

# RELEVANT PLAN INFORMATION



## Map(s)

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Showing Flood Response Area  
including

Areas Protected By Dikes, Areas Not Protected By Dikes, Flood Prone Areas, Dike Protection Boundary, Dike Pump Station, Bridges, Utility Crossings, Dams, Other Structures, Evacuation Routes, etc.

## Instructions To Area Supervisors

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### EXAMPLE

1. Limits of their patrol - be aware of geographical boundaries and features of dikes.
2. Stay on duty until relieved.
3. How to contact headquarters - personnel to be familiar with communications equipment and procedures.
4. Fill out inspection log.
5. Mark with stakes all problem areas and, if they appear dangerous, immediately report to headquarters.

### EQUIPMENT TO PROVIDE TO AREA SUPERVISORS:

1. All-weather clothing.
2. Radio for communications to headquarters.
3. Flashlight for night patrols.
4. Long wooden stakes and red flagging.
5. Round-nose shovel.

## FLOOD FIGHT OPERATIONS

### BASIC SAFETY TIPS FOR PATROL CREWS

- Workers must be reminded to wash their hands before eating or drinking. Bacteria can be rampant in flood waters and this simple step can go a long way in reducing the threat of an outbreak of water borne disease.
- For similar reasons, all injuries should receive prompt first aid and care to reduce the risk of infection. Anyone who is injured must be instructed to review the need for a tetanus booster with their personal physician or other medical authority. Even minor cuts and scrapes can provide an entry path for tetanus germs.

- To reduce cuts and scrapes, gloves must be worn while doing heavy work. While leather or heavy gloves are best, almost any pair of gloves will provide some degree of hand protection.
- Skin creams and lotions can be used to moisturize and protect skin. The skin, particularly on the hands, can become dry and cracked after being exposed to water and other harsh field conditions. Dry, cracked, and broken skin can lead to infections and other problems. The application of a good protective and moisturizing skin cream every several hours can significantly reduce this problem.
- Some functions may require special protective equipment. Provisions must be made to issue specialized safety gear to volunteers and other workers. Hard hats may be necessary, particularly around machinery or in areas where loading equipment is being used. Ear protection shall be required around extremely noisy equipment. In some communities patrols are provided life jackets and vests.
- All workers must be reminded never to walk behind construction machinery or heavy equipment.

It is extremely dangerous to walk or drive in flooded areas. The flood waters can lift manhole covers and expose unseen, water filled shafts. It may be impossible to rescue someone who has fallen into an unprotected water filled sewer or utility shaft. Persons who are forced to walk in flooded areas must be instructed to use a walking stick or pole to probe for unseen dangers and the use of life jackets is recommended.

Workers must also be advised to avoid areas subject to collapse, such as areas next to inundated foundation walls. The weight of the person on water saturated ground may be enough to cause the basement or foundation walls to cave in.

### Flood Response Organization and Personnel

POSITION	NAME	PHONE	ALTERNATE	PHONE

### History of Water Levels on the \_\_\_\_\_ River (Lake, Creek, Etc.)

YEAR	DATE	HEIGHT

## Provincial Snowpack And Flow Reports

(Insert relevant information here.)



# Dike Patrol Log

(Insert relevant information here.)

**Flood Protection Information for the \_\_\_\_\_ Area(s)**

**(Separate section for each area)**

**(Include dikes, erosion protection and other works)**

## Checklists Of ICS Functions

### REGIONAL FUNCTIONS

Safety and General Functions - for all Personnel

Incident Commander (Sector Commander)  
Deputy Commander (Deputy Sector Commander)  
Information Officer  
Safety Officer

Chief of Operations (Flood Fighting Chief)  
Operations Functions

Chief of Planning (Flood Assessment and Planning Chief)  
Planning Functions  
Technical Specialist Functions

Chief of Logistics (Support Coordination and Liaison Chief)  
Logistics Functions

Chief of Finance (Administration and Services Chief)  
Finance Functions

Supervisor / Team Leaders (if required)

Only those ICS positions required for a safe and effective response need to be invoked for any particular emergency situation. Depending on the scope and nature of the situation certain supervisory and leader roles may not be invoked.

In a smaller scale emergency, a single person often does handle all of the functions, at least for a limited period of time. The same is true even of a larger scale emergency at the initial stage of activation and mobilization. As the response expands to meet the requirements of the emergency, a person is assigned to each component section, and then that person gains additional personnel who are assigned individual functional responsibilities as their sections become more active.

**Reference: MELP Water  
Related Hazards  
Emergency Response  
Plan and Procedures,  
1998.**

**NOTE: ICS nomenclature with BC Flood Plan terminology in (brackets).**

**Safety and General Functions - for all Personnel**

It is the responsibility of supervisors to ensure that safety of response personnel is of the highest priority. All new response personnel arriving on the scene must be briefed on safety matters and informed of unsafe situations. Hazard response work has an "A" Hazard Classification under the *Workers' Compensation Act* (WCA). Safety requirements must be organized according to the requirements of the *Occupational Health and Safety Regulations*, and are dependent on the number of workers per shift and the travel time to the nearest hospital.

Ideally, response personnel should work in teams of two in the field, and must have ready access to communications (phone, receivers). Operations under night, or very severe weather, conditions should be carefully considered. The well-being of personnel working alone must be checked in accordance with WCA requirements. Checks should be made at such intervals and by such means as are appropriate to the nature, hazard and circumstances of the employment.

**Personnel Requirements**

In a small emergency, a single person might handle all of the functions for a limited period of time. The same is true even of a larger emergency at the initial stage of activation and mobilization. As the response expands to meet the requirements of a larger emergency, a person is assigned to each component branch, and then that person gains additional personnel who are assigned individual functional responsibilities as their cells become more active.

The response must function on a continuous, 24/7 basis from activation until de-activation. The manner in which this is done is at the discretion of the Chief of Planning (Flood Assessment and Planning Chief). While the immediate solution may be to establish several complete shifts for the duration of operations, there are seldom resources or facilities to sustain this approach. Plans should call up two complete

shifts for an initial period of time, after which reduced-strength options can be considered for implementation on a branch by branch basis, such as:

- **Duty Officer(s)** - a reduced staff of one or two persons handles all incidents affecting the branch. This system might require several days experience or some preliminary training, but it is particularly useful during periods of reduced activity.
- **Reduced Staffing** - the branch staff work longer shifts or with fewer people than would be attempted in order to provide relief to some others. This is appropriate to allow short breaks for meals, etc. Reduced staffing can also be used to permit other staff activities to occur, such as VIP briefing or a field visit.
- **Partial Stand-down** - a branch or section within a branch may be left unmanned temporarily to suit reduced activity levels. This approach may be possible during night hours when supported (or supporting) functional organizations cannot operate, and as response operations come to an imminent end.

#### **Other Considerations**

- a. **Staff Rest:** Time must be allowed for rest, meals, ablutions, etc. The matter cannot be "left to sort itself out." Schedules must follow the Hours of Work Provisions in the *Employment Standards Act*, especially section 39, **No excessive hours.**
- b. **Labour Relations:** Rules and regulations regarding safety and over-time, etc. are not suspended on account of the emergency.
- c. **Briefings, Conferences:** Activities at the PFRC which require all staff to attend should be infrequent. They interrupt necessary rest time and can preclude such necessary events as field visits.

### Safety and General Functions - for all Personnel

The following are general instructions applicable to all MELP Hazard Response Personnel.

- Determine re-assignment of priority office work and arrange personal/home matters.
- Acquire work material and safety gear required for field work.
- Determine initial location and staging areas and means of transportation.
- Report to assigned location (Provincial Field Response Centre, Command Post, Staging Area) and obtain situation briefing and assignments.
- Identify supervisor and obtain all necessary safety/survival equipment and procedures.
- Ensure arrival and location recorded by supervisor.
- Obtain checklists of respective functions.
- Obtain appropriate forms for field operations.
- Identify and brief subordinates on situation, safety, reporting relationship and functions.
- Maintain personal log of activities and hours worked.
- Check out with supervisor on completion of functions and/or end of shift.

**The following are Checklists of Functions for hazard response. The checklists are intended to facilitate completion of actions prior to leaving the office and upon arrival in the field. The functions outlined in the checklists are presented in sequential order, allowing the person using it to follow and build on their responsibilities.**

### **Incident Commander Functions (Sector Commander in the BC Flood Plan)**

**Mission:** Command of the response personnel to ensure an effective, coordinated and cooperative response.

**Location:** Provincial Field Response Centre

**Functions:**

- Obtain initial incident briefing from field assessment personnel (PEP & MELP).
- Assess the situation and establish the action strategy.
- Conduct briefings of command staff and section chiefs.
- Delegate functions to the Sector personnel.
- Ensure coordination of reconnaissance.
- Ensure planning meetings are conducted.
- Establish and approve priorities.
- Approve and authorize implementation of incident action plans.
- Manage incident operations.
- Approve requests for additional resources and requests for release of resources.
- Approve the use of volunteers, registered through the local government and PEP.
- Ensure effective operation of the PFRC and overall operations.
- Coordinate Command staff and Section Chief activities.
- Ensure all affected agencies and resource agencies have been notified.
- Authorize the release of information to the news media or the public.
- Ensure Sector Status summary is completed and provided to the PECC.
- Prepare Sector Briefing Form for the succeeding Incident Commander.
- Issue tasking directives.

**Deputy Commander Functions**  
**(Deputy Sector Commander in the BC Flood Plan)**

**Mission:** Assist the Incident Commander by way of initiation of response strategies, response team coordination and communication.

**Location:** Provincial Field Response Centre

**Functions:**

- Ensure effective operation of the PFRC.
- Ensure briefing to the PECC.
- Ensure effective action plans for Incident Commander.
- Ensure all affected agencies have been contacted (INAC, CN/CP, etc.).
- Ensure resource agencies are identified (Coast Guard, DFO, etc.), and contacted.
- Coordinate reconnaissance.
- Perform Incident Commander's functions in his/her absence.
- Assist the Incident Commander with his/her functions.



## Information Officer Functions

(This position is filled as required depending on the scope of the hazard response)

**Mission:** Provides the main contact with media and the public to ensure that accurate, timely and consistent information is being provided on the event and the response activities.

**Location:** Provincial Field Response Centre

**Functions:**

- Obtain situation briefing from Incident Commander.
- Coordinate public information activities of all ministries.
- Establish a media centre in proximity to the PFRC.
- Obtain copies of current Status Summary from Incident Commander.
- Prepare information summary fact sheets.
- Issue Public Information bulletins as requested by the Incident Commander.
- Attend meetings to update information releases.
- Provide escort service to the media and senior government personnel.
- Respond to special requests for information.
- Maintain log of inquiries and incident status report.

## Safety Officer Functions

(This position is filled as required depending on the scope of the hazard response)

**Mission:** Monitors and assesses hazardous or unsafe situations and develops measures for assuring personnel safety, as well as undertakes whatever steps to prevent or stop unsafe acts.

**Location:** Provincial Field Response Centre or Command Post

**Functions:**

- Report to supervisor for situation briefing.
- Identify obvious hazards and unsafe situations that might need to be addressed.
- Ensure an adequate number of qualified first aid personnel, safety equipment and Ambulance Services will be on-site to meet *Workers' Compensation Act* requirements.
- Ensure response activities are being monitored for safety compliance.
- Monitor familiarization of auxiliary personnel and volunteers to field equipment and safety. (volunteers are registered through the local government and PEP)
- Ensure unsafe practices and all injuries are reported to the Incident Commander and that a mechanism of stop-orders are in place.

### Chief of Operations Functions (Flood Fighting Chief in the BC Flood Plan)

**Mission:** Provides assistance in the preparation of the response strategy and determines the requirements for equipment, contract services and field crews.

**Location:** Provincial Field Response Centre

**Functions:**

- Obtain briefing from Incident Commander.
- Develop operations portions of Action Plan.
- Brief and assign operations personnel in accordance with Action Plans.
- Brief Incident Commander and Chief of Planning.
- Determine equipment and human resource needs and allocation and request additional resources.
- Together with Chief of Planning, make recommendations on priority of operations.
- Report information about special activities, events and occurrences to Incident Commander.
- Ensure response activities are monitored for effectiveness and safety.
- Coordinate response activities for dam and dike protection and repair to watercourses and drainages.
- Coordinate repairs to roadways and bridges.
- Assemble and supervise field crews.
- Ensure field crews provided with safety materials and equipment, transportation, communications, etc.
- Supervise contractors and auxiliary personnel hired.
- Identify obvious hazards and unsafe situations that might need to be addressed.
- Ensure an adequate number of qualified first aid personnel, safety equipment and Ambulance Services will be on-site to meet *Workers' Compensation Act* requirements.
- Ensure response activities are being monitored for safety compliance.
- Monitor familiarization of personnel to field equipment and safety.
- Ensure unsafe practices and all injuries are reported and that a mechanism of stop-orders are in place.
- Ensure permanent records are kept of operations including time and costs.

### Operations Functions (Flood Fighting in the BC Flood Plan)

**Mission:** Provides operations services, such as hazard response (flood fighting).

**Location:** Field Crew Staging Area/Field Locations

**Functions:**

- Report to Chief of Operations or supervisor for situation briefing.
- Obtain appropriate information and materials (forms, maps, briefcases, etc.).
- Arrange for transportation, communications and safety equipment.
- Obtain briefing on functions and safety matters.
- Undertake operations functions.
- Provide on-site construction supervision, supervise contractors and auxiliary personnel hired.
- Review activities for effectiveness and safety.
- Notify the supervisor of critical situations that threaten people, infrastructure (roads, communications and utilities), property or the environment.
- Maintain a record of work accomplished and personal/equipment work hours.
- Identify obvious hazards and unsafe situations that might need to be addressed.
- Report unsafe practices and any injuries.

### Chief of Planning Functions (Flood Assessment and Planning Chief in the BC Flood Plan)

**Mission:** Recommends response action priorities to the Incident Commander and collects, evaluates, disseminates information obtained from field assessment.

**Location:** Provincial Field Response Centre

**Functions:**

- Undertake advance planning including assembly of information, maps, reports, assessment forms, and assignment of staff.
- Obtain briefing from Incident Commander.
- Liaise with River Forecast Centre and provide local forecasts.
- Assign assessment personnel to PFRC as appropriate.
- Determine priorities and set schedules for site surveys/inspections.
- Review and update field reports.
- Determine level of protection needed for priority areas at risk.
- Together with Chief of Operations, assess and recommend priorities for action plan.
- Assemble information on alternative response strategies and make recommendations.
- Identify need for use of specialized expertise/resource(s) for planning and operations, including dike safety, dam safety, river process, worksite, geotechnical, etc.
- Provide information to the Information Officer.
- Ensure transportation, safety equipment, tools and supplies available for teams.
- Coordinate special tasks as assigned by the Incident Commander.
- Ensure an adequate number of qualified first aid personnel, safety equipment and Ambulance Services will be on-site to meet *Workers' Compensation Act* requirements and a stop work mechanism is in place.
- Ensure activities are being monitored for safety compliance and unsafe practices and activities are reported.
- Monitor familiarization of personnel to field equipment and safety.
- Ensure permanent records are kept of assessments, hours of work, etc.
- Brief Incident Commander and Chief of Operations.

## Planning Functions

### (Flood Assessment and Planning in the BC Flood Plan)

**Mission:** Conduct field surveys for the systematic collection of information, prepare documentation, advise on response techniques, and monitor response efforts.

**Location:** Field Crew Staging Area/Field Locations

**Functions:**

- Report to Chief of Planning or supervisor for situation briefing and assist in identifying areas and facilities at risk.
- Obtain filed reports, maps and data forms for assessments.
- Obtain appropriate Assessment Forms and tools (flagging, tape measure, marking pen, camera, binoculars, etc.).
- Arrange with supervisor for site transportation and safety equipment for site assessment reconnaissance (hard hat, safety vest, boots, etc.).
- Assemble with assessment team members and supervisor to delineate functions, to schedule field deployment, to review data collection procedures and to establish safety procedures.
- Undertake assessment functions including site assessments, gauge reading, advice on design and construction techniques (seepage, boils, erosion, sloughing, etc.).
- Fill out an Assessment Form for each site assessment and forward to supervisor.
- Review field data obtained and prepare maps and plans as required.
- Notify supervisor of any critical situations that threaten people, infrastructure (roads, communications and utilities), property or the environment.
- Maintain a record of work accomplished and personal hours worked.
- Identify obvious hazards and unsafe situations that might need to be addressed.
- Report unsafe practices and any injuries.

## Technical Specialist Functions

(These positions are filled as required depending on the scope of the hazard response)

**Mission:** Provides specialist assessment services including dike safety, dam safety, river process, worksite, geotechnical, construction, etc.

**Location:** Field Crew Staging Area/Field Locations

**Functions:**

- Report to the Chief of Planning (Flood Assessment and Planning Chief) for situation briefing and assist in identifying areas and facilities at risk.
- Obtain filed reports, maps and data forms for assessments.
- Obtain appropriate Assessment Forms and tools (flagging, tape measure, marking pen, etc.).
- Arrange with supervisor for site transportation and safety equipment for site assessment reconnaissance.
- As required, assemble with assessment team members and supervisor to delineate functions, to schedule field deployment, to review data collection procedures and to establish safety procedures.
- Undertake specialist assessment functions in coordination with Assessment Teams and dam/dike owners as required.
- Prepare and provide Assessment Forms and other documentation to supervisor.
- Review field data obtained and prepare Maps and Operational Plans.
- Prepare risk analysis and advice.
- Notify supervisor of any critical hazard situations that threaten people, infrastructure (roads, communications and utilities), property or the environment.
- Maintain a record of work accomplished and personal work hours.

## **Chief of Logistics Functions**

### **(Support Coordination and Liaison Chief in the BC Flood Plan)**

**Mission:** Provides the coordination of other ministry's activities in support of the PFRC operations whereby additional resources are sought by the Incident Commander. Arranges and provides facilities, services, personnel and materials.

**Location:** Provincial Field Response Centre

**Functions:**

- Obtain briefing from Incident Commander.
- Assign work locations and preliminary work tasks to section personnel.
- Keep a record of units activated including names and locations of assigned personnel.
- Participate in preparation of Action Plan.
- Review Action Plan and estimate needs for next operation period.
- Assess response equipment and personnel needs.
- Coordinate requests for additional resources identified by Incident Commander not available within the PFRC structure.
- Coordinate support elements of the Action Plan.
- Coordinate notification and liaise with community to inform and address hazard concerns.
- Coordinate local community efforts with the Provincial response.
- Arrange volunteer services.
- Establish Command Post and field communications as required.
- Ensure other agencies provide evacuation services and health services.
- Ensure liaison with traffic control.
- Co-ordinate with livestock protection and evacuation services.
- Liaise with Chiefs of the ICS sections and Commander.
- Arrange for transportation and accommodation of response personnel.
- Maintain inventory, costs and records of equipment deployed/returned.



## Logistics Functions

(This position is filled as required depending on the scope of the hazard response)

**Mission:** Arranges and provides facilities, services, personnel and material.

**Location:** Provincial Field Response Centre/Command Post

**Functions:**

- Report to the Chief of Logistics (Support Coordination and Liaison Chief) and obtain briefing.
- Determine types of response equipment needed.
- Establish a Command Post, if required, and field communications in proximity to area.
- Assess future equipment and personnel requirements.
- Liaise with Finance Officer.
- Distribute and record equipment issued.
- Arrange for transportation and accommodation.
- Maintain inventory and cost records of equipment deployed and returned.

### Chief of Finance Functions (Administration and Services Chief in the BC Flood Plan)

**Mission:** Provides administration and financial services to the Incident Commander as may be required on a 24 hour basis, including billing, accounting, filing, invoicing and preparation of service contracts.

**Location:** Provincial Field Response Centre

**Functions:**

- Review Action Plan and estimate PFRC needs for next operation period.
- Identify service and support requirements for PFRC operation.
- Establish and maintain a filing system for PFRC staff.
- Prepare summary sheets of cumulative resource deployment.
- Ensure all PFRC obligation documents initiated at the incident are properly prepared and completed.
- Prepare and consolidate time and wage records for the PFRC.
- Provision of PFRC facilities including a large meeting room (20 persons), a small meeting briefing room (6 persons) and a media centre.
- Ensure adequate facilities are provided to house the PFRC.
- Ensure access security and services are provided on a 24 hour basis (keys, coffee, food, etc.).
- Provide sufficient telephones and communications for PFRC operations.
- Ensure clerical services, stationary and supplies are available to support the PFRC.
- Maintain financial control and records of PFRC expenditures and commitments.
- Acquire emergency materials and maintain records.
- Arrange accommodation and travel for PFRC staff.
- Provide radio communication to the PFRC.
- Ensure adequate courier and message service available on a 24 hour basis.

### Finance Functions

(This position is filled as required depending on the scope of the hazard response)

**Mission:** Provides for the overall administrative and finance services which include billing, accounting, filing and invoicing and preparation of service contracts.

**Location:** Provincial Field Response Centre/Command Post

**Functions:**

- Report to and obtain briefing from the Chief of Finance (Administration and Services).
- Obtain stationary, office equipment supplies and clerical support for response personnel.
- Establish financial (cash accounts, invoices, billings, contracts, etc.) and administrative (filing, stationary supplies, etc.) capability for response.
- Assign support clerical staff, if needed, to support response efforts.
- Liaise with Logistics Officer for preparation of equipment and service contracts and rentals.
- Coordinate accounting for food, equipment, wages, accommodation, travel, etc.
- Prepare financial and administration status reports.

## Supervisor/Team Leader Functions

(Position(s) filled as required depending on the scope of the hazard response.)

**Mission:** Assumes supervisory role over Operations or Planning functions/teams as required.

**Location:** Command Post/Site Assessment Crew Staging Area

**Functions:**

- Report to Chief of Operations or Planning, or supervisor, for situation briefing and assist in identifying areas and facilities at risk.
- Assume delegated responsibilities from supervisor.
- Determine number and deployment of field crews.
- Determine resource allocations among multi-site activities.
- Secure site transportation and safety equipment for field crews/teams.
- Assemble field crews to delineate functions, schedule field deployment, to review data collection procedures and to establish safety procedures.
- Review activities for effectiveness and safety.
- Supervise contractors and auxiliary personnel hired.
- Identify obvious hazards and unsafe situations that might need to be addressed.
- Ensure response activities are being monitored for safety compliance.
- Monitor familiarization of personnel to field equipment and safety.
- Ensure unsafe practices and all injuries are reported and that a mechanism of stop-orders are in place.
- Ensure permanent records are kept of work accomplished, costs and hours worked.