



SQUAMISH - LILLOOET
REGIONAL DISTRICT



Emergency Program

2018 ANNUAL REPORT



Grouse Creek Fire, Anderson Lake 2018
Photo courtesy of Mary Konkin

Executive Summary

In 2018, the SLRD experienced another summer of tinder dry conditions along with many other parts of BC and Canada. The Xusum Creek and Grouse Creek fires above Anderson Lake affected residents in electoral areas B and C for most of the summer. Properties along the Highline Road were under evacuation order at times and the community of D'Arcy was under evacuation alert for weeks until more favourable weather conditions assisted in putting the fire out. Recognition to all our volunteer firefighters and to all those in the SLRD who contributed to a safe fire season with their vigilance in quickly reporting fire activity and for complying with the fire bans that were in place.

The SLRD Alert emergency notification system continues to attract subscribers with an additional 400 sign ups in 2018, taking the total number of subscribers to ~1,400. We continue to advocate that all residents, business owners and employees sign up to this free service, which delivers text, voice and email messaging directly in the event of an emergency.

As our summers get drier and hotter in general, we have been proactively working to get the message out to communities that every resident and property owner has an opportunity to decrease the risk from wildland interface fires using FireSmart principles. In Area A, FireSmart and emergency preparedness materials were delivered to households in partnership with the Lillooet Regional Invasive Species Society, while other communities developed burn piles from tree trimming and clearing other combustible landscape debris from properties.

Wildfires are not the only hazard increasing in the SLRD with our changing climate. The Emergency Program successfully applied for over \$500K of provincial funding for now completed hazard and risk assessment studies, including landslide and rockfall hazard from Mt Currie, flood and debris flow hazard around Seton Portage and updated floodplain mapping for the Upper Squamish Valley. In addition, funding was received by the Pemberton Valley Dyking District and updated floodplain mapping was completed for the Lillooet River, and the latest research on Mt Meager landslide hazard was published, showing that another slide on the scale of the 2010 event (or larger) is likely to occur. The risks many of these geological hazards present cannot be satisfactorily mitigated by structural works alone, or in some cases at all, making good monitoring of the highest risk hazards essential to provide some warning of a large scale event. The SLRD is working hard to lobby provincial government to get this monitoring in place while also exploring the possibility of advancing monitoring through academic partnership with the geotechnical institutes such as Simon Fraser University and the University of British Columbia.

At the neighbourhood level, 27 community emergency plans were completed and published on the SLRD website after two rounds of community feedback. The objective of the plans is to support communities to become more disaster resilient through knowledge, training and relationship building between emergency program staff and neighbourhood contact people. In 2019, we will continue to work with communities on their respective action plans to improve preparedness.

Looking ahead to 2019, the SLRD emergency program will continue to focus on improving disaster preparedness, response and recovery, explore options for mitigation, and also work directly with community groups on resident-led emergency response processes and disaster resilience.

2018 Emergency Program: in brief

- Activated the SLRD Emergency Operations Centre three times in 2018, for wildfires burning near the communities of D'Arcy, Ponderosa, McGillivray and the Highline Road area, and for a plane crash at Tyaughton Lake.
- Over 60 severe weather warnings, high stream flow advisories, air quality advisories and other emergency notices were issued in 2018, events that affected residents and travellers throughout the SLRD.
- Finalised 27 community emergency plans for communities throughout the SLRD, incorporating feedback from members of each community.
- Chaired a half day best practice and innovation in emergency management workshop at the 2018 Emergency Management and Business Continuity Conference, also presenting on the community emergency plan project.
- The Emergency Program provided Fire Service Administration support to SLRD Fire Departments (Britannia Beach Volunteer Fire Department, Garibaldi Volunteer Fire Department, and Seton Valley Volunteer Fire Department), and served as an information sharing conduit for the Society-operated fire services in Birken, Bralorne, and the wildfire first response group at Gun Lake.
- Project managed the completion of over \$500K of provincially funded studies including the Mt Currie landslide and rockfall hazard, Seton Portage debris flow and flood hazard, and the Upper Squamish Valley flood hazard.
- Drafted an integrated flood response plan for the communities of the Pemberton Valley and submitted a funding application to advance evacuation route planning for the area as a result of the updated floodplain mapping and risk assessment for the Lillooet River.
- Submitted a detailed funding proposal for Union of BC Municipalities Community Resilience Initiative for \$100,000 in funding to provide basic wildland fire training to all volunteer fire departments and community wildfire protection groups in the SLRD, and to conduct FireSmart activities at Gates and Seton Parks.
- An increase of ~400 subscribers to the SLRD Alert emergency notification system.
- SLRD Alert system used regularly to reach specific communities affected by natural hazard effects, road closures and utility system outages.
- Conducted Forest Fire Management (FFM) activities including the conclusion of Community Wildfire Preparedness Plan updates2 for all Electoral Areas, and on-going operational fuel treatments for Texas Creek and Fountain Valley (Electoral Area B)
- Facilitated special event permitting to promote public safety and emergency preparedness, including the 2018 Whistler Ironman.
- Updated staff Emergency Operation Centre training, with funded EOC Essentials, Logistics and Finance training held in Lillooet and Pemberton, with staff from member municipalities and First Nations also attending.
- Upgraded EOC IT capability with provincial funding for laptops and connectivity, plus the capability to move EOC IT equipment quickly if relocation is required.
- Received funding for 500 each of blankets and toiletries kits as Reception Centre evacuee supplies and 200 flood clean-up kits for rapid deployment to flood affected areas.

Recognition and Appreciation

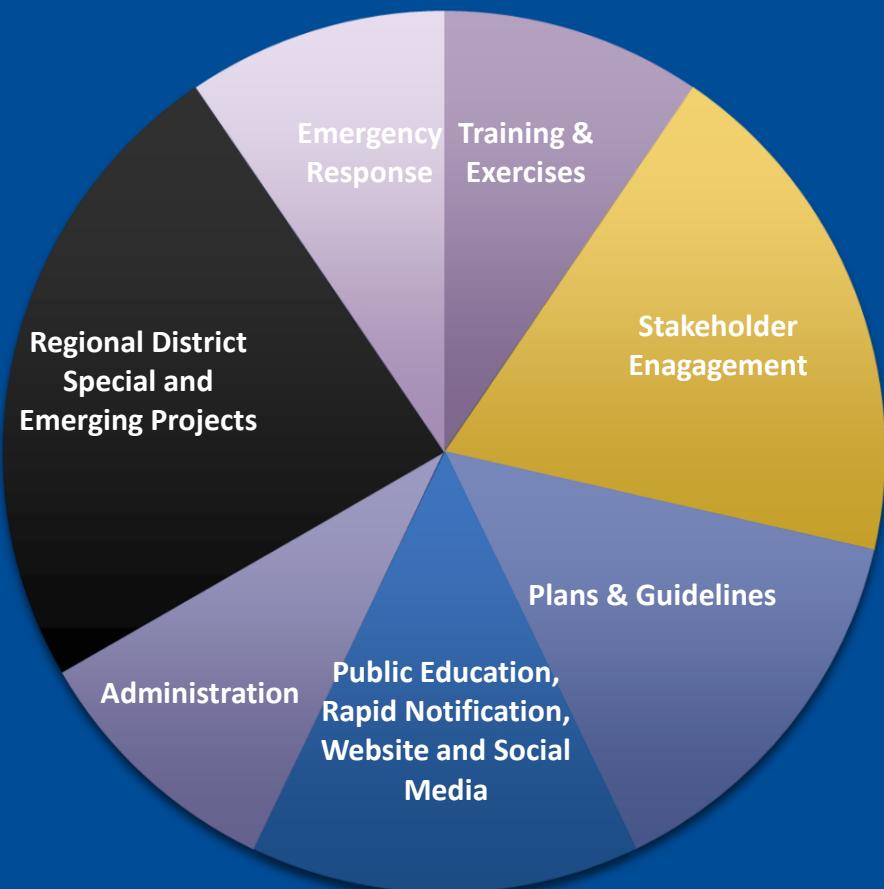
The work of the SLRD Emergency Program is not limited to staff and partner agencies. When an emergency occurs, members of the community step forward and meet the needs of their friends, family and neighbours. While the following list is not exhaustive, in 2018 the SLRD Emergency Program was grateful to have the assistance and partnership of these individuals, groups, and governments:

- **Barb and Mike Morley** at Ponderosa (Electoral Area C) provided assistance, including food, shelter and communications support, to BC Wildfire crews. Barb and Mike also served as a reliable conduit of information in and out of the remote Highline Rd. area during the Xusum and Grouse Creek fires.
- During the Grouse Creek fire, **N'Quatqua** welcomed the SLRD and collaborated in supporting BC Wildfire and structural protection crews, and provided space for community meetings. N'Quatqua also generously hosted the fire crews and the community at a community dinner, and provided traditional context and knowledge to assist the community in coping with the event.
- **The Birken Volunteer Fire Department** provided volunteers and vehicles for overnight fire-watch on the Grouse Creek Fire, while the **Sicamous Fire Department** and the **Whistler Fire Rescue Service** provided firefighters to support structural protection work by BC Wildfire.
- During the Xusum Creek fire, **Tsal'ah** worked closely with the SLRD to ensure residents of Seton Portage and Shalath were kept informed, and provided space for public meetings. SLRD and Tsal'ah personnel also had the opportunity to conduct a joint evacuation exercise, and learn from each other's expertise.

The SLRD Emergency Program relies on volunteers to assist during emergencies. Key support for emergency operations often come from volunteer fire departments. The SLRD Emergency Program would like to note the following:

- **Chief Frank Richings**, a respected leader and an institution at the Seton Valley Volunteer Fire Department, passed away unexpectedly. Frank's fierce commitment to his community, his sense of humour, and his tireless dedication to putting people first are deeply missed.
- **Chief David McCarthy** retired from his role at the Garibaldi Volunteer Fire Department. David's calm presence, deep knowledge and humour, and community spirit supported the growth and professionalism that has become the hallmark of the GVFD. The SLRD Emergency Program wishes him the best with his future adventures, wherever they may take him.

Areas of Focus in 2018



2018 external grants, funding and cost recovery

Upper Squamish Valley floodplain mapping and risk assessment	\$150,000
FireSmart (community program)	\$ 10,000
Emergency Operations Centre IT Equipment	\$ 23,000
Flood/Fire Clean up kits and ESS supplies	\$ 16,400
Seton Valley Integrated Hydrogeomorphic Risk Assessment	\$300,000
Community Wildfire Prevention Program (forest fuels management)	\$300,000
Response Costs (recovered from EMBC)	\$ 85,000

Strategic objectives & achievements

STRATEGIC OBJECTIVE	WHAT WE SET OUT TO ACHIEVE	WHAT WE ACHIEVED
Ensure statutory compliance under the Emergency Program Act (2005) and all other applicable legislation	<p>Maintain statutory compliance and advocate for change where applicable.</p>	<p>Initiated a review of the SLRD Emergency Plan, to be progressed in 2019.</p> <p>Member of the Sea to Sky and Lillooet Emergency Program Coordinators groups which meet quarterly to discuss issues and promote initiatives in emergency planning.</p> <p>Presented at the Emergency Management and Business Continuity Conference on the Community Emergency Plan project as part of chairing a half-day conference workshop on best practice and innovation in emergency management.</p>
Disaster risk reduction for the 31 communities of the SLRD through increased knowledge and community engagement.	<p>Partner with targeted communities to reduce their interface and structural fire risk through the Fire Smart initiative.</p>	<p>Emergency planning engagement with all communities on their highest ranked hazards through the community emergency plans, including interface fire. All communities offered the opportunity to apply for funding to cover FireSmart initiatives and \$10,000 expected to be fully disbursed to communities from the FireSmart UBCM grant.</p> <p>Conducted Forest Fire Management (FFM) activities including updates of all Community Wildfire Preparedness Plans by Electoral Area, and prescription and operational fuel treatment activities in Electoral Areas B, C, and D.</p>
Increase Community-based response capacity through community empowerment and relationship building.	<p>Increase knowledge through research.</p>	<p>Received funding and project managed studies for:</p> <ul style="list-style-type: none"> Upper Squamish river floodplain mapping and risk assessment Seton Valley integrated hydro-geomorphic risk assessment <p>Received funding and initiated region-wide flood hazard and risk prioritisation study.</p>
	<p>Increased knowledge of the hazards, risks and vulnerabilities of each community to enable better risk reduction planning, and development of community specific operational emergency management plans</p>	<p>Nearly 400 new subscribers added to the SLRD Alert emergency mass notification system as part of ongoing campaigning through social media.</p> <p>Twenty seven community emergency plans completed with community input and published on the SLRD website. Commenced community engagement on action plan items in the respective plans.</p> <p>Wrote and facilitated a functional evacuation notification exercise with Tsal'ahl First Nation.</p>

Strategic objectives & achievements

STRATEGIC OBJECTIVE	WHAT WE SET OUT TO ACHIEVE	WHAT WE ACHIEVED
Support economic resilience of communities	<p>Support business and organizational stakeholders by assisting with emergency management planning advice in terms of public/private interface of response roles and responsibilities</p>	<p>Member of the Roads Stakeholder group, which meets twice yearly to address any events that have the potential to impact, or have impacted, public safety and transport access.</p>
Promote SLRD organizational readiness and business continuity	<p>Manage the permitting of Special Events in the SLRD to promote economic development alongside public safety for residents and visitors.</p>	<p>Coordinated the regulatory compliance of special major events with impacts in SLRD areas, including the Red Bull 400 and Tough Mudder sporting events (~30,000 attendees).</p>
Build coordinated emergency response capacity in the Sea to Sky Corridor	<p>Provide opportunities for staff members to enhance their emergency management skillset</p>	<p>Received funding for and held the following Emergency Operation Centre courses for staff, with participants also from member municipalities and first nations:</p> <ul style="list-style-type: none"> • EOC Essentials • EOC Logistics • EOC Finance
	<p>Support and enhance coordinated process and planning with Corridor Local Authorities included North Shore Emergency Management (Tri-Cities), District of Squamish, Village of Pemberton, Resort Municipality of Whistler, and First Nations.</p>	<p>Member of Evacuation planning project Steering Group for the Squamish-Whistler Evacuation Plan.</p> <p>Drafted the Interim Integrated Flood Response Plan, a joint project with the Pemberton Valley Dyking District, Village of Pemberton and Lil'wat First Nation.</p>

Strategic objectives & achievements

STRATEGIC OBJECTIVE	WHAT WE SET OUT TO ACHIEVE	WHAT WE ACHIEVED
Build coordinated emergency response capacity in the Sea to Sky Corridor	<p>Support and enhance coordinated process and planning with Corridor Local Authorities included North Shore Emergency Management (Tri-Cities), District of Squamish, Village of Pemberton, Resort Municipality of Whistler, and First Nations.</p>	<p>Participated in the twice-yearly EMBC Seasonal Readiness Workshops in the SouthWest and Central BC Regions.</p> <p>Member of the Sea-to-Sky Emergency Program Coordinator's working group, which meets quarterly with the purpose of improving jurisdictional interoperability for emergency response.</p> <p>Proactively communicated with other jurisdictions during emergency response to enhance emergency coordination and effective use of resources.</p> <p>Provided funding support for the operations of the Pemberton and Lillooet Emergency Support Services (ESS) volunteer team</p> <p>Provided funding and regulatory support to the six SLRD Volunteer Fire Services/funded Fire Services to foster structural and interface fire preparedness and response.</p>

SLRD Emergency Response

The Emergency Operations Centre or EOC is the physical location where an organization comes together during a disaster response. It functions as a “mission control” where coordination and management decisions are facilitated.

EOC activities can include:

- Coordinating & prioritizing resource requests from the site(s)
- Resolving conflicting demands for support and resources
- Coordinating and liaising with federal, provincial and other local governments and other agencies involved in the response
- Preparing media releases and scheduling press conferences
- Preparing and disseminating information to inform and alert the public and staff
- Establishing a public call centre to provide accurate information to impacted residents
- Analyzing and evaluating data and maintaining maps, display boards and other data
- Planning for the continuance of local government

In 2018, the SLRD EOC was activated three times:

Response Event: Xusum Creek Fire (May 2018)

The fire was discovered on 23 May 2018 below the Highline Road at the northern boundary of the SLRD community of McGillivray. It was held at 500 hectares and considered under control on May 30th.

Key actions: Properties along the Highline Road were put on evacuation alert or order depending on their location. Security, traffic control and a pass system for residents was put in place for the duration of the wildfire event.

Response Event: Tyaughton Lake Plane Crash (August 2016)

At the beginning of August a light aircraft crashed in Tyaughton Lake, killing two and injuring one of the three people on board. The lake was closed to all users while scene investigations took place and a Do Not Use water advisory was issued due to the potential for aviation fuel contaminating the water.

Key actions: The Do Not Use water advisory was issued and signage erected in the area along with extensive messaging through social media. As the event occurred during a time of high numbers of recreational users, getting the message out widely was essential.



Image courtesy of Global News

Response summary continued...

Response Event: Grouse Creek Wildfire (August 2018)

The Grouse Creek wildfire was a lightning caused fire, discovered on August 7th and located 4.5km NW of D'Arcy. The fire was held at an estimated 848 hectares by the beginning of September. There was extensive smoke from the fire in the surrounding area, the recreational communities of McGillivray and Ponderosa were put under evacuation order, while the community of D'Arcy was under evacuation alert for an extended period of time.

Key Actions: Implemented the evacuation orders and alerts at the recommendation of the BC Wildfire Service. Notified and updated affected residents through the SLRD Alert rapid notification system, through media and website updates. Coordinate operational response, acquired resources and monitored all affected areas in conjunction with Emergency Management BC and all operational response partners including neighbouring jurisdictions, provincial ministry representatives, and the Canadian Red Cross.



Increase your disaster resilience:

- **SIGN UP** for SLRD Alert at slrd.bc.ca
- **STOCK UP** your emergency kits for home and to go
- have an emergency **PLAN** for people and pets
- **CONNECT** with your neighbours.

High water on the Upper Squamish River 2018
Photo: Sarah Morgan

