WYNNDEL IRRIGATION DISTRICT

Wynndel Irrigation District
Emergency Response Plan

January 2024

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1.0 EMERGENCY RESPONSE PLAN – INTRODUCTION

1.1 Emergency Plan Objective

The objective of the Wynndel Irrigation District (WID) Emergency Response Plan (ERP) is to provide staff and regulatory agencies with guidelines for addressing a wide range of potential water-related emergencies that Wynndel may face.

Wynndel has the responsibility to provide adequate fire flows, an adequate supply of irrigation water,and clean, safe drinking water to our customers, and make every effort to maintain this when an emergency occurs. Proper preparation allows a utility to react more thoughtfully and thoroughly when anemergency occurs.

Information from the following documents was utilized in the preparation of this plan:

- 2021 – Water Master Plan
- *Drinking Water Protection Act*
- AWWA Manual M19, Emergency Planning for Water Utilities
- WID Policies and Procedures Manual (current as of present date)
- Interior Health (IH) Documentation on Water Quality events
- Ministry of Health - Provincial Turbidity Decision Tree
- Watershed Mapping for Duck Creek

No two emergencies are exactly the same. This ERP is a guideline for dealing with a wide range of emergencies. Each emergency is set out with a description, a general chronological order regarding how to deal with the emergency and how to document the works in a consistent manner. The task list for each emergency is also a check list that will serve staff with a reminder of items to be checked off or considered through the course of an emergency event. This document includes items specific to the WID water supply system.

Sections 3 through 7 set out the potential emergency scenarios. For each scenario, an order for addressing the emergency with a checklist is included. The objective is to ensure that key items have been considered in the emergency response and obvious items have not been overlooked.

1.2 Operational Resiliency

Operational resiliency is the ability of the operation to adjust, adapt, and continue to provide service under emergency conditions. The objective for the Wynndel Irrigation District is to have a high operating resiliency. Operational resiliency indicators include the following:

Emergency Response Plan: Having a thorough and well-thought-out ERP is the first step in developing resiliency in operations so that emergencies can be better handled. This document is a part of the process for developing resiliency.

Regional Agency Coordination: This ERP must be circulated and available to the greater regional emergency response agencies.

Mutual Agreements for Aid: For certain emergencies, WID may have to rely on other water utilities for assistance and support. The Town of Creston and the RDCK are two local adjacent water utilities that WID may require assistance from at some date in the future. The District will work toward a formal mutual aid agreement, based on the principles in protecting a community;

Emergency Power: Gravity supply with back-up power generation to run the disinfection equipment is possible for the WID water system if there were a catastrophic failure in the power supply grid.

Ability to Meet Water Demands: The capacity of the WID water system is substantial and, if needed in an extreme emergency, could benefit areas beyond the limits of the current service area.

Critical Parts Inventory: A listing of critical parts or where they are available is provided in Appendix C of this document. Contact names for those support agencies in the Kootenays that may have specialty parts or services are listed in Section 11 of this document.

Critical Staff Resiliency: The ability of staff to react and maintain composure during an extreme event is not known until tested. Training and positive reinforcement of decision-making by staff at all levels will assist in covering what might occur during an emergency.

1.3 Staff Priorities

During any emergency, WID have to follow the general operating principles provided within this section.

Safety of WID Staff is Paramount: If WID does not maintain safe working conditions, they may compromise their own safety and may not be able to assist the public if the emergency conditions escalate. WID staff are to be aware of their personal safety first, so that they will be able to be of assistance to the greater public.

- Identify the hazards and their severity.
- Determine who might be harmed and how.
- Evaluate the risks and decide on precautions to be taken.
- Determine if the risks can be removed.
- Determine who are the appropriate people to contact for assistance.
- Record any significant findings.
- Always wear appropriate collective or personal protective equipment
- If working alone, ensure use of Working Alone monitoring system and procedures.

Safety of Public: Protection of the health and well-being of the citizens of our community is equivalent to the first principle.

Safety of Public and Private Assets: This includes protection of the integrity of public and private physical assets including roads, buildings, homes, and other assets of value. The intent is to take reasonable measures to protect all assets, but not at the risk of personal or public injury.

Safety of Environment: This includes protection of slopes, stream banks, and items that might become damaged with the flow of water.

Inform Media and Communicate: This issue can occur prior to, during, or after an event. Communication to the public is important but falls after the preceding items.

Reporting of Event: The reporting of work falls under the responsibility of the person in charge during an emergency. Support staff may assist; however, documentation of the events is now required for reporting and quality control.

The Distribution List for the ERP is located at the back of this document. Sufficient numbers of the ERP have been printed to have one in each staff truck and one at each major facility location including the Office and Water Treatment Plant (WTP).

1.4 Emergency Planning Definitions

The concepts and emergency planning definitions utilized in this document are listed in this section. Definitions are in accordance with AWWA Manual 19, Emergency Planning for Water Utilities.

Emergency: An unforeseen or unplanned event that may degrade water quality or impact quantity of domestic water, irrigation water, and fire flow supply available to the community.

Minor Emergency: A routine, common or localized event that affects a minimal number of customers. Examples include a small diameter pipe break, motor vehicle incident involving a hydrant, a short power loss, or a service repair. A minor emergency should be easily handled by the utility without special equipment or materials. Minor emergencies, if dealt with effectively can be controlled so they do not become major emergencies.

Major Emergency: A disaster that affects a major part of the water system and their customers in terms of either water quality or water quantity. A major emergency can place the health and the safety of a community at risk. Major emergencies occur infrequently.

Natural Disaster: Natural disasters are caused by natural forces or events that cannot be controlled by humans. These can include wildfire, earthquake, flooding, tornadoes, heat domes, freezing or other severe weather-related events.

Human Caused Disaster: A disaster caused intentionally or non-intentionally by human actions. It may be the result of human error, transportation accidents, employee work stoppages or lack of attention, vandalism, sabotage, terrorism, biological contamination, chemical spills, etc.

Hazard: Is a source of potential damage or danger associated with a disaster. Examples are unstable slopes due to a creek wash-out, ground shaking from an earthquake:

Lifeline Supply: The concept of Lifeline services is where the infrastructure for a community provides the essential services for health, safety, and sustenance. Lifeline utilities include water, wastewater, electricity, and natural gas in colder climates. Certain transportation networks, communication systems, hospital systems, and emergency operation centers can be considered lifeline services.

1.5 Emergency Reporting Form

Type of Event:_____

Date and Time:_____

Location:_____

Contributing factors:_____

Notes:_____

Photos Taken? Yes / No - download to WID Record file

Recorded by:_____

2.0 EMERGENCY SCENARIOS

2.1 Introduction

This section provides a listing of possible water system emergencies that are related to the physical components of the water supply. The quality of the water delivered is addressed in Section 3 of this ERP.

2.2 Emergency Scenario Format

This page sets out the format for all emergency scenario descriptions within this Emergency Response Plan.

Description of Event: Title of each potential emergency is provided so that the information can be located in the area of district work. Events in Section 2 describe the physical aspects of providing water service. Events in Section 8 describe the water quality issues that may become an issue.

Indicators: Means of how the emergency is or can be recognized are provided for each emergency. The emergency may be indicated by either WID staff or external contacts.

Actions: Actions for how WID staff is to react to the emergency are listed generally in order of expected approach. This list is only a guideline and, during an emergency event, if time permits, the list should be reviewed to ensure that all foreseeable actions are taken. The boxes listed on the right-hand side of the numbered scenarios form a checklist for the lead Water Operator to review that all appropriate actions are being taken.

Contacts: Contact agencies are listed after actions. The specific contact persons are listed within the Communications Section of this Emergency Response Plan.

Event Record: This checklist at the page bottom provides a summary of the event, whether photos were taken and a listing of the reporting of the emergency.

All emergency events, even including service repair leaks and small water main breaks are to be documented and issued to the WID Office for electronic filing.

3.0 WATERSHED EMERGENCIES

3.1 Contamination - ALGAE Bloom in Watershed

Description: Algae Bloom is found within Upper Watershed.

Indicators: Noted algae bloom reported in upper watershed reservoirs WID staff. Causes may include warmer temperatures and elevated nutrient levels.

Actions: Steps to be taken by WID staff.

1. Document Incident: Record location of bloom (reservoir), distance to WID Intake, climatic conditions in past couple weeks.
2. Notify Supervisor
3. Notify Management
4. If bloom is significant, collect water samples and send to Passmore laboratories for species ID and discuss importance of findings.
5. Consider closing Duck Creek intake and switching to Huggard creek until bloom is over or until water quality improves, if deemed necessary.

   Note: Historically speaking, it has been rare that a bloom in the upper reservoirs has contributed to a bloom in the WID Reservoir and even when it has the treatment plant has been effective at removing the organics. Some algae species produce toxins in which case the treatment plant process may not be effective in full removal and consultation with IH would occur.

6. Communication: Begin public notification if required.
7. Continue monitoring and sampling if event progresses or recommended by consultant or Interior Health.
8. Treat Reservoir: Contact aquatic biologist. Review and consider ways in which to treat reservoir for algae bloom.

4.0 Watershed: Extreme Runoff Event in Duck Creek Watershed

Description: Extreme flow events increase turbidity and the risk of damage to WID physical structures and to the community.

Indicators: Alarm indication from phone call from main WID office or from a resident; Extreme weather statement issued by Environment Canada or other forecaster; Direct call from staff members noticing heavy rainfall event visually or from media.

Actions: By WID crew member upon receipt of notification.

1. Determine Magnitude of Creek Flow:
    - Visually drive to Duck Creek Intake to witness flow and see if flow is contained by the creek banks. Contact Management to inform them of the condition. Provide them with photos or videos if possible.
    - Consider throttling down Intake if event is considered short lived to reduce the amount of high turbid water from entering the WID Reservoir.
    - Inform Fire Department and if risk of overtopping the banks of Duck Creek, advise Fire Department to consider declaring a state of local emergency and evacuations along Duck Creek.
2. Determine Origin of High Flows:
    - Determine which creek stem is generating majority of flows, Duck or Huggard.
    - If single stem is causing high flow, consider that dam integrity may be compromised.
    - Check storm cell radar on internet site to see if flows are storm related. Link below or Google Silver Star Radar. http://www.weatheroffice.gc.ca/radar/index_e.html?id=xss
3. Site Review at Intake:
    - Travel to Intake if safe to do so.

- Check integrity of structure, then banks along Duck Creek and flow to WID Reservoir.
- Stay well clear of creek if it is flowing at high level. If any portion of works appears compromised, begin throttling back of gates and control flow between sites.
- Call for assistance if structural support is required for earthwork berms or sand bagging.

4. Stability of WTP Intake:
   - If known to be a restriction in creek flow, review level of creek in relation to top of gates.
   - prepare sandbags to keep creek flow within banks.
   - Check the integrity of retaining walls.
5. WTP Operations:
   - To be closely monitored to determine expected conditions and make appropriate changes to on-line treatment at plant.
6. Any damage noted to be assessed:
   - Repairs to involve appropriate engineer.
   - If work is within wetted perimeter of Duck Creek, water licensing and approvals (Section 9) through the Water Sustainability Act (WSA), and environmental monitoring may be required.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

5.0 WATER SUPPLY AND INTAKE

5.1 Toxic Substance in Duck Creek Above Intake

Description: Elevated levels of known or undetermined contaminant in source water (Duck Creek).

Indicators: Vehicle accident in Duck Creek or other tributaries, notification by Ministry of Transportation and Infrastructure, the public, Fire Department or Provincial Emergency preparedness agency.

Actions:

1. Notify Water Operator
2. Notify Supervisor
3. Notify Manager
4. Determine estimated time of incident and when flow will reach intake gates. Ensure corrective action is taken to rectify source of problem.
5. Close Gates: WID staff to close Duck Creek intake gates before contaminant reaches this diversion. Switch Huggard Creek to intake.
6. Sampling in Duck Creek and WID Reservoir as required
7. See section 5.3 if contaminant has possibly entered the Duck Creek Intake
8. Collaboration with industry experts and regulators
9. Reduce Customer Demand as per Appendix B if necessary.
10. Sampling Program: If required, discuss with Engineer, Biologist/Chemist and Drinking Water Officer to develop a reasonable and representative sampling program. Consider sampling in creek and reservoirs affected. If contaminant is known, sample for specific parameter. If not known, sample and test for full parameters as required.
11. Environmental Contamination Containment: Communicate with Ministry of Environment staff regarding containment of spill and impact on environment.
12. Assess Water Demand: Review system water demands and determine water quantity for minimal domestic needs. Contact Drinking Water Officer (DWO) if WID cannot provide these levels.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

5.2 Contamination of WID Reservoir

Description: Contamination has been detected or possible contamination is present

Indicators: Public notification (taste, odor or color observations), poor water sample results, visible observations made by Water Operators.

Actions: Steps to be taken by WID staff

1. Notify Water Operator
2. Notify Supervisor
3. Notify Manager
4. Water Operations staff to investigate site, inform Management or Senior operations staff to contact IH.
5. Confirm that the source of contaminant is mitigated.
6. If chemical contamination confirmed or highly suspected to be present:
    - Discuss with Engineer, Biologist/Chemist (Lab) and DWO to develop a reasonable and representative sampling program. Contact Lab and arrange bottles if required and collect samples for rush analysis.
7. Office staff to be called in
8. Communication: Begin public notification.
    - Continue discussion with appropriate experts for moving forward.
    - Discussions with Works and Infrastructure to consider alternate water source if needed.
    - Continue monitoring until water quality is back to normal and IH gives approval to lift advisory or notice.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

6.0 WATER TREATMENT PLANT (WTP) EMERGENCIES

6.1 WTP - Cannot Meet Water Demands

Description: This type of emergency is typically caused by extreme weather events that place a very high irrigation demand on the WTP, or any other situation where water demands are high and WTP equipment reduces the ability to maintain maximum output.

Indicators: Visual Observations by Water Operators. Failure of WTP equipment as identified by SCADA and alarms.

Actions: Steps to be taken by WID staff.

1. Document Situation: Note date, time, location and means of event recognition.
2. Notify Water Operator
3. Notify Supervisor
4. Notify Manager
5. WTP Site Investigation: Historically this problem has been caused by high flows.
    - Check all SCADA pages and trends to determine what is operational, what has failed, or what is at risk of failure in the WTP.
    - Note status of chlorine disinfection, raw water temperatures,chemical dosing status, and raw water flows from the WID collection tank.
    - Check all necessary WTP equipment to confirm proper functionality.
    - Check WTP shelving and inventory lists for available parts & pieces that may be available to aid in necessary repairs.

6. If Flow Issue:
    - If the raw water flow from the infiltration gallery, Collection tank, or intake is reduced or somehow compromised, determine which part of the infrastructure is the issue and take steps to correct.
    - If the raw water flow to WTP is reduced, blow out the Infiltration gallery one side at a time.
    - If Duck Creek level is too low, notify management and the board, to consider shutting gates on dam to allow more water as soon as possible.
7. Contact Contractors:
    - Contact additional support as needed. District electrical/instrumentation technician, other Water Operators, or any necessary process equipment suppliers & distributors for advice or help.
8. **First response** - If WTP cannot provide water for demand, reduce customer demand

Event Record: Record of incident details for future reference and evidence of events and actions taken.

6.2 WTP – Power Failure – Emergency Power Operation

Description: For extended power failures, the WTP has a backup propane generator which is sufficient to run the entire WTP for extended periods of time. In the event of a power outage the generator will automatically start and transfer power from utility to generator. It is possible for multiple alarms to occur at the WTP when this happens.

Indicators: Generator run alarm to stand-by SCADA, other WTP alarm.

Actions: Steps to be taken by WID staff.

1. Notify Water Operator
2. Notify Supervisor
3. Notify Management
4. Document Situation: Note date, time, location and means of recognition of event. Check SCADA to see if backup generator is online at WTP
5. WTP Site Investigation:
    - Ensure that WTP chlorine disinfection system remains operational and check all necessary SCADA pages and trends to confirm all equipment and instrumentation is functioning correctly.
    - Clear/reset any alarms and restart WTP if it has shut itself off on alarm during the power transfer.
    - Contact WID Fortis BC to determine if the power event will be for an extended period of time, and if there's an ETA on utility power restoration.
    - Check propane level in the back-up generator.
6. Media Alert: FortisBC will notify customers via social media possibly media release regarding outage.
7. If water quality at the WTP is compromised due to a power outage that results in equipment failure, inform management. Water Treatment Operator will determine whether a BWN is required.
8. Call administrative staff to begin public notification if required.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

6.3 WTP – Failure of Critical WTP Process Equipment

Description: This type of WTP emergency would be caused by a failure of critical process or control equipment. The equipment could include the SCADA system, pumps, mixers, valves, actuators, electrical, instrumentation, flowmeters, software, PLC's, chemical dosing equipment, level meters etc

Indicators: Visual Observation by Water Operator. Failure of equipment as identified by SCADA alarms. Alarms to phone.

Actions: Steps to be taken by WID staff.

1. Notify Supervisor
2. Notify Management
3. Document Situation: Note date, time, location and means of identifying the event.
4. WTP Site Investigation:
    - Ensure chlorine disinfection systems, chemical dosing pumps, raw water flow from WID collection tank are all operational, and functioning correctly.
    - Check all SCADA pages and trends to confirm what is functioning, what has failed, or what is at risk of failing.

- If the raw water flow from the Infiltration gallery works, WID collection tank, or intake is reducedor somehow compromised, determine which part of the infrastructure is the issue and takesteps to correct.
- If there's a low or high reservoir level, adjust the intake accordingly.
- If the raw water flow to WTP is reduced, clean the infiltration gallery one side at a time.
- If Duck Creek level is too low, notify Water Operator, Manager and Board, possibly close gates on dam or introduce Huggard creek into intake to allow more water as soon as possible.

5. Support Contractors:
   - Contact additional support as needed. District electrical/instrumentation technician, other Water Operators, or any necessary process equipment suppliers & distributors for advice or help.
6. **First response** - If WTP cannot provide water for demand, request to reduce customer demand.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

6.4 WTP - Road Access Failure to WTP

- Description: Road failure or road instability to the WTP due to washout, slide, water main break, or another situation.

Indicators: Phone call from local resident or visual recognition by staff.

Actions: Steps to be taken by WID staff.

1. Secure site.
2. Ensure WID truck blocks off road and calls for YRB assistance. Have WID staff bring up barricades and signage to block off affected areas. Inform neighbors that may be impacted by the road closure.
3. Notify Supervisor
4. Notify Management
5. Contact YRB and Fire Department to barricade area for public safety.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

7.0 DISTRIBUTION EMERGENCIES

7.1 Break of Primary Transmission Main

Description: The large diameter transmission main downstream of the WTP is a critical supply main and would be difficult to repair quickly, a disruption in this line could result in loss of water to a very large portion, if not all, of Wynndel.

Indicators: Alarms, Low water at WID Reservoir, or phone call from public

Actions: Steps to be taken by WID staff

1. Close the closest upstream valves to isolate the leak, maybe within the WTP so Water operations would perform this task.
2. Notify Supervisor
3. Notify Board
4. Contact Manager who will call-in available staff.
5. Water Operations to throttle down or close at intake to ensure WID Reservoir is maintaining its normal operating level.
6. Coordinate repair of main.
7. Notify Management who will notify IH.
8. Arrange for alternate water source. Depending on the break location, re-routing of water may be possible to keep large areas of town in water.
9. Issue Public Notification to reduce/restrict all water consumption.
10. Call administrative staff to begin public notification.
11. If during high demand time of year to maintain minimum domestic flows, irrigation mustbe shut off throughout the entire District.
    - Start with connections that are irrigating at the time and then those that are not at the time. Some may turn irrigation on in the coming days.
12. Contact Critical Customers
    - Administrative staff to be called in.
    - Contact all irrigators to give advance notice.

- Contact other critical customers, answer public enquiries, and utilize direct e-mail notification list to inform customers of loss of supply. (other forms of communication in the future)

13. Contracting equipment to be brought in to expose area of break and determine repair required. Call Engineering if support is required for design of the repair. Timeline for bringing lines back in service to be determined at this time. Repair techniques and materials to be assembled and repair works to begin.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

7.2 Water Main Break

Description: Small breaks are considered manageable emergencies. Large breaks have the capacity to cause larger areas of WID to be out of water, they are more difficult to repair and the damage from a large pipe break is orders of magnitude more dangerous than a small break. Public health risks must be considered for these and for large breaks.

Indicators: Phone call from main WID office or on-call service; Alert provided by public; Direct call to staff member

Actions:

1. WID to isolate main break/service line leak. Throttle nearest line valves. Close gate valvesat safe speed so as not to cause pressure spikes and water hammer in the distribution system. Call for assistance to repair the main. Public safety takes priority over minimizing property damage.
2. Advise the Fire Department and provide street names if hydrants are out of service, and/or hydrant number.
3. Notify Water Operator
4. Notify Supervisor
5. Notify Board
6. Flush out mains, consider flushing to the nearest hydrant on the pressurized side of the closed valves to wash out contamination if it's believed to have entered the system.
7. Excavate hole to below the leak point, maintaining a void under the pipe to prevent further materials from entering.
8. Assess Break Magnitude: Identify if positive pressure was maintained.
9. Coordinate Repair Materials Determine size of main, materials, diameter, class of pipe, repair couplings and fittings, etc.
10. Contact Water Division. Once information is gathered and particularly if positive pressure has not been maintained. Discussions to determine if a WQA or BWN is required.
11. Repair water main Utilize proper fittings, procedures, and disinfection protocol (AWWA C651, Disinfecting Water Mains).
    - Fill the water main slow and bleed air from high points during and after the main is loaded upto normal pressures.

- Flush water main in area downstream of where break occurred to remove contaminants and help bring water quality to normal standards.

Event Record: Record of incident details for future reference and evidence of events and actions taken

Water Quality: WID to conduct appropriate sampling. Most common parameters includeE. coli, Total Coliforms, turbidity and chlorine residuals.

Removal of BWN or WQA can occur after water quality parameters have returned to normal and approval from IHA is granted.

7.3 Water Distribution, PRV High Pressure / Low Pressure

Description: High pressure may stress the local in-home PRV valves that should be in each residence. Hot water tanks may be damaged if there is higher pressure and the in-home PRVs are not operating properly.

Indicators: Water Operator observation calls from public on low or high pressures.

Actions: Steps to be taken by WID staff,

1. Notify Water Operator
2. Notify Supervisor
3. Notify Board
4. Identify effected location: Confirm that pressure variation is localized and not out to a larger service area. Check adjacent downstream, upstream and adjacent pressures at stations.
5. Site Visit: If near station, go immediately to station prior unless confined space equipment is required. Look at downstream and upstream PRV stations for service area. Contact other staff required for entry, if PRV is confined space.
6. Troubleshoot station: Check pressure gauges, look for leaks, flush Y-strainers, and signs that all components are functioning properly.
7. Watermain Break: If low pressure leaving the PRV is present and all indications that systems are operating properly then look for water leak, check out roadways in the service area. Look for water seepage across roads, water main break.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

7.4 Contamination within the distribution system

Description: Contamination has been detected or possible contamination is present

Indicators: Public notification (taste, odor or color observations), poor water sample results, water repair crews notice unusual water characteristics, known backflow from cross connection, backflow from large main break.

Actions:

1. Isolate contaminated area if known.
2. Notify Water Operator
3. Notify Supervisor
4. Notify Board
5. Determine source of contamination
6. Take corrective actions to prevent further contamination.
7. Determine water Notice or Advisory type. Eg. If Biological contamination a Boil Water Notice maybe required but Chemical contamination will most likely require a Do Not Drink notice.
8. Communication: Begin public notification.
9. Determine area to sample, collect and send to lab for analysis (indicate “rush” results if needed)
10. Begin water main flushing if required.
11. Arrange for an alternate water source if needed.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

7.5 Water Treatment Plant

Description: Unauthorized access

Indicators: Public notification (taste, odour or colour observations), Broken lock on reservoir access, poor water sample results, contamination has been detected

Actions:

1. Notify Water Operator
2. Notify Supervisor
3. Notify Board
4. Contact RCMP
5. Look around site for evidence of contamination: eg. Containers that may have contained a substance.
6. Isolate water tank if possible and it makes sense to do so.
7. Communication: Begin public notification if required.
8. In consultation with IH or Testing Laboratory, collect appropriate water samples in the tank and in the Distribution System downstream for rush analysis.
9. If possible, dump water in tank, pressure wash and disinfect.
10. Consider hydrant flushing to remove potential contamination.
11. Arrange for an alternate water source if needed.

Event Record: Record of incident details for future reference and evidence of events and actions taken.

8.0 Emergency Contact Numbers

Event	Agency	Phone No.	Cellular/Fax
Major Event	Provincial Emergency Program	911	911
Injury – Safety	Creston Valley Hospital	911	911
Ambulance	BC Ambulance Service	911	911
Fire	Wynndel Fire Department	911	911
Fire	Creston Fire Department	911	911
Dam Failure	Provincial Emergency Program	800-663-3456	n/a
Forest Fire	Southeast Forest Centre	250-365-4040	n/a
Watershed Damage	Provincial Offender Line	877-952-7277	n/a
SCADA Failure	Turnkey Controls	250-549-4701	
Board Numbers			
Chair of Board	Dean Bryans	250-866-5788	
Vice Chair	Lorne Ostendorf	250-866-5312	
Trustee	Hugh Grant	250-866-5788	
Trustee	Kip Cantrel	250-431-8401	
Trustee	Calen Dodge	250-464-5929	
Manager of Operations (Local)	Evan Stang	403-634-4369	
Water Operator (Remote)	James Gosse	604-845-0845	
Back-up Water Operator	Brent Despot	250-254-5393	
Consultant of System	Mel Tissington	250-428-6774	
Administration	Annette Steed	250-428-6225	

Contractors / Equipment

Organization	Person	Office	Cellular	(R)Residence/(F)Fax	Support Role
W.H. Excavating	Will Heycamp		250-402-9537		Excavation and Trucking
Hansens Excavating	Blair Hansen		250-428-6654		Excavation and Trucking
Northtown Rentals			250-428-5961		Rental Equipment
FR Rentals			778-517-8388		Rental Equipment

Organization	Person	Office	Cellular	(R)Residence/(F)Fax	Support Role
Comfort Welding			250-428-7464		Welding and piping
EMPS	Bob Grantham Dennis Malashewsky	765-4998	470-8963	764-8772 (R) 765-3998	Motors & Pumps
Aquatech Services	Randy Woods	765-4730	470-8869		Augering – Boring
TCG The Company	Richard Bachand	573-7814	371-1042	573-7815	Augering – Boring

Specialty Services

Organization	Person	Office	Cellular	(R)Residence/(F)Fax	Support Role
Bighorn Helicopters			888-265-1889		Helicopter
BID AIR			250-426-8888		Helicopter
Thunderbird Helicopters			250-426-0090		Helicopter
Divers – Aquability Projects	Neal Klose		250-826-2967		Diving services, submerged gates and screens
Diving Dynamics	Vern Johnston		250-861-1848		Divers

Consulting Advisors

Organization	Person	Office	Cellular	Support Role
General Water Eng.	Bob Hrasko	250-212-3266	250-212-3266	General Water Engineering
Larratt Aquatic	Heather Larratt	769-5444	717-6289	Aquatic Biology
Dams	Dwayne Meredith	250-503-5817	550-6762	Dam and Water Engineering
Dams	Aaron Hahn	778-480-6063	250-718-9087	Dam Engineering

Organization	Person	Office	Cellular	Support Role
CENTRIX	Ken Hansen	717-8813	469-0577	Instrumentation
Anderson	Brad Anderson	717-8813	469-0580	Instrumentation
GeoPacific Consultants	Tyler Smith	801-8536		Geotechnical

Suppliers

Company	Product	Person	Office	Cellular	(R)Residence/ (F) Fax
Iconix	Pipe materials	Dave Houghton	765-8668	212-0178	765-6036
Wolseley Waterworks	Pipe materials	Jake Jackson	765-5186	250-300-1708	765-5187
Others					
Canada Pipe	Ductile Iron Pipe	John Braun	604 737-1279	604 649-4265	604733-0465
Mearl's Machines	Pumps, process piping	Greg Anderson	763-0109	212-4806	763-5894
CENTRIX	Instrumentation Equipment	Garth Ink Brad Anderson	717-8813	469-0583 469-0580	717-8814
Waterhouse Enviro	WTP Chemicals	Mark Carey	604 921-3317	604 970-8900	
Bi-Pure Water Canada	Chlorine		604-882-6650	24 hr Emergency No. Trucking phone Number	
Safety Equipment	Canadian Safety Equipment	Louis Santos	763-5005	250-826-5847	863-3473
Turnkey	SCADA	Dallas Labelle	250-549-4701		

Interior Health (Regulator) Contact List

Interior Health Authority	Contact	Cell	Email
Jennifer Beverley	250-342-5658		jennifer.beverley@interiorhealth.ca
	After Hours: 1-866-457-5648		

Emergency Response Number Medical Health Officer 1 (866) 457-5648

The following is meant to assist water suppliers to reach their Interior Health representative in the event of a water quality problem as part of their Emergency Response Plan protocol. If you are not able to reach your primary contact cellular phone, please contact the 1 (866) 457-5648.

Government Agency Contacts

Organization	Person	Office	Cellular	(R)Residence/ (F) Fax	Support Role
Provincial Emergency Program (call 911)		800 663-3456			Emergency
Ministry of Municipal affairs		250-387-4060			
Ministry of Environment		250-489-8540			Watershed protection
Forest Fires		800-663-5555			Emergency Fire Line
Ministry of Transportation		250-420-6550			Access
YRB Roads (Maintenance)		888-352-0356			
Caro Environment	Sarah Gulenchyn	765-9646	250-859-2660	765-3893	WQ Testing

9.0 REVISIONS AND UPDATES

9.1 Introduction

This section provides a listing of the agencies and individuals that have a copy of the WID Emergency Response Plan (ERP). This section also provides a historical listing of the Revisions and Updates since October of 2023.

A listing page of plan updates and recommendations is included in this section for incorporation into future plan updates.

9.2 ERP Distribution List

ERP Distribution List	
1	WID office
1	WID Treatment Plant
1	Manager Operations Vehicle Evan Stang
1	Operators Vehicle Evan Stang
1	Chief Operator (Remote) James Gosse
-	Digital Copies Distributed
8	Total

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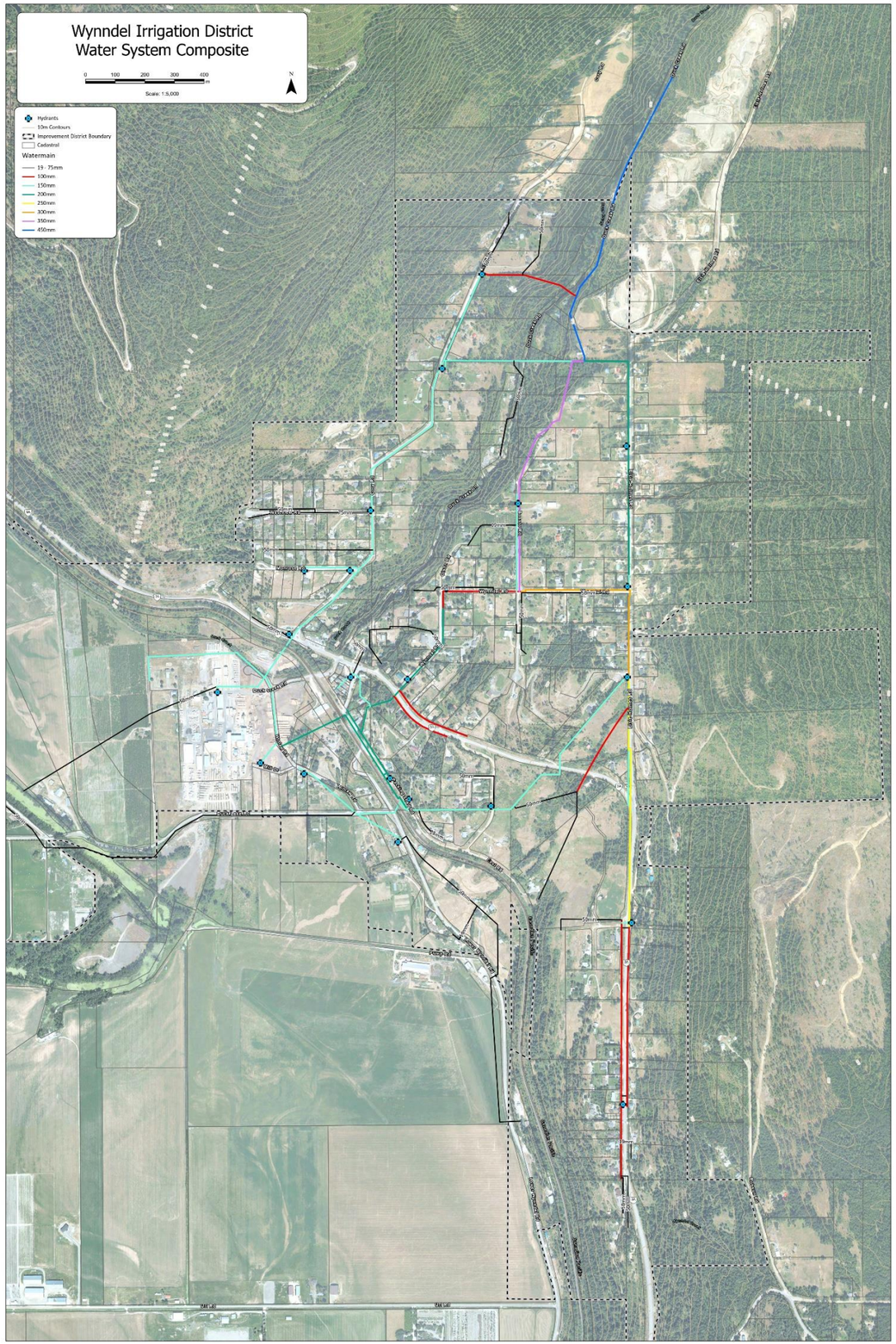
9.3 Emergency Response Plan – Revisions

Date of Issue	Plan Version No.	Revisions – Description of Changes


Wynndel Irrigation District
Water System Composite
0 100 200 300 400 m
Scale: 1:5,000
N
Hydrants
10m Contours
Improvement District Boundary
Cadastral
Watermain
19 - 75mm
100mm
150mm
200mm
250mm
300mm
350mm
450mm