

BACKCOUNTRY SEARCH AND RESCUE

History and Updates

SB21-245 and BSAR Legislative Study

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1. Backcountry Search and Rescue- History and Background
2. Senate Bill 21-245
3. BSAR Legislative Report and Recommendations



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Backcountry Search and Rescue - Colorado's Structure

- Organized Search and Rescue in Colorado started with the creation of Rocky Mountain Rescue Group (RMRG) in Boulder in '47. RMRG covered the entire state until the creation of Arapahoe Rescue Patrol in '57 and Alpine Rescue Team in '59. Now there are roughly 50 BSAR teams.
- County sheriffs have a statutory responsibility to coordinate search and rescue.
- The varying geography, resources, and capacity of each county and sheriff's office are factors in the availability and acumen of search and rescue resources.
- There are roughly 2800 volunteers on 50 BSAR teams all are oncall 24/7/365.
- And these numbers do not include efforts by Sheriffs, CPW, Nat'l Parks, USFS, etc



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Just to name a few...



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Colorado Search and Rescue Association (CSAR)

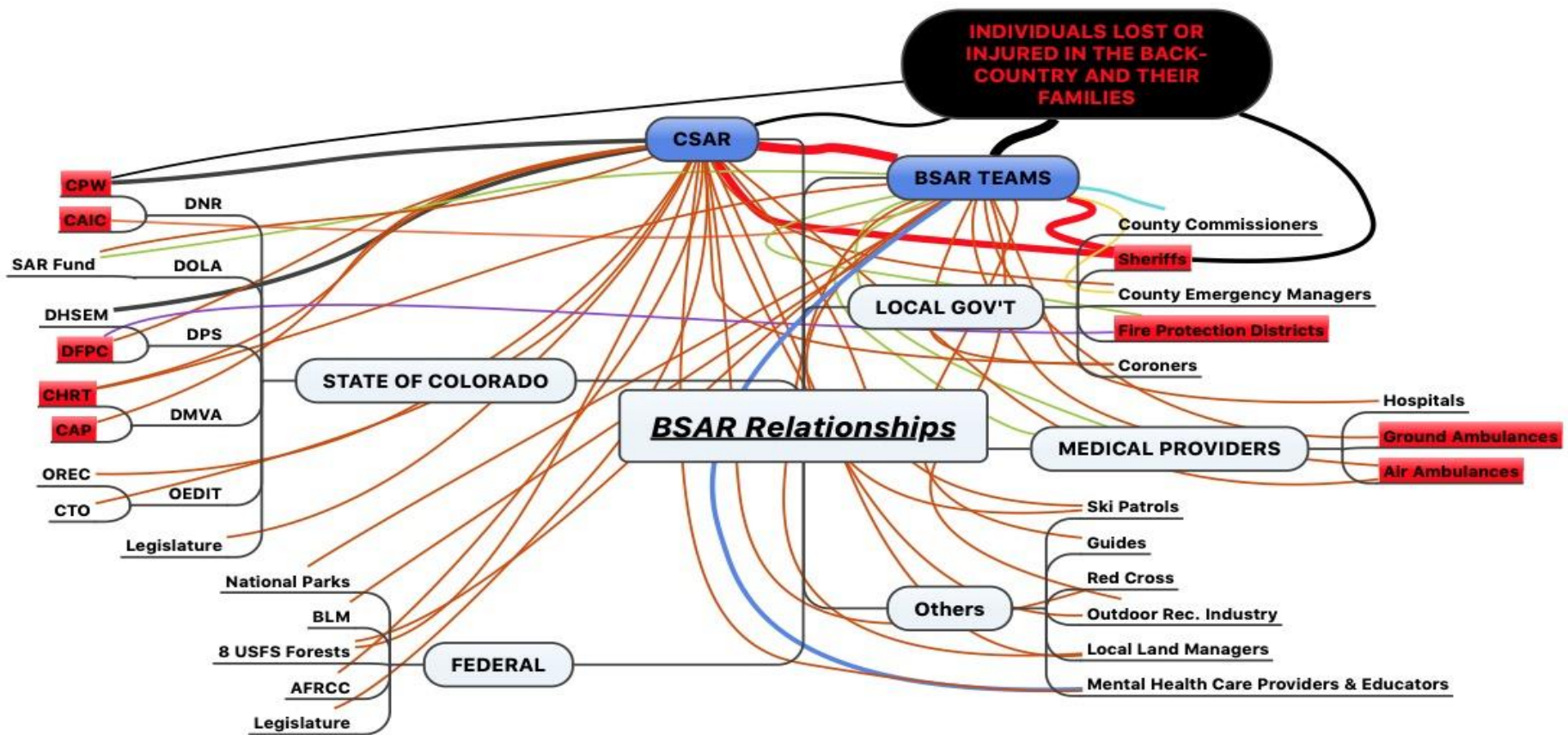
In 1960 RMRG held the first Rescue and Disaster Control Conference. This has evolved into CSAR and Colorado Dept. of Homeland Security and Emergency Management.

CSAR Provides:

- Statewide BSAR trainings for responders
- Statewide BSAR resources dispatching and logistics when requested by sheriffs or national parks
- Public Outdoor Safety Education - now in collaboration with CPW and the CO Tourism Office
- Advocacy at local, state and national levels
- Assistance to BSAR teams and sheriffs running teams
- A forum for collaboration



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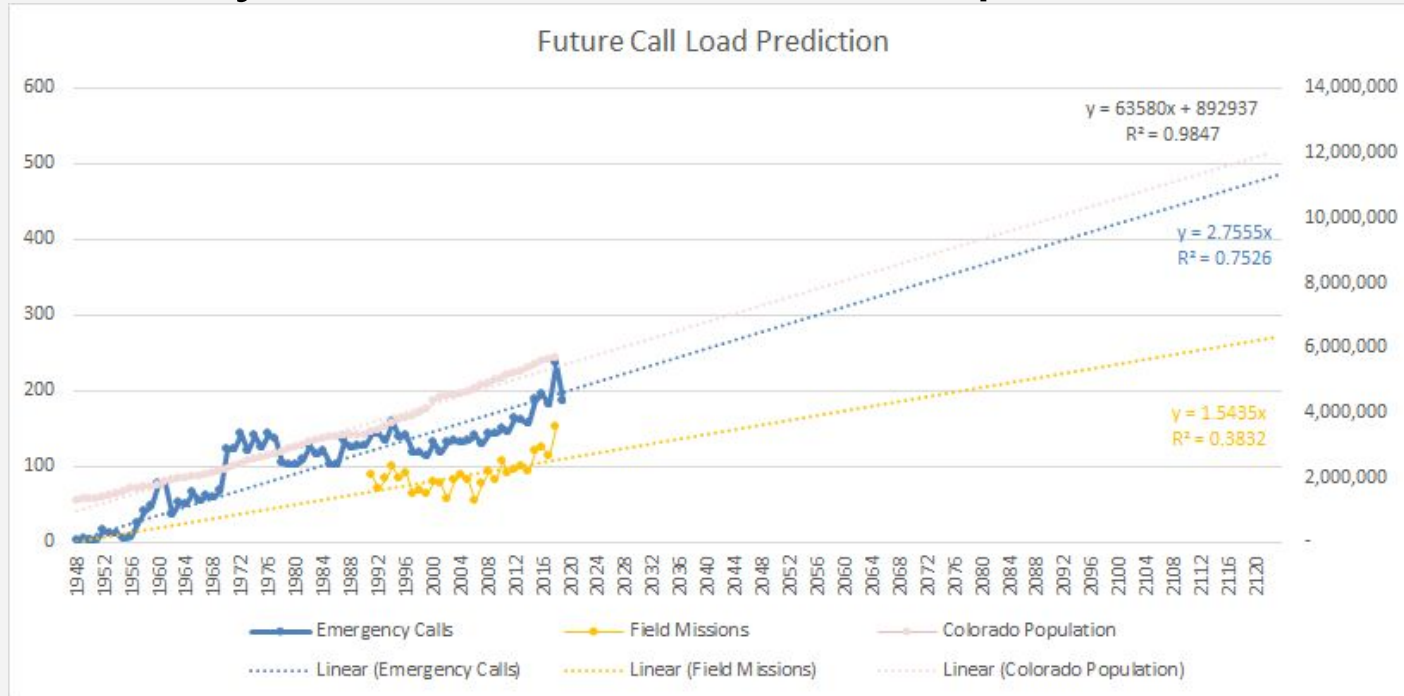
SEARCH AND RESCUE FUNDING

- The non-profits primarily do fundraising locally
- Some receive funding from their local sheriff's offices
- Most volunteers personally fund equipment, logistical needs (gas, training, equipment, etc)



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Rocky Mountain Rescue Group : Call Data



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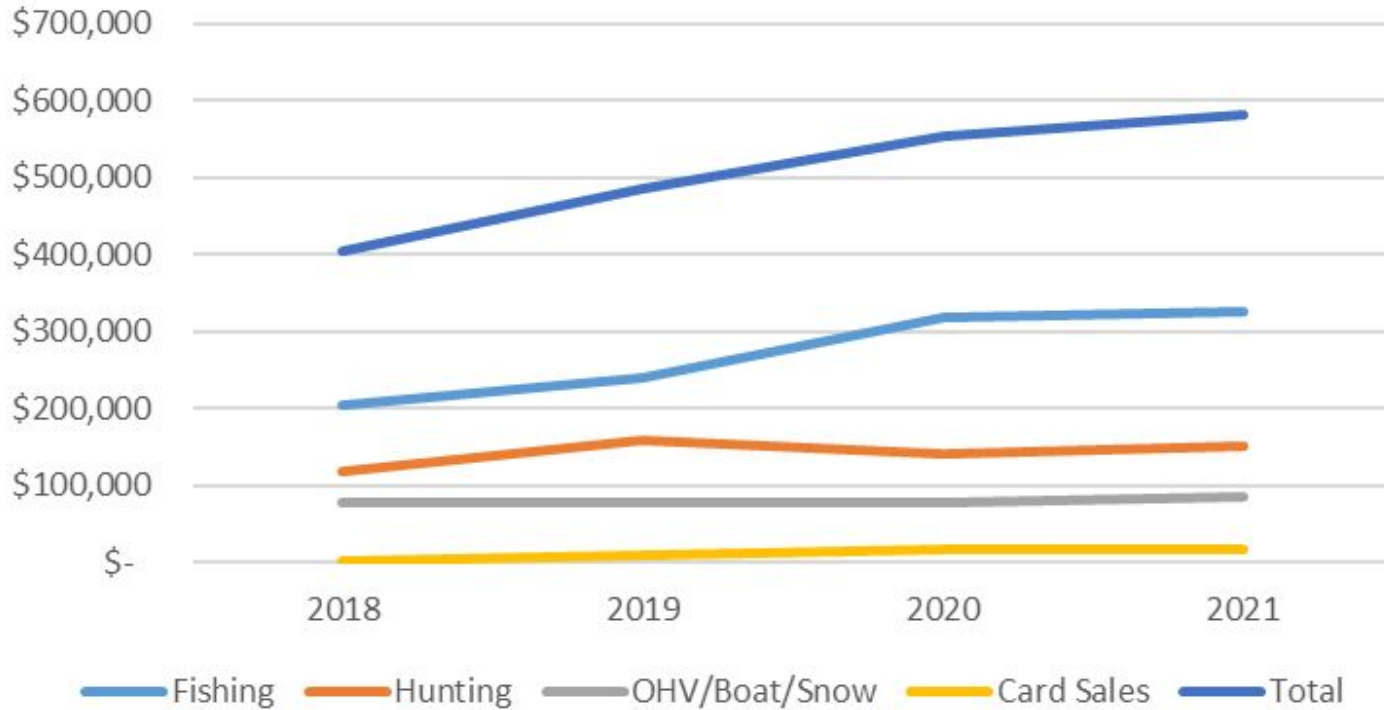
COLORADO SEARCH AND RESCUE FUND

- Colorado Search and Rescue Fund- Created in 1987 per C.R.S. 33-1-112.5
 - CPW generated funding
 - \$.25 fee attached to every hunting/fishing license and OHV/Snowmobile/Boat Registration
 - Approximately \$580,000 in 2021
 - Colorado Outdoor Recreation Search and Rescue (CORSAR) Card
 - Accounted for ~\$105,000 in FY 20-21
- Maintained and dispersed by the Dept. of Local Affairs (DOLA)



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SAR Fund Revenue from CPW



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SEARCH AND RESCUE

- Teams have generally made things work between governmental agencies, volunteers groups and an increasing clientele
- CSAR is the umbrella entity, helping coordinate and facilitate SAR groups across Colorado.
- During responses, CSAR operates pursuant to a sheriff's authority or an MOU with DHSEM
- Funding, resources, equipment- and most importantly- volunteer support is badly in need of help in some areas



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2021 Brought Multiple Changes and Advancements for Colorado Search and Rescue Support

SB 21-249; Keep Colorado Wild Act

- Hopefully generating \$2.5M/yr. for SAR starting in 2024

HB 21-1326; Section 3

- Transfers \$2.25 million to DOLA to “support backcountry search and rescue efforts”

SB 21-245; Backcountry Search and Rescue

- Legislatively mandated BSAR study to be conducted by DNR/CPW and allocated ~\$240,000 for the project



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HB 21-1326; Section 3

- **\$2.25 Million Available for BSAR grant funding over four phases**
 - Intended as a funding stop gap until KCW funding is flowing
 - Phase 1- \$600,000 awarded; \$2.6 million in requested funding
 - Phase 2- Opens in May 2022
 - These requests reflected needs in equipment (vehicles specifically), training and services (capacity building at CSAR)



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Backcountry Search and Rescue; SB 21-245

CRS 33-1-102. Definitions

(1.3) "BACKCOUNTRY SEARCH AND RESCUE" MEANS THE UTILIZATION, TRAINING, AND SUPPORT OF RESPONDERS, WITH THEIR SPECIALIZED EQUIPMENT, COORDINATED BY A SHERIFF TO PROVIDE THE SERVICES DESCRIBED IN THIS SUBSECTION (1.3) DURING EMERGENCIES OR DISASTERS IN FORESTS, DESERTS, MOUNTAINS, CANYONS, CAVES, WATERS, PARKS, PLAINS, AND, AT TIMES, IN MORE POPULATED AREAS. RESPONDERS INCLUDE MEMBERS OF VOLUNTEER TEAMS THAT WORK ALONGSIDE FIRE, LAW ENFORCEMENT, EMERGENCY MEDICAL PERSONNEL, THE COLORADO NATIONAL GUARD, AND OTHER GOVERNMENT EMPLOYEES IN DISASTERS OR EMERGENCIES...



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Backcountry Search and Rescue; SB 21-245

The bill outlined the following 10 study points:

1. How to improve and develop a sustainable structure for coordination...
2. The availability and adequacy of workers compensation
3. The availability and adequacy of retirement benefits
4. Compensation and reimbursement for volunteers
5. The availability of necessary equipment
6. The need for funding to obtain, maintain and replace equipment and operate BSAR teams
7. **The physical and psychological impacts on BSAR volunteers and the availability and adequacy of support and services**
8. Issues related to governmental immunity
9. Training needs for BSAR volunteers
10. The need for public outdoor safety education



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Backcountry Search and Rescue; SB 21-245

To Fulfill the Requirements in 245, CPW engaged in a two pronged approach:

1. Contracted with CU Anschutz to study item 7: Physical and Psychological impacts on BSAR volunteers, led by:
 - **Laura McGladrey: PMHNP, FNP, MSN, RN, FAWM** and Senior Instructor of Clinical Teaching
 - **Paul Cook, PhD:** Professor Chair: Behavioral, Family, & Population Health Division
2. Hire a three person team to coordinate, research and prepare the rest of the study requirements and author the SB21-245 BSAR study report:
 - **Alex Alma:** Helped develop COTREX, Board Member of VOC
 - **Dale Atkins:** Lifelong BSAR volunteer, former CIAC employee
 - **Michael McIntosh:** Retired Weld County Sheriff, consultant w/ DougCo Sheriff's Office



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Backcountry Search and Rescue; SB 21-245

BSAR Study Process

1. Survey regarding “who are BSAR volunteers?”
2. Interview volunteers, agencies and experts to draw some trends and gaps
3. Hosted a BSAR summit in October 2021
4. Research several of the mandates listed in SB21-245
5. Synthesize and formulate the report and recommendations



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Backcountry Search and Rescue Study Report

FOR IMMEDIATE RELEASE



Bridget O'Rourke Kochel
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Colorado Parks and Wildlife releases Backcountry Search and Rescue Study to strengthen rescue operations in Colorado



**RELEASED
JANUARY 17, 2022**

Backcountry Search and Rescue Study

Senate Bill 21-245 (C.R.S. §33-10-116)



COLORADO
Parks and Wildlife
Department of Natural Resources



Photo credit: Arapahoe Rescue Patrol

<https://cpw.state.co.us/aboutus/Pages/News-Release-Details.aspx?NewsID=8057>



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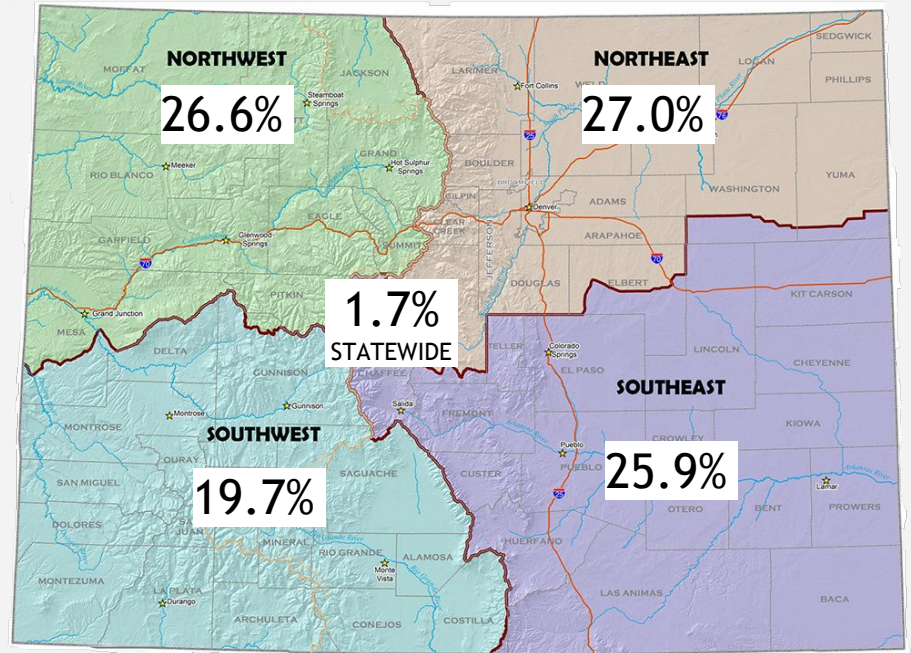
Surveys

- BSAR Volunteers (657)
- County Sheriffs' Offices (41)

Interviews (35+)

Research

BSAR Workgroup



BSAR Volunteer Survey Response Distribution



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Table 1 - Survey Demographic Summary

BSAR Volunteers - Leaders	Demographics	BSAR Volunteers - Regulars
50 (50)	Age mean (median)	46 (45)
83.5% 15.7% 0.8%	Gender Man Woman Other	68.3% 30.4% 1.3%
93.8% 0.4% 5.8%	Race White African Am. Other	94.5% 0.2% 5.2%
14.5 (11)	Years of Service mean (median)	7.7 (4)
76.2%	Education Bachelor's or higher	75.8%
249	Total Responses	402



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Backcountry Search and Rescue; SB 21-245

Notes from the BSAR Study regarding volunteers

- Volunteers - Volunteers are the backbone of the entire BSAR system. Based on the best available data, the value of direct expenses and donated time by volunteers is estimated at \$21M annually.
- Our survey revealed that one in three (31%) members spends more than \$2000 per year, out of pocket on things such as gear, fuel, and training. This value is likely very underreported, as most teams don't have detailed ledgers of their personal BSAR spending. The mean value spent by all survey responses is \$1587.



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Backcountry Search and Rescue; SB 21-245

Table 5 - Individual Volunteer Expenses

BSAR Volunteers (Leaders) N=245	BSAR Costs	BSAR Volunteers (Regulars) N=406
87.9 (70)	Time: BSAR days per year – mean (<i>median</i>)	53.2 (40)
\$1907 (\$1000)	Money: dollars spent per year – mean (<i>median</i>)	\$1307 (\$750)
2130 (1000)	*Travel: Miles driven per year – mean (<i>median</i>)	1450 (500)

*For the survey, respondents were asked to include money spent on travel in the “money” column



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BSAR Legislative Report and Recommendations

1. Coordination Structure*

“Don't change much right now as we have some of the best BSAR available in the world.”
-BSAR Volunteer

Top Recommendations

- **Strategically increase the use of helicopters** - BSAR leaders should consider the value and cost to have a helicopter dedicated to BSAR needs, and have a conclusion by no later than December 1, 2022.
- **Improve field communications** - Have a paid staff person collect additional information on specific radio and satellite communication needs by December 1, 2022.



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BSAR Legislative Report and Recommendations

2. Worker's Compensation

Top Recommendation

- **Pursue a single coverage option:** CSAR, the County Sheriffs of Colorado (CSOC), and the state should approach Pinnacol Assurance and County Technical Services, Inc. (CTSI) to discuss what a single coverage option could look like for BSAR teams and have a conclusion no later than December 1, 2022.

3. Retirement

No Action



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BSAR Legislative Report and Recommendations

4. Compensation and Reimbursement

*“Find funding to offset volunteer costs so volunteering just becomes about time”
-BSAR volunteer*

Top Recommendations

- **Retain the gear reimbursement aspects of the Search and Rescue (SAR) Fund** - The current model that the SAR Fund has for reimbursing personal gear damage and loss works reasonably well.
- **Offer mileage reimbursement or a stipend** - Consider giving volunteers mileage reimbursement or a stipend, and discuss implementation options with BSAR leaders. Putting \$1 Million to this use would cover approximately 40% of volunteers' personal mileage costs per year.



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BSAR Legislative Report and Recommendations

5. Equipment

Table 6 - Do you feel that your BSAR team has the necessary equipment to complete its BSAR mission?

	Small Teams	Large Teams
Less than enough	46%	41%
About right	50%	47%
More than enough	4%	12%

Top Recommendation

- **Retain some team equipment purchasing aspects of the SAR Fund -** Allowing equipment purchases is an important use of the SAR fund for some teams, especially those that face local fundraising and donation challenges.



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BSAR Legislative Report and Recommendations

6. Funding

Table 4 - SAR Fund Revenue and Incident Activity Comparison

SAR Fund Revenue Sources State Fiscal Year 20-21			BSAR Incidents by Activity Calendar Year 2020	
Funding Source	Revenue Totals*	Revenue %	Rec Activities Prompting SAR	% of Total Incidents
Fishing Licenses	\$325,561	49%	Hiker/Climber	55%
Hunting Licenses	\$150,914	23%	Biker/Skier	14%
CORSAR Card Sales	\$105,027	16%	Hunter/Fisherman	6%
Off-Highway Vehicles, Boats, Snowmobiles	\$85,842	13%	Snowmobile	4%
			Off-Highway Vehicles/Boating	9%
			Other (Aircraft, horseback, caving, kite-boarding)	12%

*These totals do not account for SAR Fund staff and administrative costs



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BSAR Legislative Report and Recommendations

6. Funding

“If the state [tourism office] keeps up the outdoor rec focus in its marketing, they need to provide adequate education campaigns/funding to match the amount of outdoor rec they promote.”

-BSAR volunteer

Top Recommendations

- **Move the SAR Fund to Colorado Parks and Wildlife (CPW)** - The study team recommends that CPW administer the SAR Fund going forward.
- **Seek additional state funding** - In order to adequately fund key recommendations in this report, additional state funding should be identified to support BSAR teams.
- **Continue engaging other partners** - Many who benefit from BSAR, such as the outdoor recreation industry and many backcountry users, are not paying in to support BSAR teams and volunteers.
- **Hire a Development Manager** - CSAR should hire a Development Manager to map out funding strategies such as corporate fundraising, membership giving programs, and grant assistance to BSAR teams.



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BSAR Legislative Report and Recommendations

7. Physical and Psychological Support

“[We need] the ability to support our team members with mental and physical care. I worry about burn out.”

-BSAR volunteer

Top Recommendations:

- **Plan for needed mental health services and incident support practices** with input from all stakeholders,
- **Train BSAR professionals** through continued prevention education on awareness, mitigation, and critical incident support, e.g. using the Responder Alliance curriculum. It would take an estimated \$250K per year to train one-third of the BSAR volunteers.
- **Coordinate clinical services** from community mental health providers who could be contracted and trained to address the unique mental health needs of BSAR professionals through a “centralized coordinating center”, such as the successful hub-and-spoke program in SB 19-001 at the University of Colorado. This would cost approximately \$350-400K per year, including the cost of the coordinating center, peer support coordination and allocated funding for utilization of local services.



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BSAR Legislative Report and Recommendations

8. Governmental Immunity

Top Recommendation

- **Improve immunity protections through legislation**, such as expanding and explicitly stating that BSAR volunteers and their affiliated organizations (teams) are included in the protections of C.R.S. §13-21-113.7.

9. Training

“Teams need to meet basic requirements: Data collected, minimum skills (cpr, bleeding control, ics, etc.) and the skills are current. Raise the professionalism of SAR in Colorado. Create statewide speciality teams that meet certain requirements. Provide consistent services.”
-BSAR volunteer

Top Recommendation

- **Host a BSAR Credentialing/Training Summit** - BSAR leaders should convene to discuss the potential for a new credentialing/training program for Colorado BSAR by no later than December 1, 2022.



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BSAR Legislative Report and Recommendations

10. Public Outdoor Safety Education

Current education for backcountry users “...doesn't identify the real risks of what they are undertaking. Colorado makes high risk adventures seem like carnival rides.”

-BSAR volunteer

Top Recommendations

- **Develop public-facing decision-making aids** - The state could work with CSAR to develop an online guide/aid, similar to AdventureSmart, that will give detailed information on how to make smarter backcountry decisions.
- **Develop plug-n-play marketing toolkits** - The state could fund or provide staff to create a free statewide toolbox of premade professional Preventative Search and Rescue (PSAR) education materials, with messaging, graphics, and videos that are applicable to anywhere in the state.



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BSAR Legislative Report and Recommendations

Additional Study Recommendations- outside of SB21-245

1. **Provide centralized administrative support** - Leadership from BSAR partners (CSAR, CSOC, and relevant state agencies) should convene to identify which agency or group is best to provide support in key planning and administrative areas for BSAR teams. This should be done by no later than December 1, 2022.
2. **Establish a program coordinator** - Find a way to pay for at least one full-time employee either at CSAR or at a state agency to coordinate and support these volunteer positions.
3. **Host a BSAR Data Summit** - BSAR partners should host a summit to discuss which data is most important to collect, how to define each data item, and what format each should be in. This should be completed by no later than December 1, 2022.
4. **Hire a Data Analyst** - The state should fund a BSAR data analyst to improve data accountability, consistency, and analysis of trends to better identify potential system improvements and more effective prevention measures, such as site-specific signage.
5. Several others (survivor benefits, cell phone reimbursement for coordinators, etc)



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Next Steps...

- Awaiting a potential BSAR bill in this legislative session to address some of the recommendations outlined in the BSAR study
- Continued Psychological/Mental health surveys and training with remaining funding on the contract with CU Anschutz
- Developing new avenues for funding and support outside of traditional means- Perhaps a public/private partnership with the outdoor recreation community?
- Brainstorming how all the moving parts can work more efficiently and effectively in the next several years as details and processes get ironed out.



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Questions?



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