



BCSARA 2022 Year In Review

An Enduring Lifeline for British Columbia



Comox Valley Search and Rescue manager,
Paul Berry, throws a rope rescue line to rafters on a river.
Photo credit: Brian Argyle | argylephoto.com

ON CALL 24/7/365

Ground search and rescue (GSAR) in British Columbia is provided solely by highly-trained volunteers. On call 24 hours a day, 365 days a year, these skilled professionals provide their time, dedication and expertise as well as their own personal gear at no cost to the people of B.C. and to the individuals they rescue.

BCSARA is proud to represent the 3,400+ GSAR members in B.C. who make up 78 groups across the province. B.C. search and rescue teams have responded to all activations in our 20-year history.

Alberni Valley Rescue Squad	Grand Forks SAR	Powell River SAR
Archipelago SAR	Hope SAR	Prince George SAR
Arrow Lakes SAR	Houston SAR	Prince Rupert SAR
Arrowsmith SAR	Juan de Fuca SAR	Princeton SAR
Atlin SAR	Kamloops SAR	Quesnel SAR
Barriere SAR	Kaslo SAR	Revelstoke SAR
Bella Coola Valley SAR	Kent Harrison SAR	Ridge Meadows SAR
Bulkley Valley SAR	Kimberley SAR	Robson Valley SAR
Burns Lake SAR	Kitimat Ground SAR	Rosland SAR
Campbell River SAR	Ladysmith SAR	Salt Spring Island SAR
Castlegar SAR	Lions Bay SAR	Shuswap Volunteer SAR
Central Cariboo SAR	Logan Lake SAR	South Cariboo SAR
Central Fraser Valley SAR	Mackenzie SAR	South Columbia SAR
Central Okanagan SAR	Metchosin SAR	South Fraser SAR
Chetwynd SAR	Mission SAR	South Peace SAR
Chilliwack SAR	Nanaimo SAR	Sparwood SAR
Columbia Valley SAR	Nechako Valley SAR	Squamish SAR
Comox Valley SAR	Nelson SAR	Stewart SAR
Coquitlam SAR	Nicola Valley SAR	Sunshine Coast SAR
Cowichan SAR	North Peace SAR	Terrace SAR
Cranbrook SAR	North Shore Rescue	Tumbler Ridge SAR
Creston SAR	Northern Rockies SAR	Vernon SAR
Elkford SAR	Oliver/Osoyoos SAR	Wells Gray SAR
Fernie SAR	Pemberton SAR	West Chilcotin SAR
Fort St. James SAR	PEMO SAR	West Coast Inland SAR
Golden and District SAR	Penticton SAR	Whistler SAR

As a provincial organization, BCSARA respectfully acknowledges the traditional territories of Indigenous nations throughout British Columbia. We honor the Elders, both past and present, as well as the Knowledge Keepers for their insight and guidance on these diverse and beautiful lands.

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HOW IT ALL BEGAN



Search and rescue teams were formed out of simple necessity

In B.C., search and rescue teams were formed out of one simple necessity—because a call for help had come for someone injured or missing and members of the community wanted to respond.

In the beginning, there was no formal training or equipment and volunteers often came from local fish and game clubs, volunteer fire departments, civil defence units or hiking clubs who saw a need and tried to fill it. Over the decades, teams continued to evolve, becoming more organized and well known which, in turn, increased their call volume.

Many of the GSAR groups that exist today got their start in the 1960s, although most did not become “incorporated” non-profits until they saw an ability

to fund raise for their needs. Once the provincial government established gaming grants in the late 1990s, almost all GSAR groups formalized and became non-profit entities.

With that status, they now had the ability to raise funds for the equipment and training required to save lives. In order to be equipped and ready to respond, fund raising became a significant activity for every GSAR group.

While volunteers heavily contributed their time, they also did financially as well, often paying for things like clothing, fuel and meals and they continue to do so to this day.

LOST HIKER REALIZES SAR IS FOR EVERYONE



On August 2011, I had hiked up to Golden Ears, enjoyed the amazing views, and was going back down. The trail is not marked well and it did not take me long to veer off. The first time I noticed my mistake and backtracked to the trail. But soon, I lost the trail again and this time my mistake was consequential.

At this point, I remembered Twitter conversations with search and rescue members and a few AdventureSmart seminars I had attended. Their advice was clear. If you get lost and can't get back on the trail, call for help and call early. Like many people, I thought 911 calls are reserved for people in immediate danger to their lives and that definitely wasn't me. Still, after some hesitation, I placed the 911 call.

The 911 operator answered at the second ring and, before long, I was connected to the police. An officer asked me about injuries and medical conditions, about food and water supplies, and where exactly I was. I am even worse with technology than with route finding, so it took me a long time to get the GPS coordinates from my phone. The police officer remained calm and supportive throughout. He also urged me to do everything to conserve battery power.

About five minutes after we had hung up, I got a call from search and rescue. The guy was very cheerful (which was much appreciated!) and he asked again about injuries and medical conditions food and water (he wanted specifics but seemed satisfied with one bagel, some power bars and one liter of water) and my GPS coordinates.

Eventually, he told me “We'll come and get you” and explained that it would probably take an hour to 90 minutes until they'd be there with a helicopter. He also told me that the helicopter would first do a few rounds of fly-overs to evaluate the area and find a spot to safely land. Since it looked like there might be better options farther down, I asked if I should make my way further into the gully. That was the only time his

tone got very serious: “No, stay exactly where you are. We have a very good phone connection, we do not want to lose that.” He told me they would text me a link to some GPS tracking site and I should answer that text but otherwise stay off the phone. After we hung up, I felt for the first time optimistic that this day wouldn't end in a complete disaster.



A short while later, one person came up to get me. I was thrilled beyond words to see him. He told me we had to get down a different way and asked me if I was comfortable walking across some uneven surface and rocks. Heck, yes! We made it to the ice-patch where the helicopter was sitting without incident.

When the search and rescue helicopter landed, I noticed they had brought the full rescue team. It was very reassuring to know how seriously they take their volunteer job! Two guys got out, one to assist me, one to carry my backpack. Once I was buckled in, we took off and after a short flight landed safely at a landing patch down in the park. Again, I was assured I did the right thing to call for help when I did and, again, like so many times earlier, I was touched by the genuine concern for my safety and wellbeing. While I had heard good things about search and rescue in the past, I had no idea they were THAT good.

Christina Behme



GET TO KNOW GSAR IN B.C.



75% of the province is covered in mountains and 64% is forested

We've got B.C. covered

Home to the highest waterfalls, the longest beaches and the mildest climate in Canada, British Columbia is a stunningly beautiful province that regularly seduces visitors and residents to head outdoors. With six national parks and more than 400 provincial parks to choose from, recreationalists are never at a loss for somewhere to go and something to do in B.C.

And, with a land mass larger than four times that of Great Britain, B.C. also contains 14 bio geoclimatic zones—from deserts to rainforests! If that wasn't

enough to lure recreationalists outside, 75% of the province is covered in mountains and 64% is forested, setting the stage for some magnificent backdrops to every outdoor activity imaginable.

While all of that diverse beauty only increases B.C.'s appeal, it also ramps up the challenges that GSAR groups face. Between mountainous terrain, extreme weather and swiftly-changing conditions, GSAR members have to be knowledgeable, skilled and trained to handle whatever they encounter.

We do more than just help lost hikers

While lost or injured hikers remain one of the top reasons for search and rescue callouts, GSAR groups also help in ways you may not be aware of—from urban searches for dementia patients to going door to door to deliver evacuation notices during civil emergencies.

Other typical search and rescue types include despondent individuals, flood and wildfire evacuations, and pet rescues for humanitarian reasons. In fact, GSAR members help the whole family who are often together when enjoying the outdoors.

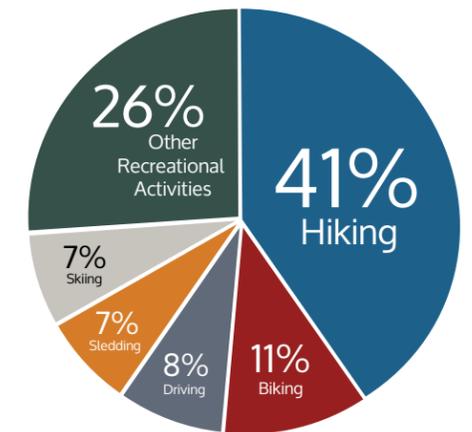
GSAR goes where other first responders can't

In B.C., GSAR groups can only be activated by specific requesting agencies such as BC Ambulance, police services such as the RCMP, fire services or the coroner's office. GSAR members offer the ability for these agencies to continue their operation far beyond their own boundaries.

GSAR also supports paid responders in terrain and conditions where they either don't have the expertise required or need help for safe access (e.g., swiftwater, rope-accessed terrain) or when they need skilled resources to continue the operation.

What does it take to respond?

To complete the 1510 taskings of 2022, there were 2087 team deployments including 67 GSAR callouts that lasted more than 24 hours. The longest deployment covered eight operational periods (96 hours in total). The most calls received during one day by a single GSAR group was five!



OUR NUMBERS SAY IT ALL

Key Insights for 2022

During the past 10 years alone, more than 10,000 lives have been saved, thanks to GSAR intervention and, for the year 2022, 1,019 lives were saved. The estimated economic and social cost averted by saving 1,019 lives is estimated at a staggering \$4.4 billion.

Of the 1,510 GSAR tasks in 2022, 12% involved subjects who would have died without urgent GSAR intervention and 43% involved subjects who would have ultimately not survived if GSAR had not intervened.

Lives saved
1,019
People rescued (needed help)

1,510
SAR tasks

1,758
Additional people assisted (with subjects)

49
Dogs rescued

262
Bodies recovered

71
Still missing when search suspended

94

441,026
total hours of service in 2022

\$11M
\$189M
\$6M

The value of volunteerism

If GSAR members were paid just for the hours they give, the cost would amount to more than \$11 million in wages alone (based on a comparable average hourly wildland firefighter wage of \$25 per hour).

If B.C.'s volunteer service was replaced by a salaried full-time staff service with the same number of personnel on call 24/7/365, the minimum cost would skyrocket to \$189 million a year in wages.

In 2022, the provincial government contributed \$6 million towards the cost of equipment, training and programs to maintain readiness. GSAR groups continue to fund raise to meet the actual cost to be task ready of nearly \$11,415,000.

Time well spent

Data has shown that, if a GSAR member spends a 10-hour day searching/rescuing a subject, the true time of that activity for the volunteer is actually 40 hours (10 hrs. on task + 20 hrs. training + 10 hrs. to maintain readiness). Effectively, this turns one long day into a full work week.

Last year, GSAR members volunteered, on average, 128 hours each, which is approximately a month of full time work from each member and equates to 441,026 hours in total volunteered in a year."



100 hours/first year
as a member in training (MIT)

\$2,275/first year
for dedicated personal GSAR gear as a MIT

Average 165 hours/year
of active GSAR time

\$780/year
in personal costs to be operationally ready

Average 80 hours/year
of specialized team training

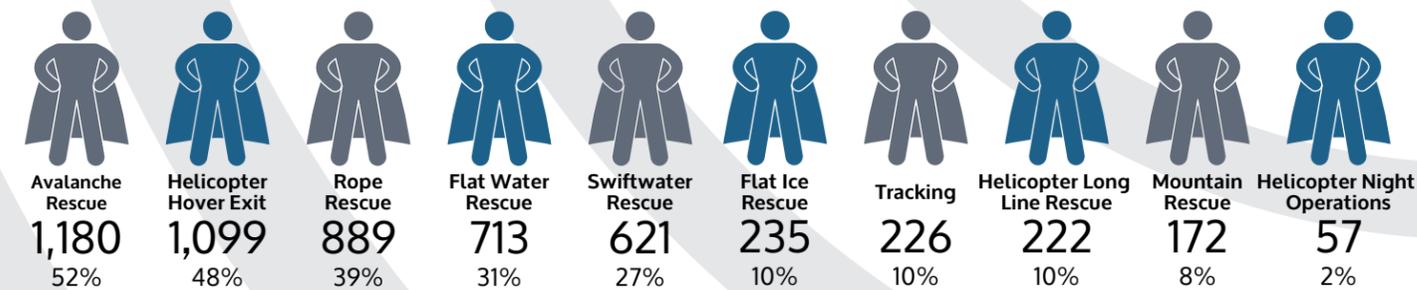
Membership Category	Members in 2022
All members	3442
Active GSAR members	2291
Members in training	490
Non-operational support* members	263
Leave of absence	188
Operational support* members	120
Reserve members	90

* Support includes governance, accounting, logistics, equipment maintenance/repair, instruction, legal, prevention/education/outreach, etc.

A DAY IN THE LIFE OF A GSAR MEMBER

Highly-qualified professionals

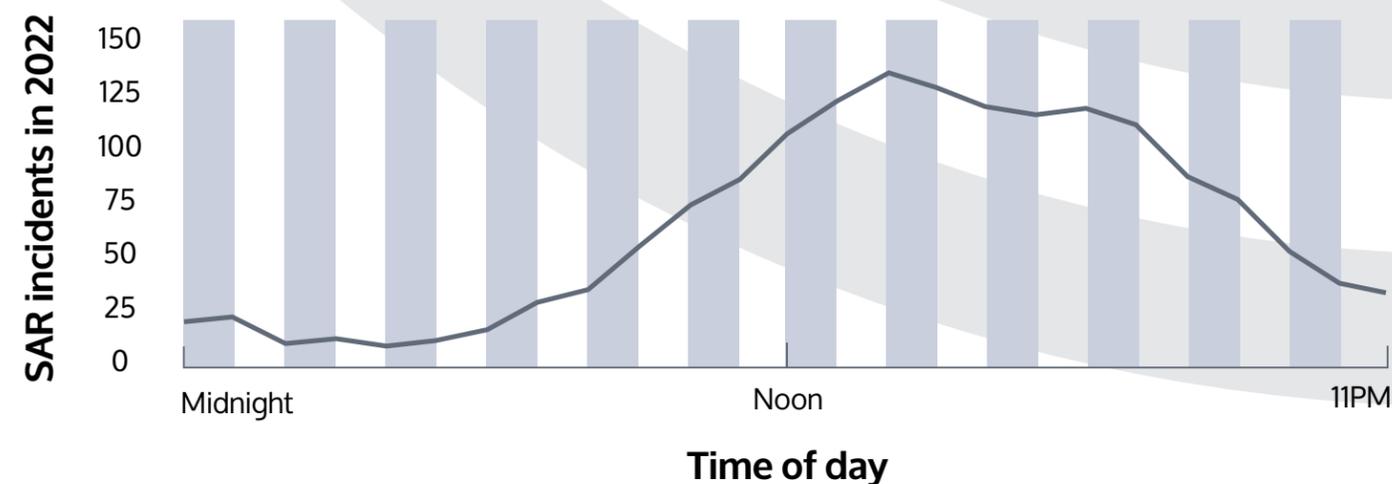
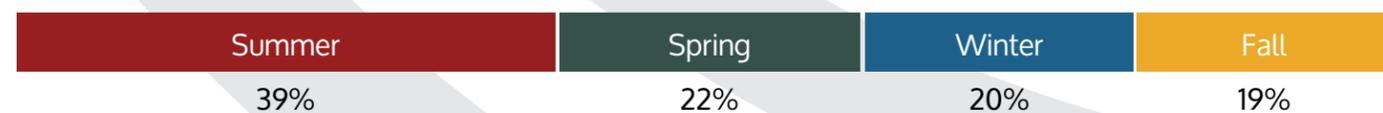
Since B.C. GSAR groups cover a wide variety of terrain and conditions, each group may be approved for specific qualifications that are relevant to their area. In addition to human GSAR members, there are also 12 avalanche and 17 wilderness tracking GSAR group dogs.



All GSAR members are required to have basic first aid but 72% of members have higher-level qualifications. Of that, 12% are doctors, nurses, or professional first responders (paramedics or fire fighters).

In addition to active GSAR members, there are also non-operational and operational support members who fulfill important roles and dedicate a large amount of their time to training as well.

When does GSAR get called out?



GSAR members spend half of their time training to respond to an incident

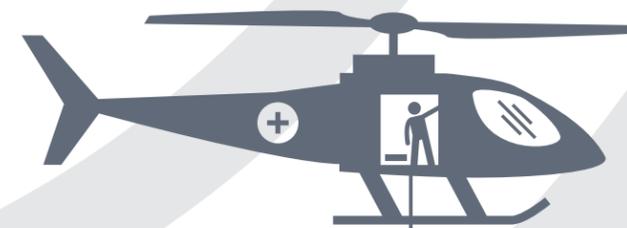
Core GSAR Training



- Consists of six different components including an overnight component and Incident Command System Level 100, which represents 97 hours of training
- Minimum seven hour first-aid course, most GSAR members have higher training
- Swift water online awareness training
- Optional rope rescue online awareness course

Technical Rescue Training

Wildland rope rescue, swift water, flat water and ice rescue, avalanche rescue, mountain rescue, helicopter long line and winch operations



Specialty Training

Leadership, GSAR manager level 1 and 2, tracking, train-the-trainer, canine search (avalanche and wilderness), night vision operations



Activity Specific Training

Such as, but not limited to, off-road vehicle operations, chainsaw bucking operations, and code 3 driving

SPOT THE SEARCHER

B.C. is well-known for its unforgiving terrain and incredible foliage. In this photo, a GSAR member is wearing high-visibility clothing while laying down to simulate a search subject. Can you spot them?

(For the answer, please visit www.bcsara.com/findthesearcher)



HOW SEARCHES UNFOLD

How is GSAR activated?

In B.C., search and rescue members are activated and work under the authority of one of the following requesting agencies:

- Police
- BC Emergency Health Services
- Canadian Forces & Canadian Coast Guard
- Parks Canada
- Coroner Services
- Fire Services

Once activated, a highly-trained GSAR manager gathers as much information as possible to determine how best to respond.

If it is a search, the GSAR manager will want to know where the subject was going and what type of subject they're looking for—a hiker, a subject with dementia or, perhaps, someone who is despondent. There are more than 30 categories of subjects and each may require a different approach to the search.

If it is a rescue, the GSAR manager will ask what are the potential injuries and what is the location of the subject to determine the best resources required to access the subject and get them back to safety.

The majority of all incidents are quickly resolved. However, some incidents require other GSAR groups to be called in to assist with some searches lasting several days and including hundreds of volunteers. These are challenging searches requiring higher level search managers, extensive team coordination and different search techniques.

Terrain, vegetation, weather and other factors can all impact the searcher's ability to find the subject. To better understand how vegetation plays into finding a subject, try to find the GSAR member in the photo on the previous page.



There are more than 30 categories of subjects and each may require a different approach to the search

TALES FROM THE SAR SIDE

Lapel pin solves mystery crash

On Christmas Day, 1978, my wife and I were walking along a snow-covered road near our cabin when a huge SAR aircraft flew over us just above the trees. We waved and it circled back to take a closer look at us. We stood there, smiled, and showed as best we could that we were fine. I instinctively knew that someone was having a bad Christmas.

After joining my local GSAR team in 1984, in the early summer of 1992, I got a call. "Hi, you're with SAR right? I'm a timber cruiser and think I found an airplane in the forest where I was working." I asked if he had contacted the RCMP but he gave me the impression they were not that interested. It was a strange phone call. When he told me where he was working, I knew it was remote and only recently had a road built nearby. Three of us went into the site with the timber cruiser and his assistant on a three km hike that took more than two hours.

He showed us the engine and tail wheel of a small plane. This led to an investigation and three more trips into the valley. I found a piece of fabric, mostly buried, and it turned out to be a Royal Canadian Legion dress jacket. The tiny label pin for long standing service had a lodge number on it. This tiny piece of treasure unlocked the mystery of this crash.

We were standing in the huge avalanche path near the back of a steep valley with a 9000 ft. peak. The jacket belonged to a member of the Royal Canadian Legion lodge in Indian Head, Saskatchewan. He and his wife and son, pilot and small dog, had left Saskatchewan the day before Christmas in 1978 enroute over the mountains to 108 Mile House in British Columbia.

The consensus is that the plane had turned into the main valley because of weather and flew into the side valley with no way out and hit high up on the avalanche path. The largest piece of evidence found was the engine. The piece that identified the plane type was the Cessna tail wheel and a small piece on the engine cowling with the mechanic's name scratched into it confirmed it was the missing plane. The lapel pin was the key to unraveling the whole puzzle.

Back on that Christmas Day in 1978, my wife and I were on the flight path of the missing plane. The plane flying over was the reason I joined SAR. That tiny seemingly mundane lapel pin brought closure to the lives of many including the daughter of the missing parents.

When people ask me why I joined GSAR and why I have been involved for so long, I tell them it is because of a lapel pin. I now have earned a collection of my own.

Kevin Deckert

Wells Gray SAR



Remnants of plane unidentified

Clearwater RCMP are continuing to attempt to identify fragments of a wrecked airplane, found May

23 in the Tum-tum area.

"All we've got is part of a motor, pieces of a fuselage and a suitcase."

Sgt. Terry Grimm told the STAR/JOURNAL last week. "There is a serial number on the motor we're trying to trace," he added.

Police have not yet identified the plane's actual crash site, Grimm said. What fragments have been found, he said, were located "at the base of an avalanche chute," indicating the plane "may have gone down high."

The wreck, another officer indicated, will prove to be an old one. Gilbert Smith Forest Products workers in the area May 23 first spotted the aircraft fragments, police said.

Air and ground searches to date netted aircraft remains which appear to have been carried down the mountain by glaciation.

Rumors that human skeletal remains had also been discovered are false, Grimm stated.

Location of those pieces already recovered suggest that efforts to recover more will have to wait until winter's snows retreat further.

Water Search and Rescue personnel in the area on a recent week-end witnessed an avalanche in the area in which the aircraft remains.

More needed to identify plane wreckage

Police have been unable to positively identify the airplane wreckage found near Tum Tum Lake two weeks ago.

An airplane engine; tail wheel assembly; small, torn piece of luggage; small pieces of metal; and clothing fragments were found, mostly at the bottom of a very steep, narrow, rugged valley, said police. No human remains have been located at the site.

The wreckage was discovered by a timber cruiser surveying the area for a lumber company. Further scrutiny by RCMP helicopter failed to locate anything more, although members of the local Search and Rescue team who walked into the area with the assistance of the person who first located the debris did find additional wreckage, report police,

although nothing found confirmed the identity of the aircraft.

Files of missing aircraft from British Columbia yielded no possibilities for the area. However, a further check into the records for aircraft missing on a trip from Alberta or Saskatchewan to B.C. revealed the report of an aircraft that disappeared on a flight from Indian Head, Saskatchewan, to 100 Mile House in 1978.

That plane, with four persons on board, was last heard from after it left the Red Deer, Alta., airport.

Police stress they have no evidence to indicate that this, in fact, may be the plane located.

A search for more wreckage that will positively identify the plane will be carried out.

—NC

Hats and torches

When I think of search and rescue in a smaller community where we tend to know each other, I often think of hats and torches. As volunteers we sign up, train and are honored to take off our everyday hats when a call comes in. We take off the hats of foresters, nurses, teachers, business owners, millwrights, machine operators and more. We even take off the hats of being someone's neighbor, coach, teacher, fellow community organization or church member, even the hats of being a partner, parent, family member or friend.

Once the searcher hat goes on, we strive to be a torch for the missing person and their family. We combine techniques, search theories, technical skills and specialized resources to be a beacon of help and hope in the worst situations and, hopefully, to bring the subject home.

It is challenging in a small community, sometimes challenging to the extreme, to balance those hats, and keep that torch lit well when we are called out for one of our own, and that is why it is so important to have programs like CISM when those relationship connections add an extra dynamic to any SAR call.

It is always an honour to be asked to put our skills and training and experience to full use during someone's worst day and we can show up to help with our SAR hats on. And to the best of our abilities, we will continue to help whenever requested.

Mark Durupt

Nechako Valley SAR

MORE TALES FROM THE SAR SIDE

Strange body in the water

Probably one of the strangest calls for Kent Harrison SAR was the report of a body floating in a slough near Agassiz. The RCMP paged KHSAR to retrieve the body, only to discover that it was a large 'Scooby Doo' stuffed animal! The item was partially submerged, with only its back showing. Sadly, attempts to revive it were unsuccessful.

Neil Brewer
Kent Harrison SAR



Challenging GSAR manager story

Two individuals with mental challenges were reported missing on an extremely busy hot summer weekend at a small lake with hundreds of people. Not one witness reported seeing them. The first subject was found late the first night high up on a nearby mountain trail. The second subject was nowhere to be seen. Each day, the police brought out the first subject and asked questions which were answered in the only way she could—cryptically.

On the fourth day, which meant the subject was without water for an extended period and would be very critical, possibly fatal if not found, the first subject gave the final clue that allowed us to find the second subject. She said, "I wasn't alone long when you found me." We swept down from where she was located that first night and the second subject was found safe and sound laying in thick brush. This search took every ounce of SAR training and partnership with the police to be successful.

Dwight Yochim
Former SAR manager

Sunset surprise

Three hikers headed up to a viewpoint to watch the sunset staining the sky pinks and purples. The hikers were awed as the sun fell behind the peaks and into the ocean, watching until the last glow of colour faded to grey. With darkness now upon them, the hikers turned around to start their descent home.

Surprised by how dark it was, the hikers were chilled and helpless in the inky blackness of the forest. Without the glow of streetlights, they couldn't see the trail. Without warm sunshine, they got cold. Without a map, they became lost. With no other options, they called 911. With extra headlamps and warm clothes at the ready, GSAR members found, equipped, and escorted the hikers safely back to their car.

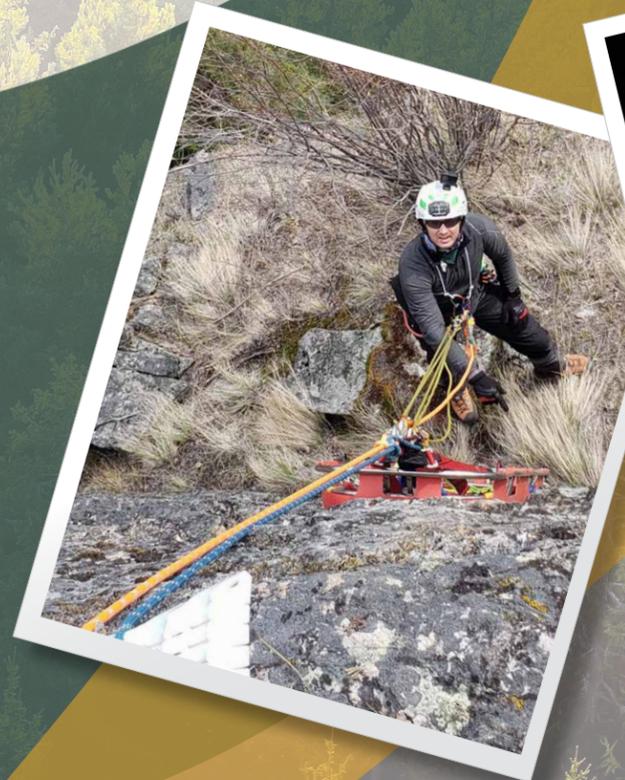
Dr. Nicole Sugden
Squamish SAR / Lions Bay SAR



Doggone rescue

A call came in on a hot summer day from a 72-year-old. We were informed that his older hiking partner (79-years-old) was with their dog that had collapsed and were told he would not come down without his dog. When reached, it was clear that the dog was suffering from heat stroke. Gus, an 80 lb. Labrador, was loaded into a stretcher and carried down the mountain followed by his 79-year-old owner. A letter from Gus' owner and a donation was later received. The letter informed us that Gus and his owner were doing great.

Member
Coquitlam SAR



ARE YOU RESCUE READY



B.C. has been the province with the most targeted outdoor education and incident prevention program, compliments of BC AdventureSmart

As the busiest province in Canada for search and rescue, it's understandable that, for almost two decades now, British Columbia has also been the province with the most targeted outdoor education and incident prevention program, compliments of BC AdventureSmart.

BCSARA created the AdventureSmart program with the intention of offering wise outdoor best practices for all provincial recreational enthusiasts—however, it was soon adopted as a national program. Today, each province and territory has a designated AdventureSmart program coordinator and volunteer outdoor educators.

The reduction of search and rescue callouts and the severity of incidents has always been the goal of this program which originally stemmed from a Public Safety Canada new initiative fund (NIF) project grant.



Making the connection

BC AdventureSmart uses many mediums to reach out to recreationalists. From web-based learning, face to face outreach and in person community events, to live virtual education, on demand schooling and a targeted media presence, the BC AdventureSmart program provides very consistent, data driven messaging. Ebbing and flowing with the seasons and with the trends, allows BC AdventureSmart to be flexible and fluid with its outdoor education tactics.

Our exclusive summer and winter series of online learning events offer a unique and convenient way to become more knowledgeable and better prepared. Take a look of some of the many topics we cover:

- No charge for rescue
- Backcountry safety for pets
- Lost hikers tell their stories
- Avalanche and wildfire awareness
- Snowmobile incident prevention and risk mitigation
- Aging populations with dementia
- Indigenous women outdoors
- Good Samaritan stories
- Lost person behaviour
- Trail specific safety videos

For each of these topics, special guests are welcomed to the BC AdventureSmart virtual podium to share their expertise, guidance and resources to help enthusiasts be better informed before their adventures. We know that most critical decisions are made before the enthusiast leaves their home.

By focusing on the 3Ts—trip planning, training and taking essentials—we can share the perfect recipe for accomplishing adventures in a healthy, safe manner.



Trifecta of outdoor safety

Often overshadowed by the thrill of adventure, the glory of summiting or the excitement of mountainous challenges, is the trifecta of outdoor safety.

Our three-pillar approach, endorsed by BCSARA, produces dependable outdoor education for adventurers based on data driven insights, offers continued expansion of partnerships and welcomes new industry supporters, and creates targeted initiatives.

This trifecta builds upon a culture of safety that started years earlier and helps support an ever-evolving BC AdventureSmart program. Now, with many supporters in various industries and government organizations, we can work together to ensure that our safety messaging is both heard and acted upon.



**If you get lost today,
will anybody know?
Did you leave a trip plan?
Are you prepared?**



AdventureSmart



Top 10 worst things you can do

1. **Wearing inappropriate footwear** (causing slips, trips, falls and broken bones)
2. **Not leaving a trip plan with a trusted emergency contact**
3. **Assessing your skills wrongly and recreating above your abilities**
4. **Thinking easy access to a trail equals an easy hike** (just because it's there, doesn't mean it's easy)
5. **Going into the mountains with ONLY a cell phone and 'maybe' some water**
6. **Not thinking 'what if'** (what if I break my ankle, get lost or have to spend the night)
7. **Not knowing your location** (such as latitude and longitude)
8. **Relying on search and rescue volunteers for incidents that could be preventable**
9. **Being over-confident, not aware of risks**
10. **Being under prepared and misinformed**

AdventureSmart



CHAMPIONS OF GSAR

A rescued subject becomes a champion of SAR in B.C.

"Our company, Lighthouse Projects Ltd., is based in Vancouver and we have been supporting the 78 BC ground search and rescue groups since 2016. We were further motivated to support the mission that provides unpaid volunteer support for these dedicated GSAR teams after our own rescue experience by Kent Harrison SAR in 2021.

We have donated our BrightSource lighting products to aid in the large number of ground rescues undertaken in the dark. The SAR groups have come to rely upon these bright, functional and eco-friendly tools to assist as a key component, when needed.

The level of professionalism required to be part of the team of volunteers is exceptional. The fact that this expert assistance is extended free of charge—as in you don't pay to be rescued—is remarkable.

It is hard to explain the relief one feels when, after an accident, sudden storm or navigation error, you find the need for help and a cheerful, expert team arrives to take charge and bring you back to safety.

We challenge other BC-based companies to support BC SAR groups in whatever manner they see fit, from financial to service or product. Thank you, volunteers!"

**Ian Mackenzie, Founder & President
BrightSource**

Platinum Tier Sponsor

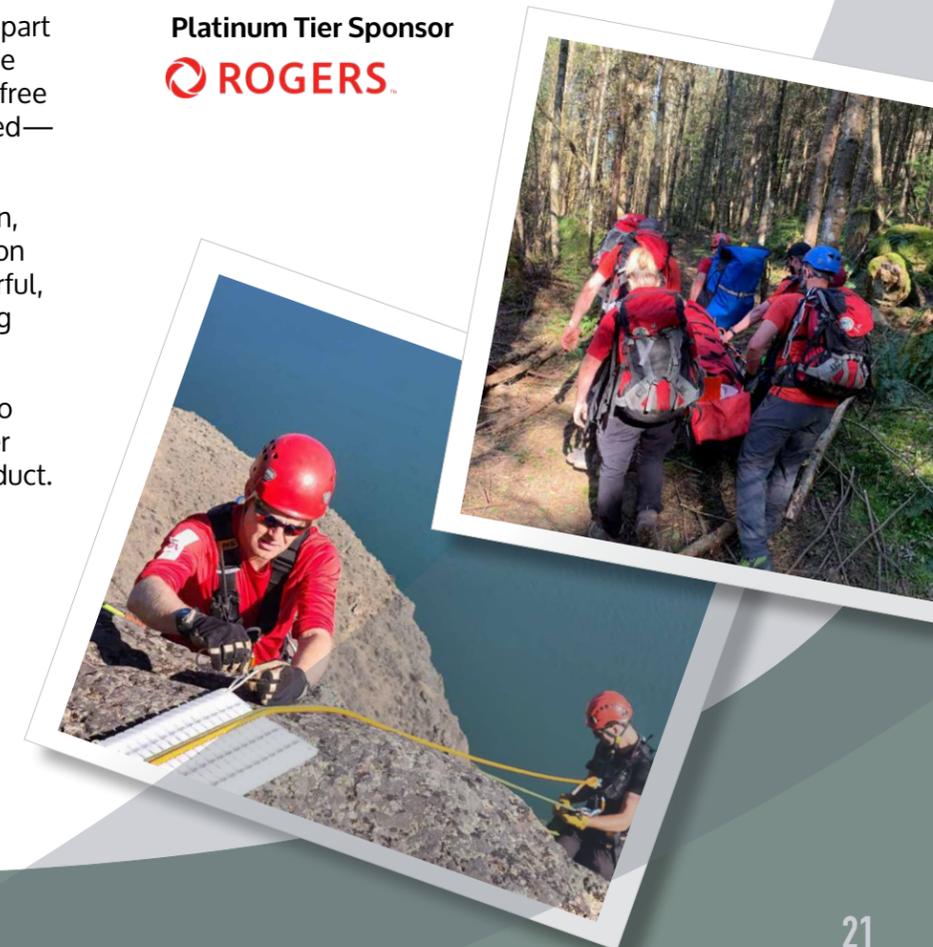


A lasting commitment to resiliency

"Rogers is committed to partnering with organizations like the BC Search and Rescue Association (BCSARA) to help build resiliency in communities so they are ready to respond before a disaster strikes. Last year, we donated \$1 million to BCSARA as part of a multi-year partnership to provide long-term support for critical search and rescue services in the province and enable community preparedness. The investment is supporting new technology and specialized equipment to help the organization's network of 3,400 professional volunteers save lives."

Rogers Communications

Platinum Tier Sponsor



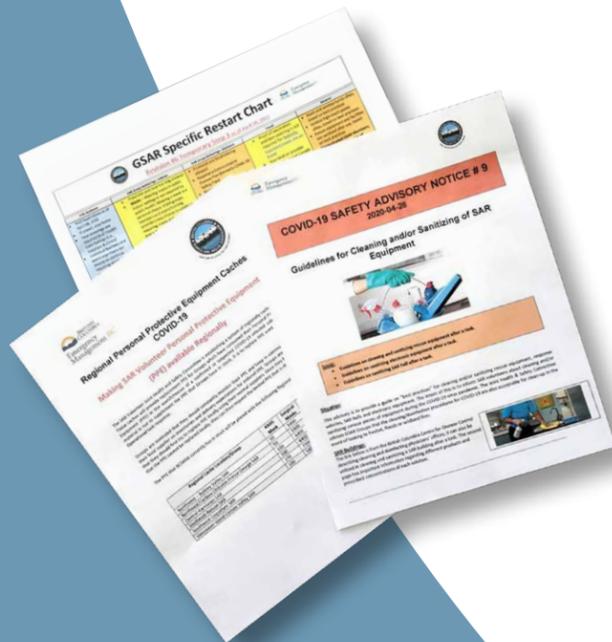
COME HOME SAFE



From the onset of the pandemic, the Joint Health and Safety Committee (JHSC) made every effort to provide timely and relevant information to GSAR groups as well as provide guidance to prevent the spread of COVID-19 on operational tasks and training activities. By following the provincial health officer's orders and notices and our own specific safety COVID-19 protocols, we were able to deliver ground search and rescue services to the public throughout the pandemic, without disruption.

Our COVID-19 response included:

- The sharing of 31 COVID-19 safety advisory distributed to all members with key guidance on pandemic practices.
- The development of six regional caches of personal protective equipment for GSAR groups in case of low supplies.
- A COVID-19 website landing page, where GSAR groups were able to find assorted information on COVID-19, in essence, "a one stop shopping" site on this topic.
- The development of a GSAR specific restart chart (six editions) as restrictions were eased.



In addition to dealing with COVID-19 requirements, the JHSC also developed a number of health and safety tools including:

1. **RADeMS**—This response assessment and decision-making support guide offers six different applications (ground search, human disease outbreak, motor vehicle operations, mountain rescue, rope rescue and swift water rescue). RAdEMS was developed in collaboration with the Canadian Search and Rescue New Initiative Fund (NIF). This tool is a fundamental part of any risk assessment and management strategy and provides guidance on any critical decision-making for operational tasks and training exercises. It is available as a wallet size reference card or as an app for both Apple and android phones.
2. **SAR heat index calculator**—The heat index calculator was developed for GSAR groups to use as part of their risk assessment in extreme hot weather conditions. This is a measurement of discomfort the average person experiences because of the combined effects of temperature and humidity.
3. **GSAR specific air quality health index chart**—The GSAR specific air quality health index chart can be utilized as a reference tool in performing risk assessments for training exercises and operational tasks during periods of poor air quality (wildfire smoke).
4. **Administrative help to GSAR groups:**
 - a. Health and safety poster library specific to GSAR
 - b. Fillable PDF inspections forms library
5. **Transparent incident reporting:**
 - a. A monthly incident report review is now a standing agenda item for BCSARA board meetings.
 - a. Incident reports are reviewed monthly and a "lessons learned" monthly report is prepared for GSAR members.

Operating standards

The JHSC continuously reviews and/or revises the Provincial Operating Guidelines (POGs) and as well the GSAR Safety Program Guide. There is a scheduled rotation of POGs to be reviewed annually or on a as-needed basis. Likewise, the same holds true for the GSAR Safety Program Guide.

Communications

It has always been a priority for the JHSC to communicate relevant, important information in a timely fashion to GSAR groups. The JHSC uses several different mediums to push information out to the community:

- GSAR safety newsletters
- Safety ALERTS
- GSAR seasonal safety reminders
- The Navigator (a monthly electronic newsletter)
- Monthly health and safety incident reports

It has always been a priority for the JHSC to communicate relevant, important information in a timely fashion to GSAR groups

NOT ALL INJURIES ARE VISIBLE



BCSARA has worked hard to build one of the largest volunteer peer-based critical incident stress management (CISM) programs in Canada.

Much like other technical teams in GSAR, our current roster of 26 peers are comprised of fellow BCSARA volunteers who have received specialized training to respond to their respective colleagues following a critical incident. Over the past five years, we have responded to more than 250 calls requesting CISM services and consistently see between 400-600 GSAR volunteers supported annually through these calls.

Number of CISM interventions over the past five years

Year	# of CISM Interventions
2022	71
2021	69
2020	54
2019	56
2018	51

400-600+ SAR volunteers supported annually

Occupational stress injuries are much more prevalent among emergency responders due to the very nature of what they are tasked out to do. For this reason, it is essential that we take the utmost care of our greatest asset...the volunteer.

The CISM program was formally developed in 2006 so that volunteers would have a way to unpack difficult calls with others who have navigated similar experiences. It was clear that this dedicated group of helpers were far more likely to confide in someone they felt 'gets it' and so began the journey of the BCSARA CISM team.

CISM addresses three main areas of need

Prevention: Through our education and awareness initiatives, we strive to reach every GSAR group in B.C. every 2-3 years. We have a suite of presentations to draw upon for both the GSAR volunteer and their significant other. Much like health and safety practices, we aim to help reduce risk by equipping them with psychological personal protective equipment (PPE) through resiliency tools and preparedness measures.

Intervention: Following a critical incident, which can be described as an unusually difficult event, any GSAR member can request support by calling the emergency coordination centre (ECC). Our CISM team then provides either one-on-one or group support.

Resource and Referral: Much like physical first aid, sometimes the next level of care is required to prevent further injury. Our CISM peers are able to provide assistance with getting GSAR volunteers connected to additional supports, where appropriate.

A peer-based program is a program that is developed and implemented by individuals who have the same or similar lived experiences as the individuals they are serving



THE FUTURE OF GSAR IN B.C.



GSAR incidents projected to break 2,500 per year by 2037

Call volume will continue to increase

During the pandemic, incidents peaked at 1,850 and, while numbers are slowly returning to pre-pandemic levels, it is estimated that B.C. will reach 2,000 incidents per year by 2026 and 2,500 incidents per year by 2037.

In order to sustain the professional services that GSAR members provide and respond to an increase in callouts, it will be increasingly important to employ new technologies to enhance efficiency.

Use of new technology

Technology is evolving quickly and it is critically important that GSAR evolve with it. Outdoor enthusiasts are increasingly adopting technology into their recreational lifestyles – from satellite phones and personal locator beacons to SOS and crash detection cellphone features.

Apple's SOS system has already been used multiple times in B.C. and, recently, Rogers announced a partnership with StarLink to bring satellite phone coverage to Canada. As technology improves, searchers will soon be able to locate a subject with a phone, dramatically decreasing search time and potentially increasing the number of lives saved.

The implementation of electric bikes is also becoming widespread. E-bikes allow searchers to get to the subject quicker and with less effort. With batteries lasting a long time, e-bikes can be deployed immediately which reduces the need to wait for a helicopter. This is also a more environmentally-friendly approach to GSAR.

Other technologies include:

- The use of video scanning software taken from drones or aircraft to identify subjects on the ground, significantly reducing search time.
- A device that can be carried in an aircraft which acts like a mini cell tower and allows searchers to call cell phones that are out of cell range and locate subjects quicker.
- Night vision technology in helicopters can find subjects at night and allow for extraction of the subject by helicopter, saving lives and dramatically reducing suffering and search time.
- Some technology that is available to policing services such as lidar, side scanning sonar and ground penetrating radar may assist in cold cases or underwater recoveries.

Like the rest of Canada, B.C. and GSAR are feeling the impacts of climate change and, even here, technology can assist. GSAR groups are frequently called upon to assist communities with civil emergencies to deliver evacuation notices and alerts and to perform rescues such as those that happened during the November 2021 atmospheric storm event in the Fraser Valley.

Made in B.C. software is being used to track real time as evacuation notices are distributed, allowing emergency managers to see where GSAR members are and what areas have received important public safety information.

Advocating for GSAR improvements

Search and rescue volunteers are innovators and often the first to adopt technology to help improve search and rescue services. Over the decades, ground search and rescue in B.C. has been entirely built by the province's dedicated volunteers who continually look for ways to improve safety and efficiency.

Through BCSARA's Ground Search and Rescue Advisory Council, new technology is introduced and evaluated by council members who include:

- RCMP
- Municipal police
- BC Emergency Health Services
- Fire rescue

Advisory council recommendations are then forwarded to EMCR for approval into regular use by GSAR.

SUPPORT OUR SKILLED PROFESSIONALS



How is GSAR in B.C. funded

Through a contribution agreement with the Government of B.C., BCSARA receives almost \$6 million of which almost \$5 million is distributed to the 78 GSAR groups around the province. Groups are awarded funding based on factors including capabilities and the qualifications of individual members. Capabilities include:

- Canine search
- Tracking
- Avalanche rescue
- Rope rescue
- Mountain rescue
- Helicopter hover entry/exit
- Helicopter night vision (pilot stage)
- Helicopter long line rescue
- Swiftwater rescue
- Flat ice rescue
- Flat water rescue



Who pays for what

The Province pays 100% of expenses incurred during a search and rescue incident while funding provided to GSAR groups is dedicated for training, equipment and readiness. The \$5 million which groups receive covers about 40% of these costs. GSAR groups continue to fundraise for the remainder in a number of ways such as:

- Raising support from their local community or regional district
- Applying for various grants
- Donations from community events and local businesses
- Public donations

The remaining \$1 million from the contribution agreement is used to fund:

- Canada's largest peer critical incident stress management (CISM) program and the search and rescue prevention program known as BC AdventureSmart
- Directors and officers' liability insurance as well as accidental death and dismemberment insurance for all GSAR groups and their members
- A memorial program to recognize GSAR members lost during active duty
- Database management and administration
- A qualified staff of six



Flexible sponsorship options

Recognizing the different needs of our partners, BCSARA has created a flexible model that allows sponsors to choose a tier level that fits within their budget. Support may be in-kind products or services as well as a monetary donation (tax receipt provided).

BCSARA is open to and encourages multi-year, ongoing sponsorship arrangements.

- Pro deals > Sponsors and non-sponsors are welcome to offer a discount to GSAR members for merchandise or services.
- Silver tier > \$5,000 to \$15,000
- Gold tier > \$15,000 to \$25,000
- Platinum tier > \$25,000 and beyond

Each tier receives a specific level of recognition and promotion to our GSAR groups including but not limited to:

- Social media posts
- Member's newsletter posts
- Guest speaker opportunities
- Logo use authorization
- Sponsor logo placement
- Story page



Diversified funding

As a small not-for-profit organization, it's important that BCSARA diversify its revenue streams and not rely solely on government funding. In partnership with the Victoria Foundation, BCSARA has set up the BC Search and Rescue Association Fund.

It is hoped that, over the coming years, this fund will grow to assist BCSARA in diversifying its funding, allowing BCSARA to cover its administrative costs and direct more funds to the GSAR groups. With a recent donation from Rogers for \$1 million over five years, Rogers opted to place this donation with the Victoria Foundation.

If you wish to support our efforts, please go to www.bcsara.com/donate to see all the options available to you—any donation amount is greatly appreciated.

BCSARA is the only search and rescue association in Canada to successfully secure ongoing government funding to support search and rescue readiness

OUR ORIGIN STORY



Many SAR groups pre-existed BCSARA such as Comox Valley SAR (pictured here) which is celebrating its 50th anniversary

Twenty years ago

In 2022, BCSARA quietly celebrated its 20th anniversary. Although it became a society in 2002, more than a decade earlier, in 1990, the first provincial SAR advisory committee had already been established, based on a police services report recommendation.

Comprised of volunteers, the provincial SAR advisory committee worked hard to ensure that GSAR in B.C. was well-represented and that effort continued once BCSARA was formed.

Today, BCSARA is the only search and rescue association in Canada to successfully secure ongoing government funding to support search and rescue readiness. Over the years, many different funding models were tried before securing this sustainable funding.

BCSARA's vision is to develop and support the safest, most efficient ground search and rescue service for the citizens and visitors of B.C.

Beginning in 2019, BCSARA hired the first three of what would eventually become six permanent staff in 2022 with responsibilities ranging from finance, administration, communications, health and safety, training, prevention and public education and database administration (BCSARA maintains an extensive database for statistical analysis).

Our advocacy role

In 2007, BCSARA was asked by the Province and requesting agencies to take on the mandate of the former advisory council including advocacy on behalf of GSAR. Of all the work we do, we consider advocacy for GSAR groups to be one of our most important roles.

Our mission has always been to represent the professional ground search and rescue community by providing advocacy, access to information, CISM support, funding and health and safety support as well as public education and prevention programming.

Through our new advisory council, we provide a process by which groups can be heard and bring forward their ideas. The council then reviews and evaluates all requests for GSAR improvements and makes recommendations to EMCR for follow-up and approval into use.

Our governance model

BCSARA is governed by 16 elected board members:

- Four officers (president, vice-president, treasurer and secretary)
- 12 regional directors

In addition, there are four joint committees with members from both BCSARA and the Province:

- Partnership committee (two assistant deputy ministers and two board members)
- Management committee (two BCSARA staff, two EMCR staff)
- Search and rescue joint health and safety committee (BCSARA board member and EMCR co-chair)
- Search and rescue joint training committee (BCSARA board member and EMCR co-chair)

2010

Alternative funding proposed to the B.C. provincial government

2015

Alternative funding updated

2016

2-year \$10 million grant provided by the Province

2017

1-year \$5 million grant provided by the Province

2019

Three-year \$18 million grant provided by the Province

2022

\$6 million sustainable GSAR funding included in annual provincial budget

WITH OUR THANKS



President's Message

The ground search and rescue (GSAR) program in British Columbia is arguably the finest volunteer-based program in the world. With members dedicating more than 400,000 hours annually to response, training, administration and fundraising, the incredible dedication and commitment from these groups is truly a marvel.

I am humbled every time I get the opportunity to represent the GSAR volunteers and the BC AdventureSmart and CISM programs. As diverse a province and people as B.C. is, all of you make the world, the country, the province, and each of your communities, a much better place because of everything you do.

As GSAR members (and the BC AdventureSmart and CISM programs) deal with increasing demands, this means time

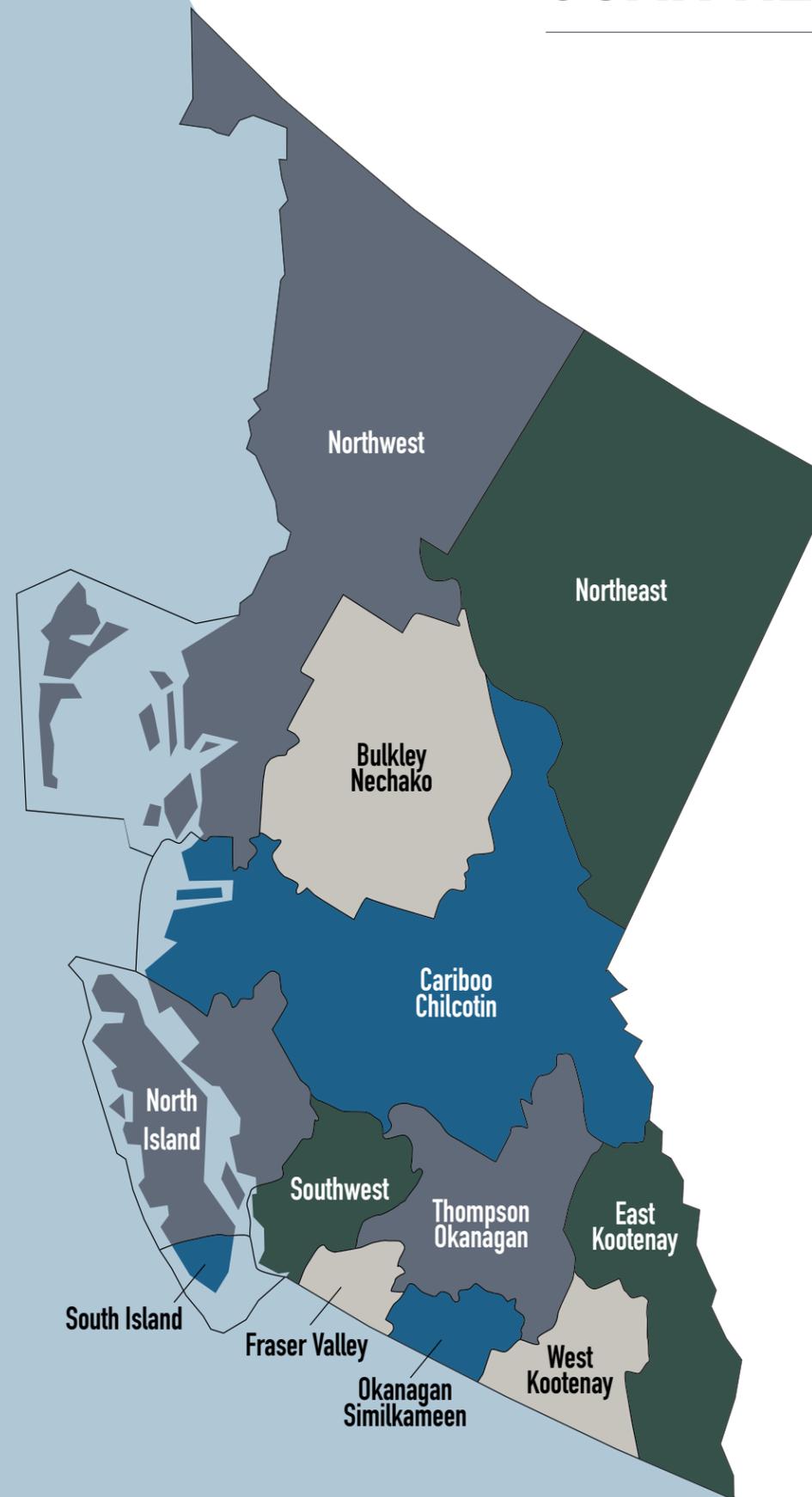
spent away from family and friends, especially on weekends, to ensure that others make it home safely. It means missed BBQs, trips to the beach and family reunions to, instead, trek through deep forests or rocky slopes looking for a lost hiker.

Become a difference-maker and help reduce the number and severity of calls, which, in turn, reduces the number of GSAR callouts and requests to our CISM program. Let's allow the GSAR community to enjoy beautiful B.C. as well.

Again, to the GSAR community and their supporters, a heartfelt thank you for the talent, skills and commitment you bring to this role. And, to all who enjoy B.C., please do so safely and well-prepared!

Chris Mushumanski
President, BCSARA

GSAR REGIONS IN B.C.



Northwest Region

- Archipelago SAR
- Atlin SAR
- Kitimat SAR
- Prince Rupert SAR
- Stewart SAR
- Terrace SAR

Northeast Region

- Chetwynd SAR
- Fort Nelson SAR
- (Northern Rockies SAR)
- South Peace SAR
- North Peace SAR
- Tumbler Ridge SAR

Bulkley Nechako Region

- Bulkley Valley SAR
- Burns Lake SAR
- Fort St. James SAR
- Houston SAR
- Nechako Valley SAR

Cariboo Chilcotin Region

- Bella Coola Valley SAR
- Central Cariboo SAR
- Mackenzie SAR
- Prince George SAR
- Quesnel SAR
- Robson Valley SAR
- South Cariboo SAR
- West Chilcotin SAR

North Island Region

- Alberni Valley Rescue Squad
- Arrowsmith SAR
- Campbell River SAR
- Comox Valley SAR
- Nanaimo SAR
- Powell River SAR
- West Coast Inland SAR

South Island Region

- Cowichan SAR
- Juan de Fuca SAR
- Ladysmith SAR
- Metchosin SAR
- PEMO SAR
- Salt Spring SAR

Southwest Region

- Coquitlam SAR
- Lions Bay SAR
- North Shore SAR
- Pemberton SAR
- Squamish SAR
- Sunshine Coast SAR
- South Fraser SAR
- Whistler SAR

Fraser Valley Region

- Central Fraser Valley SAR
- Chilliwack SAR
- Hope SAR
- Kent Harrison SAR
- Mission SAR
- Ridge Meadows SAR

Thompson Okanagan Region

- Barriere SAR
- Kamloops SAR
- Logan Lake SAR
- Nicola Valley SAR
- Shuswap SAR
- Vernon SAR
- Wells Gray SAR

Okanagan Similkameen Region

- Central Okanagan SAR
- Oliver/Osoyoos SAR
- Penticton & District SAR
- Princeton SAR

West Kootenay Region

- Arrow Lakes SAR
- Castlegar SAR
- Creston SAR
- Grand Forks SAR
- Kaslo SAR
- Nelson SAR
- Rossland & District SAR
- South Columbia SAR

East Kootenay Region

- Columbia Valley SAR
- Cranbrook SAR
- Elkford SAR
- Golden & District SAR
- Kimberley SAR
- Revelstoke SAR
- Sparwood SAR
- Fernie SAR



Fort Nelson GSAR



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