horns
Approved Life Vest(s)
Appropriate Fall Protection
Boat appropriately equipped
(if needed)

2 ft. and over

1 Competent Person
2 Rescue Persons
1 or more throw rope
1 or more Ring Buoy w/ rope
2 Portable Radios/Air Horns
Boat appropriately equipped
Oars
Boat Motor/fuel
Approved Life Vests

Person In Water Plan

Emergency Contacts

HOSPITAL **911** **or** **State Police on State Radio**
AMBULANCE **911** **or** **State Police on State Radio**
FIRE/Rescue **911** **or** **State Police on State Radio**
POLICE **911** **or** **State Police on State Radio**

State HAZMAT Coord.

Andy Shively Cell: 802.229.8740 Wk: 802.828.2797 Pgr: 802.250.4666

District HAZMAT Coord.

Wk: Cell:

State Safety Officer

Rob Gentle Cell: 802.272.9054 Wk: 802.828.2585

State Safety Tech.

District Safety Coordinators

Wk: Cell:

Person In Water Plan

In the case of a person falling into water that represents a drowning hazard.

- Sound the alert horn signaling a person has entered the water.
- Immediately call for local **911** assistance.
- Yell to the victim to determine if they are conscious and to provide a location.
- Deploy ring buoy in the direction of the victim.
- If the site and conditions allow, launch the boat.
- If the victim is conscious, assist the victim by deploying the ring buoy such that the victim can grab hold of the buoy and be towed to shore.
- If the victim is unconscious, let the ring buoy float with the victim as a locator.
- If launched, utilize the boat to assist the victim.
- If ring buoy or boat assistance is unsuccessful, track victims location visually.

Rescue Assistance Checklist

- Has Rescue Support personnel been designated by the Competent Person?
- Has a Working Over Water Safety Plan been developed and approved?
- Person In Water Plan been prepared and reviewed by the Competent Person and the designated Rescue Personnel?
- Has a Person-in-water or Emergency warning system been established to alert the Rescue Personnel and Competent Person of a Person-in-Water or Emergency?
- Has a communications system been implemented for WOW personnel?
- Have ring buoy with 90 ft of rope and/or a throw rope been staged at a proper location such that the personnel can deploy the buoy in the event of a PIW?
- Are all SAFETY regulations being followed including, Fall Protection and PPE?
- If needed, has boat been placed down by water's edge and all appropriate gear and equipment with the boat?

**Vermont Agency of Transportation
10 Minute Job Safety Analysis**

Date:

Bridge #: Rte.: Mile Marker: Town:

Competent Person: Work Leader:

Personnel working on scene:

Job Being Performed:

Boat: Y N Comments why:

River Description:

Depth: Width:

Does job site require evaluation by State/District Safety officer or VOSHA: Y N

Comments why:

PPE Required:

HAZARD	CONTROL

Other Comments or Concerns:

Approved:

**Name
Title**