

**Emergency Response Plan
For
Shawnigan Village Waterworks**

PO Box 369 Shawnigan Lake BC

250-743-4091

Cell # 250-480-9516

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Shawnigan Village Waterworks Emergency Response Plan

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Shawnigan Village Waterworks Emergency Response Plan

Emergency Response Plan Contact List

		Phone	Cell	Fax
Office	Sue Lidstone	250-743-4091	250-744-0162	743-4021
Operator's Name	Rod Lidstone	250-389-4091	250-480-9516	
System Engineer	John Motherwell	250-475-3535		475-3536
Health Officer	Mr. Mark Hall	250-737-2010		737-2008
Water samples	Maxxam Labs	250-385-6112		382-6364
Police	Shawnigan RCMP	250-743-5514		
• Fire Chief		250-743-4283		
	Keith Sheilds	250-743-4120		
Fire Hall		250-743-2096		
BC Hydro		1-888-769-3766		
• BC Tel	Acct. # 232055920 3	250-310-3100		
• FortisBC	Emergency	1-800-663-9911		
• BC One Call	Call Before Dig	1-800-474-6886		
Provincial Emerg. Preparedness Program		250-952-4913		
		1-800-663-3456		
Cowichan Valley Emergency Program		250-746-2562		
Electrician	Dave Motherwell		778-679-1041	
	Jeff Metcalf		250-857-7551	
Pump Repairs	Osbourne	250-386-3381		
	GR Martin	250-743-3075		
• Pump Rentals	Canadian Dewatering	1-800-635-5288		
BC Aquifer	Pipe & Pumps	250-748-4041		
Backhoe	Ross Hagel	250-743-8369	250-882-1409	
Water Mains specialist	Shane Black		250-715-6108	
Plumber CVM	Zach Simon	250-733-2116	250-882-2920	
Plumber	Geoff Doran	250-743-5493	250-715-6876	
Stanco Water Tanks	John Greig	604-273-6441		
Regional Director	Bruce Fraser	250-733-0771	250-888-0160	
Ministry of Environment		250-727-2141		
Bulk Water Hauler		250-388-2712		
	Drillwell	250-746-5268		
Bottled Water Supplier	Canadian Springs	250-727-9100		
Newspaper (Citizen)		250-748-2666		748-1552
Radio Station	C-FAX	250-386-1070		
Radio Station	Q FM	250-475-0100		
Highways		250-361-7318		
Chlorinator supplier	Jeff Van Isle	250-383-7145		
Ambulance		250-746-4233		
• CVRD -Shawnigan North Water System		250-746-2500	746-5612	

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Mill Bay Waterworks

250-743-9023

743-3155

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System Specifications Located in Lake Pumphouse

- System Maps
 - Control system operation Manual
- BC Hydro Account # 9388 2316 902
Mechanical Drawings

- Telephone lines:

Dialer 250-743-5327
Reservoir to Lake data line SS212TC18331

- Log Book

System Specifications for Jersey Rd. Booster Pumphouse

- - Control system operation Manual
- Mechanical Drawings
BC Hydro Account # 9388 0649 502

System Specifications for Galland Rd. Booster Pumphouse

- - Control system operation Manual
- Mechanical Drawings
BC Hydro Account # 321 876

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Contamination of source – Spills, Vehicle Accident, Train Accident

Actions:

- Shut down pumps
- Notify Health Unit
- Notify Users
- Contact government agencies for advise and assistance.
- Arrange alternate source if necessary, bulk hauler, bottled water

Contacts:

- Local Health Unit, Provincial Emergency Preparedness, Police, Ministry of Environment, Fisheries.

Loss of Source - Intake damaged

Actions:

- Shut down pumps
- Arrange for alternate source, bulk hauler, bottled water

Contacts:

- Local Health Unit

Broken Water Main

Actions:

- Reduce Pressure (maintain enough flow to prevent backflow)
- Call for repairs
- Notify effected customers

Contacts:

- System Engineer
- Local Health Unit
- Backhoe Greg Kendall
- Cowicahn Valley Mechanical (Zack)

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Chlorinator Failure

Actions:

- Notify Health Unit
- Shut off pumps
- Notify Customers of boil water
- Take Chlorine Samples at reservoir
- Batch chlorinate at reservoir
- Flush hydrants to distribute chlorinated water
- Take Chlorine samples throughout system
- Arrange for repairs

Contacts:

- Local Health Unit
- System Engineer

Pump Failure

Actions:

- Notify customers if not able to maintain supply
- Notify Health Unit if not able to maintain supply
- Call for repairs
- Monitor reservoir levels
- Arrange for backup pumps

Contacts:

- Local Health Unit
- Pumps Osbourne Electric
- System Engineer

Low Pressure

Actions:

- Identify area and Booster Pumphouse: Galland Rd. Pumphouse or Jersey Rd. Pumphouse
- Check pumphouses for problem

Galland Rd. may only need to be reset if supply flow was low for an extended period of time

Contacts:

- System Engineer

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- Pumps Osbourne Electric
-

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Power Failure

Actions:

- Call BC Hydro estimate of time
- Monitor reservoir levels
- Notify customers if not able to maintain supply
- Notify Health Unit if not able to maintain supply
- Arrange for backup generators

Contacts:

- Local Health Unit
- HB Electric to connect generators

Backflow or Back Siphonage

Actions:

- Notify Health Unit
- Notify Customers of boil water advisory
- Identify and isolate Cross Connection
- Purge and Disinfect lines

Contacts:

- Local Health Unit,

Earthquake

Actions:

- Check for power
- Monitor reservoir levels
- Notify customers if not able to maintain supply
- Notify Health Unit if not able to maintain supply
- Arrange for engineer do a complete system check

Contacts:

- Local Health Unit
- HB Electric to connect generators
- System Engineer

Shawnigan Village Waterworks Emergency Response Plan

Control System Failures Lake pump house

Identify type of failure	Possible causes
No flow both pumps	<ul style="list-style-type: none">• Power outage• Main breaker tripped• Lost suction prime• Broken or leaking suction above water line
No flow one single pump	<ul style="list-style-type: none">• Power surge• Control valve malfunction• Pump air locked• Chlorinator line leak
Blocked suction	<ul style="list-style-type: none">• Mercoid switch malfunction• Closed suction valve
Low water level	<ul style="list-style-type: none">• Extended Power outage• Malfunctioning Jersey rd floats• Telephone communication wire damaged

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Control System Failures Jersey Rd. transfer pump house

Identify type of failure	Possible causes
Steel Reservoir high level	<ul style="list-style-type: none"> • Float malfunction • Lake pumps left on manual • Solenoid back feed valve stuck open
Concrete reservoir high level	<ul style="list-style-type: none"> • Float operated level control malfunction • Swing check valve stuck open in tank • Both steel and concrete tank pump supply valves left open
Transfer pumps no flow	<ul style="list-style-type: none"> • Air locked • Low concrete tank level • Valves closed
Low concrete reservoir	<ul style="list-style-type: none"> • High demand on upper reservoir transfer pumps exceeded refill rate • Low steel reservoir •
Low steel reservoir	<ul style="list-style-type: none"> • Lake pump house malfunction • Data line damage • Extended power outage in village • Back feed solenoid valve malfunction •
Chlorine alarm	<ul style="list-style-type: none"> • Chlorine tanks low • Chlorinator pump failure • Chlorine analyzer malfunction • Analyzer flow blockage • (Loss of echo) recalibrate • Circulator pump failure
	<ul style="list-style-type: none"> •

Shawnigan Village Waterworks Emergency Response Plan

Control System Failures Galland Rd. Booster pump house

Identify type of failure	Possible causes
No flow both pumps	<ul style="list-style-type: none"> • Power outage • Main breaker tripped • Lost suction prime • Low water supply
No flow one single pump	<ul style="list-style-type: none"> • Power surge • Mercoid switch malfunction • Pump air locked • Valve closed • Low pressure reset
	<ul style="list-style-type: none"> •

Possible actions required to remedy pump failures

- Run Pumps on manual if necessary
- Review Control System Operating Manuals Located in Pumphouses
- Contact System Engineer if needed
- Monitor reservoir levels
- Notify customers if not able to maintain supply
- Notify Health Unit if not able to maintain supply
- Contact contractors for repairs if needed

Contacts:

- Local Health Unit
- Electrician
- BC Telephone
- System Engineer