



National
Operational
Guidance

Hazard

**Inaccurate situational awareness:
Water rescue and flooding**



NFCC
Fire Central
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Hazard - Inaccurate situational awareness: Water rescue and flooding

Hazard Knowledge

Water and flood environments can have appreciable variations over short distances and can change rapidly as weather conditions and conditions upstream alter. This presents significant challenges when gathering information to establish accurate situational awareness. It may not be possible to identify sub-surface hazards, undertows and variations in depth before committing personnel to the water, but every effort should be made to identify pertinent information.

Accurately identifying hazards, water conditions and weather conditions are important factors when planning a response to an incident. When gathering information, incident commanders should consider:

- Speed of flow
- Depth
- Hydrology
- Water hazards and features
- Weather conditions and likely variations
- Upstream conditions
- Water temperatures
- Tidal patterns
- Debris
- Unstable or unsafe structures

Any assessment of conditions can vary significantly over short distances or time periods and should be updated regularly.

When considering flood events, the development duration and scale of the incident should be considered.



Control measure - Site-Specific Risk Information (SSRI): Water rescue and flooding



Control measure knowledge

Fire and rescue services should gather and make Site-Specific Risk Information (SSRI) available for all known hazards in their area. This should include bodies of water, particularly those that are known to be used for recreational or commercial purposes.

SSRI should include details of

- Launch sites
- Safe entry points
- Hazards including hydrological features
- Details of pertinent temperature charts and tidal patterns

They should also include site-specific control measures such as available rendezvous points, access routes, isolation points, tactical actions and contact details of responsible agencies.

Areas at risk of flooding can be identified and assessed using historical data, history of previous incidents and mapping. This information should also be used to identify control measures within areas susceptible to flooding.

Strategic actions

Fire and rescue services should:

- Work with partner agencies to identify and develop SSRI for water hazards in their area
- Make SSRI available to personnel using risk information systems

Tactical actions

Incident commanders should:

- Use available SSRI when working near, on or in bodies of water





Control measure - Gather information from the public and liaise with other agencies

Control measure knowledge

Initial crews will need to gather information from members of the public and liaise with other agencies in attendance.

Strategic actions

Fire and rescue services should:

- Provide incident commanders with the means to access relevant information at search incidents
- Participate in joint training and exercises with other agencies to improve interoperability at search incidents

Tactical actions

Incident commanders should:

- Confirm and communicate the involvement, number and severity of any casualties (persons or animals)
- Anticipate casualty condition and potential survivability given the environmental situation
- Identify number and last known position (LKP) of any occupants in need of rescue or assistance to evacuate
- Establish the last known position (LKP) or place last seen (PLS) of casualties, including times
- Liaise and co-ordinate activity with other emergency responders, including police search advisers (PoISA)
- Use the information gathered to develop and communicate a co-ordinated search plan
- Identify whether any rescue attempts have been made by onsite rescue teams prior to arrival
- Cross-check records of people found against those of people still missing



Control measure - Check river conditions

Control measure knowledge

Where available, fire and rescue services should receive notification of strong stream advice, tide predictions and river level warnings. This information can be used to predict likely changes in river levels that may affect tactical plans.

Information regarding river conditions in a fire and rescue service's area may be provided by environmental agencies, the Met Office, the Rivers Agency or local water management groups such as the Canal Trust or local drainage boards.

Strategic actions

Fire and rescue services should:

- Establish mechanisms to receive and share notifications of changes in river conditions

Tactical actions

Incident commanders should:

- Access all available information sources on river levels and conditions
- Consider contacting environmental agencies or other responsible bodies for information on changes in conditions and water levels



Control measure - Tide timetables and water temperature charts

Control measure knowledge

Tidal changes occur predictably in coastal waters and rivers, but the timings of high and low tides fluctuate throughout the year. To ensure any change in tide behaviour is accounted for when planning actions at an incident, the incident commander should use tide charts or timetables. Information on tide times is available from the [Met Office](#) and from local sources.

Local authorities, water management bodies, environmental agencies and the Met Office may be available to provide water temperature charts. Available charts will provide either average, expected or up-to-date water temperature information for seas, rivers and other bodies of water. Where available, temperature data should be considered during planning and may assist during operational activity.

Strategic actions

Fire and rescue services should:

- Have access to information on tide patterns where appropriate and make it available to relevant responders

Tactical actions

Incident commanders should:

- Consider using tide times and temperature charts when working near, on or in water



Control measure - Assess current and forecast weather conditions

Control measure knowledge

Forecast weather conditions should be obtained and monitored as they can have a negative effect on operations and the health and safety of personnel.



This information should be assessed, along with any microclimate that could be produced by the specific location and its topography. Current and forecast weather conditions should be used to inform the tactical planning and risk assessment of an incident.

Strategic actions

Fire and rescue services should:

- Provide personnel with access to meteorological information, such as for example, the Met Office's FireMet in 'hazard manager' for predicting weather conditions
- Ensure that strategies are in place to enable timely communication of forecast weather conditions to operational personnel

Tactical actions

Incident commanders should:

- Access past, present and future weather information from sources such as the Met Office
- Request and review up-to-date weather forecasts