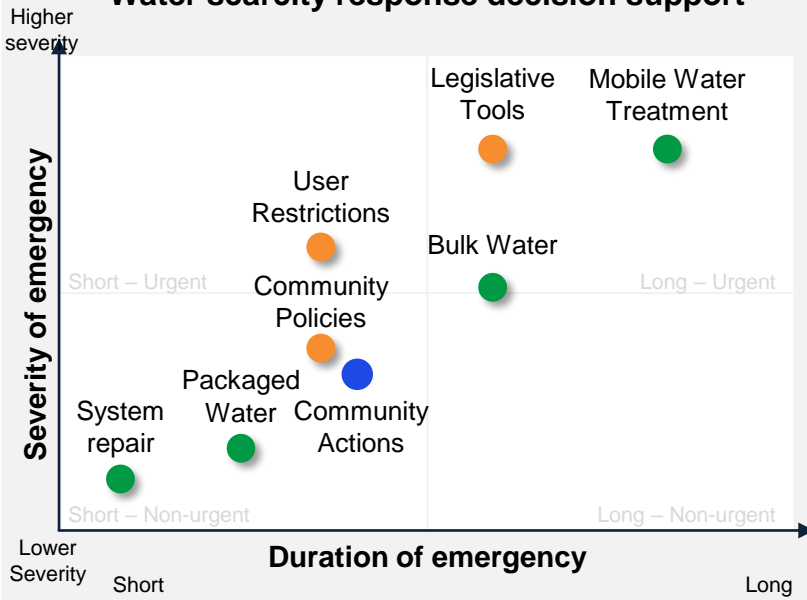


### Water scarcity response decision support



- Water shortage actions are placed on above chart in relation to each other to reflect in which situations it might be appropriate to take each action. The scale and position are directional and is illustrated as guidance and for consideration only.
- Note: System Repair / Enhancement actions should be taken on an as needed basis (both preventatively and in response to an emergency)

### Key Contacts

#### 24/7 EMCR Emergency Coordination Centre

Tel: 1-800-663-3456

#### EMCR (XXX) PREOC Operations Section

Tel: (XXX) XXX-XXXX

Email: [XXX.OPS1@gov.bc.ca](mailto:XXX.OPS1@gov.bc.ca)

#### Regional Health Authority Drinking Water Officer

Tel: (XXX) XXX-XXXX

Email: [XXX@XXX.ca](mailto:XXX@XXX.ca)

### Resources

#### Emergency Info BC

Webpage: [EmergencyInfoBC.ca](http://EmergencyInfoBC.ca)

#### British Columbia Drought Information Portal

Webpage: [arcg.is/1WffXj](http://arcg.is/1WffXj)

#### BC Drought information webpage

Webpage: <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams>

### Community Actions

- Consider activating...**
- When a water shortage emergency is anticipated
  - In advance of taking legislative action
  - In combination with legislative action

- Consider...**
- Equity towards - and perception by - groups impacted by municipal actions
  - Cost, lead time, and resources required to implement the action
  - Appropriate consultation of potentially impacted groups

- Potential actions**
- Following are dependent on having appropriate established infrastructure + policy framework
- Increase frequency of meter reading
  - Minimize evaporation by installing pool covers at municipal pools
  - Slow flows by reducing water pressure to minimum allowed levels
  - Convert public water uses to reclaimed waste water unless for critical health and safety reasons

### Public Information and Community Policies

- Consider activating...**
- When a water shortage emergency is anticipated
  - In advance of taking legislative action
  - In combination with legislative action

- Consider...**
- Equity towards - and perception by - groups impacted by policies and use restrictions.
  - Provision of sufficient notice and warning before implementing policies or use restrictions
  - Appropriate consultation of potentially impacted groups
  - Drafting policies prior to their need

- Potential actions**
- Public Information
    - Distribute information regarding water conservation
    - Provide conservation guidance based on user group
    - Develop communications and media kits
  - Community Policies
    - Implement voluntary water use reduction policies
    - Reduce water usage in key governmental departments

### User Restrictions and Legislative Tools

- Consider activating...**
- Bylaw restrictions when a water shortage emergency is anticipated and in combination with legislative tools during an emergency
  - Legislative tools during an emergency

- Consider...**
- Equity towards - and perception by - groups impacted by legislative tools
  - Provision of sufficient notice and warning before enacting legislative tools
  - Appropriate consultation of potentially impacted groups
  - Enforceability of use restrictions
  - Drafting bylaws before water scarcity risk escalates

- Potential actions**
- User Restrictions through bylaws
    - Time of use restrictions
    - Type of use restrictions
    - Total water usage restrictions
  - Legislative Tools
    - Emergency Program Act* (e.g. declaring a State of Local Emergency)
    - Water Sustainability Act*

Community Actions  
Local water supply and demand

Policy Options  
Local water demand

Logistics Options  
Local water supply

### System Repair / Enhancement

- Consider activating...**
- Proactively in anticipation to a water shortage emergency
  - On an as-needed basis

- Consider...**
- Criticality of asset
  - Stock availability
  - Lead time
  - Complexity of system required
  - Availability of key personnel to install/repair

- Potential actions**
- Assess repair and/or enhancement options
  - Determine stock level
  - Procurement
  - Storage

### Packaged Water

- Consider activating...**
- In response to short term, immediate needs
  - In the event of a boiled water advisory
  - In combination with other logistic options to supplement water supply

- Consider...**
- Setting up contracts in advance
  - Cost
  - Packaged water size format
  - Lead time
  - Stock availability
  - Expiration date
  - Transportation modality (e.g. land, sea, rail)
  - Vendor location
  - Central storage
  - Community distribution

- Potential actions**
- Procurement
  - Transportation
  - Storage
  - Distribution
  - Tracking
  - Demobilization

### Bulk Water

- Consider activating...**
- In response to anticipated more severe or prolonged, water shortage emergencies

- Consider...**
- Setting up agreements in advance
  - Lead time and capacity of water source
  - Mutual aid agreements (when seeking assistance from nearby communities)
  - Seasonality (some communities have surplus during certain seasons only)
  - Distance between fill and destination site
  - Transportation modality (e.g. land, sea, rail)
  - Licensing requirements for water haulage options
  - Health authority and drinking water officer consultation and authorization
  - Community distribution

- Potential actions**
- Obtain *Water Sustainability Act* Authorization
  - Procurement
  - Transportation
  - Testing and Storage
  - Distribution
  - Tracking
  - Demobilization

### Mobile Water Treatment Systems

- Consider activating...**
- In response to severe, very long-term, or recurring water shortage emergencies
  - If there is an available, nearby non-potable water source that can be treated

- Consider...**
- Available water source for treatment
  - Site
  - Lead time to deliver and set up solution
  - Cost (rent vs. buy)
  - Water treatment capacity
  - Local resource capacity to operate and maintain system
  - Complexity of system and resources to operationalize

- Potential actions**
- Feasibility study
  - Procurement
  - Implementation
  - Operations & maintenance
  - Demobilization