

LORAIN COUNTY FIRE DEPARTMENTS

Standard Operating Guidelines

Swift Water Rescue Operations	SOG: 014 DRAFT 8/30/06 Effective Date: Supersedes: N/A Approved: _____ President, Lorain County Fire Chiefs Association Page 1 of 6
-------------------------------	---

.10 PURPOSE

To provide a guideline for conducting water rescue/recovery operations involving swift water. Swift water rescue is a subset of technical rescue that involves the use of specially trained personnel, ropes, mechanical advantage systems and river rafting equipment.

2.0 DIVISIONS AFFECTED

All Fire Department personnel
All Lorain County swift water rescue technicians.

3.0 RESPONSIBILITY

- All Officers are responsible to comply with and ensure that personnel under their command are adequately trained, fully understand, and comply with this guideline.
- All members have the responsibility to learn and follow this guideline.

4.0 GUIDELINES

4.1 Dispatch

Upon receiving a call for an emergency incident involving water, the jurisdiction's dispatcher shall attempt to gather as much information as possible. Dispatch shall:

- Ascertain an exact location for emergency personnel to respond, which may not be an exact address.
- Number of victims in the water.
- How long victims have been in the water.

The dispatcher shall document the initial time of call, as it will assist Command how long response personnel will operate in the Rescue mode. After receiving the call, Dispatch shall:

- Dispatch the fire department's required assignment to a water rescue incident;
- Activate the MABAS system for the Lorain County Swift Water Rescue team;
- Dispatch an ALS ambulance to the scene;
- Dispatch police / Sheriffs department.

4.2 Arrive on scene; take command; size-up

1. The first-arriving officer on the scene shall establish Command. The Incident Commander shall announce a size-up of the situation upon arrival.
2. Command should secure a witness as soon as possible after arriving on the scene. This will help to identify and locate the problem.
3. If the victim is submerged, Command should consider the risk-benefit of rescue attempts.
4. If the victim is visible on the surface, Command shall assign one member to make contact with the victim without entering the water. This member shall let the victim know that help is on the way and encourage them to stay where they are if this is the safest course of action.
5. Command should immediately begin assessing the need for additional resources. If additional resources are necessary, Command should put in an early call for them. If later, it is determined that they are not necessary, Command can put those units back in service.
6. Command should perform an immediate assessment of the present hazards. Command may want to assign a *Safety Officer*. *Safety* will be responsible for identifying the hazards present and to have them secured if possible.

If it is not possible to secure hazards, *Safety* will notify all personnel of the hazards and notify Command so that an action plan can be established. Some hazards associated with water rescue operations would be: volume, velocity, and temperature of water, floating debris, unusual drop-offs, hydraulic effects, and depth of water.

7. "Rescue" or "Recovery." Based on the conditions present and the hazards to rescuers, Command, in conjunction with the Rescue Group Supervisor, must decide to operate in the rescue or recovery mode. If Command determines that the operation will be run in the rescue mode, a rescue should begin quickly.
8. The Rescue Group should establish an action plan as soon as possible. The step-by-step plan should be communicated to Command and all personnel involved in the rescue.

4.3 Pre-rescue Operations

1. Make the general area safe. Command should begin to make the general area safe. Command shall identify and establish a hot, warm, and cold zone for the incident, using the following criteria:
 - Hot zone shall be the body of water;
 - Warm zone shall be 25 feet from the edge of the water;
 - Cold zone shall be the area beyond the 25-foot mark;
 - A minimum perimeter of 50 feet shall be established.

In swift-water rescue incidents, *Safety* should spot floating debris and notify Command or *Rescue* Group. Command may also consider use of a helicopter for aerial recon to spot hazards.

2. Make the rescue area safe. Command should secure the immediate rescue area and assign *Accountability* for all personnel working within the rescue area. Personnel working in the rescue area (water's edge) shall have personal protective equipment (PPE), including personal flotation device (PFD) and water rescue helmet. If possible, the hazards in the rescue area should be secured. If it is not possible, Command shall notify all rescuers in the area of the possible hazards.
3. Pre-rescue/Recovery. Depending on the action plan established, Command may want to establish a *Rescue Group* and assign a Rescue Group Supervisor.

The Rescue Group Supervisor shall be responsible for:

- Gathering all equipment and personnel necessary to operate according to the action plan;
- Assigning rescue personnel to conduct the rescue, and support personnel to support the rescuers, during the actual rescue phase;

- Developing an alternative action plan and communicate it to all personnel operating in the rescue area.

4.4 Rescue Operations.

1. After pre-rescue operations are complete, Rescue shall implement the action plan for the removal of the victim(s). Rescue operations should be conducted from low risk to high risk order, and with the least amount of risk to the rescuer necessary to rescue the victim. The Rescue Group Supervisor shall discuss the risk/benefit of the operation with Command.
2. Rescue should assign downstream (near shore) personnel, with throw bags, and a far shore (opposite bank) for incidents involving swift-water rescue.
3. The order of water rescue from low risk to high risk will be:

TALK the victim into self-rescue. If possible, the victim can be talked into swimming to shore or assisting the rescuers with his/her own rescue. If a victim is stranded in the middle of a flash flood, this will not be prudent.

REACH - If possible, the rescuer should extend his/her hand or another object, such as a pike pole, to remove the victim from the water.

THROW - If the victim is too far out in the water to reach, rescuers should attempt to throw the victim a throw bag or some piece of positive flotation (i.e., PFD, rescue ring). Downstream personnel should be in position during the actual rescue operation. If the victim is able to grab the throw bag, the rescuer can pendulum belay or haul the victim to the nearest bank. Care should be taken to assure the victim will be belayed to a safe downstream position.

First responders that have had operational level water rescue training should be able to conduct the above rescues. If the victim cannot be reached by either of these methods, Command should consider stopping the operation until a Water Rescue Team arrives. If the operation becomes a high risk one, Command will want the equipment and experience of the Water Rescue Team. After the Water Rescue Team arrives, Command should discuss with them the action plan. Command should consider re-assigning the Rescue Group to an officer from the Water Rescue Team.

4. The next order of water rescue from low risk to high risk would be:

ROW - If it is determined that a boat-based operation shall be run, Command should assign a company on the opposite bank to assist Rescue Group in establishing an anchor for a rope system. The company on the opposite bank will be made aware of the action plan. Rescue Group will be responsible to assure that the rope system used for the boat-based operation is built safely and proper. A minimum of two point tether should be built for swift-water operations.

Rescue should consider personal protective equipment (PPE) for the victim(s).

GO - If it is not possible to ROW (boat base operation) to the victim, Rescue should consider putting a rescuer in the water to reach the victim. This is a very high risk operation. Only rescuers with the proper training and equipment should be allowed to enter the water. Before the rescuer actually enters the water, they shall discuss the action plan, including specific tasks and objectives, hazards and alternate plans. The rescuer shall never be attached to a life line without the benefit of a quick-release mechanism. The rescuer should take PPE of at least a PFD to the victim. Members shall not do a breath-hold surface dive in an attempt to locate a victim beneath the surface of the water.

HELO - At times the use of a helicopter is the most reasonable method of reaching the victim. Helicopter operations over water are considered high risk operations. Command should consult with Rescue and the pilot to determine the risk/benefit of the use of a helo. If the pilot says he/she can do the operation, Command should consider it. Rescue should assign rescuers to the helicopter and discuss with the pilot and the rescuers the specific action plan and should address the weight and balance considerations. Command will have the approval of the use of a helicopter for water rescue operations. The pilot will make the final determination how the helicopter will be used.

4.5 ASSESSING THE VICTIM

Once the rescuers have reached the victim, they should do an immediate assessment of the victim - a quick assessment of the ABC's and the exact method of entrapment. If the victim is conscious, the rescuer should determine if the victim can assist in his/her own rescue. If the victim is unconscious, the rescue must be quick. If the incident has been determined to be an underwater or recovery operation, Rescue should proceed with a dive operation (see LC

SOG #003, Dive Operations). Depending on the length of submersion, Rescue Group will decide on a dive rescue or recovery operation. If the victim can assist in his/her own rescue, the rescuers should proceed with the rescue action plan. The victim should be brought to shore as soon as possible.

4.6 TREATMENT

When the victim is brought to safety, an assessment should be done by ALS personnel. Treatment shall be administered according to local protocol. If necessary, the victim shall be transported to the appropriate facility.

5.0 TERMINATION

Command should begin termination as soon as possible after the victim has been removed from the water. This shall include securing all the equipment used for the rescue and personnel accountability. This may also include witnesses, photos, victim's personal effects or equipment used in the rescue. Personnel should not participate in a towing or vehicle removal operation from the water. Command should consider activating the C.I.S.D. for extraordinary or extended operations.

5.1 Prepare for termination:

- Personnel accountability.
- Equipment accountability. If there has been a fatality, Rescue Group may consider leaving equipment in place for investigative purposes.
- Re-stock vehicles.
- Consider debriefing.
- Secure the scene; return to service.

Additional Considerations:

- HEAT. Consider rotation of crews.
- COLD. Consider the affects of hypothermia on victim and rescuers.
- RAIN/SNOW. Consider the affects of rain or snow on the hazard profile.
- TIME OF DAY. Is there sufficient lighting for operations extending into the night.
- Consider the affect on family and friends; keep family informed.
- Consider news media; assign a P.I.O.