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Into the Wild: Can Regulation of Wilderness Recreational Activities Improve Safety and Reduce Search and Rescue Incidents?

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INTO THE WILD:
CAN REGULATION OF WILDERNESS
RECREATIONAL ACTIVITIES IMPROVE
SAFETY AND REDUCE SEARCH
AND RESCUE INCIDENTS?

ANNE VILLELLA* & T.K. KEEN**

ABSTRACT

National media coverage of high risk wilderness search and rescue missions have sparked rigorous debate about whether those rescued should pay the cost of search and rescue efforts and whether public bodies should require climbers and hikers – or others participating in wilderness recreational activities – to participate in mandatory wilderness education, or carry equipment, such as locator beacons.

The majority of wilderness search and rescue incidents result from poor judgment, lack of physical and mental preparation, or technical knowledge and skills. These failings on the part of recreationalists place both the recreationalist and search and rescue workers at risk. In light of those considerations, this Article looks at existing wilderness regulations intended to improve safety and their effectiveness.

The authors conclude that regulation of wilderness recreation must focus primarily on educating recreationalists rather than mandating the use of particular equipment or imposing liability on recreationalists for search and rescue costs.

In addition, the authors conclude that public bodies must provide reliable and adequate funding for search and rescue operations, equipment, and training. As more people spend time in our nation's wilderness areas, the cost and number of search and rescue incidents continue to climb. Accordingly, the authors recommend that public bodies implement voluntary search and rescue card programs that provide funding specifically for search and rescue operations.

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I. INTRODUCTION

At 2:00 A.M. on December 11, 2009, from Timberline Lodge on the south side of Oregon's Mount Hood, three young but experienced climbers began their ascent of Mount Hood. Before departing, the three obtained a climbing permit at the self-service station at Timberline Lodge and filled out a form that indicated they would return by late afternoon. The form listed their equipment – including ropes, harnesses, crampons, and a cellular phone. They had let loved ones know the route they intended to take and the time they expected to return. But they neither returned as expected, nor contacted their loved ones.

The next day, the local sheriff's department, aided by volunteers from Portland Mountain Rescue, began its search for these three young climbers. Rescuers found and recovered the body of Luke Gullberg, the most experienced of the three. However, rescuers saw no sign of the other two, and for the next several days, amid national media coverage and challenging weather, continued to search for Anthony Vietti and Katie Nolan with no success. Seven months later, rescuers found the bodies of Vietti and Nolan, still roped together in an ice gully 9,500 feet above Timberline Lodge.

Rescuers, family, and friends will never know exactly what transpired on the mountain that day in December 2009; but, from all the evidence including photographs found on the climbers' cameras, and the medical examiner's report, experts have pieced together their tragic story. Most likely, they were descending the mountain, having abandoned their summit attempt when a snow avalanche caused all three to fall between 300 and 500 vertical feet. Vietti and Nolan fell to the foot of the ice gully and were covered with snow, rendered unconscious, and died of hypothermia with otherwise non-life threatening injuries. They were only two feet apart and still roped together when rescuers found their bodies several months later.

Gullberg fell farther out and likely lay unconscious for some time, becoming hypothermic. Upon regaining consciousness and unable to see his climbing companions, he untied his rope, left his pack, and made his way perhaps 1,000 feet down the glacier snow field before he collapsed and succumbed to hypothermia.¹

1. See Robert Spiek, *Mount Hood Climbers Died Attempting Reid Headwall Route in December, 2009*, TRADITIONAL MOUNTAINEERING (Dec. 14, 2009), http://www.traditionalmountaineering.org/News_Hood_ReidHeadwall_ThreeDie.htm. The story of these three climbers personally impacted the life of one of the authors of this Article and became the impetus for this Article.

National media coverage of the Gullberg, Vietti, and Nolan tragedy, like other tragedies before it, sparked rigorous debate about who should pay the cost of search and rescue (“SAR”) efforts² and whether public bodies should require climbers, or others participating in wilderness recreational activities, to participate in mandatory wilderness education or carry locator beacons that would assist searchers in locating those who are lost or injured in the wilderness.³

Despite the debate about SAR costs and safety regulation, wilderness recreation – defined broadly here as encompassing activities carried out for enjoyment on federal, state, or locally owned land where “earth and its community of life are untrammled by man, where man himself is a visitor”⁴ – has remained relatively unregulated.⁵ Traditionally, those who participate in wilderness recreation have borne the risk associated with those activities and have been responsible for their own safety. As a country, we value the wilderness for the chance to get away from the structured and busy

2. See David A. Graham, *A Mountain of Bills: Who Should Have to Pay to Rescue Stranded Climbers?*, NEWSWEEK, Dec. 19, 2009, available at <http://www.newsweek.com/who-should-pay-rescue-stranded-climbers-75845> (revealing that National Park Service spent nearly \$5 million on search and rescue in 2008); see also Letters to the Editor, *Guilt, Fear Drives Argument about Mount Hood Beacons*, OREGONIAN (Dec. 23, 2009, 4:00 AM), http://blog.oregonlive.com/myoregon/2009/12/guilt_fear_drives_argument_abo.html (“If beacons are to be mandatory, the mandate should apply to all users of the outdoors, not just 3 percent of those who get into trouble. Why should a climber have to take a beacon while a hunter or ATV rider is allowed to risk his life with no such protection?”); Allan Brattman, *Objectivity? Reporter Feels Families’ Pain in Mount Hood Tragedy*, OREGONIAN (Dec. 19, 2009, 7:28 AM), http://www.oregonlive.com/opinion/index.ssf/2009/12/objectivity_reporter_feels_fam.html (noting that “[h]ow people approached this event may boil down to the values, experiences and emotional baggage they brought along”).

3. See Steve Duin, *Logic on Mountain Climbing Locator Beacons Is Dubious*, OREGONIAN (Dec. 16, 2009, 9:20 PM), http://www.oregonlive.com/news/oregonian/steve_duin/index.ssf/2009/12/logic_on_mountain_climbing_loc.html (revealing that “Oregon has yet to get deathly serious about locator beacons. Contrary to what might seem common sense”).

4. The definition adopted here is taken in part from the definition of “wilderness” in the Wilderness Act of 1964. See Wilderness Act of 1964, Pub. L. No. 88-577, 78 Stat. 890 (codified as amended at 16 U.S.C. §§ 1131-1136 (2006)). As used throughout this Article, “wilderness” encompasses any area that is untrammled by man, not just those areas designated as wilderness under state, local, or federal law.

5. While federally recognized wilderness areas and park systems are highly regulated, few safety regulations govern the requirements for wilderness activities such as climbing and hiking. Those regulations that could be classified as safety regulations, such as camping and fire regulations, are beyond the scope of this Article. See, e.g., 36 C.F.R. § 2.13 (2011) (regulating building fires in national parks); 36 C.F.R. § 2.4 (2011) (regulation possession, carrying, and use of weapons, traps, and nets); 36 C.F.R. § 2.10 (2011) (regulating camping and food storage in designated camping areas).

lives we lead for the opportunity to be a part of the world, unchanged by man.⁶ Individuals venture into these wilderness areas to hike, climb, hunt, or engage in other activities that can only be experienced in the wild. Solitude, beauty, personal challenge, and physical and spiritual exhilaration rank high among the reasons folks seek wilderness recreation. But those who venture into the wilderness know, or should know, that these activities have inherent risks, including the risk of injury and death that can result from variations in terrain, falling snow, ice, and rock, severe weather, and, of course, the risk of simply getting lost. Thus, with these inherent risks, safety is a primary concern in all wilderness activities. Undoubtedly, there is not a solution that eliminates all risk of death or injury to those who enjoy the outdoors, but there are solutions that individuals and public bodies may choose in order to reduce the need for SAR and associated SAR costs.

Because of the inherent risks as well as poor judgment, lack of physical and mental preparation, or technical knowledge and skills, hundreds of individuals in the United States die or suffer severe injuries every year while participating in wilderness activities. In turn, SAR workers and volunteers who aid those lost or injured in the wilderness are placed at risk of injury or death, and public dollars typically fund those SAR efforts. When individuals exercise poor judgment, lack physical and mental preparation and technical knowledge, and fail to remain informed of weather conditions or exercise common sense, they place SAR workers needlessly at risk, forcing rescuers to race against the clock while attempting to persevere through unpredictable weather and challenging environments.

In fact, the vast majority of wilderness SAR incidents, whether those incidents involve climbers, hikers, hunters, or others, result from lack of preparedness and poor judgment by individual recrea-

6. Over the last 130 years, the wilderness and park systems in the United States have provided hundreds of millions of people the opportunity to enjoy the wilderness. Our national park system includes more than eighty-four million acres in all fifty states. See CHARLES R. "BUTCH" FARABEE, JR., *Forward to DEATH, DARING, AND DISASTER: SEARCH AND RESCUE IN OUR NATIONAL PARKS* (1998). However, Congress passed the Organic Act in 1916, which created both the national park system and the National Park Service (NPS). See National Park Service Organic Act, 16 U.S.C. § 1 (2006) (indicating authority for administering Organic Act). Under the Organic Act, the NPS is to manage the national parks "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner . . . as will leave them unimpaired for the enjoyment of future generations." *Id.* In addition, state, county, and city parks and wilderness reserves offer thousands of additional destinations that include backcountry areas.

tionalists.⁷ In response, over the past twenty years, some local and state governments have passed legislation that allows a public body to seek reimbursement for SAR costs.⁸ Public bodies also have imposed or considered imposing equipment requirements on recreationalists such as mandating life jackets for boating activities,⁹ or carrying cell phones or other signaling devices.¹⁰ In addition, the federal government has enacted preventive SAR (“PSAR”) legislation and imposed regulations recommending, and in some instances, mandating, that recreationalists watch educational training programs live, or by video, before engaging in wilderness or “backcountry” activities at certain national parks.¹¹

The question remains whether any of these regulatory actions achieve their safety goals of reducing injury or death or reducing the number of, and costs associated with, SAR incidents. This Article seeks to answer those questions and provide guidance for those public bodies contemplating safety regulation of wilderness activities.

7. See MOUNTAINEERING: THE FREEDOM OF THE HILLS 487 (Ronald C. Eng ed., 8th ed. Mountaineers Books 2009).

8. Many public bodies decline to pursue reimbursement for SAR costs on the advice of the SAR community. This is because a delay by a person in reporting the need for rescue actually increases the costs and dangers of the rescue for SAR team members. For a detailed discussion on how charge-for-rescue laws have limited effect and fail to provide funding, see *infra* notes 180-184 and accompanying text.

9. See 323 MASS. CODE REGS. 2.07 (2013) (mandating that kayakers and canoeists wear lifejackets in particular seasons); see also *Massachusetts Environmental Police Remind Canoeists and Kayakers of Lifejacket Regulations*, MASS. DEP’T OF ENERGY & ENV’T (Sept. 14, 2012), <http://www.mass.gov/eea/pr-2012/120914-life-jackets.html> (“Lifejacket wear throughout the year is smart boating, and a recommended standard practice by the Environmental Police, but not until September 15 does it become required for canoeists and kayakers due to dropping air and water temperatures.”).

10. See H.B. 2509, 74th Leg. Assemb., Reg. Sess. (Or. 2007) (H.B. 2509 would have required individuals or groups ascending above 10,000 feet on Mount Hood to carry at least one two-way, electronic communication device (e.g. radio or cell phone) in addition to “a global positioning system receiver, a personal locator beacon transmitter, a Mount Hood mountain locator unit, or another comparable device”).

11. These educational programs include, among many others, Mount McKinley in Alaska. See Bob Janiskee, *Climbing Is Capped at Mount McKinley and Climbers Are Left to Wonder What’s Next*, NAT’L PARKS TRAVELER (Dec. 2, 2008, 3:00 AM), <http://www.nationalparkstraveler.com/2008/12/climbing-capped-mount-mckinley-and-climbers-are-left-wonder-what-s-next> (explaining that NPS imposed annual cap of 1,500 Mount McKinley climbers per year because of crowding, lack of park resources, environmental issues, and safety concerns). In addition, when an individual or group submits a Backcountry Permit Request to Grand Canyon National Park, the park sends the permit holder a hiking video unless the permit holder indicates that he or she already has a copy of the video. See *Grand Canyon National Park Backcountry Permit Request Form*, U.S. NAT’L PARK SERV. (2013), available at <http://www.nps.gov/grca/planyourvisit/upload/permit-request.pdf>.

A historical perspective of wilderness recreation and SAR operations provides context for current regulatory trends and policies. Thus, this Article first looks at this rich history, focusing primarily on how SAR efforts have changed as more and more people seek to escape urban life to enjoy the wilderness. In addition, this Article looks at SAR operations, including the type of activities and other factors that give rise to SAR incidents and the nature and costs of SAR operations. This historical background sheds light on the specific concerns that have emerged in recent years around wilderness recreation and safety.

Against this backdrop, lawmakers can evaluate current regulations and, if necessary or desirable, craft new legislation that balances the interests of those who seek solitude with the interests of enhancing safety through technology, or other means, to reduce the number of SAR incidents. Accordingly, this Article reviews current and proposed regulations, including charge-for-rescue and other statutes, that lawmakers have promoted as primarily safety regulations aimed at saving lives and reducing the strain on scarce federal, state, and local financial resources.

Finally, this Article analyzes the effectiveness of various regulations and whether they have improved wilderness safety, reduced SAR incidents, or the strain on resources. The Article concludes that regulatory efforts, if any, to improve wilderness safety and the cost and number of SAR incidents should focus on prevention, such as developing wilderness education programs, and expending resources on SAR training and equipment. Focusing on these areas will directly address key concerns: reduced injury and death, fewer SAR incidents, and, ultimately, reduced strain on scarce public resources.

II. HISTORICAL BACKGROUND: WILDERNESS RECREATION AND SAR IN THE UNITED STATES

To enact effective laws or develop programs that improve wilderness safety, lawmakers first need a historical perspective on wilderness activities and SAR operations, as well as an understanding of the various circumstances that lead to wilderness SAR incidents and the cost of such SAR operations. Once lawmakers have a clear perspective on these issues, they can evaluate whether existing laws have effectively achieved the goals of improved safety, reduced costs, and, ultimately, discern whether additional regulation is necessary. This backdrop could shape the policies that will ultimately drive the regulation of wilderness activities and SAR operations.

A. History of SAR Operations

SAR operations have evolved dramatically since the frontier days. In the early days of the frontier, the operations involved informal individual efforts that relied upon happenstance and limited knowledge of terrain and circumstances to make rescue possible. Today, SAR operations are highly coordinated, technical, and advanced operations that involve coordinated local, state, and national humanitarian efforts.

In the early frontier days, those who ventured into the wilderness knew they did so at their own risk and typically prepared for the dangers they would encounter. Early travelers to the national parks, who were often affluent recreationalists, were not long removed from their life of frontier survival and knew that they had to rely on their own skill and good judgment as SAR assistance was minimal at best. “[N]o well-equipped rescue teams, government agencies . . . satellite-based radios . . . , or helicopters [were available] for quick evacuation” to provide a sure-fire rescue.¹²

Prior to the first formal SAR operations, there were, no doubt, countless efforts to aid fellow wilderness travelers who were lost, injured, or in other imminent distress. Those who embarked on rescue efforts did so without a legal obligation¹³ or any expectation of reimbursement of rescue expenses. They engaged in a humanitarian act. Indeed, the search for and rescue of those in peril has been, and remains, “among the most humanitarian of acts,” a belief that still permeates any conversation of SAR today.¹⁴

As outdoor activity changed from the frontier days of discovery to the more recreational activities seen today, the types, costs, and complexities of rescue have also changed. In the early years of transition from the frontier days to modern times, informal SAR teams formed when well-equipped locals, knowledgeable of the terrain and conditions, were called upon to assist those lost or in danger in the mountains or wilderness areas.¹⁵ Although military personnel and park rangers often helped coordinate SAR missions, it was not

12. See FARABEE, *supra* note 6, at 25.

13. American common law traditionally recognized no duty to rescue a person in distress. “The early common law was highly individualistic; it was feared that judicial intervention in social and economic affairs would sap men of their self-reliance” and so the common law rejected a legal duty to rescue others. See Jay Silver, *The Duty to Rescue: A Reexamination and Proposal*, 26 WM. & MARY L. REV. 423, 424 (1985).

14. *NASAR Position Statement Billing for Search and Rescue Operations*, NASAR (Apr. 2009), http://www.nasar.org/files/board_of_directors/positionpaper/No_Bill_for_SAR_Position_Statement_-_NASAR_4-2009.pdf.

15. DONALD C. COOPER, *FUNDAMENTALS OF SEARCH & RESCUE* xiv (2004).

until 1926 when a group of outdoor enthusiasts formed the first land-based SAR organization.¹⁶ That Oregon-based organization, the Crag Rats, formed as a volunteer mountain rescue and SAR organization. Initially made up of local businessmen, ranchers, and lumbermen, the Crag Rats remains the oldest mountain rescue organization in the country.¹⁷ Over the next several decades, hundreds of volunteer SAR groups formed across the states. These organizations, made up of skilled outdoor enthusiasts familiar with the local terrain and conditions saved thousands of lives, educated other volunteers, and performed an important public duty.

In the 1940s, the advent of World War II had a tremendous impact on the development of SAR in the United States. In 1941, after urging from the leaders of the National Ski Patrol and the National Ski Association, the United States established the first of America's Mountain Troops.¹⁸ Later that year, the War Department, with the aid of experienced mountaineers, designed and refined equipment used by mountaineers and SAR teams.¹⁹ In 1944, the War Department published the first field guide and handbook for SAR and climbing.²⁰

Over the next thirty years, in place of informal and local groups, state legislatures gradually began expressly designating agencies responsible to oversee SAR operations – which often required the efforts of both paid and volunteer rescuers. During this time, it became apparent to those involved with SAR efforts that a more coordinated effort would make SAR efforts more efficient, and that SAR workers and volunteers could use more sophisticated medical training.²¹ In 1970, a group of representatives from five states formed the National Association of Search and Rescue (“NASAR”), which became, and remains, an inter-agency liaison for dozens of SAR groups and agencies nationally.²² In addition, in 1973, the federal government created the Interagency Committee on Search and Rescue (“ICSAR”) to coordinate SAR at the federal level and implement the National Search and Rescue Plan.²³

Today, at the federal level, several agencies hold responsibility for SAR response. The National Search and Rescue Committee,

16. FARABEE, *supra* note 6, at 98.

17. *Id.*

18. *Id.* at 140.

19. *Id.*

20. *Id.* at 144.

21. *Id.* at 285–86.

22. FARABEE, *supra* note 6, at 285.

23. *Id.*

the interagency committee that oversees the National Search and Rescue Plan under the Homeland Security Department, oversees and coordinates SAR activities touching on federal lands. Under that plan, the United States Coast Guard (Coast Guard) oversees maritime SAR operations.²⁴ The National Park Service (“NPS”) provides civil SAR services on lands and waters administered by the NPS, assists national park and national monument visitors, and aids authorities in neighboring jurisdictions, including state, local, and tribal entities, with emergency response.²⁵ These SAR operations, including emergency medical aid, are conducted in a wide variety of environments such as remote, rural, and roadless areas; lakes, rivers and oceans; and deserts, mountains, and caves. These SAR operations often require extended response times and the use of specialized equipment.

For incidents primarily local or intrastate in character, state and local authorities retain SAR responsibilities within their boundaries.²⁶ These local authorities hold responsibility for land-based SAR operations and oversight usually falls on sheriff and fire departments or other state agencies, such as fish and wildlife departments.²⁷ Many local organizations also heavily rely upon volunteer groups such as the Crag Rats and Portland Mountain Rescue to supplement or lead SAR efforts in their jurisdictions.

As coordinated SAR operations have evolved, the result has been SAR operations at the local, state, and national level that blend expertise in SAR operations, more efficient response, and the ability to better address medical emergencies in the field.

B. Factors Leading to SAR Incidents

Formal creation of SAR organizations, advances in SAR training, and coordinated efforts have been a positive step in allowing public bodies to provide safe and effective rescues. However, despite these improvements and increased regulation, wilderness SAR

24. U.S. DEP’T. OF HOMELAND SEC., U.S. COAST GUARD, NATIONAL SEARCH AND RESCUE PLAN OF THE U.S. 5 (2007), *available at* [http://www.uscg.mil/hq/cg5/cg534/manuals/NatL_SAR_Plan\(2007\).pdf](http://www.uscg.mil/hq/cg5/cg534/manuals/NatL_SAR_Plan(2007).pdf) (last visited May 5, 2014) (hereinafter NAT’L SEARCH & RESCUE PLAN) (“The National Search and Rescue Plan of the United States coordinates search and rescue (SAR) services to meet domestic needs and international commitments, as well as assign SAR Coordinator responsibilities for the U.S. aeronautical and maritime SAR Regions.”).

25. *Id.* at 5-7.

26. *Id.* at 7.

27. *See id.* at 5. For an example of a state search and rescue plan, see WASHINGTON STATE CEMP, EMERGENCY SUPPORT FUNCTION 9 (2013), *available at* <http://www.emd.wa.gov/plans/documents/ESF9-SearchRescue-December2013.pdf>.

costs and incidents continue to increase nationally.²⁸ Wilderness SAR incidents arise for a variety of reasons and in a variety of settings, such as participants' lack of adequate preparation or unexpected weather changes. While the NPS and many states keep records of SAR activities, it is difficult to use those separate records to provide a thorough picture of SAR data nationally because metrics and forms of measurement vary by jurisdiction. Nonetheless, a review of available data provides some insight into the nature of, and factors leading to, SAR incidents.

The activities that lead to SAR incidents cut across all forms of recreational activities. However, data from federal and state public bodies indicate that hiking²⁹ and boating account for the greatest number of SAR incidents.³⁰ In the national parks, between 1992 and 2007, hiking accounted for 48% of SAR incidents and boating accounted for 21% of SAR incidents.³¹ In addition, of all SAR incidents that involved deaths, hiking was the most common cause at 22%; and, most SAR operations were commenced because a person was lost or did not return when expected.³² State SAR reports

28. See OFFICE OF EMERGENCY MGMT., OREGON SEARCH AND RESCUE ANNUAL REPORT (2012), available at http://www.oregon.gov/OMD/OEM/tech_resp/sar_docs/annual_sar_report_2012.pdf (hereinafter OREGON SAR 2012 REPORT) (indicating that SAR incidents increased 2% between 2011 and 2012); ME. ASS'N FOR SEARCH & RESCUE, MAINE WARDEN SERV. SEARCH & RESCUE SYNOPSIS (2012), available at http://emainehosting.com/masar/Warden_Service_SAR_Reports/2011-2012-Warden-Service-SAR-Report.pdf (reporting that SAR incidents increased 13% between 2011 and 2012). In 2008, the NPS conducted 3,481 missions at a cost of \$4.8 million. See Whitney Ward et al., *Economic Impacts of Search-and-Rescue Operations on Wilderness Management in the National Parks*, 28 PARK SCI. 3 (2012), [http://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience28\(3\)Winter2011-2012_103-105_Ward_et_al_2854.pdf](http://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience28(3)Winter2011-2012_103-105_Ward_et_al_2854.pdf). ("Each year the Park Service expends 50,000 to 100,000 personnel-hours responding to SAR incidents . . ."). In 2012, the NPS conducted fewer missions – 2,876 – but SAR costs rose to \$5.2 million. See NPT Staff, *National Park Service 2012 Search-&Rescue Caseload Reflects Many Ill-Prepared, Out-Of-Shape Visitors*, NAT'L PARK TRAVELER (July 4, 2013, 1:33 AM), <http://www.nationalparkstraveler.com/2013/07/national-park-services-2012-search-and-rescue-caseload-reflects-many-ill-prepared-out-shape-visitors23550>.

29. The International Search and Rescue Incident Database (ISRID), a database that includes SAR information from several countries and public bodies in the United States, shows that the greatest number of SAR incidents arise because hikers are lost or report late. See ROBERT J. KOESTER, LOST PERSON BEHAVIOR (2008).

30. See Travis W. Heggie & Michael E. Amundson, *Dead Man Walking: Search and Rescue in the U.S. National Parks*, 20 WILDERNESS & ENV. MED. 244, 248 (2009); Gretchen K. Ela, *Epidemiology of Wilderness Search & Rescue in New Hampshire, 1999–2001*, 15 WILDERNESS & ENV. MED. 16 (2004); see also, OFFICE OF EMERGENCY MGMT., OREGON SEARCH AND RESCUE ANNUAL REPORT (2010).

31. Heggie & Amundson, *supra* note 30, at 244.

32. Lloyd Athearn, *Climbing Rescues in America: Reality Does Not Support 'High-Risk, High-Cost' Perception*, AM. ALPINE CLUB (May 19, 2005), http://www.traditionalmountaineering.org/AAC_Rescues.pdf (stating day hiking in national parks in

closely track the federal data, as does data collected on the International Search and Rescue Incident Database.³³ This data can provide useful guidance to public bodies that are looking for statistics-driven reasoning to create efficiencies in SAR programs. Ideally, collecting data locally or regionally provides the best information because of differences in geography, terrain, weather, and activities available to recreationalists.

In addition to the activities that lead to SAR incidents, the circumstances that lead to SAR incidents range from unavoidable circumstances to reckless conduct engaged in by the recreationalist. While some incidents arise from unavoidable circumstances and deliberately illegal conduct, most incidents arise because of reckless, careless, unskilled, or uninformed actions.³⁴ Errors in judgment, fatigue, and poor physical condition account for most incidents in national parks.³⁵ Insufficient equipment, clothing, and training also serve as significant factors leading to SAR incidents.³⁶ Conversely, weather, equipment failure, and darkness account for only a small percentage of SAR incidents.³⁷

C. SAR Costs and Funding

Most SAR operations occur at the expense of public bodies and volunteer organizations that conduct those SAR operations, not those individuals who benefit, i.e., those who are rescued. Under the National SAR Plan, federal agencies may not delay responses to persons in danger or distress because of cost reimbursement delays; nor may agencies subsequently seek cost-recovery from persons assisted in SAR operations.³⁸ Similarly, most state and local agencies lack authority to seek cost-recovery from persons assisted in SAR operations. That cost allocation is consistent with the primary mission of SAR organizations to “save lives, not just the lives of those who can afford to pay the bill.”³⁹ Thus, federal, state, and

2003 accounted for over 30% of all park service rescues; overnight hiking accounted for an additional 10.4%); *see also*, Ela, *supra* note 30 (showing that “the largest proportion of search and rescue was initiated for lost or missing persons”).

33. *See generally*, KOESTER, *supra* note 29.

34. *See* Robert E. Manning, *Emerging Principles for Using Information/Education in Wilderness Mgt.*, 9 INTL. J. OF WILDERNESS 20 (2003).

35. *See id.*

36. *See id.*

37. *See* Travis W. Heggie & Tracey M. Heggie, *Search & Rescue Trends Associated with Recreational Travel in U.S. National Parks*, 16 J. OF TRAVEL MED. 23, 24 (2009).

38. *See* NAT'L SEARCH & RESCUE PLAN, *supra* note 24, at 13.

39. *NASAR Position Statement Billing for Search and Rescue Operations*, *supra* note

14. During his speech at the U.S. Naval Institute Conference on Apr. 22, 1999,

local governmental agencies spend millions of taxpayer dollars annually on search and rescue operations that aid a small number of individuals who venture into the wilderness. This section looks at the rising cost and incidence of SAR operations, as well as funding sources for those operations.

SAR operations, once commenced, “normally continue until all reasonable hope of rescuing survivors has passed.”⁴⁰ Thus, a single SAR operation can cost as little as a few hundred dollars to well over \$100,000.⁴¹ In the national parks, for the fifteen-year period from 1992 to 2007, there were 78,488 individuals involved in 65,439 SAR incidents.⁴² Based on those figures, the NPS, on average, responded to over eleven SAR incidents each day. The average cost of a SAR operation during that same period ran \$895 and the NPS reported total SAR costs of approximately \$58.5 million.⁴³ These average numbers do not tell the whole story. Often SAR expenses run in the tens of thousands of dollars or even in excess of \$100,000 for single multi-day searches involving large teams of highly trained personnel, helicopters, or other sophisticated equipment.

In addition, SAR costs have steadily increased. Between 2003 and 2012, the NPS’s annual SAR expenses increased from \$3.4 million to over \$5.3 million. Data available from state agencies indicates a similar trend. For example, in New Hampshire, the average annual cost of SAR expenditures between 2007 and 2012 increased from \$207,000 to \$360,000.⁴⁴ Often these SAR expenditures do not take into account the hundreds of civilian volunteer hours or mili-

Admiral James Loy stated, “As long as I’m commandant, you won’t hear any of my Coast Guard radio operators say, ‘Roger, sir. I understand you’re taking on water and preparing to abandon ship. Can you tell me your position and give me the number of a major credit card?’” Admiral James Loy, Remarks at the U.S. Naval Institute Conference (Apr. 22, 1999), *available at* <http://www.alpinerescueteam.org/wp-content/uploads/2012/11/Golden-No-Charge-for-Rescue-Final.pdf>.

40. See NAT’L SEARCH & RESCUE PLAN, *supra* note 24, at 18.

41. The average cost of SAR operations at Denali National Park and Preserve and Wrangell-St. Elias National Park and Preserve in Alaska is between \$18,000 and \$29,000. However, the average cost of most SAR operations in the national parks is significantly lower, running about \$1,340. Arizona reported SAR expenses of over \$170,000 for the evacuation of campers in Havasu Canyon, near Grand Canyon National Park, when flash flooding threatened the lives of over 250 people. *Arizona Officials Have an Important Message for Lost or Injured Outdoor Enthusiasts: Don’t Fear a Big Bill*, ARIZ. REPUBLIC, Nov. 21, 2009, *available at* 2009 WLNR 23524945.

42. Heggie & Amundson, *supra* note 30, at 228 (discussing total SAR accidents in national parks from 1992-2007).

43. *Id.* (noting average cost of each SAR accident and total costs of all SAR accidents).

44. See *N.H. Bills Lost Hikers for Cost of Rescues*, CBS NEWS (Oct. 29, 2009, 3:30 PM), <http://www.cbsnews.com/stories/2009/10/29/national/main5451330.shtml> (noting New Hampshire average SAR expenditures).

tary helicopter, equipment, or personnel hours provided without charge to local authorities.⁴⁵

Funding for SAR operations come from various sources. The NPS receives funding from three sources. For SAR operations that cost less than \$500, funding comes from base park accounts – i.e., the operating accounts for the parks where the incidents occur⁴⁶ – and donations.⁴⁷ For SAR incidents that cost more than \$500, funding comes from a national SAR Account, which consists of funding from other NPS accounts, including maintenance, visitor services, new construction, and new land acquisitions.⁴⁸

Funding for SAR operations that occur outside of national parks and waters covered by the Coast Guard come from the budgets of county and state agencies that oversee rescue operations within their boundaries. Some of those agencies allocate money from their general funds while others allocate money from designated SAR funds that receive money through the sale of permits, licenses, fines, and similar sources. In addition, volunteer organizations, particularly mountain rescue organizations, bear a significant cost burden for SAR operations through volunteer hours and donations.⁴⁹

As SAR costs continue to climb, more public bodies may find SAR expenses exceed SAR annual budgets. New Hampshire's Fish and Game Department, for example, is self-funded through money received primarily through the sale of fishing and hunting licenses, as well as snowmobile and ATV registrations.⁵⁰ Over the past several years, SAR expenses have exceeded revenues.⁵¹ As a result, the legislature has studied a range of options to provide more suitable funding for SAR and is currently considering a bill that would allow hikers and climbers to voluntarily purchase a "hike safe" card. The proposed annual fee for a hike safe card would be \$25 for an individual or \$35 for a family.⁵² The voluntary hike safe card program

45. See OREGON SAR 2012 REPORT, *supra* note 28 (noting how financial numbers often do not include volunteer hours).

46. See Heggie & Amundson, *supra* note 30, at 228.

47. See Ward et al., *supra* note 28.

48. See Heggie & Amundson, *supra* note 30, at 228.

49. See Athearn, *supra* note 32. For example, in Oregon, for every paid hour of time spent searching for or rescuing wilderness travelers, volunteers put in between 1 hour and 11 minutes (for boating SAR operations) to five hours and forty-two minutes of volunteer time (for climbing SAR operations). See *id.*

50. Lynn Touhy, *N.H. Routinely Outspends Search and Rescue Budget*, CONCORD MONITOR (Sept. 14, 2013), <http://www.concordmonitor.com/home/8505675-95/nh-routinely-outspends-search-and-rescue-budget>.

51. See *id.*

52. H.B. 256-FN, 2013 Sess. (N.H. 2013).

is similar to the card program in Colorado and SAR Fund programs in Utah and Wyoming. However, if the New Hampshire program passes, the hike safe card program would work in conjunction with the state's charge-for-rescue statute, which allows the state to bill those who are rescued for SAR expenses if the person acted negligently.⁵³ Under the proposed bill, the state could not bill the person rescued if the person has a current hike safe card, hunting or fishing license, or snowmobile, ATV or boat registration.⁵⁴

III. REGULATIONS IMPOSED ON RECREATIONALISTS

Since the late 1980s, lawmakers in several jurisdictions have enacted or considered enacting safety regulations focusing on four key areas: (A) charge-for-rescue laws that permit public bodies to recover SAR costs from those who benefit from SAR operations as a way to encourage responsible activity; (B) PSAR programs and safety orientation programs, which focus on safety education and often require recreationalists to pay a permit or registration fee and complete a safety orientation before receiving a backcountry permit; (C) equipment regulations, which mandate the use or carrying of certain equipment by recreationalists; and (D) mandatory SAR insurance coverage for certain activities. This section provides an overview of those regulations.

A. Charge-for-Rescue: SAR Cost Recovery Laws

One recently implemented practice, although not frequently used by public bodies, is to charge individuals for rescue. Although charging individuals for the cost of rescue contravenes federal policy⁵⁵ and the policy of most rescue agencies and organizations in the country,⁵⁶ a growing number of public bodies have passed SAR cost recovery statutes or regulations that permit SAR cost recovery.

53. N.H. REV. STAT. ANN § 206:26-bb (2008). For a more detailed discussion of the hike safe card program and its use in conjunction with New Hampshire's charge-for-rescue statute, see *infra* notes 182-184 and accompanying text.

54. H.B. 256-FN, 2013 Sess. (N.H. 2013).

55. See NAT'L PARK SERV., 2006 UNITED STATES NATIONAL PARK SERVICE MANAGEMENT POLICY (2006), available at <http://www.nps.gov/policy/mp2006.pdf> (hereinafter 2006 NATIONAL PARK SERVICE MANAGEMENT POLICY).

56. See Athearn, *supra* note 32, at 5. The Mountain Rescue Association, which represents over ninety volunteer rescue groups in the U.S., Canada, and the U.K. opposes charging for rescue services, and "no MRA-affiliated rescue team currently charges for rescue services." *Id.* The no charge policy for SAR services is consistent with the common law "free public services doctrine." Under that doctrine, an agency, state, or municipality, may not recover costs incurred while carrying out public services – such as rescue operations – unless a legislative enactment permits recovery. See *id.*

Public bodies also have looked to, and relied upon, general civil and criminal statutes and regulations as a means to recover SAR costs. When considering whether to enact SAR recovery statutes and regulations, states have weighed several factors, including agency policy, the potential safety risks of charging for rescue – such as delay by the lost or injured party in seeking help – and the discretionary nature of SAR operations.⁵⁷

The recent shift to recover SAR costs is due, in part, to the rising cost of SAR operations that strain public financial resources, the increasing number of people spending time in wilderness recreational areas, and the belief that these laws will improve wilderness safety by encouraging better preparation and discouraging reckless behavior.⁵⁸ This section provides an overview of the types of laws used by public bodies to recover SAR costs. In particular, it first looks at statutes and regulations that permit federal agencies to recover costs in limited circumstances. This section then looks at state charge-for-rescue statutes, focusing in particular on the persons from whom public bodies may recover SAR costs, the dollar limits on SAR cost recovery, and the conduct that triggers liability under these statutes.

1. SAR Cost Recovery by Federal Agencies

Federal policy expressly prohibits agencies from billing those rescued for SAR expenses.⁵⁹ Nonetheless, federal agencies may recover SAR expenses from a person whose unlawful conduct leads to government action, such as disorderly conduct, interfering with a governmental function, or providing false information that might lead to an unnecessary search or prevent the initiation of a necessary search.⁶⁰ These federal provisions impose criminal sanctions as a means to deter behavior that may place others at risk and, secondarily, allow recovery of damages, which may include recovery of SAR costs. In so doing, these laws discourage criminal conduct that places others in harm's way.

57. NAT'L PARK SERV., REPORT TO CONGRESS, ANALYSIS AND COST RECOVERY FOR HIGH-ALTITUDE RESCUES ON MT. MCKINLEY, DENALI NATIONAL PARK AND PRESERVE, ALASKA (Aug. 2001), available at <http://www.traditionalmountaineering.org/MR-study.pdf>.

58. See Travis W. Heggie & Tracey M. Heggie, *supra* note 37, at 23 (2009).

59. See NAT'L SEARCH & RESCUE PLAN, *supra* note 24, at 13.

60. See 36 C.F.R. § 2.32 (2012).

a. Providing False Report or Information

Under federal law, the Coast Guard and the NPS may impose criminal penalties and recover SAR costs when a person provides false information that might lead to an unnecessary search or prevent the initiation of a necessary search.⁶¹ Although the federal anti-hoax law has long allowed the Coast Guard to recover SAR costs, in 1991 Congress amended the law to add stiff criminal penalties following an incident in which a hoax call resulted in the death of two anglers. A man and his son aboard the *Sol E Mar* off Nantucket, Massachusetts, transmitted a distress signal indicating their boat was taking on water. Someone else interrupted that distress signal, identifying himself as the *Sol E Mar*, and gave additional details, but then began laughing. The Coast Guard radio operator believed the two calls were part of a hoax, and the Coast Guard did not respond. Sadly, the Coast Guard later learned that the initial call, made by the fisherman and his son, was an actual distress call. The *Sol E Mar* capsized and the two men drowned.

Because federal law only allowed reimbursement for SAR costs, the Coast Guard could not pursue criminal penalties against the hoax caller. Following that incident, Congress amended the law to allow the imposition of criminal and civil penalties, including a prison term of up to six years, fines up to \$300,000, as well as financial responsibility for all SAR costs. The Coast Guard has used that law on several occasions.⁶²

In addition to the Coast Guard hoax law, the NPS regulations permit recovery of all costs incurred, including SAR costs, when an individual knowingly provides false information to an individual investigating an accident or knowingly makes a false report that “causes a response by the United States to a fictitious event.”⁶³ The NPS regulations apply to any circumstance where a park user provides false information, including when a person initiates a false report or provides information that results in a SAR operation.

61. See 14 U.S.C. 88(c) (2010) (Coast Guard anti-hoax law); see also 36 CFR 2.32 (2012) (NPS false information and false report regulation).

62. See John Erickson, *Coast Guard Hoax Suspect*, WCTI12.COM (Dec. 9, 2013), <http://www.wcti12.com/news/coast-guard-hoax-suspect-i-did-it/-/13530444/23400664/-/59juxlz/-/index.html> (explaining how Coast Guard responds to hundreds of hoax calls per year and has invoked criminal law on many occasions); see also *News Release*, OFFICE OF U.S. ATTORNEY, S. DIST. OF CAL. (Jan. 26, 2012) available at <http://www.justice.gov/usao/cas/press/2012/cas12-0126-Berry.pdf> (last visited May 5, 2014).

63. 36 C.F.R. § 2.32 (2012).

b. Interfering with Agency Functions and Disorderly Conduct

The NPS has used both its “interfering with agency function” regulation⁶⁴ and its “disorderly conduct” regulation to recover SAR costs when a park user puts rescuers and others at risk by “creating a hazardous condition.”⁶⁵ Under the NPS disorderly conduct regulation, a person creates a hazardous condition by “deliberately disregarding a substantial and justifiable risk of creating a hazardous or physically offensive condition of which they are aware.”⁶⁶ Though the regulation does not expressly apply to SAR services, a claim filed against a park user for creating a hazardous condition may result in the user paying damages resulting from his or her negligent conduct, which may include SAR costs.

Park rangers in several national parks have used that provision to cite climbers and other recreationalists whose actions or lack of adequate equipment contributed to dangerous situations requiring rescue or putting others at risk.⁶⁷ The most publicized use of these regulations occurred in 2009 when the NPS issued a citation to a climber on Mount McKinley. The climber, from Croatia, insisted on a helicopter evacuation off of Mount McKinley when there was nothing medically wrong with her.⁶⁸ The bizarre tale began on the popular West Buttress route, which has rangers and volunteers stationed at 7,200 feet, 14,200 feet, and usually 17,200 feet.⁶⁹ On the ascent, the climber stopped at 15,800 feet to descend while her climbing partner continued.⁷⁰ She then called 911 because “her partner had her stove and her tent.”⁷¹ She arrived at the 14,200 foot camp with only “a slight limp and with no assistance” and admitted making the call to 911 concerning her equipment.⁷² Her

64. *Id.*

65. 36 C.F.R. § 2.34 (2012) (providing regulation prohibiting disorderly conduct in national parks).

66. *U.S. v. Albers*, 226 F.3d 989, 995 (9th Cir. 2000) (articulating standard for determining whether person acted recklessly and, therefore, violated 36 C.F.R. § 2.36(a)(4) (2011)).

67. See Athearn, *supra* note 32, at 7; see also *Citation Issued for Grand Teton Rescue Triggered by SPOT Locator Device*, NAT'L PARK SERV. (Sept. 29, 2011), <http://www.nps.gov/grte/parknews/news-release-11-89.htm> (reporting citations issued to climbers for disorderly conduct and creating hazardous conditions).

68. See Beth Bragg, ‘Attitude’ Sickness Halted Denali Climber, ANCHORAGE DAILY NEWS (May 20, 2010), <http://www.adn.com/2010/05/19/1286141/attitude-sickness-halted-denali.html> (reporting that National Park Service issued citation for “interfering with agency function” to hiker who suffered no injury but refused to descend Mount McKinley without air support).

69. *Id.*

70. *Id.*

71. *Id.*

72. *Id.*

partner agreed to return to the 14,200 foot camp to return the gear, but that was not the end of the 911 calls leading to the eventual citation.⁷³

Later the same evening, the climber made a satellite phone call to family or friends in Croatia, who then called someone in Tacoma, Washington, who in turn called the 911 operator. That operator transferred the call to Alaska operators, who then called park rangers. At 2:00 A.M., a ranger went from his tent to the climber's tent, about a hundred meters away. Aside from some pain in the arch of her foot, they found nothing wrong with the climber. However, they agreed to pay two guides to assist her down the mountain.⁷⁴ At the last minute, the climber declined to make use of the guides and insisted on an aerial rescue.⁷⁵ Over six days, rangers attempted to talk her into walking off the mountain, but the climber refused.⁷⁶

Park rangers, some with over ten years of experience stated they had "never before encountered an able-bodied climber who flat-out refused to climb."⁷⁷ For almost six days, rangers refused to fly her off the mountain because the high-altitude and location created a high-risk helicopter operation.⁷⁸

Eventually the climber was air lifted off the mountain and received "a rare citation for 'interfering with agency function' and creating a hazardous situation."⁷⁹ Due to the NPS's no-charge for rescue policy, the citation provided the agency the only means it had to punish or deter wrongful conduct that jeopardized the safety of SAR personnel and others.

2. SAR Cost Recovery Under State and Local Law

Only a handful of states have enacted laws that expressly permit SAR cost recovery. Those laws vary with respect to the persons from whom a state may recover SAR costs, the type of costs and dollar amounts recoverable, the type of conduct – i.e., negligent, intentional, knowing, reckless, or some other standard – that triggers the public body's right to recover SAR costs, and whether the

73. *Id.*

74. *See* Bragg, *supra* note 68.

75. *Id.*

76. *Id.*

77. *Id.*

78. *Id.*

79. *Id.*

agency has a legal duty to seek SAR costs. This section looks at the various approaches states have taken.⁸⁰

a. Persons from Whom Public Bodies May Recover SAR Costs

Statutes vary with respect to the persons from whom a public body may recover SAR costs. Most states allow recovery from any person who benefitted from the SAR operation or was rescued.⁸¹ However, some states restrict the scope of liability when the person who is the subject of the SAR operation is a minor or has died. For example, Idaho allows recovery of SAR costs from any person who is eighteen years of age or older, but expressly prohibits recovery from the person's family, heirs, or assigns.⁸² California, which modeled its statute after Idaho's statute, is similar.⁸³ Conversely, Hawaii has expanded the scope of liability. Hawaii allows recovery of SAR costs from any person who "ultimately benefitted" from the SAR operation; however, it also permits recovery from the "estate, guardians, custodians, or other entity responsible for the person's safety," or any "entity responsible for placing the person in the position of danger."⁸⁴ By expanding the scope of financial responsibility for SAR costs, Hawaii has alternative parties from whom it may recover costs when the subject of the SAR operation has died, is a minor, or does not have financial resources.

Unlike other state SAR cost recovery statutes that apply broadly to any person who benefits from a SAR operation, Oregon's SAR cost recovery statute only applies to persons using "wilderness areas or unpopulated forested or mountainous recreational areas." Thus, Oregon only imposes liability for SAR costs arising from

80. This Article only looks at SAR cost recovery statutes that apply to individuals, not professional outfitters. Some states have separate statutes that impose equipment requirements or SAR liability on professional outfitters. *See* CO. REV. STAT. ANN. § 33-32-108 (West 2013) (holding outfitters strictly liable for SAR expenses associated with river running activity); OR. REV. STAT ANN. § 404.103 (West 2014) (requiring paid guides of organized groups that include children under 18 to carry altimeter, contour map, and compass, if traveling above timberline).

81. *See, e.g.*, CAL. GOV'T CODE § 53159 (West 2014); IDAHO CODE ANN. § 6-2401 (West 2014).

82. *See* IDAHO CODE ANN. § 6-2401 (indicating hybrid strict liability standard, thereby placing emphasis on proximate cause, limiting liability, or providing broad affirmative defense).

83. *See* CAL. GOV'T CODE § 53159 (limiting liability through hybrid liability standard where liability is with person who violates law or with "parent or parents of a minor child" and does not extend to "his or her family, heirs, or assigns").

84. HAW. REV. STAT. § 137-2(a)(1)-(3) (West 2014).

climbing, hiking, hunting, or other activities conducted in unpopulated wilderness areas.⁸⁵

Finally, states impose liability on individuals who make a false report that results in a SAR operation. Under these statutes, the person who made the false report may be liable for fines, SAR costs, or both.⁸⁶

b. Dollar Limits on SAR Cost Recovery

While several states permit SAR cost recovery, the extent to which states may recover SAR costs varies widely, from a few hundred dollars to recovery of all SAR costs. Oregon has the most limited SAR cost recovery statute. Under Oregon's statute, a public body may collect up to the actual cost of the search and rescue, but no more than \$500.⁸⁷ Other states may collect costs from \$4,000⁸⁸ to \$12,000.⁸⁹ Others have the unrestricted right to collect all expenses directly related to the SAR operation.⁹⁰ SAR expenses may include personnel costs, such as wages and benefits, equipment costs, fuel, or any other expenses relating to a SAR operation.⁹¹

In addition to SAR cost recovery, the New Hampshire statute expressly permits the state to suspend or revoke certain state issued licenses and permits issued to a person who fails to pay billed SAR costs.⁹² Specifically, if an individual fails to pay billed SAR charges, the state may suspend or revoke that person's "license, permit, or tag issued by the fish and game department," suspend that person's driver's license, or revoke any license issued to that person by the commissioner of health and human services.⁹³

c. Conduct That Triggers Liability for SAR Costs

The type of conduct that triggers SAR cost recovery statutes varies from state to state. Some statutes allow the public body to recover for any SAR operation. Others allow the public body to

85. See OR. REV. STAT. ANN. § 404.270 (West 2014) (providing negligence standard).

86. See ME. REV. STAT. TIT. 12, § 10105(4)(D) (2013) (providing for recovery from rescuee or rescuee's guardian or estate); VT. STAT. ANN. TIT. 20, § 1848 (West 2013).

87. See OR. REV. STAT. ANN. § 404.270.

88. See IDAHO CODE ANN. § 6-2401 (West 2014)

89. See CAL. GOV'T CODE § 53155 (West 2014).

90. See ME. REV. STAT. TIT. 12, § 10105.

91. See HAW. REV. STAT. § 137-1 (West 2014) (defining "search and rescue expenses").

92. See N.H. REV. STAT. ANN. § 206:26-bb (2014).

93. *Id.*

recover SAR costs when a person either fails to use reasonable care, i.e., acts negligently, or engages in wrongful conduct, such as violating a law or warning, or acting in a manner that places the person or others at risk.

Only the state of Maine, and some local public bodies,⁹⁴ permit recovery of SAR costs regardless of whether the individual engaged in wrongful or negligent conduct.⁹⁵ Under Maine's charge-for-rescue statute, the Commissioner of the Department of Inland Fisheries and Wildlife "may recover all costs directly related to a specific search and rescue operation" from the person who was the subject of the SAR operation.⁹⁶ Thus, the Commissioner has the authority to seek reimbursement for SAR costs regardless of whether the person engaged in wrongful or negligent conduct, but the Commissioner may use discretion in doing so.⁹⁷

Two states, Oregon and New Hampshire, allow SAR cost recovery under a negligence standard. Under Oregon's charge-for-rescue statute, if those individuals who benefitted from the SAR effort failed to exercise reasonable care, the local agency has discretion to bill those rescued for SAR expenses. Reasonable care under the Oregon statute includes evidence that the person (a) "possessed experience and used equipment that was appropriate for the known conditions of weather and terrain"; (b) "used or attempted to use

94. Several local governments charge for emergency response, including SAR. See Nancy Carlisle, *A Search and Rescue in Grand or Wayne Counties Can Cost You*, Salt Lake Tribune (Sept. 27, 2012, 5:07 PM), <http://www.sltrib.com/sltrib/news/54909102-78/county-rescue-grand-search.html.csp>; see also PITTSBURGH, PA CITY ORDIN., TIT. I, § 170.02(a) (2013) (allowing for reimbursement of emergency services). Until recently, the city of Golden Colorado also charged for emergency services, including search and rescue, for all services rendered outside the city limits. See GOLDEN CITY ORD. § 16.08.090 (1991) (former ordinance requiring city to seek reimbursement for emergency services). Under that ordinance, "any party benefiting" from emergency response services provided by the fire department – which included SAR services – was "responsible for the payment" of the fees. *Id.*; see also Darcie Gudger, *Golden, Colorado Will No Longer Bill for Recreationalists' Rescues*, EXAMINER (June 10, 2009), <http://www.examiner.com/article/golden-colorado-will-no-longer-bill-for-recreationalists-rescues> (stating that city ordinance, intended to compensate city for services rendered in unincorporated parts of county, received significant publicity and was strongly opposed by SAR organizations nationally. Due to public outcry, city council reversed its policy).

95. See ME. REV. STAT. TIT. 12, § 10105 (2013) (granting State Commissioner of Department of Inland Fisheries and Wildlife authority to "recover all costs directly related to a specific search and rescue operation . . . [f]rom the person for whom the search and rescue operation was conducted").

96. ME. REV. STAT. TIT. 12, § 10105 (4)(D)(1).

97. See *id.* In 2009, the Maine legislature considered, but did not pass, a bill that would have required the Commissioner to seek recovery of SAR costs unless the person held a valid hunting or fishing license, or a Maine Rescue Card, which was also proposed under that bill. H.P. 355, 124th Leg. Sess. (2009).

locating devices or cellular telephones when appropriate”; (c) “notified responsible persons or organizations of the expected time of departure and the expected time of return and the planned location or route of activity”; and (d) “had maps and orienteering equipment and used trails or other routes that were appropriate for the conditions.”⁹⁸ Although Oregon passed its charge-for-rescue law in 1995, the state has invoked the law only once. State administrators argue that the law is difficult to apply because of the “reasonable care” standard.⁹⁹

Under New Hampshire’s negligence-based SAR cost recovery statute, the Department of Fish and Wildlife is required to bill for SAR costs if it determines a person acted “negligently in requiring a search and rescue response by the department”¹⁰⁰ However, if a person fails to pay within thirty days of receiving a bill, the department has discretion in pursuing payment by legal action or settling the claim.¹⁰¹

Five states – California, Hawaii, Idaho, Oregon, and Vermont – allow for SAR cost recovery for wrongful conduct – such as intentional, knowing, or reckless behavior.¹⁰² These charge-for-rescue laws seek to discourage conduct that creates a substantial risk to the person or SAR personnel. Hawaii’s statute has the broadest reach. That statute provides that a public body may recover SAR costs when the operation resulted from an “intentional disregard for the person’s safety,”¹⁰³ including, among other things, disregarding a warning or notice.¹⁰⁴ Thus, while Hawaii’s statute makes clear that intentional disregard of a warning or notice, such as a warning prohibiting entry into a closed area, falls within the statute, the stat-

98. OR. REV. STAT. ANN. § 404.270 (5)(a)-(d) (West 2014). The original draft bill would have imposed a maximum reimbursement cost of \$5000, which the public body could seek if individuals or groups had engaged in “wilderness travel or mountain climbing” and had failed to carry with them a “cellular phone, two-way radio, or electronic signaling device.” H.B. 3434, 62d Leg. Assemb., Reg. Sess. (1995).

99. See generally Jason Eck & Deanne Darr, *Paying the Price for Rescue*, TRADITIONAL MOUNTAINEERING, http://www.traditionalmountaineering.org/News_Rescue_Charges.htm (last visited May 6, 2014).

100. N.H. REV. STAT. ANN. § 206:26-bb (2014) (mandating payment by Department of Fish and Wildlife in case of search and rescue).

101. See *id.*

102. See CAL. GOV’T CODE §§ 53155, 53159 (West 2014); HAW. REV. STAT. § 137-2 (West 2013); IDAHO CODE ANN. § 6-2401 (2013); OR. REV. STAT. ANN. 404.270.

103. HAW. REV. STAT. § 137-2(b) (2014).

104. *Id.*

ute reaches all intentional conduct that amounts to a disregard for the person's *own* safety.

Oregon's statute allows recovery not only when a "climber, hiker, hunter, or other users of a wilderness recreation area" acts negligently, but also when the person violates "applicable laws."¹⁰⁵ This broad language encompasses a range of conduct, such as knowingly entering a closed area, failing to obtain a permit, or disregarding a warning.

Unlike Oregon, Idaho and California laws only apply when a person enters a closed area. Idaho's provision allows SAR cost recovery when a person "knowingly enters into any area that has been closed to the public" when the area has been marked by a "sign, barricade or other devise."¹⁰⁶ It applies to land or water-based entry, including entry on foot, skis, snowshoes, bicycle, or a variety of watercraft and vehicles.¹⁰⁷ Similarly, California, which modeled its statute after Idaho, prohibits entry into closed areas. However, unlike the Idaho law that prohibits entry to marked closed areas, the California statute prohibits intentional, knowing, and willful entry to closed areas or areas that a "reasonable person . . . should have known w[ere] closed to the public."¹⁰⁸

Finally, a few states have false information reporting statutes similar to those found under federal law discussed above. Under Maine's false information statute, the state may collect costs related to a SAR operation from any person who "knowingly provided false information that led to a search and rescue operation."¹⁰⁹ Vermont recently enacted a similar statute that allows the state to fine a person up to \$1,000 for "knowingly making a false report of a person missing in the backcountry, remote areas, or waters of the State."¹¹⁰

While only seven states have enacted SAR cost recovery statutes, increasing SAR costs and incidents and the competition for financial resources may push more states to consider SAR cost recovery statutes.

105. OR. REV. STAT. ANN. § 404.270(5).

106. IDAHO CODE ANN. § 6-2401(1).

107. *See id.*

108. CAL. GOV'T CODE § 53159(b) (West 2014).

109. ME. REV. STAT. TIT. 12, § 10105(4)(D) (2013).

110. VT. STAT. ANN. TIT. 20, § 1848 (West 2013).

B. Safety Orientation and Preventive Search and Rescue ("PSAR") Programs

Federal and state agencies charged with managing wilderness recreational areas have implemented safety orientation programs and PSAR programs. These programs take a variety of forms but primarily provide information to recreationalists aimed at reducing the risk of injury, improving the wilderness experience, and meeting park management objectives, such as wilderness preservation.¹¹¹ Rather than direct regulation, these programs have emerged as indirect or "light-handed" wilderness management tools.¹¹² While some programs have been around for close to twenty years, many programs are still in their infancy.¹¹³

Programs in national parks take two forms: registration and safety orientation programs, and PSAR programs. The registration and safety orientation programs include the assessment of special permit fees authorized by statute, such as the Federal Lands Recreation Enhancement Act of 2004.¹¹⁴ Under these programs, recreationalists who apply for permits must register with the park and participate in safety orientation programs before the park will issue a permit for backcountry activities. In addition to the educational benefits provided by the safety orientation program, the registration systems provide other safety benefits. When applying for a permit, the applications generally require applicants to include an itinerary, list of names, and contact information. When the agency issues the permit, it often will issue a dash tag for vehicles. The permit and dash tag can aid park rangers in determining where a party will travel within the park system and whether a party is overdue so that rangers can commence focused search efforts quickly.

111. See Manning, *supra* note 34.

112. See *id.*

113. The earliest PSAR programs appear to have started in the 1990s and included programs at Grand Canyon National Park and Denali National Park. See Sarah Shier, *Hike Smart Podcast 01 – What is PSAR?*, NAT'L PARK SERV., http://www.nps.gov/grca/photosmultimedia/hike_smart-01.htm (last visited May 9, 2014) (stating that PSAR program at Grand Canyon National Park began in 1997); see also S.E. McIntosh et al., *Mountaineering Fatalities on Denali*, 9 HIGH ALTITUDE MED. BIOL. 89, 95 (2008) (stating program started in 1995). Parks that adopted PSAR Programs in recent years include Zion National Park, which initiated a pilot program in 2010. See Matthew T. Hamonko, *Preventative Search and Rescue: A Pilot Study and Brief Review of the Literature*, WILDERNESSMED.ORG, <http://www.wildernessmed.org/preventativesearchandrescueapilotstudyandbriefreviewoftheliterature.html> (last visited May 6, 2014).

114. See 16 U.S.C. § 6801 (2012). Prior to the enactment of the Federal Lands Recreation Enhancement Act of 2004, a variety of other federal acts permitted the collection of fees. However, the 2004 Act expressly repealed those other acts. See *id.*

The PSAR programs developed by the NPS, other federal agencies, and many states, focus on the provision of information to the general visitor population through PSAR rangers, online and print materials, and signs posted near trailheads and at visitor information centers. The parks tailor PSAR programs to the specific area based upon the perceived threats and dangers to park visitors versus providing generic supply lists or safety tips. In addition to providing educational information to visitors, it is also the ambition of these programs that recreational participants will become self-aware of their own limitations and experience.

One of the earliest registration and safety orientation programs began in 1995 at Denali National Park in Alaska. The park, which encompasses Mount McKinley, the highest peak in North America, instituted an aggressive, three-prong climber safety orientation program. The Mount McKinley program addresses mountaineering safety by requiring registration sixty days in advance of any climb, special climber use fees, and participation in a climber orientation program.¹¹⁵ As part of the sixty-day registration form, climbers certify that they have read the Mountaineering Booklet, which is a twenty-eight-page guide to Arctic climbing, first aid, and necessary equipment for mountaineers.¹¹⁶ Prior to making their climb, climbers attend an orientation program at the Talkeetna Ranger Station near Mount McKinley.¹¹⁷ The two-hour orientation provides climbers with the current weather conditions, an equipment check, and warns climbers of the importance of self-reliance in the face of mountaintop dangers.¹¹⁸

Other national parks have similar programs. Glacier Bay National Park and Preserve has a mandatory registration and safety orientation program for backcountry campers. During the months when the park requires camping permits, applicants must attend the backcountry camper orientation before the park will issue a backcountry camping permit.¹¹⁹ The orientation focuses on visitor safety and resource protection with “emphasis on tidal camping,

115. See *Mountaineering Summary 1999*, NAT'L PARK. SERV. (1999), available at http://www.nps.gov/dena/planyourvisit/upload/1999_Mtnrg_Summary.pdf.

116. See *Denali National Park and Preserve Mountaineering Permit Application*, PAY.GOV, available at <https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=16355280>.

117. See *Climbing Registration*, NAT'L PARK SERV., <http://www.nps.gov/dena/planyourvisit/registrationinfo.htm> (last visited May 6, 2014).

118. See DOW SCOGGINS, *DISCOVERING DENALI: A COMPLETE REFERENCE GUIDE TO DENALI NATIONAL PARK AND MOUNT MCKINLEY, ALASKA* 150 (2004).

119. See 36 C.F.R. § 13.1116 (2007).

bear safety, food storage, and 'leave no trace' information."¹²⁰ Similarly, the NPS established a Climbing Management Plan at Devil's Tower National Monument in Wyoming.¹²¹ The Devil's Tower plan includes, among other things, a climber education program. Under that program, the NPS maintains a climbing registration office staffed with a climbing ranger who provides climber education and information. Among the materials provided is a climber education video developed to increase climber awareness about safety concerns, as well as resource and cultural concerns around the national monument.¹²²

Unlike climbing and camper safety programs that require participation before the park issues a permit, hiker safety education creates a unique problem. Parks have difficulty implementing safety orientation programs because the vast numbers of parks that offer hiking rarely require hikers to obtain a permit. In addition, there are very few barriers to entry in participating in a recreational hike. Nonetheless, many of the national parks, and several state parks, allocate resources for hiker education. For example, Grand Canyon National Park has a "Hike Smart" program that includes an abundance of online hiker-education resources including videos, podcasts, and hiking tips prepared by the park's PSAR Rangers.¹²³ The NPS Office of Risk Management announced that it intends "to expand the preventive search and rescue programs" because it believes these programs "will have [a] direct impact on reducing the need for SAR responses."¹²⁴

Many states also have implemented hiker safety education programs in an effort to reduce SAR incidents. The New Hampshire Fish and Game Department worked with the White Mountain National Forest and the New Hampshire Outdoor Council to implement the state's "Hike Safe" program beginning in 2003.¹²⁵ The

120. NAT'L PARK SERV., PREAMBLE TO THE PRESIDENT'S COMPENDIUM 2013: GLACIER BAY NATIONAL PARK AND PRESERVE 26 (2013), available at http://www.nps.gov/akso/management/compendium_docs/2013-Final/GLBA-2013-Final-Compendium-4-4-13.pdf (hereinafter GLACIER BAY 2013 SUMMARY).

121. See *Climbing Management Plan Update: Devils Tower National Management*, NAT'L PARK SERV. (Apr. 2006), available at <http://www.nps.gov/deto/planyourvisit/upload/2006-CMP-Update.pdf>.

122. See *id.*

123. See *Backcountry Hiking*, NAT'L PARK SERV., <http://www.nps.gov/grca/planyourvisit/backcountry.htm>, (last visited May 6, 2014) (including videos, podcasts, and hiking tips prepared by park's PSAR Rangers).

124. NPT Staff, *supra* note 28 (quoting Sara Newman, acting chief of the National Park Travelers Office of Risk Management).

125. See Marty Basch, *Hit the Trails Prepared for the Worst*, N.H. MAGAZINE (Apr. 2012), <http://www.nhmagazine.com/April-2012/Hike-Safe/>.

program, offering educational materials primarily through online resources and at trailheads, promotes hiker responsibility, education, and safety.¹²⁶ The program includes a “Hiker Responsibility Code,” which consists of a set of principles to “help hikers become more self-aware about their responsibility for their own safety . . . [and] the inherent danger[s] of hiking in the backcountry,” and encourages hikers to be “better prepared every time they are on the trail.”¹²⁷ In addition to the Hiker Responsibility Code, the “Hike Safe” website includes information on preparing for a hike, such as weather, injuries, water, and avalanches. Further, the website provides the user with a gear list, referred to as the “Ten Essentials List,”¹²⁸ and instructions on what to do in the event a hiker finds that she is lost or injured.¹²⁹

C. Equipment Regulation

Lawmakers also have considered and, in a few instances, passed laws mandating use of equipment such as personal flotation devices, helmets, and electronic signaling devices, which include cell phones, Global Positioning Systems (GPS), and locator beacons. While legislators have been successful in passing laws relating to personal flotation devices for boaters and helmets for cyclists, legislators have considered, but usually have rejected, mandatory use of other safety equipment for land-based wilderness recreation.¹³⁰

Both Oregon and Washington considered statutes that would have required persons who travel above the timberline to carry elec-

126. See S.B. 128-FNA (N.H. 2011) (Testimony of Kevin Jordan, New Hampshire Fish and Game Chief Law Enforcement Officer, before the Senate Energy and Natural Resources Committee on SB 128-FNA (Feb. 10, 2011)); *Safe Hiking in New Hampshire*, N.H. FISH & GAME DEPT., http://www.wildlife.state.nh.us/Outdoor_Recreation/hiking_safety.htm (last visited May 26, 2014).

127. *Hiker Responsibility Code*, HIKE SAFE, <http://www.hikesafe.com/uploads/File/hrc.pdf> (last visited June 8, 2014).

128. See, e.g., *What to Take with You on the Trail*, HIKE SAFE, <http://hikesafe.com/index.php?page=full-gear-list> (last visited June 8, 2014). The Ten Essentials List, developed in the 1930s by The Mountaineers climbing club, provides a list of recommended equipment for climbers and hikers that is intended to allow a person to respond positively in an emergency and equip a person to spend a night safely outdoors in the event of an emergency. The list is widely known by climbers and hikers. The Ten Essentials started as a list of ten simple items and now takes a systems approach intended to guide individuals in preparing for an outing. See *What are the Ten Essentials?*, MOUNTAINEERS, <http://help.mountaineers.org/kb/questions/what-are-the-ten-essentials?> (last visited May 6, 2014).

129. See *Be Prepared for Emergencies*, HIKE SAFE, <http://hikesafe.com/index.php?page=what-to-do-if-lost> (last visited June 8, 2014).

130. See, e.g., H.B. 2509, 74th Leg. Assemb., Reg. Sess. (Or. 2007) (Oregon bill that would have required mountain climbers to carry electronic signaling devices).

tronic signaling devices. In 2007, prompted by a 2006 incident on Mount Hood, the Oregon legislature considered House Bill 2509, which would have required recreationalists to carry two electronic devices.¹³¹ The incident involved three experienced climbers who became disoriented and lost during a severe winter storm. One of the three climbers, 48-year old Kelly James, used his cellular phone to contact his family. James, trapped in a snow cave just below the summit, briefly received a cell tower signal, enabling him to make the call. But, searchers were unable to reach him by phone again. However, the information James conveyed to his family during that call assisted rescuers in eventually locating the snow cave. Unfortunately, due to the most severe winter storm to hit Mount Hood in decades, rescue attempts were delayed for several days and rescuers reached the snow cave too late. They recovered the body of James, but never recovered the bodies of the other two climbers, who had left the snow cave in search of aid.

When this tragic story prompted heated public debate about whether technology – in particular, cell phones and locator beacons – might have saved the lives of the three climbers, the Oregon legislature considered House Bill 2509.¹³² That bill would have required an individual, or at least one individual in a group, engaged in mountain climbing above 10,000 feet on Mount Hood to carry both a two-way electronic communication device, such as a cell phone plus a global positioning system receiver, Mount Hood mountain locator unit (MLU), or other comparable device.¹³³

Had it passed, the beacon law would have supplemented an existing Oregon statute that requires paid guides to carry an altimeter, a contour map, and a compass, if traveling above the timberline with a group that includes any individual under eighteen years of age.¹³⁴ Thus, the proposed law would have applied to individuals and groups summiting Mount Hood during the specified months, requiring that each carry electronic devices that could assist rescuers if aid were necessary.¹³⁵ Unlike the paid-guide law that requires an altimeter, contour map, and a compass that would allow a party to properly navigate the terrain and keep the group from becoming

131. *See id.* For a discussion of a similar Washington Bill, see *infra* note 137 and accompanying text.

132. *See id.*

133. *See id.*

134. *See* OR. REV. STAT. ANN. §404.310 (West 2014) (*formerly* Or. Rev. Stat. § 401.625).

135. *See* H.B. 2509, *supra* note 130 (providing requirements climbers would have followed if climbing Mount Hood under H.B. 2509).

lost, the requirement to carry a beacon would have only provided secondary protection. The beacon legislation ultimately did not receive the approval of both chambers of the Oregon Legislature.¹³⁶ However, with each SAR incident that occurs on Mount Hood, the conversation again turns to equipment requirements and SAR cost recovery.

Washington considered similar bills in 2009 and 2010. Washington's proposed bill required all mountain climbers who travel above the timberline to carry electronic signaling devices during certain months. In addition, it required paid guides to carry an electronic signaling device, as well as an altimeter, contour map, and compass.¹³⁷ The 2009 bill carried forward to the 2010 legislative session, but died in committee.

In addition to state efforts to pass legislation mandating the use of electronic devices, the National Research Council has recommended that the federal government require users of national parks and designated wilderness areas carry GPS receivers and transmitters for their "safety."¹³⁸ To date, neither Congress nor any federal agency has acted on the National Research Council's recommendation. This is a result of the public bodies' reluctance to impose equipment-carry requirements due to problems of enforcement, the cost to recreationists, and the false sense of security provided by any equipment to the dangers of the outdoors.

D. Insurance Regulation

Another way public bodies have sought to deter wilderness recreationalists' risky behavior and therefore improve safety, is to require individuals engaged in high-risk activities on public lands to carry SAR insurance.¹³⁹ Although SAR insurance is required in several European countries and the Himalayan region,¹⁴⁰ it is uncommon to find SAR insurance imposed by public bodies in the United

136. *See id.*

137. *See* Wa. H.B. 2619, 61st Leg. Ass., Reg. Sess. (2010).

138. *See* Robert Puterski, *The Global Positioning System – Just Another Tool?*, 6 N.Y. UNIV. ENV. L.J. 93, 98 (1997) (citing U.S. Commissioner on the Future of the Global Positioning System, National Research Council, *The Global Positioning System – A Shared National Asset, Recommendations for Technical Improvements and Enhancements* (1995)).

139. *See* Timothy Egan, *2 Parks to Require Rescue Insurance for Climbers*, N.Y. Times, Sept. 14, 1993, available at <http://www.nytimes.com/1993/09/14/us/2-parks-to-require-rescue-insurance-for-climbers.html>.

140. *See* Shelby Gilje, *High Risk Activities May have a Price*, SEATTLE TIMES, Sept. 8, 1993, available at <http://community.seattletimes.nwsources.com/archive/?date=19930908&slug=1719924>; <http://www.sherpa-travel.com/trip-insurance.php>.

States. SAR insurance, distinct from medical or travel insurance, may fully or partially cover the cost of rescue operations, and may include coverage for specific rescue activities, such as the use of a helicopter or SAR personnel expenses. The costs of such policies depend upon the endeavor, experience of the participant, and underwriting standards put forth by the insurance carrier.¹⁴¹

In 1993, the NPS instituted a policy requiring climbers and those engaged in high-risk recreation to buy rescue insurance or pay into a risk pool set up by the NPS.¹⁴² The NPS piloted the program at Rainier National Park and Denali National Park beginning in 1994. At the time the NPS imposed the requirements, only one carrier offered SAR coverage for climbers in Alaska, and none offered SAR coverage in the continental United States. Although coverage for a single trip was projected at \$25-\$60, the unavailability of coverage created difficulties in piloting the program.¹⁴³ The NPS found itself in the position of finding insurance providers to offer policies to meet the mandate.¹⁴⁴ In the end, the NPS abandoned these pilot projects at Denali and Mount Rainer due to opposition from outdoor groups, difficulty in outlining which activities would require the insurance, and possible legal consequences of mandating such insurance.¹⁴⁵

IV. ANALYSIS AND RECOMMENDATIONS

Due to the wide range of geographies and situations, it is incumbent upon public bodies at the federal, state, and local level to engage stakeholders to arrive at solutions regarding wilderness recreational safety and rising SAR incidents and costs. State legislators often have mechanisms that allow them to set up taskforces or workgroups to engage stakeholders in resolving problems. In this instance, a legislature may assemble individual climbers and groups, the outdoor guide industry, equipment suppliers, insurance providers, and technology experts to seek solutions in a particular geographic area regarding reducing SAR incidents and costs.

141. See, e.g., Comment of C. James French, AM. ALPINE CLUB (Mar. 9, 2001), available at <http://www2.hawaii.edu/~lepape/ICS667/Project/Documentation/USCongressLawPL106486.html> (providing comment in response to Public Law 106-486 (Nov. 9, 2000)); see also Pub. L. No. 106-486 (Nov. 9, 2000), available at <http://www.gpo.gov/fdsys/pkg/PLAW-106publ486/pdf/PLAW-106publ486.pdf>.

142. See Egan, *supra* note 139.

143. Gilje, *supra* note 140.

144. See Egan, *supra* note 139.

145. *Id.*; see also Gilje, *supra* note 140. The requirements were given a short piloting period, but were not a long-term fix to the issue and are no longer in effect.

Even though each geography may be different, there are two principles that should guide stakeholders based on findings at the federal and state level. First, regulation must have the effect of reducing SAR incidents and improving SAR responses. Accordingly, public bodies should consider registration, orientation, and PSAR programs, which have proven effective in reducing SAR incidents – particularly where the programs are tailored to the unique aspects of the area. Second, public bodies must find reliable means to fund SAR operations, including funding for equipment and training. In particular, public bodies should evaluate the creation of SAR funds through mandatory or voluntary SAR card programs that impose small fees on those who use wilderness areas. Circumstances that lead to SAR incidents and general safety concerns for wilderness recreationalists include unavoidable circumstances, deliberately illegal actions, reckless or careless actions, unskilled actions, and uninformed actions.¹⁴⁶ Stakeholders evaluating how to improve wilderness safety, reduce SAR costs, and provide well-trained and well-equipped SAR operations, must consider the nature of wilderness recreation and regulate in a manner consistent with those considerations. This section analyzes the effectiveness of the various wilderness regulations discussed previously and makes recommendations based on that analysis.

A. Regulation Must Focus on Reducing SAR Incidents and Improving SAR Response

Safety regulation must focus on prevention of incidents and timely, skilled SAR response. As the data regarding SAR incidents indicates, the primary causes of SAR incidents include lack of preparedness, knowledge, and experience. Similarly, survival rates are highest when a search commences soon after an individual is reported missing or injured.¹⁴⁷ Accordingly, any regulation or effort to reduce SAR incidents and improve safety in wilderness areas should focus on preventive efforts, emphasizing preparation. However, the data also reveals the need for timely and properly equipped SAR responses to calls for aid. Thus, the combination of skilled SAR personnel who are properly equipped and timely sent,

146. Manning, *supra* note 34.

147. A study that looked at survival rates concluded that the survival rate is the highest when a search begins within 17 hours of when a recreationalist is missing and that time is the greatest indicator of survival in a search and rescue operation. See Annette L. Adams et al., *Search Is a Time-Critical Event: When Search and Rescue Missions May Become Futile*, 18 WILDERNESS & ENV. MED. 95, 100 (June 1, 2007).

along with better education of those engaging in wilderness activities, are essential to increased wilderness safety. Registration, safety orientation, and PSAR programs may provide a cost effective means of educating wilderness recreationalists of risks and reducing SAR incidents. In addition, providing funding for timely SAR responses made by properly equipped and well trained SAR personnel is essential.

1. *Registration, Safety Orientation, and PSAR Programs to Reduce SAR Incidents*

Registration, safety orientations, and PSAR programs to improve recreational safety and reduce SAR incidents are perhaps the most important areas where federal, state, and local agencies should allocate resources. Data indicates that most SAR incidents result from lack of preparation, inexperience, and poor judgment.¹⁴⁸ Accordingly, aside from equipment failure and, to some extent, weather conditions, which cannot be controlled, a significant number of SAR incidents could be prevented if recreationalists better prepare for their outings and gain the knowledge and experience necessary to make better decisions. In fact, a New Hampshire study estimates that up to 42% of SAR incidents could be prevented by proper education on wilderness preparedness and map use,¹⁴⁹ and that notifying others of planned routes can be a means of shortening SAR times.¹⁵⁰ This is consistent with the NPS finding that approximately 22% of SAR operations in national parks could be prevented by proper education on wilderness preparedness.¹⁵¹ With proper education on wilderness preparation and safety, including education about the importance of self-reliance, equipment, and the need to notify others of the planned route and scheduled return time, a significant number of SAR incidents could be prevented.¹⁵²

In addition, the process that the NPS and others have used for providing information and asking visitors questions through registration forms has led to several successful programs and a decrease in SAR use. Several studies support this conclusion. A study related to the climber education program at Denali National Park shows improved climber safety and reduced SAR incidents since its incep-

148. See Heggie & Amundson, *supra* note 30, at 228.

149. Ela, *supra* note 30, at 16.

150. See Ela, *supra* note 30.

151. Heggie & Amundson, *supra* note 30.

152. See Ela, *supra* note 30; see also Heggie & Amundson, *supra* note 30.

tion. Fatalities decreased by 53% following the implementation of the 1995 safety orientation program.¹⁵³ Implementation of this program is widely viewed as the turning point in mountain safety for Mount McKinley.¹⁵⁴ Similarly, the NPS has recognized the safety orientation for backcountry permits at Glacier Bay National Park and Reserve as a primary reason the park has not had “a single serious visitor accident or fatality in the last ten years.”¹⁵⁵ Further, in a study involving injured visitors at Yosemite National Park, researchers concluded that, although the majority of those injured did not receive PSAR educational information, those who received the education found it useful.¹⁵⁶

Tailoring safety education to activities and conditions at a particular park or wilderness area is critical.¹⁵⁷ Rather than focus on traditional messaging, such as the “Ten Essentials,” PSAR programs should focus on educating recreationalists as to the proper equipment for the specific activity engaged in, area-specific instruction on wilderness or trail conditions, and how to travel on dangerous terrain.¹⁵⁸ For example, one study that looked at SAR incidents in Yosemite National Park recommended that PSAR programs should educate park users with respect to equipment that fits the park, focusing on “appropriate footwear, sufficient water, sufficient food, and trekking poles.”¹⁵⁹ The study noted that educating visitors to carry cell phones was also important, but cautioned that cell phones cannot prevent SAR incidents or help visitors self-rescue. In addition to these specific educational recommendations, the study noted that to prevent more injuries, the park should find ways to reach more visitors through its PSAR programs.¹⁶⁰

Implementing or expanding these registration, safety orientation, and PSAR programs requires funding. However, actual costs of these programs should be evaluated in light of fees assessed for

153. McIntosh et al., *supra* note 113, at 89.

154. See *Mountaineering Summary 1999*, *supra* note 115.

155. GLACIER BAY 2013 SUMMARY, *supra* note 120.

156. See Stacy M. Boore & Dov Bock, *Ten Years of Search and Rescue in Yosemite National Park: Examining the Past for Future Prevention*, 24 WILDERNESS & ENV. MED. 2, 6 (2013) (discussing survey results and usefulness of PSAR training).

157. See *id.* (discussing variety of issues arising at different parks).

158. See *id.* (“[A]lthough many park visitors are not carrying the ‘Ten Essentials’ commonly recommended, these are not necessarily the items they thought would have helped prevent or minimize their injury or illness.”).

159. Boore & Bock, *supra* note 156, at 6 (discussing most used items that were “actually implicated in injury occurrence”).

160. See *id.* (noting that “new forum aimed at reaching a larger percentage of park goers” with PSAR programs is “one of the next steps in preventing medical incidents in the Yosemite backcountry”).

special services – such as registration and safety orientation for backcountry programs – the estimated savings that may result from reduced SAR incidents, as well as the safety benefits of these programs. The costs and risks associated with rescues can be tremendous. Accordingly, taking preventive measures to improve wilderness safety provides the logical approach.

Because these federal educational programs have proven effective in reducing SAR incidents, federal recreational areas should continue to study the extent to which aggressive registration, safety orientation, and PSAR programs could have in reducing SAR costs and reducing risks to SAR personnel. The data collected from such an endeavor could be used to better target the educational outreach efforts of the federal agencies involved in fee assessments and provide the public with worthwhile education and training. The information could also be passed on to state and local search and rescue teams.

Additionally, registration, safety orientation, and PSAR programs are consistent with the policies of wilderness management. For example, under the Federal Wilderness Act, federal lands shall be “administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness” but also “provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.”¹⁶¹ Under the Wilderness Act, agencies must take actions that have minimum impact on the environment under what is commonly referred to as the “minimum impact rule.” Although human life and safety are paramount, the NPS and other agencies called upon to conduct SAR operations must consider the impact of SAR operations on the environment.¹⁶² Shifting the focus from responding to a crisis, which can have significant economic and environmental impacts (and create new risks), to establishing risk prevention programs is consistent with that policy.

In sum, federal, state, and local agencies should focus on preventing injury by implementing registration, safety orientation, and PSAR programs. Shifting the focus to prevention has proven

161. Wilderness Act of 1964, Pub. L. No. 88-577, 78 Stat. 890 (codified as amended at 16 U.S.C. §§ 1131-1136 (2006)) (stating reason for establishment of National Preservation System).

162. See 2006 NATIONAL PARK SERVICE MANAGEMENT POLICY, *supra* note 55 (discussing search and rescue program, dive operations public health programs, and emergency medical services).

effective in reducing SAR operations and is consistent with policies of wilderness preservation and management.

2. *Equipment Laws Ineffective and Difficult to Enforce*

The technology in wilderness and outdoor equipment has made enormous strides in terms of quality, durability, and SAR usefulness over the past several decades. With more people visiting parks and engaging in recreational activities, consumer demand for equipment that contains cutting edge technology is at an all-time high and is driving innovation.¹⁶³ For example, SAR once relied on MLUs to find those in distress, but now, SAR is more likely to rely on a combination of RECCO, satellite, and even cellular phone technology.¹⁶⁴ The increased access to these devices and their ease of use has caused public bodies to consider mandating specific equipment when engaging in recreational activities.¹⁶⁵ Nonetheless, laws mandating specific equipment that wilderness users should carry are likely to be ineffective in improving wilderness safety and reducing the costs and incidents of SAR operations. Further, the laws contravene the freedom we associate with wilderness recreational activity.

The dearth of equipment regulations for wilderness recreation likely reflects, in part, an understanding that a requirement to carry a particular type of equipment is unlikely to improve wilderness safety. Most SAR agencies encourage the carrying of cell phones and beacons because they can aid SAR personnel in locating lost and injured recreationalists. However, carrying a cell phone or beacon cannot prevent a person from getting lost, getting injured, or using poor judgment. Rather, cell phones and beacons only aid the individual once she is lost or injured as a way to seek assistance. Accordingly, PSAR programs designed to educate recreationalists first, about self-reliance, including the use of navigation equipment, and second, about how cell phones or beacons only provide secondary protection, would be far more effective than merely requiring individuals to carry cell phones or beacons.

163. See generally *The Outdoor Recreation Economy*, OUTDOOR INDUS. ASS'N, http://www.outdoorindustry.org/pdf/OIA_OutdoorRecEconomyReport2012.pdf (last visited May 6, 2014) (discussing growth of outdoor recreation industry).

164. See *RECCO, MLU, PLB, SPOT, and Cellular Phones Explained*, PMRU.ORG, http://www.pmr.org/safetied/Beacons_Explained.html (last visited May 6, 2014) (discussing current types of locating beacons).

165. See, e.g., H.B. 2509, 74th Leg., Reg. Sess. (Or. 2007) (intending to require climbers to use electronic signaling when climbing above certain height during specific times of year).

Moreover, mandating equipment may create safety risks. In particular, mandating equipment may create a false sense of security for individuals, placing both the individual and SAR personnel at greater risk. If a public body puts forth an equipment mandate, there is an implied sense of security in carrying such equipment. Recreationalists may disregard the need for additional equipment that is not mandated, ignore the limitations of the equipment required, or take risks that they would not otherwise be inclined to take absent the mandate.

The danger in identifying one piece of equipment or several as mandatory is that recreationalists may believe that the mandatory pieces of equipment are all that is needed. Taken to an extreme, a hiker may believe that only a water bottle and GPS are necessary when it is apparent to most that proper sun-blocking clothing, or an extra layer of clothing, is needed depending upon the temperature. Additionally, a mountain climber may believe that as long as she is carrying a beacon, there is no need to make additional emergency plans.¹⁶⁶ Both of these traps demonstrate the inherent problems of mandatory equipment regulation.

Significantly, rescue beacons – such as a Personal Locator Beacon (PLB) or the MLUs that were the subject of Oregon’s 2007 proposed statute – and cellular phones must be activated manually. Even when activated, some rescue beacons are effective only if a receiver is activated as well.¹⁶⁷ This creates three issues. First, if the recreationalist is unconscious or otherwise unable to activate the device, then the device provides no assistance. Second, with respect to rescue beacons that require activated receivers, beacon signals remain undetected until someone places a call initiating a rescue. Thus, those carrying the beacons must also carry either a cellular phone and hope that they have service, or tell a responsible party to call 911 if they do not return or make contact by a particular time. Third, PLBs may be activated accidentally, inadvertently triggering a SAR operation. Several reports, of such accidental activations

166. See Robert Speik, *OpEd: Electronic Locator Beacons, A Mountaineer’s Viewpoint*, TRADITIONAL MOUNTAINEERING (Mar. 31, 2007), http://www.traditionalmountaineering.org/News_HB2509.htm (discussing controversy over requiring electronic signaling devices). This was one of Portland Mountain Rescue’s key arguments in opposing legislation that would mandate equipment on Mount Hood. See *id.*

167. See RECCO, *MLU, PLB, SPOT, and Cellular Phones Explained*, *supra* note 164 (discussing pros and cons of locator beacons). The MLU was designed in the 1980s after a group of students and two adults died on Mount Hood in 1986 when rescuers passed within 15 feet of their snow cave during the SAR operation without noticing the cave. See Speik, *supra* note 166.

have been reported, including an incident in which a hiker's beacon placed in his backpack became activated, and another in which a skier activated a beacon believing it was an avalanche beacon, not a locator beacon.¹⁶⁸ In another incident, a group hiking in a remote area of the Grand Canyon activated their PLB on three separate occasions, all three triggering costly helicopter based SAR operations.¹⁶⁹

Finally, an individual with government-mandated equipment may be inclined to take additional and unnecessary risks once engaged in an activity. The equipment may embolden recreationalists to cross a line into a restricted backcountry area or take an unmarked trail, risks that they may not ordinarily take without possessing a locator beacon or GPS device. Instead of regarding the equipment as a safety device, the user becomes aggressive in using the equipment to explore an area, leading to trouble and perhaps a SAR event.

In addition to the potential safety risks that equipment regulation can create, such regulations are difficult to enforce. In practical terms, public bodies would be hard-pressed to enforce equipment mandates at most NPS and state-run locations because of the personnel requirements of enforcing such mandates. Absent a means to enforce equipment mandates, the regulation becomes ineffective in achieving the perceived safety goal. Public buy-in on the need to carry specific equipment would help, but gaining buy-in from all members of the activity's community is difficult.

Finding equipment that all stakeholders can agree is mandatory is a difficult task. For example, there are many routes to climb Mount Hood, Oregon, and there are just as many approaches to how to climb the mountain. Some prefer to travel light and "blitz" the mountain, carrying as little gear as possible, believing that it is less risky to spend as little time on the mountain as possible. Others take a lot of gear and plan a venture that lasts several days. Creating a list of government-mandated climbing equipment for Mount Hood would be extremely difficult, as many cannot even

168. See Scott Willoughby, *Rescue Group Finds Ignorant Beacon Owner Who Triggered False Alarms*, DENVER POST (Mar. 3, 2010, 9:03 AM), http://www.denverpost.com/ci_14501974 (discussing backcountry skier who used beacon inappropriately, signaling help units nine times in two months).

169. See Jim Burnett, *This Third Time Was Anything But Charming – SPOT Misuse at Grand Canyon National Park*, NAT'L PARKS TRAVELER (Oct. 21, 2009, 9:29 AM), <http://www.nationalparkstraveler.com/2009/10/third-time-was-anything-charming-%E2%80%93-spot-misuse-grand-canyon-national-park4790>.

agree on the types of SAR equipment that should be carried.¹⁷⁰ A similar discussion would need to be had at all NPS and state-governed areas.

Getting the public to buy-in on mandated equipment may be difficult because of the cost of the equipment, which could discourage participation in recreational activities. In mountaineering, a PLB may be the optimal piece of SAR equipment for a recreationalist to carry because it provides the greatest versatility in a search situation.¹⁷¹ However, the cost of a PLB is typically between \$300 and \$400, and although versatile, many would argue that a cell phone, RECCO, or less expensive beacon could serve them better depending upon the circumstance.¹⁷²

In short, public bodies should carefully consider whether mandating equipment for certain wilderness recreational activities will have the desired effect. Regulations that might appear to promote safety must be enforceable and not inadvertently create new safety concerns. Rather than mandate equipment, public bodies should consider whether PSAR programs that educate recreationalists about equipment would have greater impact on safety.

B. Public Bodies Must Provide Adequate Funding

In addition to wilderness education and other PSAR efforts, public bodies must find reliable ways to fund SAR operations and provide SAR personnel with adequate training and equipment. The safety of those needing rescue and those SAR personnel performing the rescue depends on the ability of the SAR teams to quickly, efficiently, and skillfully carry out SAR operations. In today's environment of stretched public financial resources, legislation creating SAR funds to reimburse agencies for SAR operations, training, and equipment, offers the best approach to SAR funding. Conversely, highly controversial charge-for-rescue laws are not the answer. These laws reduce safety and historically have failed to provide necessary funding. Finally, insurance regulation is not a viable solution. As more people use the wilderness recreational areas available in the United States, SAR incidents will continue to stretch

170. See, e.g., H.B. 2509, 74th Leg., Reg. Sess. (Or. 2007) (providing public comment and analysis of H.B. 2509). Proponents viewed equipment as a necessity to ensure safety on Mount Hood, while others questioned the value of mandating any equipment.

171. See *RECCO, MLU, PLB, SPOT, and Cellular Phones Explained*, *supra* note 164 (describing how to locate beacons).

172. *Id.* (noting locating beacon differences between PLBs and SPOTs).

resources and lawmakers must find adequate and reliable funding for these essential services.

1. *Creating SAR Funds to Improve SAR Operations*

Several jurisdictions fund SAR operations through fees assessed or voluntarily paid in conjunction with the purchase of recreational licenses, permits, and registrations. These SAR funds provide an effective means to provide safer SAR operations.

Colorado's voluntary search and rescue card program exemplifies an effective means for funding SAR. Under a 1987 law, the state created the SAR Fund for purposes of reimbursing public bodies and volunteer SAR teams within the state for SAR operations and providing funds for SAR equipment and training. When an individual purchases a fishing or hunting license, a Colorado Wildlife Habitat Stamp, or registers an off-highway vehicle, boat or snowmobile, 25 cents from the purchase of each is distributed to the SAR Fund. In addition, individuals may voluntarily purchase a Colorado Outdoor Recreation Search and Rescue Card (CORSAR Card), of which \$2 from the purchase of a one-year card, or \$9 from a five-year card, is distributed to the SAR Fund. In Fiscal Year 2012-2013, all these sources provided revenues in excess of \$420,000 to the SAR Fund.¹⁷³

Money from the fund is used to reimburse operating expenses incurred by local governments and volunteer teams during SAR operations. The reimbursement system is a three-tiered system that first reimburses SAR costs for persons who paid into the fund through surcharges on several outdoor recreational licenses, including the CORSAR Cards. If after paying all reimbursements to local governments for the persons in the Tier One group, the remaining funds are paid for reimbursement of SAR activities that involved relatives of "licensed" persons as Tier Two. If funds remain after all reimbursements for Tier One and Tier Two have been paid, Tier Three is reimbursed, which is reimbursement for all persons not part of Tier One or Tier Two. Finally, if funds remain at the end of the year after payment of all SAR operation reimbursements, county sheriffs who oversee SAR operations may apply for funding to pay for equipment or training.¹⁷⁴

Since 1996, the fund has provided over \$1.2 million to SAR organizations statewide for 1,026 missions. In addition, the fund

173. Co. Dept. of Local Affairs, ANNUAL REPORT 2012-2013 COLORADO SEARCH AND RESCUE PROGRAM 3 (2013), available at <http://tinyurl.com/kvadx2w>.

174. See *id.* (discussing details of SAR reimbursements).

has provided more than \$5.3 million for SAR equipment and training.¹⁷⁵ In sum, the Colorado program has allowed SAR personnel to be well-positioned to provide the public with SAR assistance without burdening otherwise allocated tax dollars.

Utah has a program that mirrors the Colorado SAR Fund program in many respects, but does not include a voluntary SAR “card” purchase. The Utah law, passed in 1997, created the Search and Rescue Financial Assistance Program. Under the program, the state imposes a “Search and Rescue surcharge or fee to off-highway registered or renewed vehicles, registered or renewed motorboats and sailboats, and annual wildlife habitat authorizations.” Like the Colorado SAR Fund, Utah deposits the revenues into a fund dedicated to search and rescue reimbursement for counties incurring costs associated with SAR activities.¹⁷⁶ Total funds distributed in 2010 amounted to \$273,730.94, with 28% going to reimburse SAR costs, 57% going to purchase SAR equipment, and the balance going to SAR training.¹⁷⁷ The Utah legislature has considered adding the card option, but to date has not passed legislation permitting the sale of the cards.¹⁷⁸

Wyoming has a similar SAR Fund program; however, all fees collected are voluntary. Under the Wyoming statutes, individuals purchasing hunting, fishing, and other recreational licenses are not assessed a set fee. Rather, individuals purchasing recreational licenses may opt to pay \$2 or more to fund SAR operations.¹⁷⁹

These state fee and card programs provide a feasible and highly attractive alternative to charge-for-rescue statutes. As is illustrated by both the Colorado and Utah data, individual outdoor en-

175. *Id.*

176. See UTAH PUBLIC SAFETY, 2010 SEARCH AND RESCUE REPORT (2010), available at <http://publicsafety.utah.gov/emergencymanagement/documents/2010SearchandRescueAnnualReport.pdf> (discussing various statistics of search and rescue operations).

177. *Id.* (discussing fund distribution).

178. See S.B. 60, Gen. Sess. (Ut. 2010). New Hampshire is currently considering a voluntary card option as well. New Hampshire HB 256 (2014) would establish a voluntary “hike safe card,” which would be available for a one-time fee of \$18, of which \$15 will go to the Fish and game Search and Rescue Fund and \$3 would be remitted to the license agent as a transaction fee. Individuals who purchase a hike safe card would be exempt from liability for SAR costs. Also exempt would be those who can show proof of a hunting or fishing license, off-highway recreational vehicle registration, snowmobile registration, or boat registration issued by the state. As of publication, the bill has not yet passed.

179. See Wy. Stat. §§ 23-2-101(h), 32-2-404(f), 41-3-109(b), and 41-13-110(b) (2013) (permitting individuals purchasing hunting, fishing and other recreational licenses to “pay a voluntary fee of two dollars (\$2.00) or any greater amount to fund search and rescue activities in the state.”).

thusiasts rarely pay more than a few dollars. In return, all members of the public who require SAR services have the benefit of free SAR services. By creating a fund to support services and eliminating the charge-for-rescue statutes, recreationalists in these states receive several safety related benefits. First, recreationalists can enjoy the wilderness without the fear of receiving a large bill if they need SAR assistance. Second, local authorities responding to distress calls know that their costs will be at least partially, if not fully, reimbursed and can make decisions about the best way to conduct a search unencumbered by financial concerns. Third, SAR funds provide the opportunity, if funds exceed SAR expenses, to purchase equipment and provide training, which ultimately improves the safety and efficiency of SAR operations.

Undoubtedly, fee-based systems have some drawbacks. First, the costs, even if paid voluntarily, raise the amount a person must pay to legally access public lands for recreation. In an era where outdoor activity licensing fees are growing annually, the public may disfavor such a system even if it provides a common-sense pooling of funds to pay for SAR operations. Second, even the simplest of fee-based pooling and allocation of funds requires additional costs to the public, such as oversight, management, accounting, and possibly education and outreach programs. Finally, certain segments of the population, who contribute to the fund through the assessment of fees, may object to overuse of SAR funds by other segments that overuse the fund. For example, available data indicates that hikers are likely to use more SAR funds than hunters, which could result in stakeholders objecting to the entire fee-based system.

In spite of these drawbacks, Colorado has provided a solid model that may provide solutions for other outdoor-oriented states. Indeed, Utah and Wyoming have followed suit, and so long as the costs of administering these programs remain low and the funds reimburse a substantial amount of the SAR costs, such programs appear to be the way of the future. In addition, if the funds exceed SAR operational needs, states could expand these programs to allocate funds for PSAR programs.

2. *Charge-for-Rescue Laws Have Limited Effect and Fail to Provide Funding*

Aside from anti-hoax laws that allow for recovery of SAR costs that result from the provision of false information, public bodies should rethink controversial charge-for-rescue laws. An obvious benefit of these cost recovery laws is that the public body may re-

cover expenses incurred as a result of a search. Such a system not only maximizes personal responsibility and accountability for one's recreational activities, but best approximates society's costs of rescue. However, for many reasons, charge-for-rescue laws create safety risks to both the public and SAR personnel. Moreover, these statutes, as implemented, have not provided the anticipated revenues states had hoped.

Charge-for-rescue statutes do not improve wilderness safety and may end up, in the long run, costing more lives and dollars. Several cases have shown that individuals will delay or refuse obtaining emergency response services because they fear financial liability for SAR services. By delaying the call for help, the person risks more severe injuries caused by the delay, such as hypothermia, frostbite, complications from severe physical injuries, or even death. In addition, delay can place SAR personnel at greater risk. As night falls or weather conditions change, SAR personnel may face conditions that make their task more difficult.

Such responses have been well documented. For example, an injured climber who incorrectly believed that Colorado charged for SAR services delayed seeking aid. The climber fractured his pelvis while repelling. Because of the fear of being billed for SAR services, he and his climbing partner "tried to self-evacuate, resulting in additional injuries."¹⁸⁰ Eventually, the climbing partner contacted authorities and a SAR operation ensued. Because of the delay, rescuers faced greater risks during the evacuation because of "having to perform the rescue in the middle of the night."¹⁸¹

Charge-for-rescue statutes also fail to provide the funding for which states had hoped. Despite the enactment of Oregon's charge-for-rescue statute in 1995, SAR coordinators have only invoked it once. State administrators contend that the law is difficult to apply because of the "reasonable care" standard, which is fact-specific. Similarly, New Hampshire officials have rarely invoked the state's charge-for-rescue statutes. Between 1999 and 2005, the Fish and Game Department invoked that statute only eight times.¹⁸²

180. *Examples of Endangered Persons Refusing SAR Help, Waiting to Call for Help or Hiding From Help Because of Fear of Large Bill*, CO. SEARCH & RESCUE BD., <http://www.coloradosarboard.org/csrb-documents/Refusing%20SAR%20Help.pdf> (last visited May 6, 2014) (discussing instances where those in peril refused help).

181. *Id.* (providing examples of endangered persons refusing SAR help).

182. *See* Athearn, *supra* note 32, at 7. At that time, the New Hampshire statute did not have the SAR cost recovery statute that permitted recovery for negligent conduct. Rather, the statute required a determination that the party had acted recklessly or intentionally. *See* N.H. Rev. Stat. § 153-A:24(I)(c) (discussing SAR recovery standards).

Most of those eight incidents involved “inexperienced and un-equipped hikers . . . who used cell phones to call for rescue when they got lost or caught . . . in [bad] weather.”¹⁸³ In more recent years, between 2007 and 2008, when New Hampshire spent \$413,543 on 275 rescue missions, it only billed for 16 of those rescues, seeking reimbursement in the amount of \$41,435, which is about 10% of all SAR costs.¹⁸⁴ However, even when the state has billed for SAR costs, the state may even incur costs attempting to collect upon the rescue debt, and many of those collection attempts are unsuccessful. Many recreationalists do not have the assets to reimburse the full cost of a recovery attempt or will balk at attempts by the state to collect the debt. As rescue attempts usually run into the thousands of dollars, few have the means to be able to repay those sums immediately or over time, and almost all decline to pay voluntarily.

Because SAR is a humanitarian act, states should rethink charge-for-rescue statutes imposed on wilderness recreationalists. By retaining a no-charge policy, states may avoid the risk of a delayed call for help, which could create greater risks for the lost or injured party as well as SAR personnel.

Proponents of cost-for-rescue laws argue that these laws encourage better preparation and judgment on the part of those participating in wilderness activities and discourage wrongful conduct that places others at risk. By encouraging better preparation and discouraging wrongful conduct, the effect should be to decrease the number of SAR operations, reduce the incidence of injury, loss, or death of wilderness travelers, and reduce the risk to SAR personnel. However, despite the potential for these laws to encourage preparation and discourage wrongful conduct, on balance, they do not achieve those goals.

3. *Insurance Regulation Is Unlikely to Improve Safety or Provide Funding*

Stakeholders, including the NPS, have proposed mandating rescue insurance for some high-risk recreational activities. However, mandatory insurance is unlikely to adequately address stakeholder concerns. One problem with mandatory insurance is that rather than having SAR be performed as an at-will, by the grace of government endeavor, it becomes an endeavor by contract that

183. See Athearn, *supra* note 32, at 7.

184. *N.H. Bills Lost Hikers for Cost of Rescues*, *supra* note 44 (discussing SAR reimbursement billing efforts).

could require SAR. At present, SAR is an activity that is done at the discretion of the government and volunteers, with proper consideration being given to the risks encountered by the rescuers. In dangerous situations, or in situations where rescue is not deemed necessary, no SAR attempt is made. By mandating insurance, it is conceivable that SAR would be required without proper consideration being given to whether SAR is viable or necessary.¹⁸⁵ Taking away the discretion of experts in SAR from this paradigm could increase costs and unnecessarily put SAR personnel at a greater risk of harm.

Mandated rescue insurance also puts the government in the role of having to ensure that a healthy marketplace exists for recreationalists to purchase up to the amount required by a government mandate. If insurance carriers decline to provide the coverage, or the coverage offered is inadequate in any respect, the government would have no choice but to intervene to provide the policies or restrict access to recreation areas to the amount that could be insured. Even if it were possible for federal or local governments to create such a mandate and marketplace, it is likely an area that government would not be well equipped to administer.

In lieu of an insurance requirement, funding SAR through recreational fees as discussed previously serves a similar function. Such a plan retains the discretion of SAR experts and local officials in SAR operation decision-making and allows public bodies to assess fees necessary to meet SAR needs. As Colorado and other states have done, maintaining a SAR fund is likely the most efficient and intelligent method of providing timely and professionally trained and equipped SAR operations.

V. CONCLUSION

Enjoying the beauty and solitude of wilderness recreational areas in the United States is highly valued, yet fraught with inherent risks. While regulation cannot eliminate all risks, public bodies should look at preventive opportunities to reduce the risks to those who participate in wilderness activities, rather than focusing solely on crisis response. Creating SAR funds to reimburse organizations for SAR expenses, and provide funding for equipment and training

185. See Letter from C. James Frush, Pres., American Alpine Club, to Mike Gauthier, Denali National Park and Reserve (Mar. 9, 2001), *available at* <http://www2.hawaii.edu/~lepape/ICS667/Project/Documentation/USCongressLawPL106486.html> (providing response to Pub. L. No. 106-486); *see also* Pub. L. No. 106-486 (Nov. 9, 2000), *available at* <http://www/gpo.gov/fdsys/pkg/PLAW-106publ486/pdf/PLAW-106publ486.pdf>.

is a step in the right direction. However, public bodies must also allocate resources for PSAR programs tailored to the specific geography and proactively educate the public about wilderness safety, preparation, and self-sufficiency. The combination of self-funding and PSAR programming should reduce SAR incidents.