Volume 2, Section 18 Snake Lake Reservoir Expansion Project Environmental Impact Assessment Public Safety

Submitted to:



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On Behalf of:



Eastern Irrigation District Brooks, Alberta

Submitted by:



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March 29, 2025 AARES Project #: 21-127





Executive Summary

The Eastern Irrigation District (EID) is applying for approval under the *Environmental Protection* and *Enhancement Act* (EPEA) to construct the proposed Snake Lake Reservoir (SLR) Expansion Project (the Project). The Project, located between Bassano and Brooks in Alberta, involves the construction of a roughly 8 km long, up to 20 m high dam to increase the storage capacity of the reservoir system from 19.25 million m³ to 87.4 million m³.

The Project area is located on privately owned land, which has been used for grazing and other land uses for decades. The closest communities to the Project expansion are Bassano (22 km northwest), Brooks (19 km southeast), and the Lathom Hutterite Colony (6 km southwest). There are limited residences in the area, with the closest residence being 3.5 km northwest of the Project. The nearest Indigenous community is the Siksika 146 Reserve, located upstream on the Bow River approximately 22 km away.

This Environmental Impact Assessment (EIA) section includes the potential hazards to public safety, plans and documents in place for the Project, relevant legislation, and the steps the EID has taken to provide safety training and certifications, based on requirements provided in the Final Terms of Reference (FTOR) for the Project issued by Alberta Environment and Protected Areas (Alberta EPA), and following the Guide to Preparing Environmental Impact Assessments in Alberta (GOA, 2013). Public safety is one of the top priorities for the EID and their representatives, throughout all phases of the Project. Safety mitigations have been accounted for and will be implemented through formal documentation, appropriate training for all employees and contractors, and adherence to applicable legislation and regulations.



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Abbreviations

Alberta EPA Alberta Environment and Protected Areas

EIA Environmental Impact Assessment

EID Eastern Irrigation District

EPEA Environmental Protection and Enhancement Act

EPP Emergency Preparedness Plan
ERP Emergency Response Plan
FTOR Final Terms of Reference
OHS Occupational Health and Safety
TIA Traffic Impact Assessment
PPE Personal Protective Equipment

SLR Snake Lake Reservoir



18.1 INTRODUCTION

The Snake Lake Reservoir (SLR) Expansion Project (the Project) proponent, the Eastern Irrigation District (EID), is committed to the safety and well-being of its staff, contractors, and guests. As such, the Prime Contractor selected for the construction of the Project, and all other representative agents over the course of the Project, will be held to the same health and safety standards. The term "public safety" in this document refers to the well-being of the public and prevention of Project-related events that could endanger them. This section will outline the general plans and documents in place for the Project to ensure public safety and well-being, including public notification protocols and safety procedures. Consultation with interested parties did not indicate any public safety concerns with the Project. The safety documents included in this section (i.e., Appendices P1-P5; see list in Section 18.3 below) serve as examples of the types of documents that will be developed for this Project. Site- and Project-specific versions of these and other required safety documents will be developed, likely by the Prime Contractor.

18.2 REGULATORY CONTEXT

There are several Acts, Regulations, and Codes that dictate the requirements for health and safety standards. The list below is not comprehensive, as there are various other job- and task-specific regulations.

18.2.1 Alberta Environmental Protection and Enhancement Act

The *Environmental Protection and Enhancement Act* (EPEA) in Alberta provides regulatory requirements for air, water, land, and biodiversity. The Act supports and promotes the protection, enhancement and wise use of the environment by designating proposed activities for which an approval or registration is required (Government of Alberta (GOA), 2000).

18.2.2 Alberta *Occupational Health and Safety* (OHS) *Act*, Regulation, and Code

The Occupational Health and Safety (OHS) Act is the overarching legislation that governs health and safety in Alberta workplaces. It contains definitions, requirements and responsibilities of workers, supervisors, and employers, and defines workers' basic rights and health and safety protections (GOA, 2023a). Employers have the responsibility to provide a safe work environment and adhere to all necessary requirements to protect their employees. The Act is supported by the OHS Regulation (GOA, 2021) and Code (GOA, 2024). The OHS Code provides additional definitions and sets out the minimum safety requirements for health and safety in Alberta's workplaces, according to different work types and occupations (GOA, 2024).

18.2.3 Alberta Safety Codes Act and Fire Code

The Safety Codes Act (GOA, 2023b) establishes a unifying framework for the administration of ten safety disciplines which each have their own safety codes and standards.

The Alberta Fire Code falls under the *Safety Codes Act*, and establishes requirements to address safety, health, and fire protection of buildings and facilities (National Research Council of Canada,



1992). The Alberta Fire Code also addresses fire safety at construction sites, fire safety plans, and the usage of storage tanks. This Code is based on the National Fire Code of Canada 2020.

18.2.4 Alberta Traffic Safety Act

The *Traffic Safety Act* promotes safety on the province's highways, the definition of which includes any street, road, sidewalk or bridge that the public is ordinarily entitled or permitted to use (GOA, 2023c).

18.3 PUBLIC SAFETY DOCUMENTS AND PLANS

The Final Terms of Reference (FTOR) requires an Emergency Response Plan (ERP), including public notification protocol; potential safety impacts from higher regional traffic volumes; and aspects of the Project that may have implications on public safety throughout all phases of the Project. The documents and plans outlined provide protocols for various aspects of the Project:

- EID General Emergency Response Plan (see Appendix P1)
- Snake Lake East and West Dams Emergency Response Plan for Flood Emergencies (see Appendix P2)
- Snake Lakes East and West Dams Emergency Preparedness Plan for Flood Emergencies (see Appendix P3)
- EID Environmental Practice (See Appendix P4)
- Spill Report Form (See Appendix P5)
- Transportation Infrastructure and Traffic Impact Assessment (see Volume 1, Section 5)
- Dam Safety, Accidents and Malfunctions (see Volume 1, Section 6)

The ERP details public safety measures for various aspects including site fires, contact with overhead powerlines, hazardous substance spills, and contact with buried gas lines. EID emergency personnel contact information is also provided (Appendix P1, Emergency Contact Directory). Work vehicles accessing the site will increase local traffic volume along multiple highways and county roads. Large gravel trucks will move materials between from two separate pit sites to SLR. This has the potential to disrupt sight distance for other vehicles.

18.3.1 Emergency Preparedness and Emergency Response Plans

The EID's General ERP (Appendix P1) exists to ensure the safety and well-being of staff, contractors, and visitors and outlines the steps to be taken to prepare for and respond to emergencies affecting all areas of the EID. The goal of the ERP is to allow for the site supervisor to respond in emergency situations for:

- The safety and physical/emotional well-being of all staff, contractors, and visitors;
- The timely stabilization of an emergency situation; and
- The protection of all District infrastructure, property, and the environment.

As part of the site-specific safety program, emergency response and evacuation plans will be found in the mobile office building on the job site. Copies of the ERP and emergency information will be available at the job site.

The EID is required by Alberta EPA to have an Emergency Preparedness Plan (EPP) and Emergency Response Plan (ERP) For Flood Emergencies in place to be implemented in the event



of a dam breach (Appendices P2 and P3). These documents exist for the extant Snake Lake West and East Dams. The EPP For Flood Emergencies is to be used as a guide to assist Emergency Planners in developing local response plans to deal with a major flood and/or dam breach. The plan specifically addresses what would happen downstream of the Snake Lake East and West Dams, generally how people and property would be affected, and how emergency responders would be notified of any emergency involving a large flood, potential and/or imminent dam breach.

The EID's ERP For Flood Emergencies identifies, in order of priority, the key emergency response roles and responsibilities to implement the EPP. Dam operations staff and contractors who may have a response role should receive emergency preparedness training and be involved in exercising the emergency plans. A site-specific ERP for the proposed reservoir and evacuation plans will be found in the mobile office building on the job site.

The EID is a member of the Newell Regional Emergency Management Plan. The plan has been developed to guide emergency and elected officials during a large-scale incident. It has been developed to ensure municipalities and agencies such as the EID are prepared for future emergency events and involves a mutual aid agreement. The EID works closely with City and County Emergency Services and have collaborated on many safety initiatives in the past. The EID is also a member of Western Canadian Spill Services, a spill preparedness cooperative which ensures safe and effective spill clean-up during an emergency situation.

Public Notification

If an emergency event or safety concern has the potential for impacting the general public during either the construction of the Project or the operation of the dam, the General Manager or designate will activate the On-Site Emergency Response Plan. Notification of landowners and other relevant public members will be completed by specified and predetermined EID staff and local law enforcement. The Project-specific ERP and EPP will detail specific situations and methods for public notification. See Appendix P1 for the general public notification process (e.g., see page 18, Hazardous Substance Spills) and Appendix P3 for the Fan Out Procedures (Section 14.0 in the EPP). The General Manager or designate will describe, for example, the location of the spill, product, volume, and any other relevant information pertaining to local residents or affected members of the general public.

18.3.2 Environmental Practice

The EID is committed to the protection of the environment by maintaining high environmental quality standards which meet or exceed those required by Federal Legislation. As described in EID's Environmental Practice statement (see Appendix P4), environmental protection is a priority for the EID. The EID will acknowledge all environmental issues, compliance with regulatory requirements, and environmental protection awareness during job planning and Project operations.

Representatives or agents of the EID will be held to equivalent safety and environmental protection standards throughout all stages of the Project.

18.3.3 Emergency Contact Directory

A Project-specific list of phone numbers for EID emergency contacts, first responders, and reporting agencies will be available on site in case of emergency. A preliminary Emergency



Contact Directory is available in Appendix P1 (Page 4). This list includes EID personnel as well as other agencies that may be involved in the event of an emergency (e.g., Alberta OHS, County of Newell). Critical emergency contacts, such as the District General Manger and Environmental Health & Safety 24-hour number, are also available on the first page of the ERP (see Appendix P1).

18.3.4 Spill Report Form for Dangerous Goods

The EID Spill Report Form (Appendix P5) will be used if there is a spill within the Project area or as a result of Project work. Information to be reported includes location(s), potential contamination, first aid, materials, equipment, and contractors involved, as well as product and quantity spilled. The form is also a comprehensive document for emergency reporting procedures for spill containment and management.

In the event of a hazardous substance spill in a water delivery system, the Water Districts Supervisor will contact water users and landowners in the affected or potentially affected area and begin closing any open deliveries and laterals downstream of the spill. The General Manager or designate will contact all residents and visitors within the radius dictated by the type and quantity of spill and release all information statements to the media, as required.

After contacting the local residents and any other affected or potentially affected parties, the EID's General Manager or designate will contact the relevant agencies to report the spill, such as local fire departments, Alberta Transportation, and Alberta EPA.

All contact information can be found in the ERP (see Appendix P1, Hazardous Substance Spills).

18.3.5 Safety Impacts from Traffic

Project construction is likely to increase traffic volume on highways and county roads near the Project site. After completion of the Project, no significant long-term traffic changes are anticipated; therefore, the potential impacts of traffic on public safety were assessed only during the construction phase. A Traffic Impact Assessment (TIA) was prepared as part of the Project Description. Various recommendations that contribute to public safety were made, such as developing a traffic accommodation plan and implementing dust control measures. The detailed TIA can be found in Volume 1, Section 5.

18.3.6 Dam Safety, Accidents and Malfunctions

While unlikely, the greatest Project threat to public safety would be a dam accident or malfunction. This has been thoroughly assessed in the Dam Safety Section (Volume 1, Section 6).

18.3.7 Reservoir Operations

Signage indicating "No Swimming" and "Authorized Personnel Only" have been placed near all existing EID Reservoirs. Booms and buoys have also been used to restrict boat access and fences have been used to restrict public entry to safety sensitive areas. Similar safety precautions will be implemented for the SLR Expansion.



18.4 SAFETY TRAINING AND IMPLEMENTATION

Prior to awarding construction contract(s), the EID Occupational Health & Safety Coordinator will assess contractors to ensure they meet EID's standards for appropriate safety programs and practices. All supervisors for the Project will be required to have taken part in the safety course "Supervisor's Role" offered through the Alberta Municipal Health and Safety Association (AMHSA). Construction Safety Training (CSTS), offered through the Alberta Construction Safety Association (ACSA), and Standard (Intermediate) First Aid will be mandatory for all Project workers.

Field level hazard assessments, risk analysis and regular inspections of work areas and equipment will be used to safeguard staff, contractors and visitors entering the work site. It will be mandatory for all contractors to attend any hazard assessment and safety meetings concerning the job site and/or their role, and have proper training and competencies prior to working on the Project. Equipment-specific training and competency tests will be completed by supervisors and all workers before operating any mobile equipment. Proper licences will be held by any workers operating company light vehicles, tandems, and long-haul vehicles.

Required Personal Protective Equipment (PPE) will be worn by all staff, contractors and visitors while on site. Task-specific PPE will be worn as necessary. All staff, contractors and visitors are required to report to the on-site job supervisor before entering the work area.

During construction, the Job Supervisor will be the designated leader of any incident response and direct other workers as needed. Muster location will be the entrance to the job site, marked by signage and conveyed to workers during safety meetings. Local first responder groups and emergency services will be informed of daily Project start times and emergency directions to the Project site to facilitate fastest possible response times in the event of an emergency. All staff, contractors and visitors are required to report to the on-site job supervisor before entering the work area.

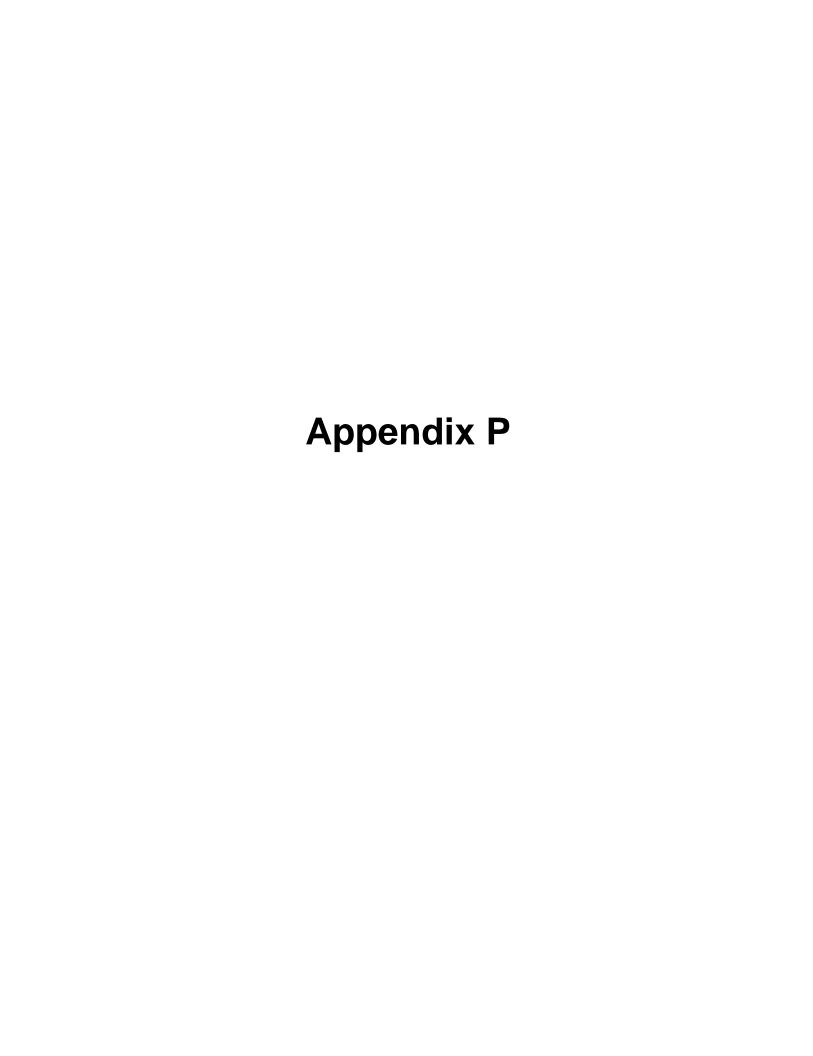
18.5 CONCLUSION

Public safety is a top priority for the EID for their current infrastructure, and similar safety protocols will be implemented throughout all phases of the Project. Safety mitigations have been taken and will be implemented through formal documentation and emergency response planning, appropriate training, signage, and adherence to applicable legislation and regulations. The EID and all representatives will adhere to all safety standards throughout both the construction and operation of the Project.



18.6 REFERENCES

- GOA. (2013). Guide to Preparing Environmental Impact Assessment Reports in Alberta. Retrieved March 2024, from https://open.alberta.ca/dataset/7fc11c66-3691-455f-a27e-389c74cecc9e/resource/23786d37-27c9-48ef-b173-4642803e9f32/download/2013-guidepreparingeiareportsalberta-2013a.pdf.
- GOA. (2021). Occupational Health and Safety Regulation. Edmonton: Alberta King's Printer. Retrieved from https://open.alberta.ca/publications/2021 184#detailed
- GOA. (2023a). Occupational Health and Safety Act. Edmonton: Alberta King's Printer. Retrieved from https://search-ohs-laws.alberta.ca/legislation/occupational-health-and-safety-act/
- GOA. (2023b). Safety Codes Act. Edmonton: Alberta King's Printer. Retrieved from https://open.alberta.ca/publications/s01
- GOA. (2023c). *Traffic Safety Act, Revised Statutes of Alberta 2000.* Edmonton: Alberta King's Printer. Retrieved from https://open.alberta.ca/publications/t06
- GOA. (2024). Occupational Health and Safety Code. Edmonton: Alberta King's Printer. Retrieved from https://kings-printer.alberta.ca/documents/OHS/OHSCode_March_2023.pdf
- Government of Alberta (GOA). (2000). Alberta Environmental Protection and Enhancement Act (RSA 2000 c E-12). *Current as of June 21, 2024*. Edmonton: Alberta King's Printer. Retrieved August 28, 2024, from https://kings-printer.alberta.ca/documents/Acts/E12.pdf.
- National Research Council of Canada. (1992). National Fire Code 2023 Alberta Edition. *Sixth Edition* 2023. Canada. Retrieved from https://nrc-publications.canada.ca/eng/view/ft/?id=6c3e5cf6-8891-40e0-8b37-a78665c23f27





Appendix P1 – General Emergency Response Plan

Important Contacts

Call 911 to report any emergency

District General Manger

• 403-362-1400

Environmental Health & Safety

- 403-362-1402
- 24 Hour Cell 403-363-5609

Operations Management

- North 403-363-5607
- South 403-363-5604
- Manager 403-363-5606

District Engineering Manager

• 403-362-1400

Eastern Irrigation District

Emergency Preparedness and Response Plan

General Plan

Updated January 2024

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Introduction and Purpose

The Eastern Irrigation District is committed to the safety and well-being of its staff, contractors and guests. Upholding this commitment requires planning and practice. This plan exists to satisfy those needs and to outline the steps to be taken to prepare for and respond to an emergency affecting all areas of the District.

Goals

The goals of the District in responding to an emergency situation include:

- The safety of all staff, contractors and visitors.
- The physical and emotional well-being of staff, contractors and visitors.
- The timely stabilization of an emergency situation.
- The protection of all District infrastructure, property, and the environment.

Applicability and Scope

This plan applies to all departments of the District as well as all of its employees

The scope of this plan is intended to encompass all hazards. This plan may be consulted when responding to any and all emergencies. When encountering a situation which has not been expressly addressed in this plan, use good judgment and the guiding principles outlined below.

Responsibility

The Eastern Irrigation District emergency plan is the responsibility of all employee within the organization and will be reviewed and updated annually. Revisions will be made as needed throughout the year. Any suggestions, comments, or questions should be directed to Jason Thompson, Safety and Environmental Tech, or Ivan Friesen, District General Manager.

Order of Succession

Leadership authority during an emergency shall flow downward through the following list of people:

- 1. Ivan Friesen General Manager
- 2. Jason Thompson Safety and Environmental Tech
- 3. Ryan Gagley Engineering Manager Brent Kroschel Operations Manager

Emergency Communications

During an emergency, the District will use the following means and methods of communication.

Possible means and methods:

Landline Telephones

Cell Phones (possible outages during emergency)

Texting (more reliable during an emergency)

Two-way Radios

Email

Take time to develop specific communications procedures defining who will be responsible for communications and what information will be communicated.

Media Inquiries

Inquiries from the media during or after an emergency will be addressed by the Regional Emergency Operations Center. The District General Manger will be consulted in releasing any information to the media.

Test, Training, and Exercises

This section is best developed on a departmental basis. It is recommended that the department spend time, at the very least, discussing the contents of this and other emergency plans with employees. It is also recommended that at least once annually the department exercise the plan by practicing all or part of it.

Emergency Contact Directory

Name	Primary Phone	Secondary Phone	Cell
Ivan Friesen - District General Manager	403-362-1400		403-363-5612
Jason Thompson - Safety Environmental Tech	403-362-1400	403-378-3255	403-363-5609
Don Syvret - South Division Superintendent	403-362-1400		403-363-5604
Scott Beddows - North Division Superintendent	403-362-1400		403-363-5606
Brent Kroschel - Operations Manager	403-362-1400		403-363-5607
Marvin Koochin – Assistant General Manager	403-362-1400		403-409-3363
Ryan Gagley - Engineering Manager	403-362-1400		403-363-5645
Roger McLean - Equipment Superintendent	403-362-1400		403-363-5648
Rob Elliott - Assistant Equip. Superintendent	403-362-1400		403-501-6093
Levi Lepp – Bassano Dam	403-641-2111		403-363-5630
Nathan Fontaine - Land Supervisor	403-362-1400		403-409-3548
Brandi Doerksen – Public Relations	403-362-1400		403-363-9694
Ronan Moen – EIDnet	403-362-1400		403-363-5924
Mark Porter - Information Technician	403-362-1400		403-363-5920
Heather Cutler - EID Reception	403-362-1400		403-363-1674
Local Emergency Services	9-1-1		
Poison Control	1-800-332-1414		
Alberta Emergency Management Agency	1-780-422-9000		
Alberta Occupational Health and Safety	1-866-415-8690		
Alberta Parks and Environment	1-800-222-6514		
Alberta Transport - Disaster Services	1-800-272-9600		
County of Newell	403-362-3266		403-793-3510

Emergency Protocols

Fire and Evacuation

In the Event of a Fire:

Pull the **Fire Alarm** and Call **911**

If you see smoke or flames:

Use **CARE**:

- Contain the fire by closing all doors as you leave
- **Activate** the nearest Fire Alarm pull station (Pull stations are located near all building exits)
- **Report** the fire by dialing 911
- **Evacuate** or extinguish (In most cases, it is best to Evacuate)

Use a **Fire Extinguisher** only if:

- You have been trained
- You have your back to an unobstructed exit
- You have a fully charged and proper type unit for the fire you are fighting
- The fire is contained, and you have reported the fire by **Fire Alarm** or **911** activation
- Everyone else has left the area
- There is little smoke or flames

Never fight a fire if:

- You lack a safe way to escape should your efforts fail
- It has left its source of origin
- You are unsure of the type of extinguisher you need or have
- If you can't control the fire within 30 seconds, abandon your efforts, close the door(s) and evacuate immediately.

Building Evacuation

You should familiarize yourself with the evacuation routes posted in all District buildings. If an evacuation order is issued for your building, or if it were necessary to evacuate due to an emergency, fully cooperate with the District Safety Coordinator and Emergency Services:

- Take only keys, wallets and essential belongings with you
- If possible wear weather appropriate clothing
- If you are the last one to exit your room close, and lock doors
- Leave the building immediately
- Do not investigate the source of the emergency
- Walk, don't run, to the nearest exit
- Use stairs, not elevators
- Assist people with special needs
- If there is no immediate danger, persons with disability/mobility limitations should shelter in place and call the Safety Coordinator at 403-363-5609 to report location and number of people needing assistance
- If there is imminent danger and evacuation cannot be delayed, the person with a disability should be carried or helped from the building in the best and fastest manner (the person with the disability is the best authority as to how to be moved out of the building)
- If you are unable to evacuate, call the Safety and Security at 403-363-5609 and report your location
- As you make your way out, encourage those you encounter to exit as well
- Follow instructions of the Safety Coordinator or other identified emergency personnel
- Wait for instructions before returning to your building after an evacuation

Medical Emergency

If someone is injured or becomes ill:

- Stay Calm
- Dial **911** and explain the type of emergency, the location, condition, and number of victims
- Let the dispatcher know of any safety hazards chemical spill, fire, fumes, etc.
- Do not hang up unless told to do so by the dispatcher
- Do not move the victim unless there is danger of further injury if s/he is not moved
- Render first-aid or CPR only if you have been trained
- Do not leave the injured person except to summon help
- Comfort the victim until emergency medical services arrive
- Have someone stand outside the building to flag down emergency vehicles and/or the Safety Coordinator when they reach the vicinity

Bomb Threat

If you receive a bomb threat, **remain calm** and:

- 1) Obtain as much information as possible:
 - Write down the number from where the call is coming
 - Write down the exact time of the call
 - Write down as accurately as possible the statements made
 - Listen to the voice to determine the sex, age, accents, lisps, tone, etc. (Note any distinguishing feature)
 - Listen for background noises
 - Try to signal a for someone else to also listen on the telephone line, if possible
 - Do not hang up and stay on the line a long as possible; wait for the caller to hang up
- 2) Keep the bomb threat caller talking, and ask as many questions of the caller as you can:
 - When will the bomb go off? How much time remains?
 - Where is the bomb located?
 - What does it look like?
 - What kind of bomb is it?
 - How do you know about this bomb?
 - Why was it placed here?
 - Who are you?
 - What is your name?
- 3) Call **911** immediately and then the **District Safety Coordinator at 403-363-5609**
- 4) Complete a <u>Bomb Threat Checklist</u> form and have it ready, along with your notes from the call, for responding Officers. It is recommended to have a <u>Bomb Threat Checklist</u> form handy, and follow it while receiving the threat

Hostile Intruder

<u>If a hostile intruder is OUTSIDE your building:</u>

- 1. Get to a room that can be locked; close and lock windows and doors
- 2. Turn off the lights
- 3. Try to get everyone down on the floor (so that no one is visible from outside the room)
- 4. Call 911. The Dispatcher will ask for, at least, the following information:
- a. Your name
- b. Location of the incident (be as specific as possible)
- c. Number of shooters (if known)
- d. Identification or description of shooter
- e. Number of persons who may be involved
- f. Your location
- 5. Stay in place (calls from unfamiliar voices to come out may be the attacker attempting to lure you)
- 6. Do not respond to any voice commands until you are sure that they come from a Police Officer or the District Safety Coordinator

If a hostile intruder is INSIDE your building:

- 1. Exit (get out of) the building immediately
- 2. Notify anyone you may encounter to exit the building immediately
- 3. Call 911. The Dispatcher will ask for at least the following information:
- a. Your name
- b. Location of the incident (be as specific as possible)
- d. Identification or description of shooter
- e. Number of persons who may be involved
- f. Your location

If exiting the building is not possible, the following actions are recommended:

- 1. Go to the nearest room or office
 - a. If you are locked out of all rooms, seek refuge in the nearest restroom,
 lock yourself in a stall and keep quiet
- 2. Close and lock the door and/or block it (try barricading the door with desks and chairs)
- 3. Cover the door windows
- 4. Call 911 (the Dispatcher will gather information from you)
- 5. Keep quiet and act as if no one is in the room (silence cell phones)
- 6. DO NOT answer the door
- 7. Stay in place (calls from unfamiliar voices to come out may be the attacker attempting to lure you)
- 8. Do not respond to any voice commands until you are sure that they come from a Police Officer or the District Safety Coordinator.

If the hostile intruder/active shooter leaves your area, and as soon as it is safe to do so:

- 1. Close and lock the door and/or block it (try barricading the door with desks and chairs)
- 2. Call 911 (if not on the line already)
- 3. DO NOT answer the door and stay in place behind cover
- 4. Do not respond to any voice commands until you are <u>sure</u> that they come from a Police Officer or the District Safety Coordinator

If you decide to flee during a hostile intruder/active shooter situation:

- 1. No matter what the circumstances, make sure you have an escape route and plan in mind
- 2. Do not attempt to carry anything while fleeing
- 3. Do not attempt to remove injured people (leave wounded victims where they are and notify authorities of their location as soon as possible)
- 4. Move quickly, keep your hands up high and visible
- 5. Follow the instructions of any Police Officers you may encounter

What to expect from responding police officers:

Police Officers responding to an active shooter are trained in a procedure known as "Rapid Deployment" and proceed immediately to the area in which shots were last heard. Their purpose is to stop the shooting as quickly as possible. The first officers to arrive will not stop to aid injured people; rescue teams composed of other officers and emergency medical personnel will follow the first officers after areas have been secured to treat and remove injured persons.

Please understand that the police will be treating all those they encounter (including you) as possible suspects. When you encounter the police:

- 1. Remain calm
- 2. Do as the officers tell you
- 3. Put down any bags or packages you may be carrying
- 4. Keep your hands up and visible at all times
- 5. If you know where the hostile intruder/active shooter is, tell the officers
- 6. Once out of harm's way remain at whatever assembly point authorities designate
- 7. Keep in mind that the entire area is still a crime scene; police will usually not let anyone leave until the situation is fully under control and all witnesses have been identified and questioned
- 8. Do not leave until you have been interviewed and released

Utility Failure and Natural Disaster

Utility Failures

These may include electrical outages, plumbing failure/flooding, gas leaks, ventilation problems. The Building and Grounds Superintendent has procedures and personnel to deal with utility failures and resumption of service. For your personal safety, in the event of a utility failure:

- Remain calm
- Immediately notify Safety and Security at 403-363-5609 or the Operations Manager at 403-363-5606.
- If the building must be evacuated, follow the instructions on Building Evacuation
- Unplug all electrical equipment (including computers) and turn off light switches
- Use a flashlight: Do not light candles or use other kinds of flames for lighting

Floods

Minor or area flooding could occur as a result of a water main break, irrigation pipe breaks or major multiple rainstorms. For imminent or actual flooding, and only if you can safely do so:

- Secure vital equipment, records, and other important papers
- If present in your area, report all hazardous materials (chemical, biological, and/or radioactive) to the Safety Coordinator 403-363-5609 or to the Operation Manager 403-363-5606.
- Move to higher, safer ground
- Shut off all electrical equipment
- Do not attempt to drive or walk through flooded areas
- Wait for further instructions on immediate action from District Safety Coordinator
- If the building must be evacuated, follow the instructions on Building Evacuation
- Do not return to your building if you have been evacuated by flooding until you have been instructed to do so by the District Safety Coordinator

Tornadoes

A "*Tornado Watch*" means that tornadoes could potentially develop. A "*Tornado Warning*" means a tornado has actually been sighted. If you see a tornado, report it immediately by calling 911, and seek shelter or safety:

- Go to a basement, underground excavation, or lower floor of interior hallway or corridor (preferably a steel-framed or reinforced concrete building)
- Seek shelter under a sturdy workbench or heavy furniture if no basement is available
- Listen for reports and siren/public address announcements
- Avoid:
 - Top floors of buildings
 - Areas with glass windows or doors
- If out in the open:
 - Cars -do not wait out the storm in a car; cars are not safe in tornadoes
 - Move away from the path of the tornado at a right angle direction
 - Lie flat in the nearest depression, ditch, or ravine if there is no time to escape

Suspicious Package or Object

If you have any reason to believe that a letter or parcel is suspicious, **DO NOT** take a chance or worry about embarrassment. Call the District Safety Coordinator 403-363-5609.

- **DO NOT** touch the package or object.
- **DO NOT** tamper with the package or object.
- **DO NOT** attempt to move the package or object.
- **DO NOT** open the package or object.
- **DO NOT** put the package or object in water or an enclosed space, such as a drawer or box.
- Isolate the package or object and evacuate the immediate area.

Characteristics of Suspicious Packages

- Special deliveries, foreign mail, or air mail.
- Restrictive markings such as "Confidential" or "Personal."
- Excessive postage.
- Handwritten or poorly typed addresses.
- Incorrect titles.
- Misspelled words.
- Stains or discoloration on the package.
- Excessive weight.
- Rigid, lopsided, or uneven envelopes.
- Protruding wires or aluminum foil.
- Excessive tape or string.
- Visual distractions such as illustrations.
- No return address.

Contact with Overhead Powerlines

Contact with an overhead powerline presents a potentially life threatening situation. When contact with a powerline occurs, the following procedures must be followed:

- Stay calm and stay where you are. If you are operating equipment, stay in the cab. If you are on the ground near the equipment, do not approach or touch the machine.
- Call for help. Contact your Supervisor or the District Safety Coordinator. Contact Fortis Power Alberta 403-310-9473.
- Warn others to stay away from the energized equipment. The ground surrounding the equipment can carry a potentially fatal charge for up to **20 meters**.
- The operator will try immediately to break contact by moving the equipment away from the lines. If the line has become arced to the equipment and does not pull away easily, stop and wait for a Fortis representative to de-energize the line. **Do not leave the cab**
- If a fire or other emergency makes it life threatening to remain in the equipment, the operator should jump clear with both feet together and then, keeping their feet together, take small hops until you are 20 meters away from the equipment. If you fall, do not try and get up. Roll until you are at least 20 meters away.
- Report all powerline contacts to Fortis as soon as possible so that a line inspection and
 any appropriate repairs can be made. Even minor contacts or arcing can create a weak
 spot in the line.
- Report the incident to your Supervisor or the District Safety Coordinator. An accident/incident investigation will be carried out and the equipment involved will be inspected to determine the extent of any damage.

Hazardous Substance Spills

The damage caused by a hazardous substance spill in canal/reservoir systems or on publicly owned land could potentially affect many agricultural water users and landowners. Should a spill event take place, the following procedures are to be followed:

- Contact your immediate supervisor. Give good directions, including land locations and landmarks if possible. Stand by to assist in directing emergency crews if necessary.
- The supervisor will contact the District Safety Coordinator 403-363-5609 and water District Supervisors in the potentially affected area.
- Water District Supervisors will contact water users and landowners in the affected or
 potentially affected area and begin closing any open deliveries and laterals downstream
 of the spill if in a water delivery system.
- The District Safety Coordinator will contact:
 - -District General Manager
 - -Fire Department 9-1-1 (if required)
 - -Alberta Transportation Dangerous Goods Incidents 1-800-272-9600
 - -Alberta Emergency Management Agency 1-780-422-9000
 - -Alberta Parks and Environment 1-800-222-6514
 - -Owner of Spilled Substance
 - -County of Newell Director of Disaster Services 403-362-3266
- The General Manager or designate will contact the general public and release all information statements to the media, if required. All other staff should direct media inquiries to the General Manager.
- The General Manager will contact Palliser Health Authority 1-800-606-1008 if required.

Contact with Buried Gas Lines

- Immediately shut down all machinery and extinguish all sources of ignition.
- Evacuate the trench or excavation. If the gas line is ruptured or is sufficiently damaged so as to present the possibility of a rupture under pressure, evacuate all personnel to 200 meters upwind of the break. If gas detection equipment indicates the presence of hydrogen sulphide gas, contact the local fire department 9-1-1. Inform them of the presence of gas, as they will need to consider the evacuation of everyone within 1600 meters downwind.
- If the gas is ignited, use extinguishers to assist in evacuation only. Do not attempt to put out the flames. Contact the local fire department 9-1-1.
- Contact the owner of the pipeline. The emergency phone number and contact name will be on the crossing agreement and on the site hazard assessment form.
- Contact the site supervisor. The site supervisor will contact the District Safety Coordinator, who will contact the ERCB 1-403-527-3385 (high pressure lines only) and an incident investigation will be conducted.
- Any contact with a buried gas line or its coating must be reported immediately. The line must be inspected and repaired by its owner before it can be backfilled.

Motor Vehicle Accidents and Injuries

Should any vehicle accident/incident occur, protect yourself first. Use gloves, barrier devices and other equipment provided in first aid kits.

- Call for help, preferably your immediate supervisor or the District Safety Coordinator. Give good, clear directions and information about the situation. Call 9-1-1 if required.
- Make the scene safe, including traffic control if necessary.
- Administer First Aid if required.
- Do not disturb the scene until given the authority to do so by an RCMP Officer, OH&S Inspector, or the District Safety Coordinator. If anything must be moved in order to help recovery efforts note what was moved, where it came from and where it was placed.
- The supervisor will call emergency services (9-1-1- if not already done so) and the District Safety Coordinator (403-363-5609 if not already done so).
- The District Safety Coordinator will contact the General Manager and Human Resources (if the incident involves District staff).
- An incident report must be filed to Occupational Health and Safety when the incident includes:
 - -A fatality,
 - -An injury that results in the worker being admitted to a hospital for that 48 hours,
 - -An unplanned or uncontrolled explosion, fire or flood that cause serious injury,
 - -The collapse of a crane, derrick or hoist,
 - -The collapse or failure of any component of a building or structure.
- The General Manager or Assistant General Manager will:
 - -Contact next of kin or will assign a designated person to make contact,
 - -Be responsible for any media or public relations.
- Human Resources will contact:
 - -WCB, if required,
 - -District insurance company,
- Land Administrator Habitat, Wildlife and Access will contact:
 - -Fish and Wildlife (if the incident involves wildlife),
 - -Animal/property owner (if the incident involves domestic animals or property).

Trench Cave-In

- Shut down the entire site immediately to prevent future cave-in or injury.
- Evacuate the trench until it can be classified as stable and safe to re-enter.
- If workers are trapped, call 9-1-1 and specify it is a trench cave-in emergency.
- Be prepared to give the following information to emergency personnel:
 - -Cell phone number,
 - -Exact land location and written directions to site,
 - -Number of individuals trapped or injured,
 - -Problems of entrapment (how are they trapped, buried, etc.),
 - -Status of the caller (are you a passerby, site worker, supervisor, etc.),
 - -Width and depth of the trench for proper equipment issuing,
 - -On site hazards (downed powerlines, gas line breaks, etc.),
 - -Water hazards (seepage, broken water mains, etc.),
 - -Have someone meet emergency personnel at the main road and guide them in.
- Contact the site supervisor (if not already on site). The supervisor will contact the Safety Coordinator 403-363-5609.
- Re-route all emergency traffic and spectators away from the immediate area.
- If it is safe to do so, enter the trench, locate and expose any buried workers. Use shovels and hands to expose the head and chest only. Perform artificial resuscitation or CPR if necessary in this position if possible until rescue personnel arrive. If artificial resuscitation or CPR is necessary and cannot be performed in the position found, further excavation and repositioning of the employee must be done to preserve life.
- The District Safety Coordinator will contact:
 - -General Manager and Human Resources,
 - -Alberta Workplace Health and Safety 1-866-415-8690.
- Human Resources will contact Alberta Workers Compensation Board.
- The General Manager or designate will contact next of kin and deal with media contacts.

Grass Fires

In the case of a grass fire, the first priority is to protect the safety of yourself and your coworkers. Know where the nearest firefighting equipment is located and how it is properly used. It is important know the weather and ground conditions in your area. Wash vehicles and equipment at regular intervals to reduce the risk of fires. If you encounter a grass fire:

- Evacuate the area if necessary and determine escape routes. Remember, fires can travel quickly and change direction without warning,
- Only attempt to extinguish the fire if you are certain it is safe to do so. Do not attempt to fight fire alone,
- Take immediate action. Contact emergency services (9-1-1). Keep calm and do not panic,
- Give your name, number and location of the fire. Give good, concise directions using land descriptions and exact directions for emergency access,
- Description of any structures, livestock or wildlife in the area,
- Description of type of fire (ground, crown etc.) and rate of speed,
- Stay on the line until the emergency dispatcher hangs up and stand by to help direct emergency crews if necessary,
- Contact your supervisor or the District Safety Coordinator 363-5609 when it is deemed safe to do so.

Cold Weather Work

In order to complete work in a proper, safe and professional manner, the normal hours of work for certain employees of the Eastern Irrigation District are subject to change based on prevailing weather conditions. This policy is intended to provide the basis of responsibilities for the employer and the employee in these cases:

1. This policy has varying effects on the employees of the District dependent upon the classification. Employees may be classified as:

• Office Employees

These are employees who are assigned on a day to day basis to the main offices of the Eastern Irrigation District.

• Divisional Field Staff Employees

These are employees who are engaged in the distribution of water during irrigation season and the construction of irrigation system rehabilitation projects during the balance of the season. These employees include:

Regional Superintendents Divisional Superintendents Water District Supervisors Maintenance Employees

• Equipment Pool (Equipment Operators)

These employees are those whose main task is the operation of heavy or light equipment and trucks and whose job duties require them to be working outside on an ongoing basis.

• Equipment Pool (Maintenance Employees)

These employees are those whose prime responsibility is to maintain, repair and ensure that all Eastern Irrigation District equipment is kept in operable condition. These individuals will be assigned to the main shop of the Eastern Irrigation District.

• Equipment Pool (Supervisory)

These employees are those who have the responsibility to supervise individuals attached to the equipment pool. These employees, who besides their outside inspection duties, have offices assigned to them at the Eastern Irrigation District head offices.

- 2. In order to be able to operate, manage and maintain the irrigation system and equipment owned by the Eastern Irrigation District in a proper, safe and workmanlike condition, a "cold weather" policy is hereby established. This policy will be enforced by Management, the Safety and Environmental Technician, Job Supervisors and Regional Superintendents. A declaration of a Cold Weather issue will be at the discretion of the Job Supervisor or Regional Superintendent. Cold weather is described as a period wherein the current temperature (between the hours of 7:00 AM and 6:00 PM) is either -30 Degrees Celsius or lower or the combined cold and wind chill reaches these same limits.
- 3. Where a cold weather condition exists, the following steps shall be followed by the classification of the employee:

• Office Employees

Office employees are expected to report to work in all weather conditions. Where an employee determines that it is unsafe to travel and is unable to report to work because of prevailing weather conditions, the individual shall take some form of authorized leave for those days. Such leave shall only apply during "cold weather" conditions.

Divisional Field Staff Employees

All employees are expected to report to work in all weather conditions. During a cold weather condition, these individuals will report either to their Regional Superintendents office or to their Divisional Shops. Other work will be found for these employees to perform in these situations at the discretion of the Regional Superintendent. Where an employee determines that it is unsafe to travel and is unable to report to work because of prevailing weather conditions, the individual shall take some sort of authorized leave for those days. Such leave shall only apply during "cold weather" conditions.

• Equipment Pool (Equipment Operators)

No operators of equipment shall report to offices or shop of the Eastern Irrigation District during cold weather conditions, unless they are requested to do so by their immediate supervisor. The Eastern Irrigation District has determined that use of the equipment and potential exposure of employees to such conditions is not proper, safe or workmanlike. No compensation will be offered under these conditions to the employee as they are paid on an hourly basis.

• Equipment Pool (Maintenance Employees)

All employees are expected to report to work in all weather conditions. All such employees will report to the shop facilities in Brooks, in order to continue with the maintenance and repair of Eastern Irrigation District Equipment. Where an employee determines that it is unsafe to travel and unable to report to work because of prevailing weather conditions, the individual shall take some sort of authorized leave for those days. Such leave shall only apply during "cold weather" conditions.

• Equipment Pool (Supervisory)

All employees are expected to work in all weather conditions. All such employees will report to the shop facilities in Brooks, in order to continue with the maintenance and repair of Eastern Irrigation District Equipment. Where an employee determines that it is unsafe to travel and unable to report to work because of prevailing weather conditions, the individual shall take some sort of authorized leave for those days. Such leave shall only apply during "cold weather" conditions.

4. This policy complies with the Employment Standards Code (Chapter E-10.2, RSA 1988) and The Occupational Health and Safety Act (Chapter 2) along with the regulations that go with them.



Appendix P2 – Snake Lake East and West Dams Emergency Response Plan (ERP) for Flood Emergencies

SNAKE LAKE EAST & WEST DAMS

EMERGENCY RESPONSE PLAN FOR FLOOD EMERGENCIES

This Emergency Preparedness Plan has been issued to the registered holder identified in Section 4.2

Prepared and Administered by the Eastern Irrigation District

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1.0 INTRODUCTION

The Eastern Irrigation District is required by Alberta Environment to have in place an **Emergency Preparedness Plan (EPP)** that defines the emergency response measures to be implemented in the event of a dam breach. The Eastern Irrigation District's **Emergency Response Plan For Flood Emergencies** outlines, in order of priority, the key emergency response roles and responsibilities to implement the EPP. Dam operations staff and contractors who may have a response role should receive emergency preparedness training and be involved in exercising the emergency plans.

The **ERP** follows generally accepted emergency response principles and is divided into three sections as follows:

General Plan

This section briefly outlines the purpose of the ERP, who is responsible for the various components, the general policies that apply and the procedures that will activate the ERP.

Check-Sheets

The Check-Sheets define the actions to be taken by the individuals assigned to key roles when the ERP has been activated. They are placed in order of priority by which key personnel may be assigned.

Duty-Sheets

The Duty-Sheets define the actions to be taken by the individuals assigned to key roles once the Level of Emergency (Hazardous Condition, Potential Flood Emergency or Imminent Flood Emergency) has been confirmed.

Appendices

Includes forms and assignment lists and key contact lists.

2.0 GENERAL PLAN

2.1 PURPOSE

The Eastern Irrigation District has an obligation to protect lives and prevent property damage in the event of a dam breach. Therefore, it necessary to have an **ERP** to be in a state of preparedness that extends beyond normal procedures.

This **ERP** must be integrated with the Eastern Irrigation District's **EPP** and the relevant municipal emergency plan(s).

2.2 AUTHORITY

The Water Act, Water Ministerial Regulation, Part 6, requires a dam owner to have in place an **EPP** that describes the arrangements in place to respond to a potential or actual dam breach.

The Disaster Services Act, Section 8, states that the local authority shall be responsible for the control and direction of the emergency response to a disaster or emergency event within their municipality.

The Municipal Government Act, Part 1, Section 3, requires a municipality to develop and maintain safe and viable communities.

The **EPP** that forms the basis for these procedures and check-lists has been developed in accordance with the Dam Safety Guidelines of the Canadian Dam Association and the guidelines prepared by Dam Safety, Alberta Environment that are specific to Alberta.

2.3 EMERGENCY RESPONSE ROLES AND RESPONSIBILITIES

2.3.1 Eastern Irrigation District

Assessment and determination of the Level of Emergency at the dam site.

Initiation of the notification of persons in the flood inundation area.

Mitigation and repair work at site of emergency.

Technical Support to the municipality(s).

Activation of, and technical support to, the **Regional Emergency Operations Centre (REOC)**, and when necessary, to the **Site Command Post (SCP)**.

Notification of RCMP and County of Newell No. 4.

Notification of persons in the immediate flood inundation area.

Notification of Alberta Emergency Management Agency and Alberta Environment.

Liaise with local media.

2.3.2 Municipal Government / RCMP

- 1. Evacuation.
- 2. Search and rescue at local level.
- 3. Road closures.
- 4. Public safety.
- 5. Emergency lodging and feeding.
- 6. Emergency medical services.

2.3.3 Alberta Emergency Management Agency

- 1. Co-ordinate provincial government assistance to the municipality(s) as required.
- 2. Co-ordinate provision of federal government assistance, as required.

3.0 ACTIVATION OF THE ERP

3.1 INITIAL RESPONSE

The First Responder (first notified staff member), on discovery of a hazardous condition at the dam, or a potential or actual flood emergency, will immediately notify the Operations Manager or the General Manager. If these are not available, immediately notify the Divisional Superintendent or the District Engineer. An initial determination of the Level of Emergency will then be made using on-site observations in discussion with one of the above.

3.2 ACTIVATION

The decision to activate the ERP will be made by the General Manager of the Eastern Irrigation District on determination of:

- 1) A Hazardous Condition (Note: This condition poses no immediate threat to the structure but if left unchecked may put the main dam or appurtenant structures at risk),
- 2) A Potential Flood Emergency Condition, or
- 3) An Imminent Flood Emergency (Dam Breach).

PROCEED TO THE FIRST RESPONDER CHECK-SHEET IN THE CHECK-SHEET SECTION OF THIS PLAN.

4.0 DISTRIBUTION AND REVISION RECORD

4.1 RECORD OF REVISIONS

REVISION #	DATE	SECTION(S) REVISED/ADDED/DELETED AND REASON
Original	February 2005	
001	February 2008	Pages 6, 8, 12, 15, 17, 20, 22 & 32 - Staff and cell phone number changes
002	December 2013	Pages 6, 8, 15, 17, 20, 22 & 32 - Staff, positions, and cell number changes. Pages 32, 33 & 34 – Updated equipment and vendor lists
003	March 2023	Pages 6, 8, 15, 17, 20, 22 & 32 - Staff, positions, and cell number changes. Pages 32, 33 & 34 – Updated equipment and vendor lists

4.2 ERP DISTRIBUTION LIST

DEPARTMENT	PERSON	NUMBER
EASTERN IRRIGATION DISTRICT	General Manager Ivan Friesen	1
	Safety & Environmental Tech Jason Thompson	2
	Operations Manager Brent Kroschel	3
	Engineering Manager Ryan Gagley	4
	Div. Superintendent Scott Beddows	5
	Snake Lake Check Building	6
	Spare (EID Library)	7
AT DEDTA ENVIDONMENT	Dom Cofety	0
ALBERTA ENVIRONMENT	Dam Safety Southern Region	8
	Southern Region	

5.0 CHECK-SHEETS

The First Responder, Emergency Co-ordinator and Assistant Emergency Co-ordinator use the **Check-Sheets** during the process of determining the initial and confirmed Level of Emergency. The Emergency Co-ordinator, based on the Level of Emergency, will then assign **Duty-Sheets** to all required functions.

DEFINITIONS FOR DETERMINING LEVEL OF EMERGENCY:

A "Hazardous Condition" poses no immediate threat to the structure but if left unchecked may put the main dam or appurtenant structures at risk. No further notifications are required at this Level of Emergency.

A "Potential Flood Emergency" is any condition that could cause a significant and/or sudden increase in water levels downstream of the dam. A Potential Flood Emergency is a condition that has been identified but not yet confirmed as to severity.

An "Imminent Flood Emergency" is defined as any condition that will, or likely will, produce significant and/or sudden increases in flow down stream of the dam. An Imminent Flood Emergency is a condition that has been confirmed as serious; however, timelines might be uncertain.

	FIRST RESPONDER CHECK-SHEET (first notified staff member)							
#			NOTES (Date/Time)					
1.	Determine the nature of the emer possible.	ils as						
2.	Begin a written log of all commu maintain a log until advised other		servations an	d events. Cor	ntinue to			
3.	Immediately contact a dam opera	tions staff me	ember and de	scribe the em	ergency			
	Name	Office	Home	Cellular	Radio #			
	Scott Beddows (Site Commander)	378-4395	See E.I.D.	363-5607				
	Ivan Friesen (Emergency Coordinator)	362-1400	Ph. List	363-5612				
	If contact cannot be ma	de with either	r of the above	e, then contac	t:			
	Name	Office	Home	Cellular	Radio #			
	Ryan Gagley (Assistant Emergency Coordinator)	362-1400	See E.I.D.	363-5645				
	Brent Kroschel (Duty Officer)	362-1400	Ph. List	363-5606				
	In discussion with an operator an Level of Emergency will be made Hazardous Condition Potential Flood Emergency	as to the						
	• Imminent Flood Emergency		eg	ate ate				
4.	Once a determination has been mappropriate Duty-Sheet and immedirected.		Level of Em	ergency, sele				

EMERGENCY CO-ORDINATOR CHECK-SHEET

Upon arrival at the Regional Emergency Operations Centre (REOC) or the Site Command Post (SCP), do the following:

#	ACTION	NOTES (Date/Time)
1.	Receive a full report on the situation from the First Responder.	
2.	Establish contact with management and Alberta Environment. Ensure they have been mobilized.	
3.	When practical, view the area of concern, and in consultation with management confirm the Level of Emergency as one of the following: • Hazardous Condition • Potential Flood Emergency • Imminent Flood Emergency ** Definitions at start of Section 5.0 ** Until additional technical and engineering support arrive, continue to monitor the site for changes in condition. Should the condition appear to be worsening before support arrives, immediately proceed to the next level of emergency.	
4.	Once the level of emergency has been verified in consultation with senior management, select the appropriate Duty-Sheet and immediately begin completion of the action items as directed.	

ASSISTANT EMERGENCY CO-ORDINATOR CHECK-SHEET

Upon being assigned to the duties of Assistant Emergency Co-ordinator, do the following:

#	ACTION	NOTES (Date /Time)
1.	Receive a full report on the situation from the Emergency Co-ordinator.	
2.	Confirm the Level of Emergency with the Emergency Co-ordinator. Select the appropriate Assistant Emergency Co-ordinator Duty-Sheet and immediately begin completion of the action items as directed. ** Definitions at start of Section 5.0**	

Telephone lines strictly for use in the Site Command Post are as follows	
Site Commander	
Emergency Co-ordinator	
Site Commander Emergency Co-ordinator Telephone line for Regional Emergency Operations Centre (REOC)	
(403) 362-1400 Regional Emergency Operations Centre	

6.0 DUTY-SHEETS FOR "HAZARDOUS CONDITION"

FIRST RESPONDER DUTY-SHEET - Page 1 of 1

IF IT IS DETERMINED THAT THERE IS A <u>HAZARDOUS CONDITION</u>, do the following:

#	ACTION	NOTES (Date/Time)
1.	Immediately notify the dam operations staff. Ensure that the hazard site is continuously monitored.	
2.	Take measures to ensure public safety is not compromised.	
3.	Begin any mitigation measures only if directed to do so by Eastern Irrigation District management.	
4.	Continue to monitor the site until support arrives. Report any changes in the condition of the dam immediately to Eastern Irrigation District management.	

HAZARDOUS CONDITION

EMERGENCY CO-ORDINATOR DUTY-SHEET

Page 1 of 1
IF IT IS DETERMINED THAT THERE IS A <u>HAZARDOUS CONDITION</u>, do the following:

	NOTES							
#	ACTION							
1.	When practical, go to the hazard site, observe the situation and re-assess the Level of Emergency.							
2.	Take measures to ensure p	ublic safety is	not compron	nised.				
3.	Contact senior management and advise them of the situation, if not already done:							
	Name	Office	Home	Cellular	Radio Call #			
	Ivan Friesen	362-1400	* See	363-5612	Unit 2			
	Marvin Koochin	362-1400	E.I.D. Phone	409-3363				
	Ryan Gagley	362-1400	List *	363-5645				
4.	Determine what additional assist in dealing with the si			•	-			
5.	Assign a staff member to the function of Site Commander and deploy to the dam site.							
	Begin mitigation activities	•						
6.	Begin mitigation activities. Assume all the duties of the Emergency Co-ordinator: a) Supervise ground operations staff b) Approve action items and requests as appropriate c) Liaise with the Lead Communication Specialist and senior management in preparing media releases and briefing notes d) Maximize available resources							

HAZARDOUS CONDITION

ASSISTANT EMERGENCYCO-ORDINATOR Page 1 of 1

THERE IS NO REQUIREMENT TO ACTIVATE THE ASSISTANT EMERGENCY CO-ORDINATOR FUNCTION AT THE "HAZARDOUS CONDITION" LEVEL.

HAZARDOUS CONDITION

SITE COMMANDER DUTY-SHEET – Page 1 of 1 Upon being assigned the duties of Site Commander, do the following:

	Upon being assigned the duties of Site Commander, do the following:							
#	ACTION	NOTES (Date /Time)						
1.	Obtain a full report on activities to date from the Emergency Co-ordinator and First Responder. Confirm the level of emergency with the Emergency Co-ordinator.							
2.	Open an Event Log and record all actions to date. Continue to keep the Log until advised otherwise.							
3.	Establish communications with the Lead Communication Specialist at the Regional Emergency Operations Centre (403) 362-1400) and provide him with your current cell phone number.							
4.	Operators report to the Site Command Post.							
5.	Dispatch available maintenance staff and/or Duty Officers to close and lock and/or control all gates, and to evacuate areas as necessary.							
6.	Assess the situation and report observations to the Emergency Co-ordinator.							
5.	Establish a Command Post and site perimeter with "inner" and "outer" zones if necessary, and with suitable staging areas. Establish site security. Ensure that dam site equipment is operational (gates, generator, etc).							
6.	When advised by the Emergency Co-ordinator, assign an individual(s) to notify residents, campers, visitors or any other individuals <u>immediately</u> downstream of the dam. Advise the Emergency Co-ordinator of anyone who cannot be notified.							
7.	Ensure occupational health and safety procedures are in place to protect site personnel.							
8.	Ensure that adequate communications equipment is available and operational.							
9.	Co-ordinate the mitigative and remedial operations at the site and maintain communication with the Emergency Co-ordinator							

7.0 DUTY SHEETS FOR "POTENTIAL FLOOD EMERGENCY"

FIRST RESPONDER DUTY-SHEET - Page 1 of 1

IF IT IS DETERMINED THAT THERE IS A

POTENTIAL FLOOD EMERGENCY, do the following:

#	ACTION							Date/Time)
1.	Begin alerting otl	her dam o	perations	staff and m	obilizing t	them to the site:		
	Name		Office	Home	Cellular	Radio #		
	Scott Beddows	37	8-4395	* See	363-5607	7		
	Brent Kroschel	36	2-1400	E.I.D.	363-5606	5		
	Don Syvret	36	2-1400	phone	363-5604			
	Levi Lepp (N1)	36	2-1400	list *	363-5630)		
2.	Begin mobilizing	g to site a	any equip	ment or m	aterials as	directed by the		
	operator. Refer t	o the "M	aterials, I	Equipment,	Labour an	nd Engineering"		
	listing in the Res	ources sec	ction of th	nis Plan for	contact nu	mbers. Stage all		
	equipment at or	near the	Site Cor	nmand Pos	t, as direc	ted by the Site		
	Commander.							
	Do NOT begin w	ork until	directed t	o do so by s	an onerato	•		
3.	Fully brief the or							
٥.	respond will							
	Co-ordinator.	mmoarac	21y a 55 a	ine the	ranction	of Emergency		
4.	Co ordinator.							
''	Should other res	ponders a	arrive bef	ore an ope	rator, have	e them assist in		
	contacting the fol							
	C	C						
	"The Emergency Potential / Immir							
	to (see <i>Message</i> i	ou are requested						
			0w)				RESPONSE	ΔΡΡΙΛΑΙ
	Name	Office	Home	Cellular	Radio	Message	REOF ONCE	TIME
	Ivan Friesen	362-1400		363-5612	Unit 2	Activate response	YES/NO	
	Marvin Koochin	362-1400	* See	409-3363]	Notify municipality	YES/NO	
	Scott Beddows	362-1400	E.I.D	363-5607	(Come to site ASAP	YES/NO	
	Roger McLean	362-1400	phone	363-5648	(Come to site ASAP	YES/NO	
	Brent Kroschel	362-1400	list *	363-5606		Standby	YES/NO	
	Jason Thompson	362-1400		363-5609		Standby	YES/NO	
5.	Your duties as the	e first res	nonder en	d with the	arrival of the	ne Emergency		
			-			0 0		
	Co-ordinator. You may be assigned to other duties. Remember to continue logging all your communications, observations and events until							
	00 0	•				ina events until		
	advised otherwise by the Emergency Coordinator.							

EMERGENCY CO-ORDINATOR DUTY-SHEET Page 1 of 1

IF IT IS DETERMINED THAT THERE IS A **POTENTIAL FLOOD EMERGENCY**, do the following:

#	ACTION	NOTES (Date/Time)
1.	If remedial action can slow the progress of the hazard, assign a competent operator as Site Commander to co-ordinate and supervise repair activities. Equip him with a portable radio and accessories as needed, and instruct him to keep the Emergency Co-ordinator continually updated. No work is to proceed if conditions are such that staff safety is at risk.	
2.	Following the remediation assessment, re-confirm with senior management the decision to proceed with the "Potential Flood Emergency" notification.	
3.	Once you have re-confirmed the "Potential Flood Emergency" condition, assign response functions and Check-sheets (record assignments) as follows: • Assistant Emergency Co-ordinator (co-ordinates notifications/evacuations) • Duty Officers (as required) • Lead Communication Specialist (first one on site) Continue to assign functions as responders arrive on site and as the situation requires.	
4.	Open an Event Log and record all actions taken to date. Continue to keep the Log until advised otherwise. If resources are available, assign this function to a Duty Officer.	
5.	Verify the operational status of the Regional Emergency Operations Centre with the Lead Communication Specialist.	
6.	Assume all the duties of the Emergency Co-ordinator: a) Supervise ground operations staff. b) Supervise ongoing notification and evacuation procedures. c) Approve action items and requests as appropriate. d) Liaise with the Lead Communication Specialist and senior management in preparing media releases and briefing notes. e) Maximize available resources. f) Keep all operations centre staff informed on the progress of the response.	

ASSISTANT EMERGENCY CO-ORDINATOR DUTY-SHEET Page 1 of 1

IF IT IS DETERMINED THAT THERE IS A **POTENTIAL FLOOD EMERGENCY**, do the following:

#			TION	gv		NOTES (Date/Time)	
1.	Receive a full report of and the First Responde	Co-ordinator					
2.	Open an Event Log an until advised otherwis		ions taken	to date. Maint	ain the Log		
3.	Begin assembling resources needed for the downstream notification and/or evacuations (human resources, telecommunications and radio-equipped trucks). Ensure communications equipment is fully operational and communication links are maintained. DO NOT BEGIN NOTIFICATIONS AT THIS TIME.						
4.	Confirm with the First R						
	Name	Office	Home	Cellular	Radio Call		
	Scott Beddows	378-4395	*	363-5607			
	Brent Kroschel	362-1400		363-5606			
	Levi Lepp	362-1400	See E.I.D.	363-5630			
	Marvin Koochin	362-1400	Phone	409-3363			
	Ivan Friesen	362-1400	List	363-5612			
	Ryan Summach Roger McLean	362-1400	*	363-5642 363-5648			
	Mark Porter	362-1400 362-1400		363-5920			
	Jason Thompson	362-1400		363-5609			
	Don Syvret	362-1400		363-5604			
5.	Follow directions in the "Flood Emergency Notification Log" when you are advised by the Emergency Co-ordinator to proceed with notifications. Request assistance of local authority and/or police services to assist with notifications. Advise the Emergency Co-ordinator of any contacts who cannot be notified.						
6.	Report to the Emerger been completed.	ncy Co-ordinate	or when not	ification of co	ontacts has		

LEAD COMMUNICATION SPECIALIST DUTY-SHEET- Page 1 of 1Upon being assigned the duties of Lead Communication Specialist, do the following:

#	ACTION	NOTES (Date /Time)					
1.	Proceed to the Eastern Irrigation District head office and establish the Regional Emergency Operations Centre by:						
	 Locking the front doors to control access or posting guards at all entrances to the building. 						
	Activating the REOC mobilization plan						
	 Ensuring the telephone lines and other communications equipment is operational. Call ProComm Solutions Inc. (403-527-5555, Medicine Hat) to have an adequate number of lines programmed as dedicated out-going lines. This will take approximately two hours. 						
2.	Confirm with the Assistant Emergency Co-ordinator which Communication Specialists have been mobilized to the REOC and expected arrival time. Request additional resources if required. Begin co-ordination and deployment of the Communication Specialists as they arrive.						
3.	Liaise with Alberta Emergency Management Agency's Government Emergency Operations Centre (GEOC) at 1-780-422-9000. As required, liaise with their Public Media & Information Room (PMIR).						
4.	Liaise with the media. Prepare media releases in conjunction with the Emergency Co-ordinator and management containing the following information:						
	• Expected magnitude of the flood wave.						
	• Likely impact on downstream users.						
	• The amount of time available for evacuation.						
	• The location of the evacuee staging area and/or Reception Centre.						
	Which areas are likely to flood.						
	• Which areas likely will not be flooded.						
	How should those in the flood path protect themselves.						
	Any other pertinent information.						
10.	Handle all public inquires. All public and media calls are to be routed to the REOC from the Site Command Post. Telephone numbers available for REOC use include:						
	Eastern Irrigation District Head Office: (403) 362-1400						
	Do not release any other telephone numbers.						
11.	Liaise on an ongoing basis with the Emergency Co-ordinator and his assistant. Final authority with the Site Command Post and the REOC rests with the Emergency Co-ordinator.						

DUTY OFFICER DUTY-SHEET- Page 1 of 1

Upon being assigned the duties of Duty Officer, do the following:

#	ACTION	NOTES (Date/Time)			
1.	Act on instructions, directions and requests from the Emergency Co-ordinator and the Assistant Emergency Co-ordinator.				
2.	Open an Event Log and record all actions. Continue to maintain operations logs, maps and situation boards until advised otherwise.				
3.	Answer the telephones, take messages, retrieve faxes, and follow-up on action items, maintain operations logs, maps and situation boards, and compile reports.				
4.					

Regional Emergency Operations Centre (REOC) telephone number:

(403) 362-1400

8.0 DUTY-SHEETS FOR "IMMINENT FLOOD EMERGENCY"

FIRST RESPONDER DUTY-SHEET - Page 1 of 1

IF IT IS DETERMINED THAT THERE IS A IMMINENT FLOOD EMERGENCY, do the following:

#			AC'	TION			NOTES (Date/Time)
1.	Begin alerting ot	her dam o	perations	staff and m	obilizing t	hem to the site:		
	Name		Office	Home	Cellular	Radio #		
	Brent Kroschel	36	2-1400	* See	363-5606			
	Scott Beddows	37	8-4395	E.I.D.	363-5607			
	Don Syvret		2-1400	phone	363-5604			
	Levi Lepp (N1)		8-4395	list *	363-5630			
2.	Begin mobilizing to site any equipment or materials as directed by the							
	operator. Refer t							
	listing in the Res					_		
	equipment at or	near the	Site Cor	nmand Pos	t, as direc	ted by the Site		
	Commander.							
	Do NOT begin w	vork until	directed t	o do so by a	an operator			
3.	Fully brief the o							
	_	immediate		me the		of Emergency		
	Co-ordinator.		•					
4.	Should other res	sponders a	arrive bef	fore an ope	rator, have	them assist in		
	contacting the fo	llowing p	eople, if r	not already	contacted, a	and stating:		
	"The Emergency	v Co-ordi	nator for	the Snake	Lake Dar	ne ie iecuino a		
	Potential / Immi	•				_		
	to (see <i>Message</i> :			ney nothica	and ye	a are requested		
		T	1				RESPONSE	ΔΡΡΙΥΔΙ
	Name	Office	Home	Cellular	Radio	Message	REGI GROE	TIME
	Ivan Friesen	362-1400		363-5612		Activate response	YES/NO	
	Marvin Koochin	362-1400	* See	409-3363	N	Notify municipality	YES/NO	
	Scott Beddows	362-1400	E.I.D	363-5607		Come to site ASAP	YES/NO	
	Roger McLean	362-1400	phone	363-5642	(Come to site ASAP	YES/NO	
	Brent Kroschel	362-1400	list *	363-5606		Standby	YES/NO	
	Jason Thompson	362-1400		363-5609		Standby	YES/NO	
5.	Your duties as th	e first res	nonder en	nd with the	arrival of th	e Emergency		
٥.	Co-ordinator. Yo							
	continue logging							
	advised otherwis	•				are o , onto until		
	aa i isaa saisi wis	i oj mo i		, 2001 3 11141	· · ·			

EMERGENCY CO-ORDINATOR DUTY-SHEET—Page 1 of 1 IF IT IS DETERMINED THAT THERE IS A <u>IMMINENT FLOOD EMERGENCY</u>, do the following:

	ionowing.	
#	ACTION	NOTES (Date/Time)
1.	Once you have confirmed the "Imminent Flood Emergency" condition, assign response functions and check sheets (record assignments) as follows:	
	 Assistant Emergency Co-ordinator (co-ordinates notifications/evacuations) 	
	Site Commander (co-ordinates activities at the dam site)	
	Duty Officers (as required)	
	• Lead Communication Specialist (first one on site) Continue to assign functions as responders arrive on site and as the situation requires.	
	Remember your priority is to ensure adequate resources are available for the notification and evacuation of people immediately below the dam.	
2.	Review the "Dam Breach Notification Log" with the First Responder and the Assistant Emergency Co-ordinator to determine/confirm evacuation message to be communicated. The Assistant Emergency Co-ordinator will now assume responsibility for continuing the notifications.	
	The local authority must be notified immediately of any agencies who cannot be contacted regarding any Flood Emergency condition.	
3.	Open an Event Log. Record all actions taken to date. Maintain the Log until advised otherwise. If resources are available, assign this function to a Duty Officer.	
4.	Assume all the duties of the Emergency Co-ordinator:	
	a) Supervise ground operations staff.b) Supervise ongoing notification and evacuation procedures.	
	c) Approve action items and requests as appropriate.	
	d) Liaise with the Lead Communication Specialist and senior	
	management in preparing media releases and briefing notes.	
	e) Maximize available resources.f) Keep all operations centre staff informed on the progress of the response.	
	2, 2225 an operation centre start informed on the progress of the response.	

ASSISTANT EMERGENCY CO-ORDINATOR DUTY-SHEET – Page 1 of 1 IF IT IS DETERMINED THAT THERE IS AN IMMINENT FLOOD EMERGENCY, do the following:

#		NOTES (Date/Time)						
1.	Receive a full report on the First Responder.	o-ordinator and						
2.	Review the "Flood Emergency Notification Log" with the Emergency Coordinator and the First Responder. You are now responsible for continuing notifications. THIS IS A PRIORITY TASK.							
	Request the assistance of Emergency Co-ordinator		•	-	es. Advise the			
	Advise the Emergency	Co-ordinator	of any con	tacts who can	not be notified.			
3.	Open an Event Log and advised otherwise.							
4.	Confirm with the First R							
	Name	Office	Home	Cellular	Radio Call			
	Scott Beddows	378-4395	*	363-5607				
	Brent Kroschel	362-1400	See	363-5606				
	Levi Lepp Marvin Koochin	362-1400 362-1400	E.I.D.	363-5630 409-3363				
	Ivan Friesen	362-1400	Phone	363-5612				
	Ryan Summach	362-1400	List	363-5642				
	Roger McLean	362-1400	*	363-5648				
	Mark Porter	362-1400		363-5920				
	Jason Thompson	362-1400		363-5609				
	Don Syvret 362-1400 363-5604							
5.	Ensure communications are maintained.	equipment is f	fully operati	onal and com	munication links			
6.	Report to the Emergency completed.	Co-ordinator	when notifi	cation of cont	acts has been			

LEAD COMMUNICATION SPECIALIST DUTY-SHEET- Page 1 of 1Upon being assigned the duties of Lead Communication Specialist, do the following:

#	ACTION	NOTES (Date /Time)
1.	Proceed to the Eastern Irrigation District head office and establish the Regional Emergency Operations Centre by:	
	 Locking the front doors to control access or posting guards at all entrances to the building. 	
	Activating the REOC mobilization plan	
	• Ensuring the telephone lines and other communications equipment is operational. Call ProComm Solutions Inc. (403-527-5555, Medicine Hat) to have an adequate number of lines programmed as dedicated out-going lines. This will take approximately two hours.	
2.	Confirm with the Assistant Emergency Co-ordinator which Communication Specialists have been mobilized to the REOC and expected arrival time. Request additional resources if required. Begin co-ordination and deployment of the Communication Specialists as they arrive.	
3.	Liaise with Alberta Emergency Management Agency's Government Emergency Operations Centre (GEOC) at 1-780-422-9000. As required, liaise with their Public Media & Information Room (PMIR).	
4.	Liaise with the media. Prepare media releases in conjunction with the Emergency Co-ordinator and management containing the following information:	
	• Expected magnitude of the flood wave.	
	• Likely impact on downstream users.	
	• The amount of time available for evacuation.	
	• The location of the evacuee staging area and/or Reception Centre.	
	• Which areas are likely to flood.	
	Which areas likely will not be flooded.	
	 How should those in the flood path protect themselves. 	
	Any other pertinent information.	
12.	Handle all public inquires. All public and media calls are to be routed to the REOC from the Site Command Post. Telephone numbers available for REOC use include:	
	Eastern Irrigation District Head Office: (403) 362-1400	
	Do not release any other telephone numbers.	
13.	Liaise on an ongoing basis with the Emergency Co-ordinator and his assistant. Final authority with the Site Command Post and the REOC rests with the Emergency Co-ordinator.	

DUTY OFFICER DUTY-SHEET- Page 1 of 1

Upon being assigned the duties of Duty Officer, do the following:

#	ACTION	NOTES (Date/Time)			
1.	Act on instructions, directions and requests from the Emergency Co-ordinator and the Assistant Emergency Co-ordinator.				
2.	Open an Event Log and record all actions. Continue to maintain operations logs, maps and situation boards until advised otherwise.				
3.	Answer the telephones, take messages, retrieve faxes, and follow-up on action items, maintain operations logs, maps and situation boards, and compile reports.				
4.	At the request of the Emergency Co-ordinator or the Assistant Emergency Co-ordinator:				
	 Assist in downstream notifications and/or evacuations. 				
	 Provide crowd control and/or security functions. 				
	Man road blocks.				
	 Assist in the Regional Emergency Operations Centre. 				
	Perform other response task as directed by the Emergency Co-ordinator.				

Regional Emergency Operations Centre (REOC) telephone number:

(403) 362-1400

9.0 FLOOD EMERGENCY NOTIFICATION LOG

FLOOD EMERGENCY NOTIFICATION LOG

Page 1

Once the Emergency Response Plan has been activated, begin callout in the order below and state the following:

"This is (your name) with the Eastern Irrigation District. We are issuing a notification of a(n) (potential / imminent flood emergency) at the Snake Lake (East/West) Dam. You are advised to activate your Municipal Plan. This is **NOT** an exercise or simulation and speed is of the essence. Will you be complying with this advice?"

NOTE: Keep the calls as short as possible and record all information on this log. Report back to the Emergency Co-ordinator when you have completed notifications or if you need additional resources.

#	NAME	PHONE NUMBER	ALTERNATE NUMBER	ACTIONS REQUIRED	CONTACT YES / NO	COMPLY YES / NO	DISPATCHED UNIT UNIT # & TIME	STATUS
1.	County of Newell No. 4	362-3266		Evacuation Order and/or Municipal Plan activation.				
2.	R.C.M.P. (Brooks)	9-1-1	362-5548	Municipal Plan activation.				
3.	Alberta Emergency Management Agency	1-780-422-90 1-800-272-96	000 600 (after hrs)	Notification				
4.	Cenovus Energy Inc. West Dam only	(403) 290-33	33	Lathom C Battery #3, LSD 100/04- 10-20-17W4 is threatened by flooding from Snake Lake				
5.	Canadian Pacific Railway West Dam only	1-800- 795-7	851	CPR Mainline between Lathom Siding and Southesk Siding is threatened by flooding from Snake Lake— embankment will be overtopped by approximately 60 cm of water				

FLOOD EMERGENCY NOTIFICATION LOG

Page 2

Once the Emergency Response Plan has been activated, begin callout in the order below and state the following:

"This is (your name) with the Eastern Irrigation District. We are issuing a notification of a(n) (potential / imminent flood emergency) at the Snake Lake (East/West) Dam. You are advised to activate your Municipal Plan. This is **NOT** an exercise or simulation and speed is of the essence. Will you be complying with this advice?"

NOTE: Keep the calls as short as possible and record all information on this log. Report back to the Emergency Co-ordinator when you have completed notifications or if you need additional resources.

#	NAME	PHONE NUMBER	ACTIONS REQUIRED	CONTACT YES / NO	COMPLY YES / NO	DISPATCHED UNIT UNIT # & TIME	STATUS
6	Canadian Pacific Railway East Dam only	1-800- 795-7851	CPR Mainline between Southesk Siding and Cassils Siding is threatened by flooding from Snake Lake—water will reach embankment but will not overtop				

10.0 REOC MOBILIZATION PLAN

REGIONAL EMERGENCY OPERATIONS CENTRE (REOC) MOBILIZATION PLAN

Page 1 of 3

The LEAD COMMUNICATION SPECIALIST is to follow these procedures for activating the Regional Emergency Operations Centre.

	activating the Regional Emergency Operations Centre.
#	ACTION
1.	The REOC mobilization kit is in a binder with the Engineering Department ERP and includes: an envelope for each emergency response function containing a check-sheet and required supplies. four copies of the Inundation maps for the use of REOC responders. media kits with pre-worded background material. two information signs stating that the facility/centre is closed. two copies of the Crawling Valley Dam Emergency Preparedness Plan. large wall map. Other required equipment: two portable two-way radios (can be obtained from Survey Department, alternate source – Equipment Superintendent). situation status board with flip chart (located in supply room). situation status board with dry erase board (remove from wall in Conference Room). stationery; adequate pens, paper etc. available in photocopy room. There is a television located in the storage room. Fax machines are located in the south and north reception areas. Contact the assistant Emergency Co-ordinator if any of the above is missing from the module.
2.	 Immediately proceed to the Eastern Irrigation District Head Office (REOC) central area. Advise any users/ visitors that the room/facility must be cleared; then lock the shop access doors and post guards at the front of the east and west hallways, and at the front (north) reception desk. Hang the information signs "District Office Closed" on the front and rear (south) doors. Lock the General Manager, Operation Manager and Executive Assistant offices. Ensure that a competent operator mans the switchboard in the south reception area. Provide the switchboard operator in the south reception area with a list indicating who is occupying which work station. Remove the wall phones and any electronics or valuables from the board room and conference rooms. These rooms will become media/press rooms.

REGIONAL EMERGENCY OPERATIONS CENTRE (REOC) **MOBILIZATION PLAN** Page 2 of 3 # **ACTION** The Assistant General Manager, District Engineer and District Safety Coordinator will occupy 3. their usual offices. The remaining offices and work stations surrounding the central area are fully functional and will be made available as necessary, and provided with: Event logs to record all activities. Standard information packages. Access to Inundation Maps. Office supplies as necessary. Setting up the equipment: 4. All telephones, fax machines, photocopiers, computers and printers are fully functional. Computer network access is restricted to District employees, however computer, printer, e-mail and internet access can be made available to outside agency liaisons if necessary. Call the "Technical Support" contact on the Key Contact – Resource Listing if this access is required. Set up the status board so that all responders can clearly see it. Key events should be 5. written on this board (time, event, actions, and response). 6. Hang up the large wall map to track progression of the flood wave where REOC staff can see it. 7. The Lead Communication Specialist will assign the priority functions to responders as they arrive: Establish contact with the Government Emergency Operations Centre (GEOC). Handle all public and media inquiries. Establish contact with the Public Media and Inquiry Room (PMIR) as required.

	REGIONAL EMERGENCY OPERATIONS CENTRE (REOC) MOBILIZATION PLAN Page 3 of 3
#	ACTION
8.	A staging area for the media will be set up in the Board/Conference room if required, with adequate chairs and tables, and access to the north washroom facilities.
	The Lead Communication Specialist will provide regular situation updates regularly to the media, with the approval of the Emergency Co-ordinator. Access to the dam site is restricted. Media tours are only permitted with the approval of the Emergency Coordinator and must be escorted.
	Inundation maps.Standard information packages.
9.	Media kits with background material containing the following information will be available for the public and media with the approval of the Emergency Co-ordinator:
	 What caused the emergency? Who owns the dam? What type of dam is it? What kind of emergency (piping, overtopping, etc) is it?
	 When were people first warned? Are people being evacuated and where are the reception centres? How can we contact evacuees? Which roads and bridges are closed/being closed?
10.	Answers to questions relating to the emergency will be supplied by the Site Command Post on a regular basis and may include: How is the condition progressing? What actions are being taken? What resources are being used for mitigation? Who/which communities have been evacuated?
11.	REOC operations will include site security and restricting critical areas to authorized personnel.
12.	The Lead Communication Specialist will lend support to the Site Command Post if directed to do so by the Emergency Co-ordinator.

11.0 APPENDICES

EVENT LOG							
Page of							
Responder's Name:		Assigned Position:					
Date:		Time Log Opened:					
Instructions	Begin this Log immediately on being assigned to an emergency response function. Document all events and responses as they occur. Care and control of this Log is your responsibility. Continue to keep this Log until advised to stand down. Submit this Log only to the Emergency Co-ordinator or to the Assistant Emergency Co-ordinator.						
TIME	EVI	ENT	ACTION and FOLLOW-UP	FOLLOW-UP			
				-			

RECORD OF ASSIGNMENTS Page of					
	Date:	Time Record Opened:			
DATE & TIME	NAME	ACTION and FOLLOW-UP			

RESOURCES

KEY CONTACT - RESOURCE LISTING

LAST UPDATE: January 2025

Instructions: This is a listing of potential manpower resources available to the site response.

The list is **STRICTLY CONFIDENTIAL**. It is for reference and internal use only and does not replace the "Emergency Response Check-sheets " **DO NOT USE AS A CALL OUT LIST.**

FOR EMERGENCY CO-ORDINATORS USE ONLY

			PHONE N	IUMBERS	
LOCATION	NAME	FUNCTION	WORK	HOME	CELLULAR
REOC	Ivan Friesen	Emergency Co-ordinator	362-1400		363-5612
REOC	Ryan Gagley	Assistant Emergency Co-ordinator	362-1400		363-5645
REOC	Marvin Koochin	Lead Communication Specialist / Information Officer	362-1400		409-3363
REOC	Jason Thompson	Lead Communication Specialist / Information Officer (assistant / alternate)	362-1400	* See E.I.D.	363-5609
REOC	Brent Kroschel	Duty Officer / Communication Specialist	362-1400	Phone	363-5606
REOC	Don Syvret	Duty Officer / Communication Specialist	362-1400	List *	363-5604
SCP	Scott Beddows	Site Commander	362-1400		363-5607
SCP	Roger McLean	Site Commander (assistant / alternate)	362-1400		363-5648
SCP	Ryan Summach	Assistant Emergency Co-ordinator (assistant / alternate)	362-1400	*	363-5642
SCP	Lee Deschamps	Mitigation/Evacuation/Maintenance	362-1400	See E.I.D.	363-5638
SCP	Will Allaby	Mitigation/Evacuation/Maintenance	362-1400	Phone	363-5613
SCP	Dustin Fika	Mitigation/Evacuation/Maintenance	362-1400	List *	363-5631
SCP	Scott McInnis	Mitigation/Evacuation/Maintenance	362-1400		363-5639
SCP	Levi Lepp	Mitigation/Evacuation/Maintenance	362-1400		363-5630
SCP	Troy Canning	Mitigation/Evacuation/Maintenance	362-1400		363-5624
SCP		Mitigation/Evacuation/Maintenance	362-1400	*	363-5627
				See	
AR	Mark Porter	Technical Support	362-1400	E.I.D. Phone	363-5920
AR	BJ Hasper	Notification/Evacuation/Security	362-1400	List	363-5634
AR	Derek Kroschel	Notification/Evacuation/Security	362-1400	*	363-5632
AR	Dylan Kime	Notification/Evacuation/Security	362-1400		363-5636
AR		Notification/Evacuation/Security	362-1400		

SITE COMMAND POST SCP
REGIONAL EMERGENCY OPERATIONS
CENTRE
ASSIGN AS REQUIRED AR
NOT AVAILABLE NA

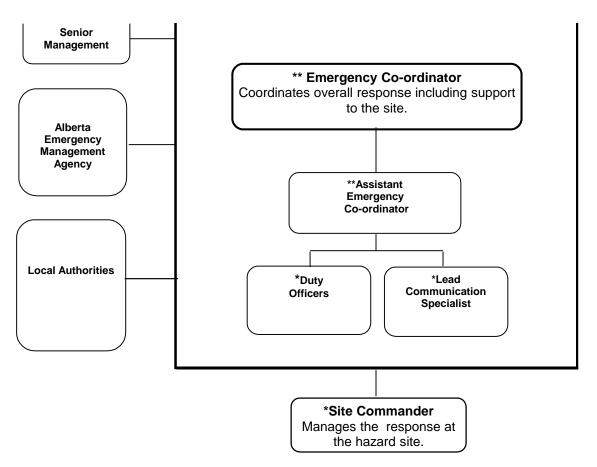
Remember, not all responders will be available so assignments must be adjusted as the situation evolves.

M	ATER	IALS, EQUIPMENT, LABOUR	& ENGINEERII	NG RESOURCES	5
Unit #	Year	E.I.D. Excavation Equipment	Serial #	Employee	
441	1993	Case 590 Backhoe			
457	1997	JD 410 E Rubber Tire Hoe			
464	1999	Hyster Forklift H190			
476	2003	Bobcat 863 Skidsteer			
477	2003	JD 624H Loader			
491	2006	J.D.350DLC Hi-Hoe			
498	2008	J.D. 444 Wheel Loader			
499	2008	J.D. 544 Wheel Loader			
500	2008	J.D. 410 Backhoe Loader			
501	2008	J.D. 410 Backhoe Loader			
503	2009	J.D. 6430 MWFD Tractor			
507	2004	Hyster H80XM Forklift			
510	2010	Caterpillar D6N LGP Tractor			
511	2010	Hitachi ZX240LC-3 Excavator			
512	2010	Hitachi ZX350LC-3 Excavator			
516	2011	XL4200 111 Grade all Hydraulic Excavator			
517	2011	J.D. 872GP Motor Grader			
518	2011	Hitachi ZX250 LC Excavator			
519	2011	Hitachi ZX350 LC Excavator			
520	2012	Case Quad Trac 550S			
521	2012	JD 350GLC Excavator			
522	2012	JD250GLC Excavator			
523	2013	CAT – 277C2 Skid Steer Loader			
524	2013	Caterpillar D6N T4 LGP Tractor			
		E.I.D. Tandems / Semis			
Unit #	Year	Description	Serial #	License	
614	2007	Freightliner Gravel Truck			
615	2008	T 800 Kenworth Gravel Truck			
616	2006	Peterbuilt model 335			
617	2011	Kenworth T800 Picker Truck			
618	2011	Mack Granite GU813			
619	2011	Mack Pinnacle CXU613			
		E.I.D. Trailers / Pups			
Unit #	Year	Description	Serial #	License	
701	1992	Flat Bed Trail 5 Wheel			
704		8 Wheel Hi-boy Trailer			

707		Flat Bed Tilt Trailer			
709		Flat Bed Tilt Trailer			
712	1995	Homemade Trailer - 3179			
713	1994	Homemade Trailer (Sign) - 3175			
714	1995	Homemade Trailer - 3197			
715	1979	Semi trailer box unit - Constr. #1			
716	1996	Homemade Trailer			
718	1996	Homemade Trailer- Rammix Tool			
719	1997	Homemade Trailer			
720	1990	Two Place Ski-Doo Trailer			
721	1998	Semi trailer box unit - Constr. #2			
722	1999	Homemade Generator Trailer			
723	1999	T71AT Skyreach 4100 Trailer			
726	2001	Hop Up Jeep Trailer			
727	2001	Booster Trailer			
728	2003	Rainbow (Bobcat) Trailer			
729	2003	Falcon 3250 Flat Deck Trailer			
730	2006	Solar Panel Trailer			
731	2006	Solar Panel Trailer			
732	2006	Solar Panel Trailer			
733	2007	Gravel Pup Trailer			
734	2007	Trailtech Tilt Deck Trailer			
735	2008	SL1400 Tandem Pony Pup			
736	2011	Peerless Shallow Drop Lowbed			
737	2011	Trail Pro 20' Cushion Tilt			
738	2011	Trail Pro 14' Dump Trailer			
739	2011	Trail Pro 20' Equipment Trailer			
740	2011	Haulmark 875 Trailer			
741	2011	Renn Tandem Steel Pup			
742	2013	Trail Pro Gooseneck Highboy Flatdeck			
743	2013	Renn Tandem Steel Pup			
		Other Trucking / Excavation	Location	Phone	
		Resources - Brooks	2004	1 110110	
		Smith Trucking Service	Brooks	362-4071	
		Brooks Asphalt	Brooks	362-5597	
		Liberty Trucking	Brooks	362-0778	
		Liberty Trucking	Alternate #	362-9040	
		Blue Line Truck Service	Brooks	362-5243	
		Brooks Backhoe Services	Brooks	362-5888	
		Da PA Jo Construction Limited	Brooks	362-7570	
		Doug Watson Trucking	Brooks	793-7936	
		Baseline Earthworks	Brooks	633-0311	
		Broerson Construction	Brooks	363-4613	

Stinnissen Oilfield Construction	Brooks	501-4838	
Maxim Services	Brooks	641-3400	
Hillside Excavation	Brooks	793-1519	
Romer Environmental	Brooks	793-7389	
	Brooks		
Other Trucking / Excavation Resources - Vauxhall			
Resources - Vauxilaii			
F. Miller Excavating	Vauxhall	654-2064	
McNiven Excavating	Vauxhall	654-2440	
B.R.I.D.	Vauxhall	654-2111	
Utility Locate Services	Location	Phone	
Badger Daylighting	Brooks	362-8828	
Hydromaxx Hydro-Vac Services	Brooks	362-0500	
Sinc Underground	Brooks	633-5999	
Eclipse Locating			
Franks and a Complete	Landin	Dhama	
Engineering Services	Location	Phone	
MPE Engineering Ltd.	Lethbridge	329-3442	

EMERGENCY RESPONSE STRUCTURE



^{**} There is a Check-Sheet and a Duty-Sheet for this response function

^{*} There is a Duty-Sheet for this response function



Appendix P3 – Snake Lake East and West Dams Emergency Preparedness Plan (EPP) for Flood Emergencies

SNAKE LAKE EAST AND WEST DAMS

EMERGENCY PREPAREDNESS PLAN FOR FLOOD EMERGENCIES

This Emergency Preparedness Plan has been issued to the registered holder identified in Section 12.0

Prepared and Administered by the Eastern Irrigation District

EMERGENCY PLANNING

EMERGENCY PLANNING PROCESS

Where required by the Water Act (ACT) the dam owner shall prepare an Emergency Plan for the specified dam. The Plan shall include an **Emergency Preparedness Plan (EPP)** and an **Emergency Response Plan (ERP)**.

This Guideline can be used as a starting point for producing the documents required to satisfy the requirements of the ACT, and can be used in whole or part or modified to suit the dam and organizational structure of the owner.

Alberta Environment (AENV), following discussions with the dam owner, will specify the date by which the draft Emergency Plan is to be submitted. Following a review by AENV, the owner will be required to distribute the EPP to all affected parties mentioned in the plan.

The owner will be required to confirm that the EPP has been satisfactorily distributed and understood by completing the attached form (see page ii).

EMERGENCY PLANNING

Emergency planning for a flood emergency at dams relies on dam owners providing warnings and downstream local authorities initiating their own **Municipal Emergency Plans (MEP)**.

The dam owner will produce his own site specific **Emergency Response Plan (ERP)** detailing what actions he will take including warnings issued to other responders.

The dam owner is also responsible for initiating and maintaining an Emergency Preparedness Plan (EPP) that describes the warnings he will issue and in general terms the actions of other responders. The EPP will contain inundation maps and flood arrival details to allow responders to plan for these situations. The dam owner is the administrator of this plan.

ISSUING EMERGENCY PREPAREDNESS PLAN FOR THE SNAKE LAKE EAST AND WEST DAMS

The Snake Lake East and West Dams Emergency Preparedness Plan has been produced by the Eastern Irrigation District, and has been distributed to the following affected parties mentioned in the plan:

- 1) Eastern Irrigation District
- 2) County of Newell No. 4
- 3) RCMP (Brooks)
- 4) Alberta Environment (Dam Safety, Southern Region)
- 5) Alberta Emergency Management Agency

Each party understands, and has agreed to fulfil, its role as detailed in the EPP and their approved ERP or MEP.

A plan for staff training and plan testing has been detailed as follows:

Staff training to be completed by January 1, 2006 Plan testing to be completed by January 1, 2006

Name:	Earl Wilson, P. Eng.
Position:	General Manager
Dam Owner:	Eastern Irrigation District
Signed:	
Dated:	

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1.0 INTRODUCTION

1.1 PURPOSE

This **Emergency Preparedness Plan (EPP)** is to be used as a guide to assist Emergency Planners in developing local response plans to deal with a major flood and/or dam breach at the Snake Lake East and West Dams. Local Authorities should use this plan as a guide to developing annexes to their existing **Municipal Emergency Plans (MEP)** that deal specifically with their response to a major flood and/or dam breach.

The plan specifically addresses what would happen downstream of the Snake Lake East and West Dams, generally how people and property would be affected, and how emergency responders would be notified of any emergency involving a large flood, potential and/or imminent dam breach.

Should an emergency develop at the Snake Lake East and West Dams, local authorities and other downstream stakeholders will be contacted as shown on the Fan-out Notification Chart (Section 14.0) and requested to initiate their **Municipal Emergency Plan (MEP)** accordingly.

Other responding agencies can use this plan to develop their own local plans.

To assist emergency responders this plan contains the following information:

- The nature of the anticipated inundation (Section 3.0).
- Maps showing the extent of the inundation, the travel times and water depths (Section 15.0).
- Generally, what other key responders would be doing.
- Fan-out notification procedures (Section 14.0).
- Key contact numbers for responding agencies (Section 13.0).

This Guide identifies two levels of emergency that are possible at the dam, a potential flood emergency and an imminent flood emergency. It is incumbent upon each local authority to ensure their **Municipal Emergency Plan (MEP)** for a major flood or dam breach emergency is current and functional.

This Emergency Preparedness Plan is a guide to assist responders in developing a Flood Response Annex to their existing emergency plans and not to be used to replace or supersede any existing Emergency Plans of Local Authorities or other responding agencies.

1.2 AUTHORITY

This plan is issued by the Eastern Irrigation District, responsible for the Snake Lake East and West Dams as required by current legislation. It has been prepared in compliance with the Alberta Public Safety Services Act, the Disaster Services Act and the Alberta Water Act, Water (Ministerial) Regulation, Section 6 - Dam and Canal Safety.

2.0 SNAKE LAKE EAST AND WEST DAM SITES

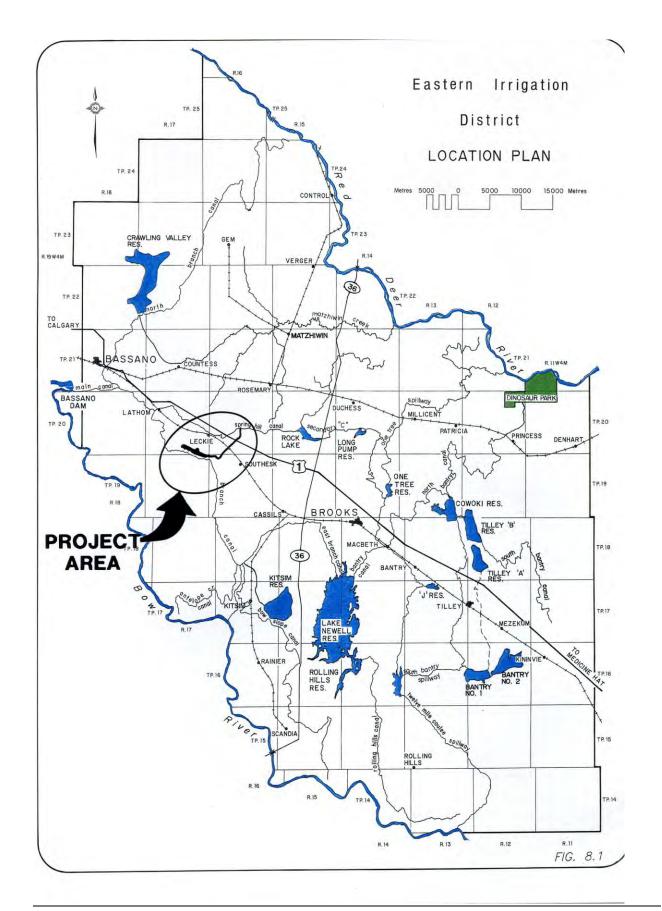
2.1 DESCRIPTION OF THE RESERVOIR AND DAMS

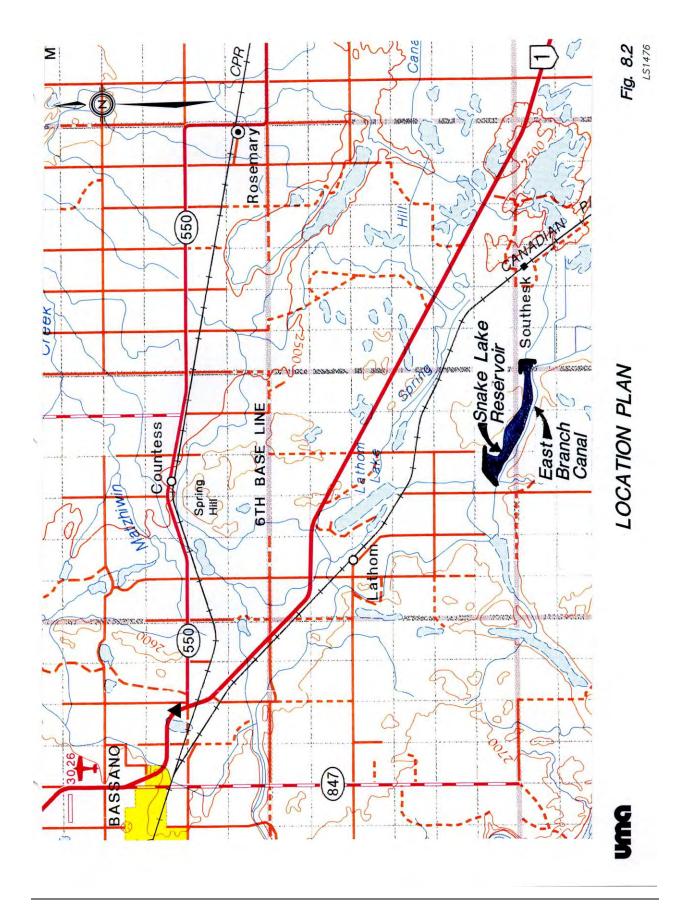
Snake Lake Reservoir is a water storage facility located approximately 15 kilometres southeast of the Town of Bassano in Townships 19 and 20, Ranges 16 and 17, West of the Fourth Meridian. The reservoir was created by the construction of two earth fill dams (East Dam and West Dam) to form a reservoir approximately 5 km long with a total capacity of approximately 19,250 dam³ at Full Supply Level (FSL) of 781.7 metres. The reservoir is supplied from the Bassano Dam on the Bow River southwest of the Town of Bassano through the upper East Branch Canal and an inlet structure located in the East Branch Canal near the West Dam. The reservoir outlet structure is located in the East Dam, providing water through the Snake Lake Canal to supplement flows in the Springhill Canal for agricultural and domestic purposes.

The West Dam is a zoned earth embankment with a total crest length of 1.6 km, a maximum height of 9.7 metres at an elevation of 783.7, and a crest width of 8.0 metres. A relief well pump system has been installed along the downstream toe of the West Dam to control seepage and pore pressures in the dam foundations. There is no outflow structure in the West Dam.

The East Dam is a zoned earth embankment with a total crest length of 1.1 km and a maximum height of 14.9 metres at an elevation of 783.7 metres, and a crest width of 8.0 metres. The outlet structure serving the Snake Lake Canal can also be used to drain the reservoir. The weir height of the flow measuring structure immediately downstream of the outlet structure is set in conjunction with an emergency spillway in the right bank of the canal to divert excess flows into a drainage area that eventually leads to San Francisco Lake.

Both East and West Dams can be accessed under flood conditions using the gravelled County roads from the Lathom intersection on the Trans Canada Highway. The only road that will be inundated from a dam breach in the West Dam would be the east/west road approximately 2 km directly north of the West Dam. No public roads would be inundated as a result of a dam breach in the East Dam.





2.2 PERSONNEL

The Snake Lake Dams are the responsibility of the North Division office,

Eastern Irrigation District 550 Industrial Road Brooks, Alberta

There are no on-site staff for this dam.

District personnel can be reached at the following telephone/cellular numbers:

District Main Office (regular working hours)	(403) 362-1400
Operations Manager (cell)	(403) 363-5606
Safety & Environmental Tech (cell)	(403) 363-5609
General Manager (cell phone)	(403) 363-5612

In the event of an emergency at the dam, E.I.D. staff would man the **Site Command Post (SCP)** and the Assistant General Manager, assisted by the District Engineer, would man the **Regional Emergency Operations Centre (REOC)**. Key contact numbers are located in the communications directory in Section 13.0 of this plan. A functional overview of each responding group is provided in Section 4.0.

3.0 EFFECTS OF INUNDATION

UMA Engineering performed dam breach modelling studies for the Snake Lake East and West Dams in 1993. It was determined that inflow resulting from a worst case scenario of the Probable Maximum Flood from a major snowmelt or rainfall event would be minimal, therefore the most probable mode of failure for the Snake Lake East and West Dams would be as a result of a piping failure. The effects of inundation from the resulting breach are indicated on the inundation maps. The approximate travel times and the maximum elevations of the flood wave are also given. The charts and inundation maps are in Section 15.0.

The following is a brief overview and the general nature, timing and hazardous conditions that are likely to develop at various downstream reaches should either of the Snake Lake Dams fail. Local Authorities and other key responders must ensure their Municipal Emergency Response Plans include a current, all-inclusive inventory of impacts to people and property within the flood plain of their jurisdiction and the appropriate corresponding response procedures.

Snake Lake East and West Dams

The Snake Lake West Dam has been classified as having a High Consequence of failure according to the Canadian Dam Association Dam Safety Guidelines because of the potential to overtop the Canadian Pacific Railway mainline east of the Lathom siding. A dam breach in the West Dam would also cause flooding of an existing oilfield facility (Cenovus Energy Inc. Lathom C Battery #3, 100/04-10-20-17W4m) located approximately 900 metres downstream of the dam. The flood waters would be prevented from reaching the Trans Canada Highway by the Springhill Canal embankment north of Lathom. One County of Newell #4 gravel surface grid road would be inundated, but no residences would be threatened. Access to the dam site would not be affected by a dam breach.

Facility owners in the flood plain would have a relatively short time from the initiation of the breach before the initial flood wave struck.

- 1. The peak outflow of 738 m³/sec. could occur as soon as 6 minutes after the breach is initiated. This is based on the initial water level in the reservoir at FSL and the breach eroding to a final base width of 18 m.
- 2. The water level at the oilfield facility approximately 900 metres downstream would reach a maximum elevation of 775.7m in approximately 1.6 hours.

- 3. The Canadian Pacific Railway mainline east of Lathom will be overtopped in less than two hours. The maximum elevation of the flood wave 775.1m, or approximately 0.6m above the lowest point of the railway embankment.
- 4. The flood waters would be prevented from reaching the Trans Canada Highway by the Springhill Canal embankment north of Lathom. The maximum elevation of the flood waters at this point would be 773.0m, achieved in approximately 3.8 hours.
- 5. The loss of the storage capacity from Snake Lake reservoir could affect flows in portions of the Springhill Canal, but service could be maintained under most conditions exclusively through the Springhill Canal during reconstruction of the dam and restoration of water levels in the reservoir.

Failure of the East Dam, while resulting in a larger breach and higher flows, does not threaten any structures or infrastructure. The flood wave would reach the Canadian Pacific Railway mainline southeast of the Southesk siding in approximately 1.5 hours, but would not overtop the embankment. Water velocities along the western edge of the embankment would reach a maximum of 1.2 m/sec.

The effects of inundation from the breach of the Snake Lake East and West Dams are shown on the enclosed inundation map which is based on the best estimate present modelling can produce of the areas that would be affected. The approximate travel times of the flood wave are also given. The charts and inundation maps are in Section 15.0.

4.0 OVERVIEW OF EMERGENCY RESPONSE STRUCTURE

In the event either of the Snake Lake Dams experiences a Flood Emergency, District North Division staff are trained to activate their on-site **Emergency Response Plan (ERP).** Activation of the plan facilitates a standard "Incident Command" system and mobilizes the following response mechanisms:

Site Command Post (SCP)

The Site Command Post will manage the emergency in the vicinity of the dam and reservoir. It will attempt mitigation measures if required and also perform initial notifications as described in the Fan-Out Procedures located in Section 14.0 of this plan. North Division staff will man the Site Command Post that will be located near the south end of the appropriate dam.

Regional Emergency Operations Centre (REOC)

A Regional Emergency Operations Centre will be set up in the Eastern Irrigation District Main office in Brooks, Alberta upon notification of a major flood event (if required) and/or identification of a potential dam breach. The centre will provide comprehensive support to site activities by coordinating site security, logistical requirements, communications and technical and administrative support. The Regional Emergency Operations Centre's primary function is to support the activities of the Site Command Post and will be manned by the Assistant General Manager and the District Engineer.

Government Emergency Operations Centre (GEOC) (Alberta Emergency Management Agency)

The Government Emergency Operations Centre monitors emergencies in progress within Alberta for Emergency Management Alberta. The Alberta Emergency Management Agency is a branch of Municipal Affairs located in Edmonton. When activated through Emergency Management Alberta, the GEOC provides response support by providing consultation to local emergency responders, Disaster services agencies, and community officials.

The GEOC will be placed on standby by the REOC through the Alberta Emergency Management Agency in the event of a Potential or Imminent Flood Emergency. The GEOC will perform notifications as described in the Fan-out Notifications List (Section 14.0) and will manage the emergency at the provincial government level. The GEOC will be staffed with the appropriate

government officials and agency representatives based on emerging events. The GEOC will (if necessary) activate the government's **Public Media Information Room**.

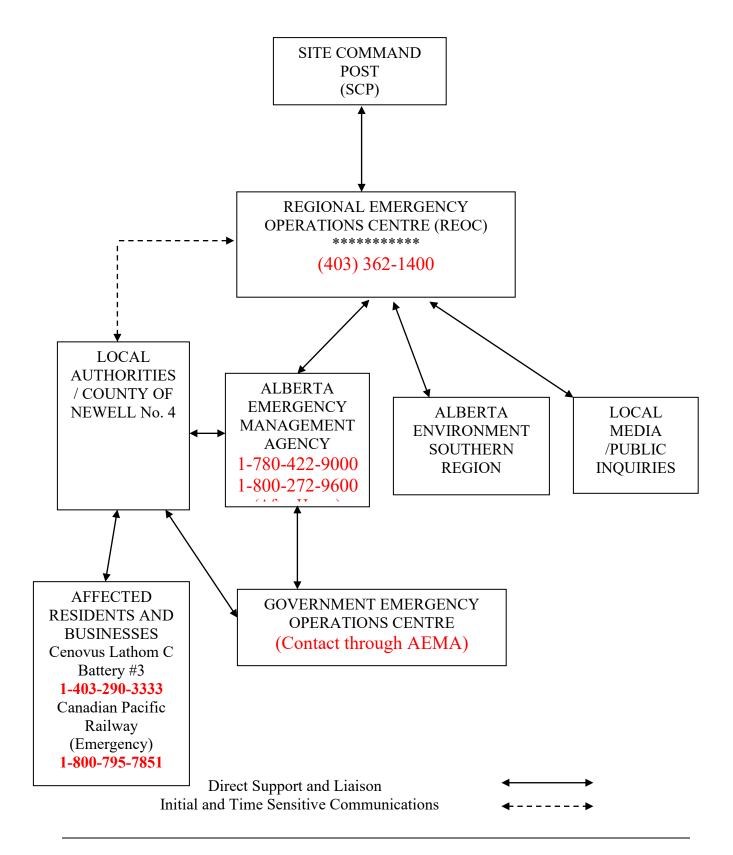
Alberta Environment

The Emergency Resource Centre (ERC) is a part of Alberta Environment's response to an emergency at one of its dams. As the Snake Lake East and West Dams are privately owned dams, the ERC is not notified directly. Alberta Environment will however, receive notification through the Southern Region (Bow) office as described in the Fan-Out Procedures located in Section 14.0 of this plan.

County of Newell No. 4

The County of Newell No. 4 will activate their **Municipal Emergency Plan (MEP)** and, based on information from the Eastern Irrigation District and/or the **Government Emergency Operations Centre (GEOC)**, will perform the required emergency response procedures as outlined in their plan.

ORGANIZATIONAL RESPONSE MATRIX



5.0 POTENTIAL FLOOD EMERGENCY

5.1 **DEFINITIONS**

A Potential Flood Emergency is any condition that could cause a significant and/or sudden increase in water levels downstream of the dam. A Potential Flood Emergency is a condition that has been identified but not yet confirmed as to severity.

- For the purposes of this plan "condition" is defined as an impending flood event or structural/operational situation that threatens, or may threaten, dam integrity.
- For the purposes of this plan "significant increase in water levels" will be defined as those flows likely to exceed bank full at critical down stream locations.
- For the purposes of this plan "sudden increase" is defined as an operator directed increase due to a dam emergency or due to a dam breach.
- If a Potential Flood Emergency progresses to the Imminent Flood Emergency the protocol outlined in Section 6.0 of this plan will be used.

5.2 SNAKE LAKE EAST OR WEST DAM SITE OPERATING PERSONNEL ACTIONS

For a Potential Flood Emergency, Eastern Irrigation District staff shall activate the **On-site Emergency Response Plan** that will direct them to:

- 1) Activate the **Site Command Post (SCP)** at the Snake Lake East or West Dam to manage the response at the dam site.
- 2) If required, activate the Regional Emergency Operations Centre (REOC).
- 3) Notify Emergency Management Alberta and advise them to place the **Government Emergency Operations Centre (GEOC)** on standby as per the "Fan-out Procedures" (Section 14.0) for Potential Flood Emergency.
- 4) Continue notifications as per the Fan-out Procedures described in Section 14.0 for Potential Flood Emergency, including notification of affected Residents and Businesses close to the dam. These names and contact information are included directly on the Fan-out Procedure as well as in the ERP downstream notification table. The responsibility for these notifications will be transferred to the Assistant Emergency Co-ordinator once the REOC has been activated.

5.3 MUNICIPAL AFFAIRS - EMERGENCY MANAGEMENT ALBERTA ACTIONS

Municipal Affairs, Alberta Emergency Management Agency, will be notified of the Potential Flood Emergency by the Eastern Irrigation District and advised to place the GEOC on stand-by.

The Regional Emergency Operations Centre (REOC) may request the Government Emergency Operations Centre (GEOC) staff to:

- 1) Begin down stream notifications as per the "Fan-out Procedures" (Section 14.0) for Potential Flood Emergency.
- 2) Dispatch the District EMO to the site.
- 3) Contact other government agencies to assist in response efforts as per the "Fan-out Procedures" (Section 14.0).
- 4) Co-ordinate the activation of the **Public Media Information Room (PMIR)**.
- 5) Liaise with the **Regional Emergency Operations Centre (REOC)**.

5.4 LOCAL AUTHORITIES ACTIONS

Local Authorities will continue to be notified as to the status of the Snake Lake East or West Dam by the E.I.D. staff, (as described in the "Fan-Out Procedures" - Section 14.0).

Local Authorities:

- 1) May be requested to send a representative to the **Regional Emergency Operations Centre** (**REOC**) as a liaison.
- 2) Will activate their **Municipal Emergency Plan (MEP)** for the Potential Flood Emergency stage. (Note: at this stage, the level of municipal response may still be undetermined).

Depending on the exact nature of the emergency the **Government Emergency Operations Centre (GEOC)** may also be involved in notifications.

5.5 R.C.M.P. ACTIONS

Upon notification of a Potential Flood Emergency the RCMP may be requested to send a representative to the **Regional Emergency Operations Centre (REOC).** The RCMP will respond in co-ordination with the local authorities and their Municipal Emergency Plans.

6.0 IMMINENT FLOOD EMERGENCY

6.1 **DEFINITIONS**

An Imminent Flood Emergency is defined as any condition that will, or likely will, produce significant and/or sudden increases in flow down stream of the dam. An Imminent Flood Emergency is a condition that has been confirmed as serious; however, timelines might be uncertain.

Imminent Flood Emergency protocol will be used for a dam breach in progress and/or when a certain failure of the structure is suspected.

6.2 SNAKE LAKE EAST OR WEST DAM SITE OPERATING PERSONNEL ACTIONS

Upon initial indication of an Imminent Flood Emergency of the Snake Lake East or West Dam operating staff shall immediately activate the **On-site Emergency Response Plan** that will direct them to (if not already completed during the Potential Stage):

- 1) Activate the **Site Command Post (SCP)** at the dam site.
- 2) Activate the **Regional Emergency Operations Centre (REOC)** to be established at the Eastern Irrigation District Main Office in Brooks.

If a decision is made to issue an Imminent Flood Emergency notification, Snake Lake East or West Dam **SCP** staff will then activate the next response level in the **On-site Emergency Response Plan** that will direct them to:

- 1) Notify local authorities as per the Fan-out Procedure (Section 14.0) for Imminent Flood Emergency.
- 2) Notify the **Government Emergency Operations Centre (GEOC)** at Alberta Emergency Management Agency and advise them to begin notifications as per the Fan-out Procedures (Section 14.0) for Imminent Flood Emergency.
- 3) Continue notifications as directed in the Fan-out procedures (Section 14.0) for Imminent Flood Emergency including notification of affected Residents and Businesses close to the dam. These names and contact information are included directly on the Fan-out Procedure as well as in the ERP downstream notification table. The responsibility for these notifications will be transferred to the Assistant Emergency Co-ordinator once the REOC has been activated.

6.3 MUNICIPAL AFFAIRS – EMERGENCY MANAGEMENT ALBERTA ACTIONS

- Municipal Affairs, Alberta Emergency Management Agency, will be notified of the Imminent Flood Emergency by Snake Lake East or West Dam site staff and advised to activate the GEOC and begin the "Fan-out Procedure" for an Imminent Flood Emergency.
- Upon initial notification of an Imminent Flood Emergency at the Snake Lake East or West Dam, the GEOC Emergency Operations staff will call back the Eastern Irrigation District Main Office or emergency contact numbers to confirm the notification of Imminent Flood Emergency.
- Upon verification of the Imminent Flood Emergency declaration, Government Emergency Operations staff will begin notifications as per the "Fan-out Procedures" for an Imminent Flood Emergency (Section 14.0).

6.4 LOCAL AUTHORITIES/FIRST NATIONS ACTIONS

Local Authorities notified of an Imminent Flood Emergency (as per the "Fan-out Procedures" - Section 14.0) will immediately:

- 1) Activate their **Municipal Emergency Plan (MEP)** for the Imminent Flood Emergency.
- 2) If necessary, send a representative to the **Regional Emergency Operations Centre (REOC)** at the Eastern Irrigation District Main Office, Brooks Alberta.

6.5 R.C.M.P. ACTIONS

Upon notification of an Imminent Flood Emergency the RCMP may be requested to send a representative to the **Regional Emergency Operations Centre (REOC)**. The RCMP will respond in co-ordination with the local authorities and their Municipal Emergency Plans.

7.0 COMMUNICATION SYSTEMS

7.1 TELEPHONES

Communications with the Snake Lake East or West Dam Site Command Post (SCP) are available through cellular telephones and two-way radio only.

Numbers that can be accessed during the initial phases of an emergency are located in the communications directory located in Section 13.0 of this plan.

If a staff member is unavailable to take a call, a messaging service is provided.

7.2 MOBILE RADIO SYSTEM

All Eastern Irrigation District vehicles stationed at the Snake Lake East or West Dam are equipped with a two-way radio, which provide District-wide radio accessibility through a repeater system. Many of the emergency response vehicles in the area have the capability to use this frequency. A base station is also located in the Main Office / shop complex in Brooks, Alberta. Hand-held units can also be made available in the REOC.

8.0 PROJECT LOCATION INFORMATION

The Snake Lake East and West Dams are located at the corresponding ends of the reservoir, in the west half of Section 31, Township 19, Range 16 W4M and the west half of Section 03, Township 20, Range 17 W4M, respectively.

(See maps – page 4 & 5)

To access the Snake Lake West Dam site, take Hwy #1 (Trans Canada Highway) east and south from the Town of Bassano approximately 11.0 km to the Lathom road. Turn south approximately 4.9 km. on the gravelled County grid road. Turn east approximately 3.2 km. on the gravelled County grid road. Turn south approximately 2.5 km. on the gravelled County grid road to the East Branch Canal. Turn east on the north bank of the canal approximately 0.5 km to the dam site.

To access the Snake Lake East Dam site, continue east from the Snake Lake West Dam site on the East Branch Canal bank approximately 5.5 km. to the dam site.

9.0 UPDATING THE EMERGENCY PREPAREDNESS PLAN

Eastern Irrigation District staff will be responsible for updating the **Emergency Preparedness Plan (EPP)** and on-site **Emergency Response Plan (ERP)** annually or as deemed practical and the phone lists and "Fan-out Procedures" table (Section 14.0) as necessary. Revisions will be circulated to all affected agencies identified in the Record of Manual Holders table in Section 12.0 of this manual.

Any revisions and/or comments to the Snake Lake East and West Dams Emergency Preparedness Plan should be forwarded to the Emergency Co-ordinator listed in the communications directory of this plan (Section 14.0). All revisions will be recorded on the Record of Revisions sheet(s) included in Section 11.0 of this plan.

10.0 MAINTAINING A STATE OF READINESS

10.1 TRAINING

EID staff, including the operations staff for the Snake Lake East and West Dams, identified as emergency responders, will be familiar with all aspects of the Emergency Preparedness and Response Plans.

The EID is responsible for ensuring the **Site Command Post (SCP)** and the **Regional Emergency Operations Centre (REOC)** are functional and that staff is adequately trained. Municipalities and other responders are responsible for their Emergency Measures.

10.2 TESTING PLANS AND PROCEDURES

Eastern Irrigation District operations staff will co-ordinate and participate in periodically testing the EPP and dam breach emergency response procedures jointly with downstream agencies and stakeholders. It is incumbent upon each responding agency to have adequate plans and trained staff in place to deal with any emergency within their jurisdiction.

11.0 RECORD OF REVISIONS

REVISION #	DATE	SECTION(S) REVISED/ADDED/DELETED AND REASON
Original	March, 2005	
001	February 2008	Pages 6, 22 – Cell phone number changes.
002	December 2013	Pages 6, 22 – Cell phone numbers and changes. Pages 7, 25 – Encana Corporation changed to Cenovus Energy Inc.
003	March 2023	Pages 6,22 – Cell phone number changes.
Changes to Albe		Changes to Alberta Emergency Management Agency

12.0 RECORD OF EPP MANUAL HOLDERS

AGENCY	PERSON	NUMBER
EASTERN IRRIGATION DISTRICT	General Manager	1
	Safety & Environmental Tech	2
	Operations Manager	3
	District Engineer	4
	Spare – Engineering Library	5
COUNTY OF NEWELL No. 4		6
RCMP (Brooks)		7
ALBERTA ENVIRONMENT	Dam Safety	8
	Southern Region	9
ALBERTA EMERGENCY MANAGEMENT AGENCY	EMO	10

13.0 COMMUNICATIONS DIRECTORY

The contact numbers listed below are to be used during the initial phases of an emergency at the Snake Lake East and West Dams or for general inquiries during non-emergencies. Once the EID's **Emergency Operations** are set-up, additional numbers will be provided to responders as required.

Additional contact numbers for information and/or services provided by the **Government Emergency Operations Centre**, including the **Public Media Information Room (PMIR)** will be provided to responding agencies as required, or is already included in Municipal Emergency Plans. Once fully operational, the PMIR will become the primary source of information for responding agencies, the public and media.

All responding agencies use their **Municipal Emergency Plans** to facilitate communications in their jurisdiction and to administer any "Mutual Aid Agreements" as required.

13.1 DAM OWNER

Eastern Irrigation Distric	t (Administration)	(403) 362-1400
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Emergency Preparedness Plan Inquiries:

Operations Manager (cell)	(403) 363-5607
Safety & Environmental Tech (cell)	(403) 363-0921
General Manager (cell)	(403) 362-5601

13.2 EMERGENCY MANAGEMENT ALBERTA

24-Hour Emergency Number	1-780-422-9000
(In Alberta Call Toll Free: 310-0000)	

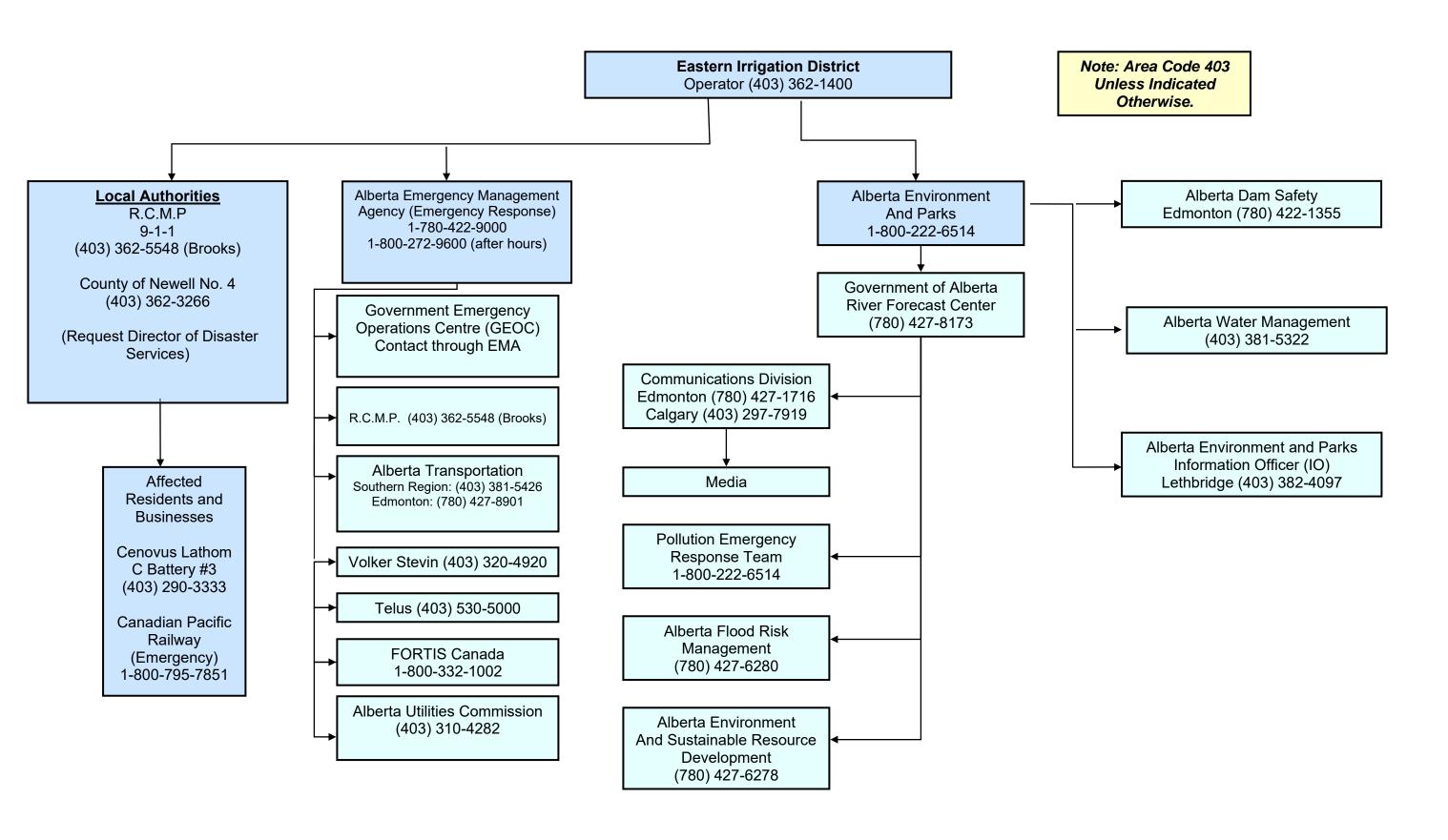
14.0 FAN-OUT PROCEDURES

A comprehensive Notification Chart is included that shows the procedures and priority of notification for all of the emergency response organizations and stakeholders.

Eastern Irrigation District staff may make use of the Emergency Response Fan-out Procedure as illustrated or they may elect to manage some or all notifications directly, depending on the nature of the flood emergency. The Fan-out chart as illustrated is described below:

Eastern Irrigation District staff will make initial notifications to organizations and stakeholders in the dark-shaded boxes at the top of the chart, following the first set of arrows. As directed by Eastern Irrigation District staff, those in the dark-shaded boxes will notify any subsequent organizations and stakeholders in the light-shaded boxes as indicated by arrows. Redundancy in notification/confirmation is made as Eastern Irrigation District staff continues to notify organizations and stakeholders directly.

Notification Chart: -- Snake Lake Dams — Emergency Response Plan Fan Out Procedure For POTENTIAL or IMMINENT Flood Emergency



15.0 TABLES AND INUNDATION MAPS

15.1 GENERAL

The Eastern Irrigation District has prepared maps showing areas calculated to be inundated if the dam failed over a short period with the reservoir initially at full supply level. Please refer to the inundation map in the back of this report for the projected flood area resulting from a breach of the Snake Lake East and West Dams.

Because of the many assumptions used, the stages and travel times should be considered approximate. Also, the water levels and travel times will be affected by bridge abutments and by debris temporarily retarding the flow.

15.2 Snake Lake East and West Dams

Assumptions for the breach of the Snake Lake West Dam include:

- Piping failure combined with reservoir at FSL of 781.7m
- Dam crest elevation of 783.7m
- Dam height of 9.0 m
- Final breach base elevation of 774.7 m
- Breach erodes to final elevation and base width of 9m to 18m taking approximately 0.1 to 1.0 hours (Snake Lake Reservoir Dam Break Analysis, UMA Engineering Ltd. June 1993)

Assumptions for the breach of the Snake Lake East Dam include:

- Piping failure combined with reservoir at FSL of 781.7m
- Dam crest elevation of 783.7m
- Dam height of 15.0 m
- Final breach base elevation of 768.7 m
- Breach erodes to final elevation and base width of 15m to 30m taking approximately 0.1 to 1.0 hours (Snake Lake Reservoir Dam Break Analysis, UMA Engineering Ltd. June 1993)

Table 15.1 lists maximum stages and approximates times between the start of the breach and the start of rising stage and between the start of the breach and the time for the maximum stage at various locations, as well as the estimated maximum elevation of the water at these locations.

Table 15.1 – Snake Lake Reservoir: Flood Stages and Transit Times					
West Dam					
Section	Landmark	Distance from Dam (km)	Time to Peak (hr)	Max. Flood Elev. (m)	
W1	West Dam marsh	0.075 km.	0.3 hrs.	776.5m	
W2	Cenovus Energy Inc. Battery	0.97 km.	1.6 hrs.	775.7m	
W3	County grid road	2.24 km.	1.8 hrs.	775.4m	
W4	CPR Mainline	3.5 km.	1.9 hrs.	775.1m	
W5	Lathom Lake – east end	4.8 km.	3.2 hrs.	773.7m	
W6	Lathom Lake – west end	6.7 km.	3.5 hrs	773.3m	
W7	Springhill Canal embankment	7.7 km.	3.8 hrs.	773.0m	
	Ea	ast Dam			
E1	East Dam Base	0.1 km.	0.3 hrs.	773.0m	
E2		1.225 km.	0.5 hrs.	771.2m	
Е3		2.45 km.	0.6 hrs.	768.6m	
E4	CPR Mainline	4.2 km.	1.2 hrs.	764.3m	
E5	CPR Mainline	6.0 km.	1.8 hrs.	763.3m	



Appendix P4 – EID Environmental Practice



Environmental Practice

The Eastern Irrigation District is committed to the protection of the environment by maintaining high environmental quality standards which meet or exceed those required by Federal Legislation. Environmental protection is among our top priorities and the District addresses all environmental issues in our job planning and project operations.

The Eastern Irrigation will:

- Ensure compliance with all regulatory requirements. Work in partnership with environmental health and safety regulatory agencies.
- Conduct operations to minimize negative environmental impacts.
- Promote awareness among staff and the public with respect to environmental protection. Provide access to environmental training resources and promote upkeep and improvement.
- Establish and maintain programs to ensure all District employees, contractors and the public
 understand and comply with all applicable environmental laws and regulations. Communicate to
 employees, contractors and the public their responsibility to follow all District environmental policies
 and practices.
- Identify, evaluate and control potential environmental risks and implement appropriate corrective measures.
- Maintain Emergency Response Plans to ensure timely and effective response and minimize negative environmental impact.



Appendix P5 – Spill Report Form



Eastern Irrigation District Spill Report Form

Report Date: Month/Day/Year	Occurrent	e Date: Month/Day/Year	Time
Report Completed By:		Contact Number:	
Geographic Location of Release or Lega	al Land Descriptio	n	
Environmental Contamination Wate	er, Air,Ground, Ot	her	
Mode Of Transport Used		Contractors Involved	
First Aid Measures Required		Evacuation Requirement	
Product Spilled	led Shipping Name UN Number		mber
Quantity of Dangerous Goods Released	d (estimated)		
Original Amount of Dangerous Goods i	in Containment		
Type of Incident Resulting in Release			
Additional Information and Comments			