

**REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN  
BOARD POLICY**

**POLICY:** Flood Defense System Deployment

**AUTHORITY:** Board Resolution dated \_\_\_\_\_.

**POLICY STATEMENT**

The Regional District of Okanagan-Similkameen (RDOS) uses a consistent approach to make decisions regarding the deployment, management, and demobilization of Temporary Flood Defense Systems (“Systems”), and maintains safety and training requirements for personnel tasked with their deployment.

**PURPOSE**

To establish:

- a. Common understanding of key terms and concepts.
- b. Protocol for the deployment, management, and demobilization of Temporary Flood Defense Systems, including concurrent or consecutive flooding events.
- c. Safety standards for personnel tasked with deploying the Systems.
- d. Training and exercise schedule for personnel on the deployment of Systems.
- e. Post-event evaluation and continuous improvement process.

**DEFINITIONS**

BC Emergency Management System (BCEMS) Response Goals

The BCEMS provides a prioritized list of response goals to guide decision-making during emergencies. These goals serve as a framework for coordinating emergency response activities and ensuring that critical public safety needs are addressed effectively and efficiently.

The BCEMS prioritized goals are:

- a. Safety and Health of Responders: To protect the well-being of all emergency personnel involved in the incident.
- b. Save Lives: To take actions that directly preserve human life.
- c. Reduce Suffering: To alleviate the pain, injury, and distress experience by those affected by the emergency.
- d. Protect Public Health: To safeguard the community’s overall health and well-being.
- e. Protect Infrastructure: To secure essential government and community structures, such as buildings, utilities, and communication networks.
- f. Protect Property: To prevent or minimize damage to private and public property.
- g. Protect the Environment: To prevent or mitigate damage to natural resources and ecosystems.
- h. Reduce Economic and Social Losses: To limit the financial and societal impacts of the emergency on individuals and the community.

Critical Resource

If a specific resource is in demand by multiple agencies or local authorities and not all requests can be met due to the limited supply of that resource, the resource may be designated a “critical resource”.

In a situation of concurrent or consecutive flooding events, the Systems may be categorized as such due to:

- a. The demand for the Systems being greater than the supply.
- b. The readiness status of the Systems due to prior use.
- c. The availability of personnel trained and equipped to deploy the Systems.

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### Temporary Flood Defense System (“System”)

Any mobile and deployable system or resource intended to mitigate the impact of flooding by diverting or containing floodwater, such as, but not limited to:

- a. Flexible tubing systems, such as Tiger Dams
- b. Rigid frame systems, such as flood fences
- c. Flexible and fillable systems, such as HESCO barriers and sandbags

Note: This policy and definition do not extend to fixed structural reinforcements such as flood gates.

### **RESPONSIBILITIES**

RDOS Emergency Operations Centre

- a. Pre-deployment assessment
- b. Deployment strategy and decision making
- c. Safety and quality assurance
- d. Community notification and engagement
- e. Demobilization
- f. Documentation

Protective Services

- a. Training and exercises
- b. Equipment maintenance and readiness
- c. Continuous improvement

### **PROCEDURES**

1. Pre-Deployment Assessment
  - a. Utilize local expertise, flood risk mapping, and real-time hydrological data to prioritize at-risk areas.
  - b. Consider known or potential competing requests or needs.
  - c. Evaluate any safety concerns for personnel tasked with System deployment, including route safety.
  - d. Verify System integrity (e.g. conduct pressure tests, confirm availability of water sources for filling)
2. Deployment Strategy
  - a. Prioritize in accordance with BCEMS Response Goals
  - b. Monitor weather and flood data continuously to anticipate secondary or cascading events and reposition barriers as necessary.
  - c. In case of requests for a Critical Resource from member communities, where available inventory is not adequate to meet all requests:
    - i. Emergency Operations Centre Director will consult with the EOC Policy Group Liaison, EOC Section Leads, and EOC Management including Risk Management.
    - ii. Evaluate the requests. Considerations include but are not limited to:
      - Immediacy of the need.
      - Likelihood of impact.
      - Scale of potential impact.
      - Nature of potential impact (see BCEMS Response Goals).
      - Availability of personnel trained in the deployment of the System.
      - Ability to successfully deploy in the required timeframe.
      - Availability of suitable alternatives.
      - Any other pertinent factors.
    - iii. Notify the relevant communities of the decision and the rationale.
3. Safety and Quality Assurance

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- a. Mandate the use of Personal Protective Equipment (PPE) for all personnel during deployment and removal.
  - b. Conduct safety briefings and establish emergency evacuation routes, and check-in procedures prior to work commencement.
  - c. Assign supervisory personnel to provide regular oversight and quality control and adherence to manufacturer guidelines where appropriate.
4. Community Notification and Engagement
    - a. Issue timely public advisories outlining System locations, emergency access routes, and anticipated impacts.
    - b. Coordinate with local media, community organizations, and social services to reach at-risk populations.
    - c. Provide educational material on the purpose and function of Systems to encourage public cooperation and reduce interference.
5. Demobilization
    - a. Decommission Systems only after threat assessment confirms the absence of further risk.
      - i. Tiger Dams: Drain, clean, and inspect tubes for damage or contamination prior to storage.
      - ii. Sandbags: Advise the public on options for disposal, and any support that might be available.
    - b. Restore affected areas and infrastructure to pre-deployment conditions where feasible.
6. Training and Exercises
    - a. Schedule annual, scenario-based exercises simulating multiple flood events requiring Temporary Flood Defense System response.
    - b. Train personnel on safety procedures, barrier assembly, safety procedures, risk assessment, and demobilization
7. Equipment Maintenance and Readiness
    - a. Conduct regular inspections and preventative maintenance of System inventory.
    - b. Replenish stock or replace components per manufacturer recommendation or after any incident of damage or wear.
    - c. Store equipment in climate-controlled, accessible locations with backup power and security.
8. Documentation and Reporting
    - a. Record all System deployments, including timing, locations, personnel, and observed effectiveness.
    - b. Compile post-event reports analyzing outcomes, challenges, and recommendations for improvement.
    - c. Document lessons learned during multi-event deployments to improve future response.
    - d. Share findings with partners and incorporate feedback into policy revisions.
9. Continuous Improvement
    - a. Review this policy every two years or following any major flooding incident involving System deployment, and make any necessary updates.
    - b. Incorporate advances in technology, materials, and best practices into deployment protocols.
    - c. Incorporate lessons learned and policy revisions into future exercises to ensure awareness and understanding of any changes.