



ANNUAL REPORT 2019

CSRD Shuswap Emergency Program (SEP)

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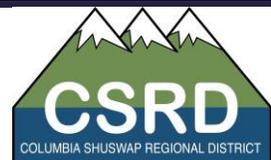


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INTRODUCTION

Resilient, engaged communities are the cornerstone of a successful emergency management program. Throughout 2019, the Shuswap Emergency Program (SEP) engaged with community stakeholders to build capacity within its borders to better respond and recover from disaster. SEP has initiated the process of refining the identification of vulnerabilities through a Hazard, Risk, and Vulnerability Assessment (HRVA) and has used those efforts to prioritize workplans.

SEP initiated a FireSmart program in 2019, offering free risk assessments to homeowners, educating the public through high-profile campaigns, and providing financial incentives for FireSmart work completed on private property.

SEP continues to value neighbourhood emergency programs (NEPs) in rural areas with the assistance in creating five new NEPs in 2019. Through these NEPs, communities are engaged in the emergency management process through the four pillars of emergency management: response, recovery, preparedness, and planning. Academic research and experience has shown that communities involved in their own local-level emergency programs respond better and recover faster from disaster events than those that are not.

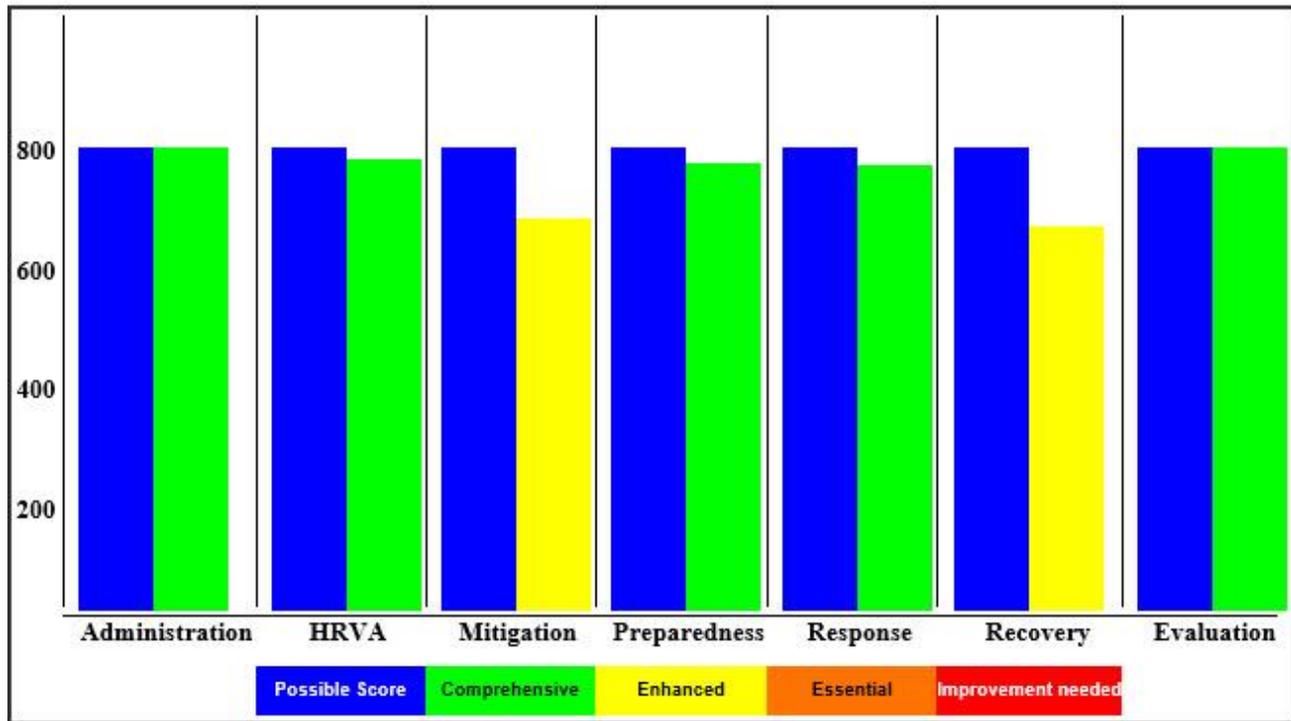
Through 2019, SEP continued to work with the residents in Sorrento affected by the erosion at Newsome Creek. These residents established the Newsome Creek Watershed Action Group, which is dedicated to advocating for quality watershed management in the Sorrento area. This includes lobbying the provincial government to repair damage done to properties, roads, and water resources because of flooding in the Newsome Creek Watershed.

In 2019, the Province of BC initiated a complete rewrite of the Emergency Program Act. The CSRD and SEP team reviewed the proposed changes and provided feedback to the CSRD Board of Directors. A response letter to EMBC was delivered by the Board, which outlines the impacts the proposed changes will have on local authorities, including the CSRD.

Community Emergency Program Review (CEPR) Tool Update

A CEPR provides local authorities a mechanism to assess whether its emergency management program meets legal requirements and responsibilities of an emergency program. Criterion is established in series of categories for self-assessment including Hazard, Risk and Vulnerabilities (HRVA), Mitigation, Preparedness, Response, Recovery and Evaluation. The following table represents the CEPR for 2019.

CEPR for 2019 Calendar Year



2019 HRVA Priority Matrix

Identifying and understanding where a community is vulnerable or at risk allows emergency managers to prevent or reduce the consequences of hazards. The HRVA helps the emergency program plan and prepare for emergencies at the community level and serves as the foundation for the program. SEP has undertaken a detailed and exhaustive HRVA.

On an annual basis, SEP examines the previous year's events and evaluates whether the prioritized ratings within the HRVA Matrix need updating or amending. HRVA prioritization guides the annual preparedness and training efforts of SEP. The table below identifies SEP's HRVA for 2019:

Hazard, Risk, & Vulnerability Analysis

LIKELIHOOD	More than 200 yrs.	1	Volcanic Ash Fallout	Terrorism		
	Every 101-200 yrs.	2	Earthquake Human Disease	Dam Failure		
	Every 31-100 yrs.	3	Avalanche Terrestrial Tsunami Animal Disease	Structural Collapse		
	Every 11-30 yrs.	4	Blizzard Hailstorm Snowstorms	Aircraft Accident Drought Explosion/Gas Leak HAZMAT - In Situ Rail Accident		
	Every 4-10 yrs.	5	Heat Wave Rainstorm Windstorm	Landslides Marine Accidents Water Contamination		
	Every 1-3 yrs.	6	Power Outages Lightning Motor Vehicle Accidents	Flooding Structure Fire Plant Diseases/Pest Infestations	Fires (WUI/Wildland)	
			1-6	7-12	13-18	19-28
			Low	Moderate	High	Very High
			SEVERITY			

OPERATIONS

Emergency Activations/Events

An Emergency Operations Centre (EOC) was activated at a level 1 on five occasions in 2019 to support incidents and deploy resources. Support actions occurred on several incidents that include:

- **March 2:** A small earthquake in Salmon Arm measuring 2.2 on the Richter Scale was observed and SEP provided communications support to update the public on information received from Earthquake Canada.
- **April 2:** Newsome Creek in Sorrento continued to experience more erosion during the freshet. SEP supported residents with continued creek monitoring by qualified professionals. An evacuation alert was issued during the freshet period based on the advice of a qualified professional (QP) geotechnical engineer. It was rescinded later in the year when the risk was significantly reduced due to reduction in creek water flow. MOTI completed their culvert replacement study of the Newsome Creek drainage.
- **June 23:** A landslide occurred on the Seymour Arm Main Forest Service Road (FSR) approximately 2 km north of St Ives. This landslide deposited enough debris across the road that it was closed for four days until the weather improved and FLNRORD could assess the area, clear the road and reopen it to the public. Travelers had to use an alternate route on the Celista-Blueberry FSR while the Seymour Arm Main FSR was closed. FLNRORD recommended that travelers be advised of soft and wet conditions and that a high clearance 4x4 vehicle was recommended.
- **August 7:** The Province of BC requested the support of CSRD structural fire apparatus to assist on the Oliver Wildfire. One CAFS-Type 3 Wildland Engine with three firefighters from the Scotch Creek/Lee Creek Fire Department responded and attended the incident for four days.
- **July/August:** A small section at the west end of Kault Hill Road slumped, resulting in a road closure that is still in effect. An alternate route remains in place for the properties on Kault Hill Road in this location. MOTI has determined a plan to fix the road and should be providing a further update in 2020.
- **December 31:** A large snowstorm started at the end of 2019 and continued into 2020 resulting in record-breaking heavy, wet snowfall. It brought down trees and powerlines, and overwhelmed road clearing crews for up to six days in some areas. SEP communicated with affected residents, NEPs, BC Hydro, the Ministry of Transportation, and opened a warming center.

2019 Provincial Wildfire and Structure Protection Unit Update

Although early predictions suggested the wildfire risk would be high in 2019, and a warm, dry March had emergency managers preparing for another eventful wildfire season, more frequent rain throughout June and July made for more normal fuel condition than experienced in 2017 and 2018. The result was a statistically low wildfire season with only 807 fires provincially. A typical year sees approximately 1,500 fires per year. As a result, the Shuswap area experienced a summer of smoke-free skies and the first year since 1999 that there was no campfire ban.

Structure Protection Unit (SPU) Team Leaders instructed day one of the Wildfire Structure Protection Program entitled Structure Protection Strategies in the Wildland Urban Environment. This two-day course is a provincial requirement for anyone being deployed provincially in an SPU Team to assist the BC Wildfire Service.

The insignificant wildfire season meant the SPUs were not needed in the SEP area and the CSRD did not receive any requests for provincial SPU support. The decision to deploy resources across the province is predicated on the fact that the assistance offered does not affect the ability to respond within our own communities.

The Office of the Fire Commissioner (OFC) inspected the CSRD SPUs in the spring and work continues to keep them up to the newest OFC Type 2 standards.

Emergency Support Services (ESS)

As a result of the independent review completed of the 2017 wildfire and flood season in BC, the Abbott/Chapman Report made 108 recommendations, one of which was the need for improving how ESS is provided across the province.

Throughout 2019, the Shuswap ESS Team worked with the changes Emergency Management BC (EMBC) has been implementing through their ESS modernization project. This included the official name change from Emergency Social Services to Emergency Support Services, new branding with a change of logo and new policies and procedures. In addition, EMBC has developed a new online Evacuee Registration and Assistance (ERA) tool which will support evacuees to self-register and allow volunteers to digitally complete the referral and reporting process. Development and testing of the ERA tool has been conducted throughout 2019. The ERA is expected to be released for use by ESS Teams provincially in April 2020.

The Shuswap ESS Team responded to 13 Level 1 responses and hosted two training sessions. The Shuswap ESS developed and delivered two exercises. The first was Exercise Task Force, a functional exercise focused on Walk-In Volunteer Management procedures. It brought together the Golden, Revelstoke and Shuswap ESS Teams to test the capabilities of the three neighbouring teams. The second was an Exercise In Sync (pictured), an operational, drill-based exercise which had participants work through the three main functions of the Documentation Unit and tested the Shuswap Electronic reporting spreadsheet.



EMERGENCY PLANNING AND PREPAREDNESS

FireSmart Initiative

The CSRD was successful in its application for a \$100,000 UBCM Community Resiliency Investment (CRI) FireSmart grant and a Columbia Basin Trust (CBT) Grant of \$25,000 for Electoral Areas A & B. This program spans the entire regional district and not just the SEP portion. The focus of the project is to provide public education and promotion of FireSmart principles which serve to reduce the overall wildfire risk to our communities.

The program provides free FireSmart home assessments to CSRD residents. The associated rebate program provides up to \$500 to people who complete the work outlined on the home assessment. Mr. Len Youden, who has a strong background in business, administration, and marketing, was hired as the CSRD's FireSmart Coordinator. One of the achievements accomplished included hosting a Local FireSmart Representative (LFR) workshop where 35 new LFRs from various CSRD Volunteer Fire Departments received training. Additional members from the Sicamous Fire Department, Revelstoke Fire Department and neighbouring local authorities also took part in the workshop and shared in the cost from their respective grants and training budgets.

The FireSmart information and message was communicated out to the public at numerous events that include Home Show, Fire Department open houses and FireSmart specific community presentations. A total of 56 FireSmart home assessments were completed, with 16 more in progress. Thousands of FireSmart pamphlets and booklets have been distributed which include information on how residents can take responsibility for reducing their own risk to their property. Resources were made available to help support resident's clean-up efforts including chipper and bin rentals which were covered under the grant for a neighbourhood that requested it.

Community FireSmart Assessments were completed in most CSRD rural communities to gain a more objective view of their current risk from wildfire. Information received was shared with the Revelstoke and Area Emergency Program (RAEMP) and Golden and Area Emergency Program to ensure consistent communication throughout the CSRD electoral areas. Staff attended workshops designed to recruit Community Champions hosted by City of Salmon Arm and attended by Salmon Arm and CSRD rural residents

At-a-Glance Statistics

- Number of FireSmart Home Assessments completed (56)
- Number of FireSmart Community Assessments completed (26)
- Number of LFRs trained (35)
- Number of open house/public meetings attended (18)
- Number of homeowner rebates issued (3)
- Number of radio spots purchased for FireSmart education and promotion (227)
- Number of FireSmart information mail-outs delivered through Canada Post (1643)

SEP and the CSRD have taken a social approach to FireSmart programming to engage the residents in building resilience in their property, their community and the CSRD region. This approach differs from the provincial norm of fuels management because it is believed to be more effective, given the sheer volume of fuels in the CSRD. The social approach allows FireSmart efforts to be concentrated on the populated areas and the urban wildland interface areas which are most vulnerable to wildfire. The goal of the program is to provide residents the tools, resources, and incentives necessary for them to build their own wildfire resilience. Pending successful grant applications, SEP is looking forward to continuing this highly successful program in 2020 and beyond.

Flood and Steep Slopes Risk Mapping and Hazard Assessments

SEP worked with the GIS department and Geo BC to acquire updated LIDAR and flood hazard mapping in priority areas along the shore of major water bodies and steep drainages that have a history of landslides. Work continued with the Fraser Basin Council and BGC on the Thompson River Watershed Flood Risk Mapping project that is a collaboration between three Regional Districts, 77 First Nations and 19 Municipalities.

Neighbourhood Emergency Programs (NEPs)

NEPs are an important part of community emergency preparedness that bring neighbourhoods together in an organized fashion and build self-reliance. CSRD met with the NEP coordinator and volunteers in Seymour Arm to review and discuss updated resources and plans. Significant progress was made in expanding the existing Neighbourhood Emergency Programs (NEPs) by adding five new NEPs for a total of 30 in the SEP area. Two NEP coordinator meetings were held (June 4th and Sep 17th) to share best practices and support the new teams. SEP has committed to promoting the continued expansion of NEPs throughout the area.

Memorandum of Understanding (MOU) with School District 83

An MOU with School District 83 (SD83) is being pursued for supply of transportation resources in an emergency. SD83 has significant transportation resources and logistics networks in place that are mostly unused in the summer months. This agreement is designed to improve organization and response times in the event of an emergency evacuation. Other meetings with SD83 were held to continue sharing information on emergency and evacuation plans both from a school perspective and a community perspective.

SEP Inter-Agency Committee Meeting Highlights (Spring and Fall)

The Inter-Agency Committee is a group of representatives from agencies that have a role in emergency planning, response, and recovery in our communities. Members include other government groups from all three levels of government, non-governmental organizations (NGOs), and faith-based organizations. These meetings are an important part of emergency preparedness by bringing response agencies together to form relationships and discuss roles and responsibilities before events occur.

Agencies that participated in meetings include: Interior Health, Shuswap Lake General Hospital, SD83, RCMSAR, RCMP and Victim Services, Shuswap SAR, BCEHS/BCAS, BCWS, Salmon Arm FD, Sicamous FD, City of Salmon Arm, District of Sicamous, Ministry of Transportation and Infrastructure (MOTI), Ministry of Agriculture, Little Shuswap Lake IB, Adams Lake IB, Neskonlith IB, North and South Shuswap First Responders, Salmon Arm Citizens Patrol, Salmon Arm Fair, BCSPCA.

The fall meeting was focused on gathering input from our partners on our evacuation route planning grant project. Updates from the member agencies were also offered. Some notable developments from partner agencies included a reduction in RCMSAR calls. RCMP's number of files were down, but the severity of issues went up. The City of Salmon Arm completed its Community Wildfire Protection Plan (CWPP) with the Neskonlith IB, while the District of Sicamous CWPP is still in progress with the Splatsin IB.

First Nations Lakes Division Emergency Preparedness Meetings

The Shuswap Emergency Program takes part in monthly meetings to share information on emergency program activities and continue building and maintaining the positive, collaborative relationship we have with our First Nations partners. SEP provide contract support to the Little Shuswap and Adams Lake Indian Bands. SEP is also an active partner with Neskonlith Indian Band, although not with an official agreement.

EOC Upgrade and Exercise

SEP received a UBCM grant to upgrade the EOC facility in the CSRD Boardroom. The upgrades included an interactive white board, desks, installation of data and power cables, and additional EOC kit supplies. An exercise was held with CSRD EOC staff to train on set-up, layout and exercise. The EOC activation plan and map was updated during the exercise and staff became familiar with the electronic filing system used during emergency events.

Evacuation Route Planning UBCM Grant

A UBCM grant was also received to update the Electoral Area Evacuation Plan. SEP worked with the contractor on updating our evacuation plan through stakeholder meetings, GIS data and mapping support, periodic feedback and revisions.

2019 Community Wildfire Resiliency Workshop in Kelowna on October 25, 2019

This was one of six regional workshops held around the province in partnership with the BC FireSmart Committee and the BCWS to support community wildfire resiliency planning and actions. It was a chance for communities to share what they are doing and provide input to the Province's new Community Wildfire Resiliency Planning Framework (replaces the CWPP process). The new program allows for grant money to be spent on private property initiatives such as FireSmart programming.

Emergency Preparedness and Business Continuity Conference (EPBCC) – Oct 2019

This annual conference brings together professional emergency planners, business continuity planners and others responsible for emergency preparedness and business continuity. Breakout sessions focused on the following six main themes:

- Health
- Emergency Preparedness / Management
- First Responders (including all sectors air, land and marine)
- Emergency Social Services / Volunteers
- Business Continuity
- Academic / Technical

Modernization of the Emergency Program Act (EPA) Legislation

The Emergency Program Act is the Provincial act governing emergency programs, response, and recovery throughout BC. The current act is from the early 1990's and needed a complete revision. The province reviewed current EPA legislation and designed this new framework which was presented to emergency managers at the EPBCC in the fall of 2019.

Feedback and suggestions were solicited from local authorities. The CSRD Board of Directors provided comments, along with most other Local Governments and First Nations. This process of updating the Legislation is ongoing, with plans to provide information on local authorities and First Nations feedback in the spring of 2020. An optimistic completion date for the new EPA has been set

for Fall 2020. The link below provides more details on the provincial EPA Modernization project and the CSRD's feedback letter sent to the Province.

<https://engage.gov.bc.ca/govtogetherbc/consultation/emergency-program-act-modernization>

MOTI and AIM Roads Presentation

The Ministry of Transportation and Infrastructure (MOTI) and the Okanagan/Shuswap maintenance contractor (AIM Roads) held an information session on their preparedness and equipment. CSRD staff attended. There is a follow-up meeting planned to debrief considering the challenges experienced during the winter of 2019.



PUBLIC EVENTS/PRESENTATIONS

Public events and presentations are an important part of spreading the emergency preparedness and prevention message to individual residents and businesses. These events also build community awareness of the response and recovery resources available in the area.

In 2019, SEP participated in numerous presentations and events that include:

- April 27-28 - FireSmart information booth at the Salmon Arm Home Show.
- May 5 - NEP and FireSmart presentation to residents at the Scotch Creek at Fire Hall
- June 8 - the annual Shuswap Emergency Program Expo as held in Sicamous and experienced a moderate attendance due to weather. This event alternates locations each year between Salmon Arm and Sicamous.
- June 27 - participated in the Sorrento Community Engagement Day with a display of emergency preparedness information from SEP.
- August 9 - a SEP, NEP and FireSmart presentation was conducted in Seymour Arm followed by a SEP, NEP presentation in Anglemont at the fire hall later that day.
- Oct 10 - FireSmart presentation at Shuswap Lake Estates.
- Oct 19 - Adams Lake & CSRD area Community event presentation to residents on FireSmart and Neighbourhood Emergency Preparedness.
- Dec 15 - Volunteer Appreciation Event murder mystery dinner, which was very well received.

The Mobile Command Truck and SPU Trailer also participated in open house events held at fire halls in Tappen/Sunnybrae, Eagle Bay, Anglemont and Silver Creek.

COMMUNICATIONS

Communications is vitally important to emergency management. Work is continuously taking place to find gaps and make improvements to the communications systems and processes. SEP has budgeted for a mass notification system in 2020 and is conducting research on mass notification system options. The goal of securing the appropriate system for the CSRD and SEP that will function and provide value during emergencies and normal business.

A focus on Social Media messaging continues with support from the CSRD Communications Coordinator. Social Media training was provided for a number of CSRD staff, including SEP, in an effort to improve communications with the public. SEP is updating preparedness messaging on a regular basis and has received positive feedback from social media followers. We encourage everyone to follow SEP's Facebook and twitter feeds at:

<https://www.facebook.com/shuswapemergency>

<https://twitter.com/shuswapemerg>

Internal communications are also critical to a coordinated emergency response. SEP Radios have been updated and licensed with the current required frequencies. SEP continues to work with the Shuswap Amateur Radio Club (SARC) to ensure ongoing emergency communication options exist. Members of this club are part of the Provincial Emergency Radio Communications Service (PERCS) that provides the BC Public Service Net (radio communications link across the province).



TRAINING



Training continues to be an important part of building and maintaining emergency management program capacity. SEP hosted and participated in numerous training and meeting events that include:

- Monthly ESS and Mobile Operations Command (MO Team) volunteer meetings and training,
- JIBC Emergency Operations Centre (EOC) Essentials course hosted locally Jan 16-17, Ammonia Leak Haz-Mat exercise scenario Feb 5, 2019 in Sicamous at Rec Centre,
- JIBC Information Officer course attended by two CSRD staff Feb 20-21,
- JIBC EOC Applied training session in Vernon Feb 27, attended by EPC,
- Wildfire Structure Protection Program course held at Shuswap Fire Training Centre with SPU instructors and BCWS March 16-17,
- JIBC EOC Operations course attended in Kelowna April 16,
- JIBC Emergency Evacuations course hosted in Salmon Arm June 12,
- JIBC HRVA course June 25-26, 2019 hosted in Salmon Arm,
- JIBC EOC Finance July 9, 2019 in Armstrong,
- Shuswap Regional Airport, After Action Review (AAR) Oct 17 on small plane crash incident,
- JIBC Planning for Community Disaster Recovery Oct 22-23 in Armstrong,
- MO Team radio interconnect training,
- SEP staff attended a FortisBC tabletop exercise review in Revelstoke.

SEP staff also attended the Emergency Response and Business Continuity conference held in October to hear presentations on a wide range of emergency management topics, share best practices, make new business contacts, and stay current on changes within the Emergency Management Community.