



# **West Coast Region Drought Response Plan August 12, 2015 Update**



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Ministry of Forests, Lands and Natural  
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## Presentation Overview

- Provincial Drought Response Organization
- Drought Response Level
- Communications
- Current Drought Response Activities
- Next Steps



# Ministry of Forests, Lands and Natural Resource Operations



## Regional and Local Level Response

- Local Government
- First Nations
- Water Service Providers
- Local Drought Management Teams (if in place)
- Regional Water Agencies and Boards
- Irrigation Districts
- Water User Communities
- Others

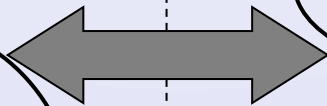
**Local Agencies and Groups**

**Technical Drought Working Group**  
(MFLNRO Manager, MFLNRO, MAL regional staff and DFO)

## Provincial Level Response

- Members
- Ministry of Forest, Lands and Natural Resource Operations (chair)
  - Ministry of Environment
  - Ministry of Agriculture
  - Ministry of Health Services
  - Agriculture and Agri-Food Canada
  - Fisheries and Oceans Canada
  - Others

**Inter-Agency Drought Working Group**



# Ministry of Forests, Lands and Natural Resource Operations



## West Coast Technical Drought Working Group

Name	Agency	Region
Ron Ptolemy	MOE – Ecosystems Protection and Sustainability Branch	Victoria
Brian Epps	MFLNRO	West Coast
Mike McCulloch	MFLNRO - Ecosystems	West Coast
Scott Silvestri	MFLNRO - Ecosystems	West Coast
Wayne Haddow	Ministry of Agriculture	West Coast
Jill Hatfield	Ministry of Agriculture	West Coast
Ralph Mohrmann	Emergency Management BC	Victoria
Gary Anderson	Vancouver Island Health Authority	Courtenay
Clare Fletcher	EMBC VI Regional Manager	Vancouver Island





## Purpose of Technical Drought Working

- Ensures effective delivery of the British Columbia Drought Response Plan
- Coordinates operational level cross-agency response to drought or low streamflow conditions
- Determines when to elevate drought levels at the basin scale.
- Works with regional cross-government drought teams who determine when to elevate the current drought level to the next level in specific watersheds and streams
- Works with regional cross-government drought teams to issue advisories/notifications on drought conditions
- Determines when to take regulatory action under the *Water Act* (Water Manager Responsibility) and the *Fish Protection Act*



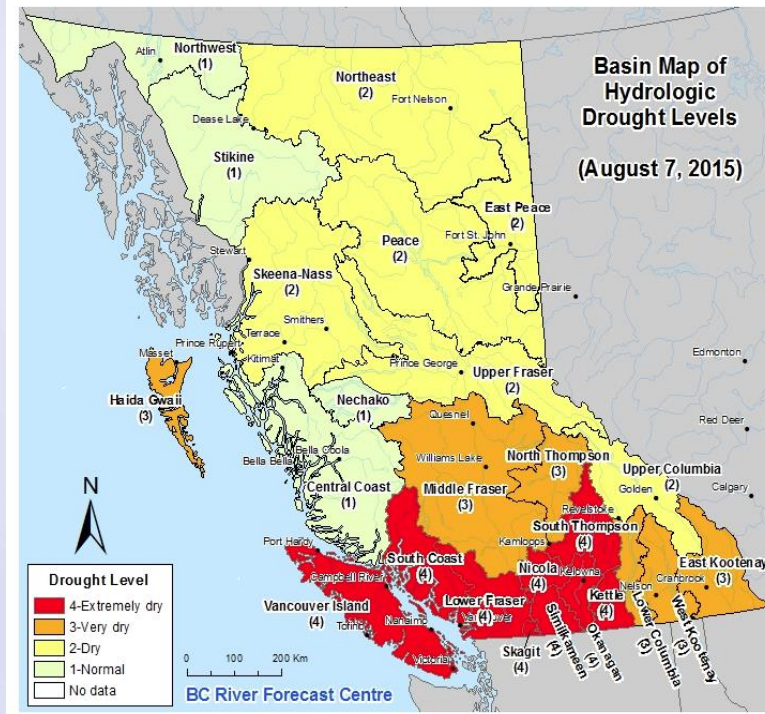
## Drought Response Levels

Level	Conditions	Significance	Objective	Target
1 (Green)	Normal Conditions	There is sufficient water to meet human and ecosystem needs	Preparedness	Ongoing reductions in community water use
2 (Yellow)	Dry Conditions	First indications of a potential water supply problem	Voluntary conservation	Minimum 10% reduction
3 (Orange)	Very Dry Conditions	Potentially serious ecosystem or socioeconomic impacts are possible	Voluntary conservation and restrictions	Minimum additional 20% reduction
4 (Red)	Extremely Dry Conditions	Water supply insufficient to meet socio-economic and ecosystem needs	Voluntary conservation, restrictions and regulatory response	Maximum reduction
Loss of Supply		Potential loss of a community's potable or fire fighting supply	Emergency response	Ensure health and safety

## BC Drought Levels – August 7, 2015

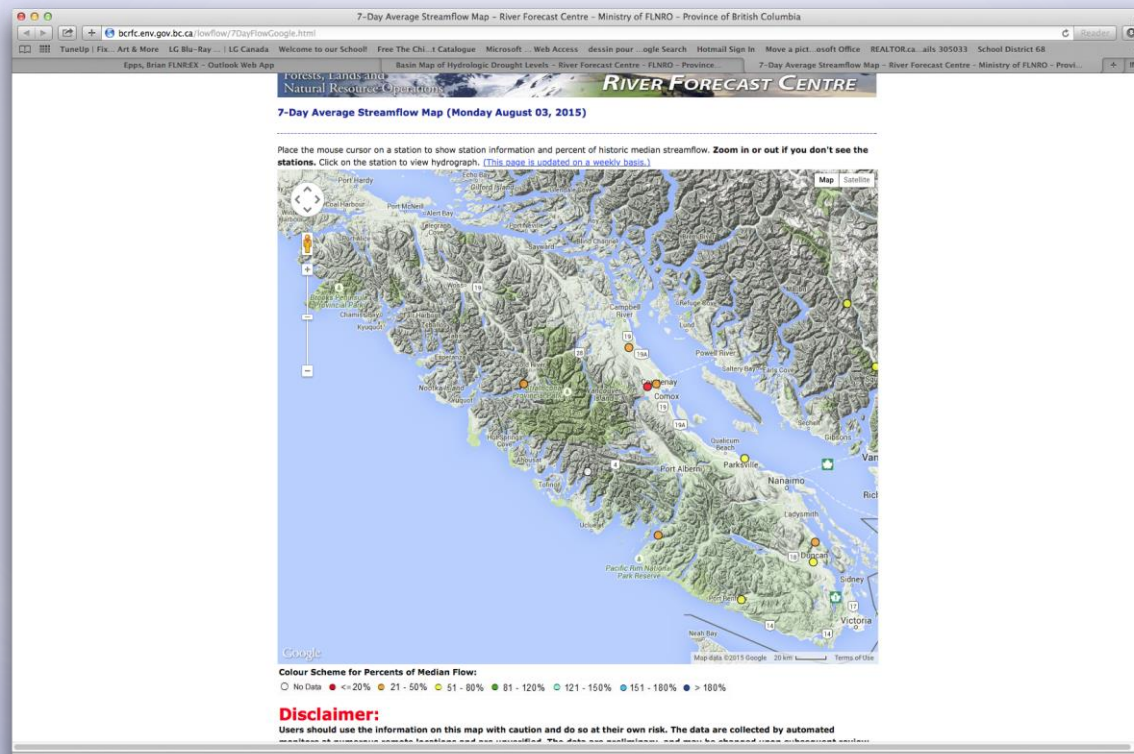
### Basin Map of Hydrologic Drought Levels

This map is updated when conditions warrant. Click on the map or [here](#) to link to the [7-Day Average Streamflow Map](#) for the WSC stations in the basins. More information on drought in BC is available at: <http://www.livingwatersmart.ca/drought/>.





## 7-Day Average Streamflow Map







## Examples of Drought Response Actions

- **Level 4 – Extremely Dry Conditions**
  - increase frequency of communication by all levels of government and water suppliers
  - continue to issue information bulletins to all stakeholders
  - implement regulatory controls under the *Water Act*, *Fish Protection Act* or other statutes as appropriate if voluntary measures are not enough to protect water users and fish
  - provide assistance to communities seeking alternative or temporary water supplies



## **Current Actions**

- **Communications/Media releases**
  - EMBC Conference Calls to Local Authorities
  - Level 4 Drought Media Release
  - Agricultural Specific Letter and Information Bulletin
  - Groundwater Users Specific Media Release
  - Island Health – Letter/Questionnaire to Water Suppliers
  - FLNRO Web Site - Drought Information Updates, FAQ, Provincial Drought Plan:  
<http://www.livingwatersmart.ca/drought/>
  - <http://www.livingwatersmart.ca/drought/response.html>

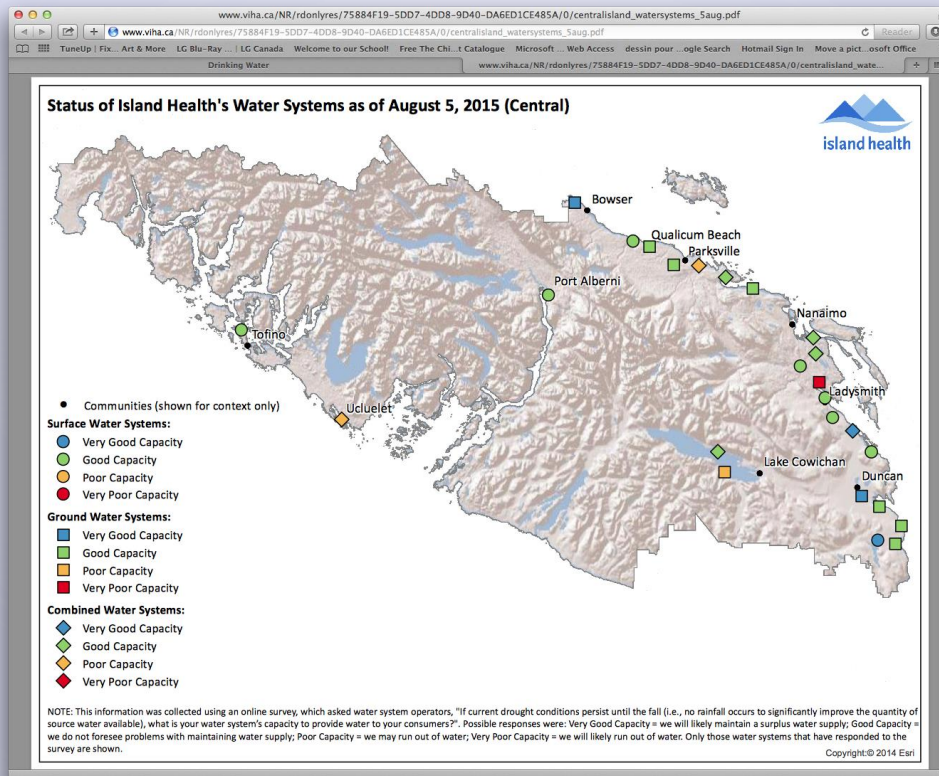


## **Current Actions - Island Health – Water Supplier Survey**

- VIHA – Link below to maps illustrating the results of Island Health’s initial data collection of Water Suppliers expected capacity.
- The online maps are split into our South, Central and North Island regions.
- Links to these maps are posted on the MHO/Public Health Drinking Water page. <http://www.viha.ca/mho/water/>



## Water System Status/Estimated Capacity





## Current Actions - Provincial Observation Well Summary

Regional District	Wells within Regional District	Wells At Historic Mean	Wells Below Historic Mean	Wells at Historic Minimum	Wells Below Historic Minimum	Wells requiring site visit to verify status	Wells not included due to short-term record	% below mean to below minimum	% at or below minimum	% at or below minimum (excluding short-term)
ACRD	1		1					100%	0%	
ComoxVRD	5	2		3				60%	60%	
CRD	19	4	3	8	1	3		63%	47%	
CVRD	12	2	2	3	1		4	50%	33%	50%
RDMW	1	1						0%	0%	
RDN	34	7	7	7	4		10	53%	32%	46%
SRD	1				1			100%	100%	
<b>Grand Total</b>	<b>73</b>	<b>16</b>	<b>13</b>	<b>21</b>	<b>7</b>	<b>3</b>	<b>14</b>	<b>56%</b>	<b>38%</b>	
<b>%</b>		<b>22%</b>	<b>18%</b>	<b>29%</b>	<b>10%</b>	<b>4%</b>	<b>19%</b>			







## **Next Steps**

- Review waters supplier capacity reports (Island Health reports).
- Review aquatic health reports (Fish Health)
- Review supply vs. demand reports for large water users (Industrial, Irrigation, Hydro, to determine if regulatory measures can help to manage available water more effectively.
- Review groundwater levels to determine downwards trends
- Expand streamflow monitoring to support decision making and potential regulatory options



# Questions ??

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