

Mt. Rainier National Park
Mountaineering Report
2012

Summary 2012

The year of 2012 was a difficult one for the entire park staff. On January 1st, 2012, ranger Margaret Anderson was shot and killed by Benjamin Barnes during a traffic stop. Mr. Barnes was then found dead about 24 hours later after a massive man-hunt by NPS, state, and federal law enforcement officers. Margaret was one of ten law enforcement rangers who work side by side at the park, and naturally impacted this ranger staff very deeply. But most of all, Margaret was a wife and a dedicated, loving mother of two girls, both under four at the time. The sadness of this tragedy set the tone for the rest of the year.

The impact of this event set all ranger operations behind schedule. What resources and energy we had went into grieving, planning funerals and memorials, and figuring how to cover and backfill Margaret's void. Margaret supervised the winter snowplay rangers and was also the EMS coordinator. This work was spread out among already stretched-thin rangers.

Two climbing ranger supervisory staff entered on duty in March and the rest of the seasonal staff began working April 17. Rangers train 40 hours per week for a little over a month. Most of the climbing ranger staff is seasonal, which means they work less than six months (average 4 ½ to 5 months and go back to their 'real' lives in the fall as carpenters, teachers, ski patrollers, etc...). Seasonal rangers make approximately 15-19 dollars per hour, do not get any federal benefits, health coverage, or retirement.

The field season was underway by the last week of May. Upper mountain rescues typically peak in late June. On June 21st, while receiving a litter via hoist from a hovering US Army Reserve Chinook CH-47 Chinook helicopter, ranger Nick Hall, a four-year lead seasonal climbing ranger, was knocked off balance and slid 2,500 to his death on the Winthrop Glacier. Nick's tragedy blew our summer climbing ranger operation into smithereens. Nick was of strong character and all the climbing rangers respected Nick's attitude, presence, and skill.

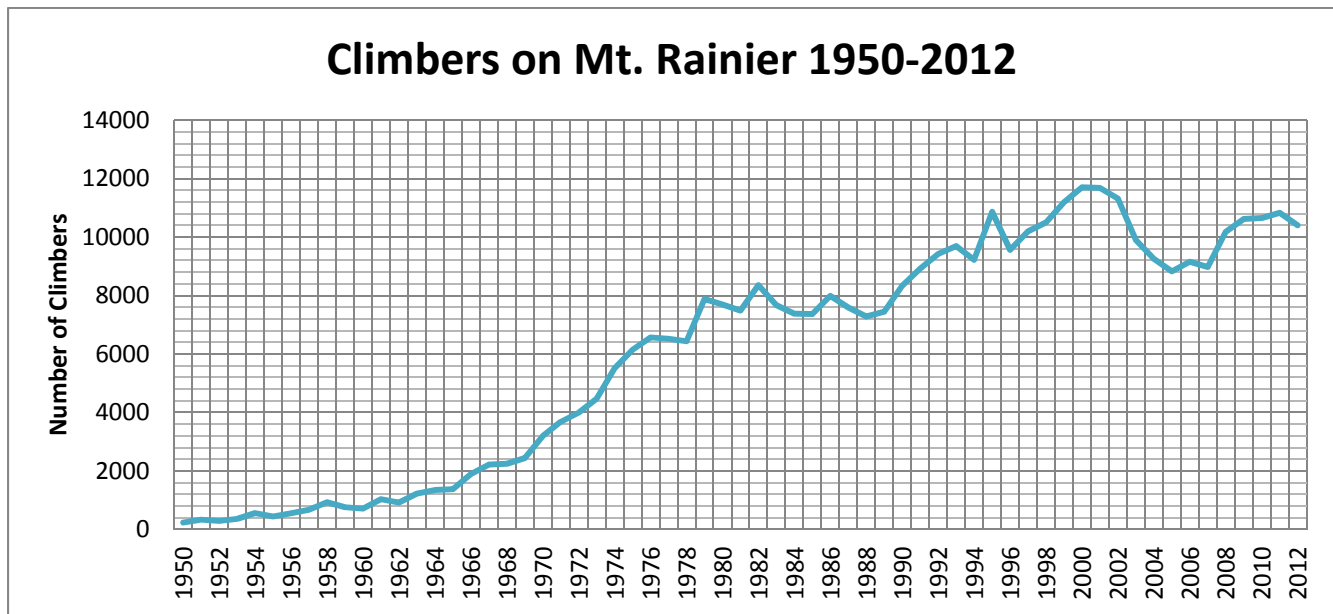
Once again, much of our energy and resources went into dealing with the fallout of this incident for the rest of July – and still we went on staffing our high camps and rescuing thanks to backfill coverage from rangers from Denali National Park, Grand Teton National Park, Yosemite National Park, and Rocky Mountain National Park.

In the meantime, in June, another long-time ranger who has worked at Camp Muir for over 10 years, Ted Cox was diagnosed with stage four cancer. Ted died on August 5, 2012, with great sadness. Once again, his absence left the ranger staff reeling, trying to figure out how to cover the work that he was doing.

The Schurman season was wrapped up by the last week of August, due to the deteriorating climbing conditions on that side of the mountain. Camp Muir was staffed, usually two rangers per night until the end of September, when subsequently, the climbing season came to an end.

Two new permanent employees were added to our staff this summer. Thomas Payne, who had worked a total of nine years in the climbing program became one of three GS-9 supervisors. Armando Purganan was hired as our first permanent administrative support assistant and comes to us as a great relief!

Overall Climbing Statistics and Route Use



There were roughly 10403 climbers in 2012, roughly 4% less than in 2011. It is difficult to explain the decline in climbing numbers this year. For a short period, after fatalities, I have seen climbing numbers drop. This may account for some of the decrease. Also, the Schurman route became more circuitous and difficult than usual and by August was a challenging climb. This also deterred climbers from climbing.

Throughout history, during periods of recession, climbing numbers on Mt. Rainier have also decreased, but during our last stock market crash in 2009, climbing numbers increased dramatically (by nearly 5% that year). Alpine climbing is a relatively expensive endeavor; the gear costs a lot of money. It was interesting that climbing continued to grow as the economy has fluttered.

2012 Route Use Compared to 7-year Average

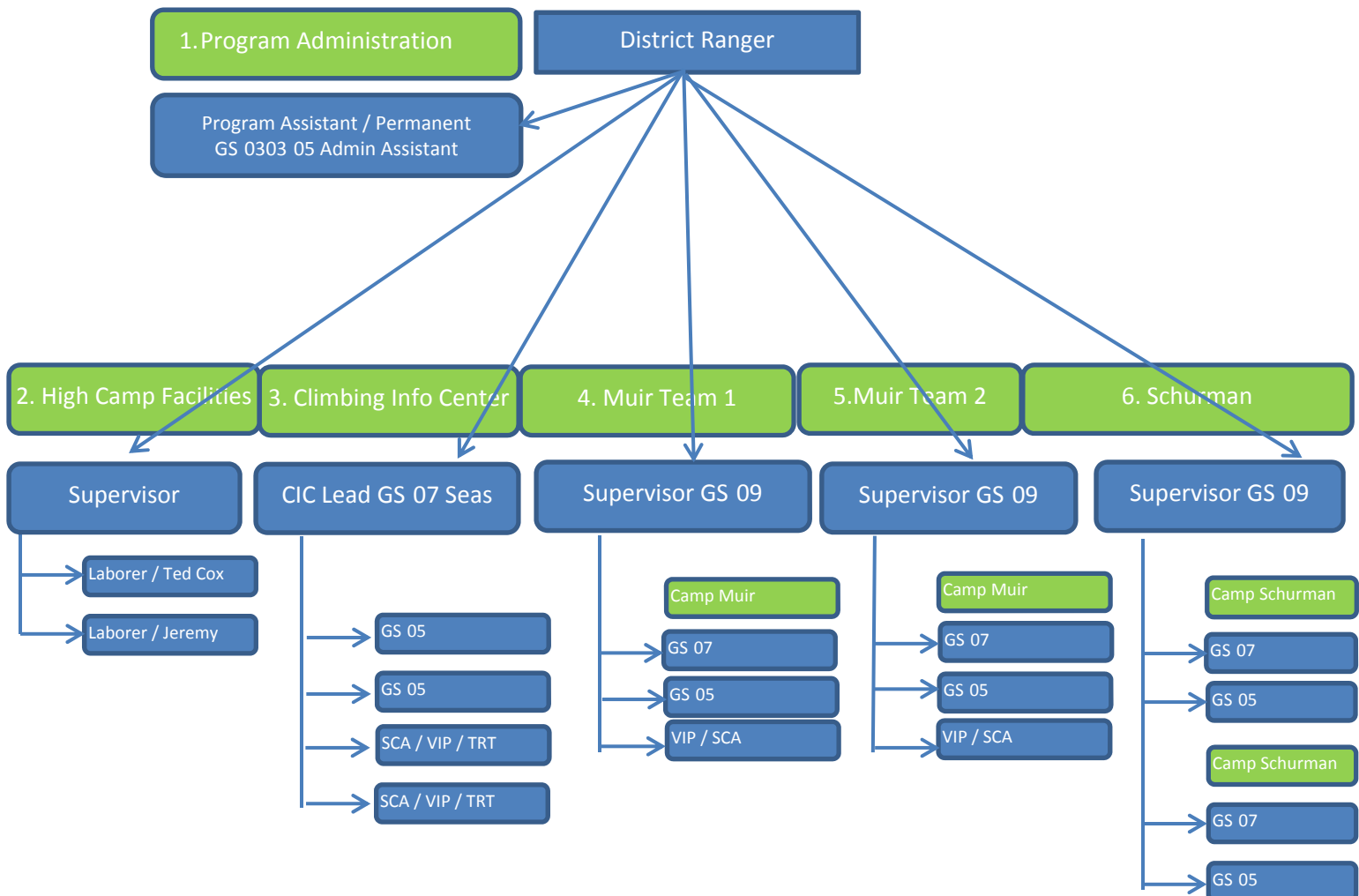
Route	Total 2012	2012 % of Avg	06-12 Total	7-year avg
Disappointment Cleaver	7315	70.32%	45533	64.40%
Emmons-Winthrop	1469	14.12%	11992	17.00%
Ingraham Direct	330	3.17%	4631	6.50%
Kautz Glacier	388	3.73%	2847	4.00%
Gibraltar Ledges	102	0.98%	843	1.20%
Fuhrer Finger	130	1.25%	980	1.40%
Little Tahoma	130	1.25%	894	1.30%
Liberty Ridge	161	1.55%	956	1.40%
glacier only - no summit attempt	87	0.84%	148	0.20%
Ptarmigan Ridge	9	0.09%	164	0.20%
Tahoma Glacier	21	0.20%	249	0.40%
Kautz Cleaver	14	0.13%	368	0.50%
Success Cleaver	14	0.13%	114	0.20%

Wilson Headwall	13	0.12%	68	0.10%
Nisqually Cleaver	3	0.03%	20	0.00%
Nisqually Glacier	11	0.11%	57	0.10%
Sunset Ridge	4	0.04%	29	0.00%
Mowich Face	16	0.15%	41	0.10%
Gibraltar Chute	11	0.11%	67	0.1%
Nisqually Ice Cliff	8	0.08%	47	0.10%
Sunset Amphitheater	2	0.02%	16	0.00%
Unspecified	164	1.58%	181	0.30%

Climbing Program Operations

The climbing ranger program was organized in this way.

Mount Rainier National Park Mountaineering District - 2012



This program structure has continued to evolve over the years, especially in areas of training, administration and supervision. This season a third GS-9 supervisor was added to the program in May as well as a GS-05 administrative assistant in July.

The most difficult part of our program to supervise in the last several years has been the Camp Schurman operation. Communications are strained. The Schurman supervisor was only able to spend on average 1-3 days per two-week period at Camp Schurman because of collateral duties as the aviation manager for the park, thus, supervision is slim. With scant communication and supervision, planning has been challenging. Also selecting enough experienced and enough team members to work at Schurman have also been difficult.

This summer's operation was made doubly difficult to manage because of the relative inconsistency of backfill coverage to replace Nick and Ted's vacancies. We struggled all summer to find resources throughout the NPS with the right qualifications, training, and experience to fill the roles they left behind.

One of the operational challenges we had this summer was that our hoist program with the military was stood down by the NPS directorate. They did however, provide us with an alternative. In the NPS, the standard extrication method among parks with climbing programs has become short-haul. Mt. Rainier had never developed a short-haul program because of their convenient relationship with the military at Joint Base Lewis-McChord.

By the end of August, most of the climbing rangers had been certified to be qualified short-haul team members. Operational challenges with the hoist program were that the ground team could not communicate with the military pilot, the pilot could not see the ground team and relied on crewmen aboard the helicopter for proximity reports, and that the wind speeds were often between 50-100 mph on the ground. The short haul procedure was able to mitigate all these problems.

One of the biggest bits of progress this season was the hiring of a permanent administrative assistant. Climbing ranger supervisors, on average, spent just over 20% of their time in the field with their employees in 2012. This was an improvement over last year because of the addition of a permanent climbing supervisor, but with all the organizational challenges this year, supervisors spent much of their time in a planning and organizational role. By August, the administrative assistant began to fully take up their duties, which allowed supervisors to get into the field with their folks more. The administrative assistant's duties consist of payroll and timekeeping, completing reimbursements for volunteers and other employees, documenting and paying in-park and out-of-park travel reimbursements, purchasing gear and equipment for the program and for incidents, organizational and wrap-up work on the business package after each SAR, tracking and equipment and property such as climbing program gear, climbing passes, and accountable property, to name just a few things.

Training

Once again, as in 2012, approximately 3,500 training-personnel-hours were recorded by climbing rangers. Trainings included these categories:

Category	Number	Hours
Administrative	4 trainings	9 hours
Avalanche	6 trainings	45 hours
Aviation	22 trainings	159 hours
Climbing Ranger	11 trainings	32 hours
EMS	7 trainings	33 hours
Other	4 trainings	40.5 hours
SAR	33 trainings	175 hours

Ski Litter Training	2 trainings	17 hours
Supervisor	4 training	20 hours
Wilderness	0 trainings	0 hours
Wildland Fire	1 trainings	9 hours

Climbing rangers attended an EMT-B refresher at the beginning of the season. The climbing rangers provided their own technical rigging class this year. Climbing rangers and guides also continued to train together, each entity, RMI, IMG, AAI, and the NPS hosted a training that brought all parties together.

A few climbing rangers were able to attend some incident organizational training like NWCG courses, S-248 Status Check-In Recorder and S-260 Interagency Incident Business Management. Several of the seasonal and permanent rangers attended Incident Command System training.

All new employees were sent to S-271 Helicopter Crewmember training in Forks, WA. Several aviation trainings were taught in the park and attended and/or instructed by climbing rangers including the Helicopter Crewmember refresher, the Helicopter Manager refresher, Single-Skid Toe-In One-Skid Entry and Exit procedures (STEP), several hoist training missions with the military, and some other various aviation related training.

High Camps

There are two ranger-staffed high camps; Camp Schurman and Camp Muir, located on the NE and S side of the mountain. Over 80% of the climbing on Mt. Rainier happens through these two routes. Many people are surprised to learn that among all backcountry overnight use, including the Wonderland Trail, that the majority, or 55% is associated with summit climbing.

The high camps take the brunt of the climbing use. 110 people are allowed to Camp at Muir each night and 36 are allowed at Schurman.

The climbing program was able to schedule at least two rangers at Camp Muir each night. This however, in practice, this is not always how many rangers are there. Rescues, illnesses, injuries, and other scheduling complications detract from two people. We were nearer to full-time 2-ranger staffing at Camp Muir than at Camp Schurman. Because of employee shuffling, Camp Schurman went without 2-rangers per night for 1-3 days per week.

One of the best additions to high camp for us this season was the installation of our solar snow melter. I conceived of this device after looking at my own solar water heater at home. If we can heat water to 180 degrees, we can certainly melt snow from 30 degrees to 35 degrees! We bought the gear and made the plans. NPS employee Barry McMonagle fabricated the plans into a supremely engineered reality. It was flown to Camp Muir (~600 lbs) in July. The first day we made 50 gallons of water. When we don't use that much, the water has been heated to over 140 degrees, actually sterilizing the water in the process. This addition to our high camp has improved the air quality inside the hut and saved the use of propane. It is estimated that just less than two 100-lb cylinders of propane are saved. Previously, we had melted snow on burners inside the hut – and had to install CO alarms because of the high levels of CO in our sleeping quarters.

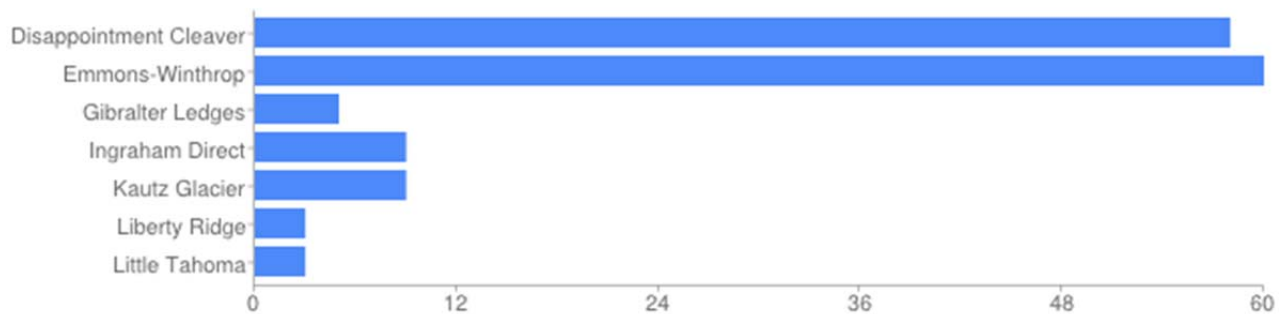


Patrols

Substantially fewer climbing ranger ascents of Mt. Rainier were recorded in 2012 mostly due to the two deaths that occurred in our program this year. Climbing rangers did record over 100 ascents this year.

1. Climbing rangers maintain a high state of physical conditioning. The average ranger summited almost 6 times in 2011. Many rangers can reach the top from Camps Schurman or Muir in two hours or less.
2. Climbing rangers are able to monitor the use of the mountain, provide input to climbing parties, keep litter and human waste picked up, and protect the alpine environment better.
3. Climbing rangers are able to provide updated route conditions on the mount rainier climbing blog.

Here are the routes that climbing rangers patrolled in 2012. Sometimes ranger patrol up one route and down another.



Climbing Information Center / White River WIC

The climbing information center at Paradise is the main climbing permit issuing station in the park. For the third year in a row, the climbing information center has been run by its own staff of rangers. This is a departure from the past where climbing rangers from the high camps have worked the CIC. The program configuration allows us to target training and simplify the skills that any one ranger must learn in order to be effective at their job.

The downsides to this is that the rangers who issue the permits are less familiar with the current conditions and providing the CIC its own staff is a little more expensive.

The rangers who work at the CIC also have the collateral duty of preventative search and rescue. It is part of their work to travel between Paradise and Camp Muir and contact day and overnight hikers and climbers and make sure they are permitted, equipped and informed about the conditions and weather.

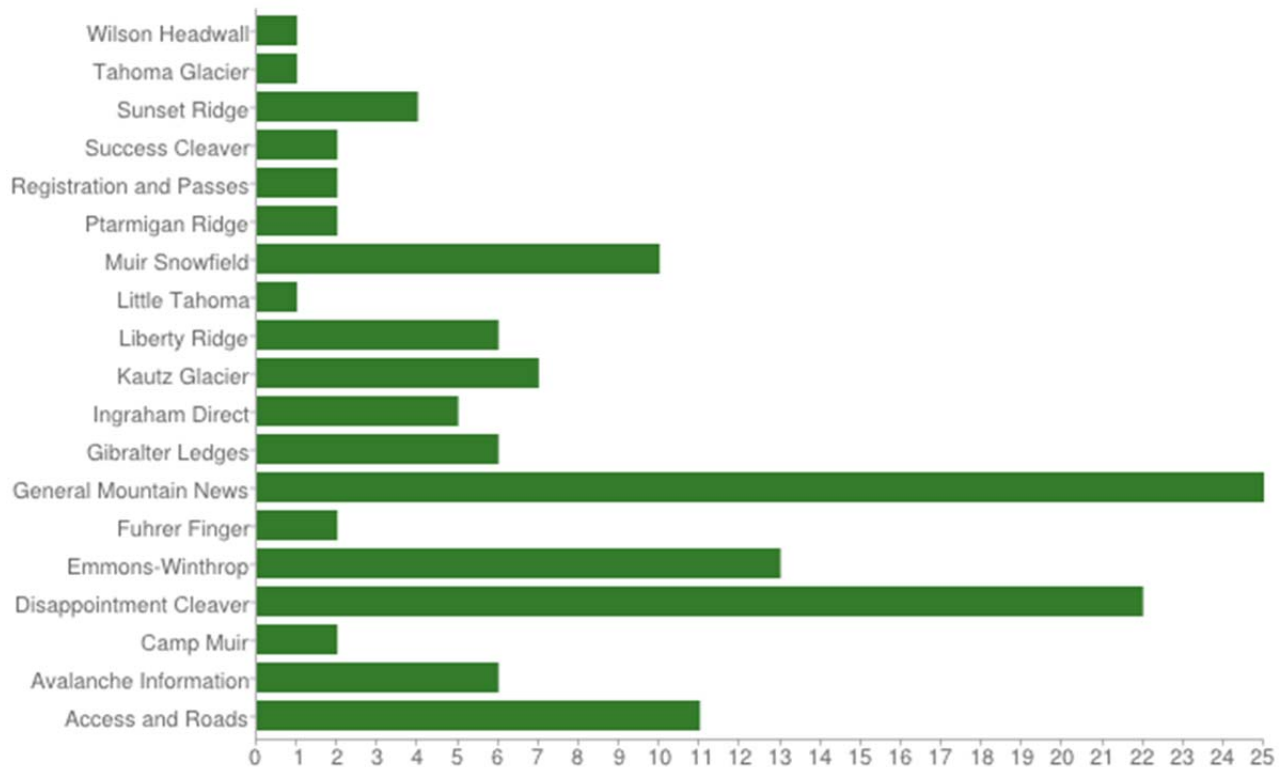
The White River WIC is staffed by the Camp Schurman rangers on Friday afternoons and Saturday mornings. The rangers then climb to Camp Schurman on Saturday afternoon. The east district backcountry staff registers all other climbers from Sunday to Thursday. A big thanks to them!

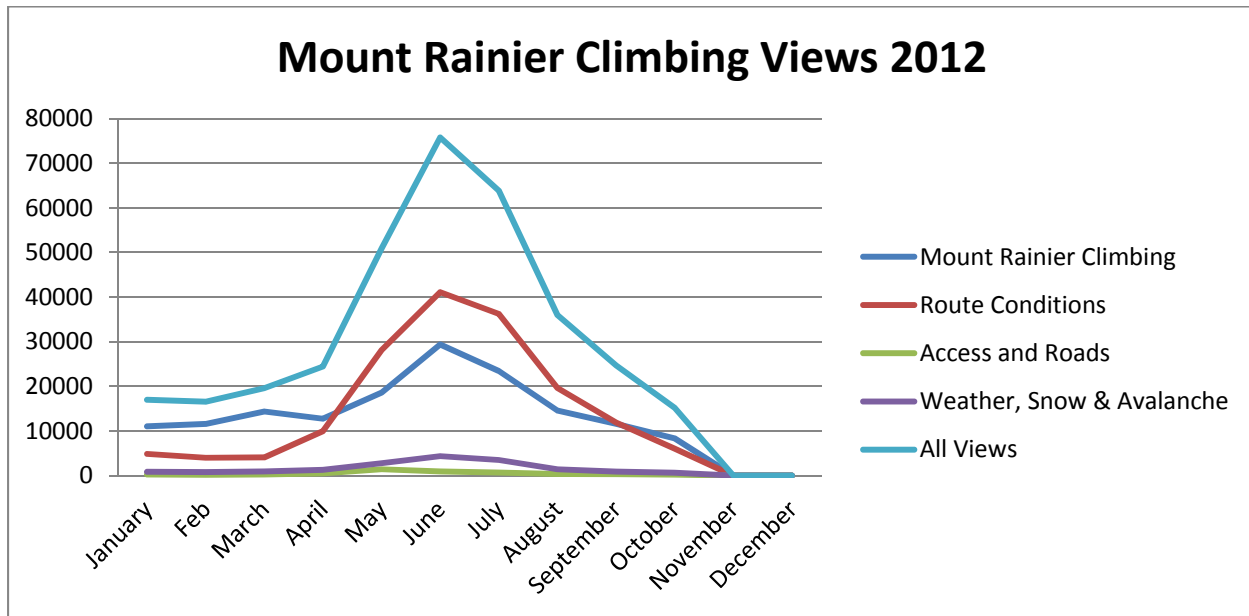
Mountrainierclimbing.blogspot.com

The climbing blog has been the best way the climbing rangers have been able to get updated route conditions out to the public in a timely way. The blog is immensely popular and takes hits from all over the world. In the past several years, there have been many hundreds of thousands of hits. We actually receive requests to advertise on it from large corporations.

Because of the installation of the network bridge to Camp Muir in 2011, the climbing rangers now have the ability to update the blog from Camp Muir, immediately after their climb. This should increase the timeliness of their route updates, reports, and communications.

Climbing Ranger Number of Blog Update Threads 2012

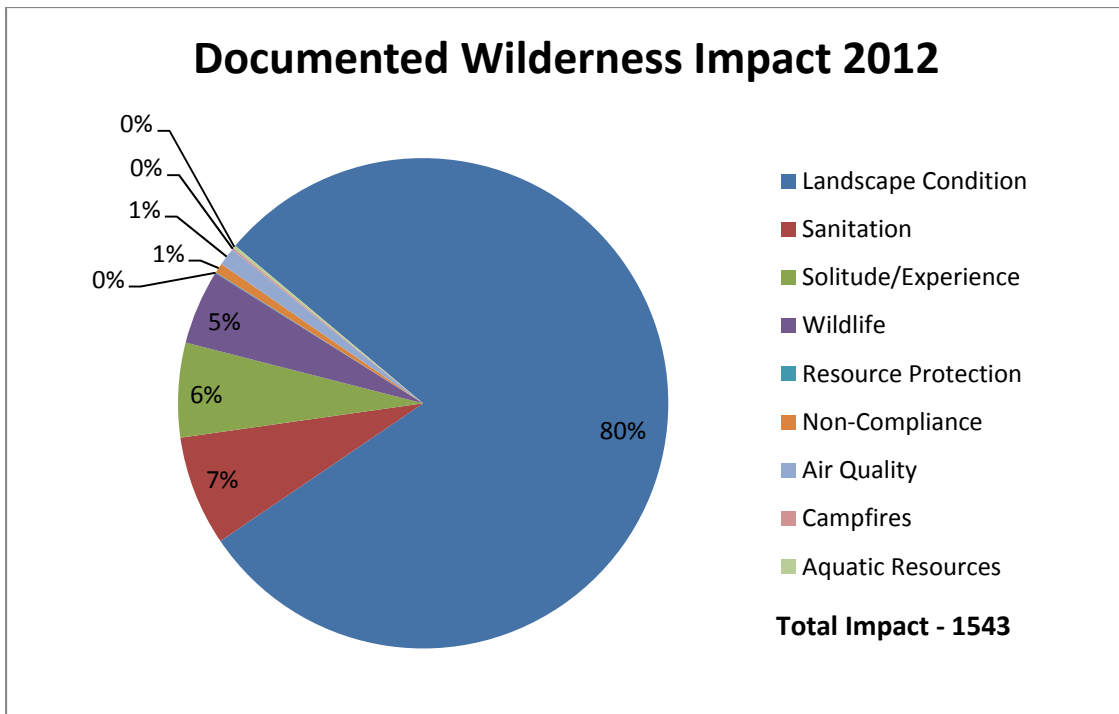




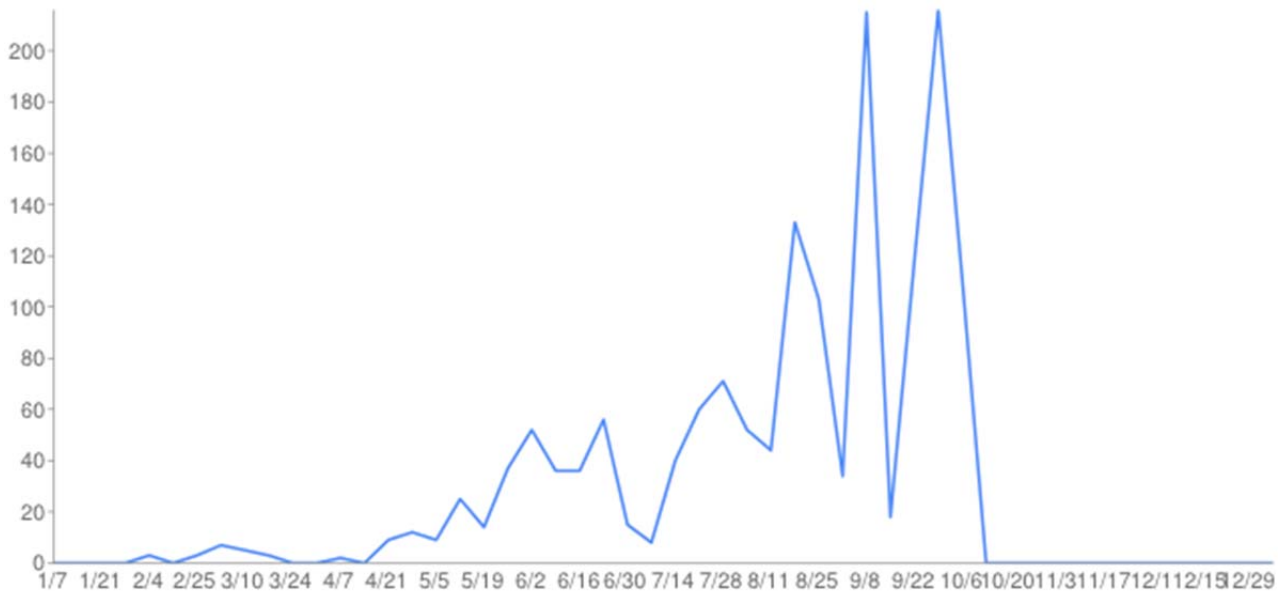
Resource Protection

The climbing rangers are simply wilderness rangers who must have skill in climbing to access the area of land in our district, monitor its use, document impacts, and clean up areas of impact. As a part of each individual's weekly climbing ranger patrol log, rangers are required to enter each impact they observe. There are roughly 62 impact categories under 9 general categories. The more impacts the rangers record, the better managers can make decisions and intervene to control or mitigate these impacts.

Climbing rangers recorded over 1500 individual impacts. This was a record number of impacts recorded in any year since the system was implemented in the 1980's – for the whole park. It is important to consider that this doesn't represent an increase in total impacts on Mt. Rainier, only that we have devised a way of more easily recording impacts and also making it a higher priority.



Impact Observations per Week 2012



The above graph represents primarily litter and stray wands, which by the end of the summer, melt out of the snow and are just laying on bare ground. This doesn't necessarily show that more people are littering in August, but this is when we see most of the melted out litter on the ground. This figure also represents a large volume of meadow stomping, denuded vegetation, and campsite rings that develop later in the season after the snow has melted.

The data suggest several areas where we could develop strategies to lessen the impacts on the mountain and preserve the wilderness character. These include removing wands from the Muir snowfield and the climbing routes and also removing blue bags and human waste. The data we are currently collecting on commercial, single engine, and military over-flights is being used to in management plans to limit flights over the park.

Human Waste

Nothing much has changed from last year in our management of human waste. We have two systems, the toilets at the high camps and the blue bag system.

The toilets at high camps are not “composting” toilets, they work somewhat effectively at separating the solids and liquids. The liquids are dispersed directly back into the rock debris below Camps Schurman and Muir. The solids are somewhat dehydrated and then transferred to 40-gallon barrels, which in turn are flown off by helicopters. The barrels are then transported to a waste processing facility outside the park.

The blue bag system is used in areas where there are no toilets. Human waste is deposited on the ground or snow. The solids are picked up like you pick up your dog’s poop in the park. The waste is transported by the visitor/climber to a high camp or ranger station where they are put in a barrel. The barrel is either flown from Camp Schurman/Muir or picked up by vehicle at ranger stations. These barrels are then transported to an incinerating facility outside the park.

The overhead in maintaining these two systems costs between 80,000 and 100,000 dollars, if you include all the people, materials, supplies, and transportation costs. Several 10’s of thousands of those dollars are paid for by money not associated with the climbing program or the cost recovery fee (climbing fee). The exact cost of operating the system is not easy to figure because you have to put a percentage of several people’s time who are not paid for out of cost recovery money.

One of the challenges we face with the management of human waste is that because of the cold temperatures at Camp Muir, we cannot just simply lay a pipe down in the winter for the urine to flow out. It freezes and clogs up the pipe, eventually clogging and causing difficulties in the toilet. So the urine drains into a holding chamber, which freezes solid. Because of the solar snow melter’s success, we are experimenting with a similar system to keep the urine warm enough to be liquid so we can easily drain it.

Below is the number of each type of human waste collected at Camp Muir.

Total Human Waste Removed from Mt. Rainier 2012

Human Waste Collected from Mountaineering Operations 2012		
Location	Number of Barrels	Pounds of Waste
Camp Muir		
Raw Human Waste	13	5500
Blue Bags	8	1,600
Camp Schurman		
Raw Human Waste	3	1,500
Blue Bags	2	400
White River		
Blue Bags	0.25	50
Paradise		
Blue Bags	5	1000
West Side Rd		
Blue Bags	0.1	20
Totals	31.35	10070

Volunteer, SCA's, and other partners

The climbing program has always relied on these partnerships to conduct its operation. Each year, approximately ¼ of all employee hours are volunteer. Volunteers aren't exactly free.

Because of the complexity of the duties and the serious consequences of mistakes, the climbing ranger program only accepts volunteers who are able to commit to a April – September, 40-hour / week schedule. This allows for the volunteers to receive the same training as the climbing rangers they work with such as avalanche training, EMS training, technical rope rescue training, general operations training, safety policies, aviation training, and incident management training to name a few.

Each full-time volunteer also receives a \$20/day stipend and their housing is paid for. These costs average just over 4,000 dollars per volunteer per summer.

The entire volunteer program cost us about \$18,000 this year. The return on investment though is quite high.

VIP Hours 2012

VIP	SCA	MRA	Total
4364	0	724	5088

Paid Equivalent:	x \$20/hour	\$101,760.00
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Guiding

This year was the 6th year of a 10-year contract with three commercial guide services. These contracts were openly bid. The companies were selected and the contract was signed on November 1, 2006. The three companies were Alpine Ascents International, International Mountain Guides, and Rainier Mountaineering, Inc. The climbing program maintains a positive and progressive relationship with the guide services, which makes sense because we work so closely together on the upper mountain and on search and rescue operations.

The contract is very specific on the numbers that each company is allowed to guide, the guide client ratios, and many other parameters. Here's the results from the guide services end of season reports, which includes not only their normal summit climbs, but also their winter seminars, expedition seminars, and private climbs all around the mountain.

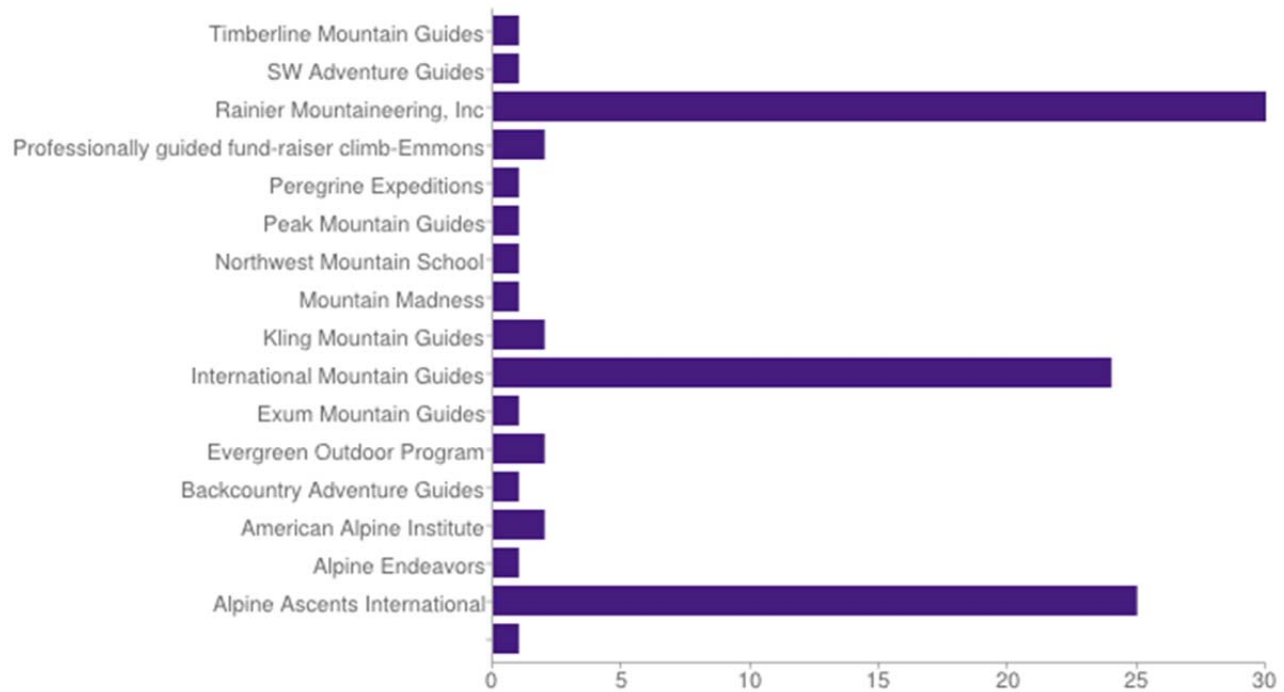
Guide Service	Guides	Clients	Total
Alpine Ascents International	336	619	955
International Mountain Guides	357	682	1039
Rainier Mountaineering, Inc	736	2016	2752
Total:	1429	3317	4746

Since the total number of climbers registering for Mt. Rainier was 10,403 people in 2012, this makes the ratio between independent and guided activity about 55% to 45%, respectively. This is consistent with historical ratios.

The guides work closely with the climbing ranger staff. In 2008-2012 three joint trainings were held each season, with each partner, NPS, AAI, IMG, and RMI hosting training. This allows the rangers to meet the guides, develop working relationships with them, so that they can better work together in stressful rescue situations.

The climbing rangers also do random monitoring of the guide services for compliance to their contracts and operating plan. These monitoring forms are submitted electronically to the climbing program manager and the commercial services manager in the park. This allows any kudos or issues to be passed on or mitigated very quickly. In 2012, there were a 97 monitoring performed by climbing rangers. We were also to catch some of the approved single trip guide services, listed below.

Guide Service Observation



Mountain Rescue Association

The MRA is of incredible importance to us. Mt. Rainier National Park currently has a patrol program with its Washington chapters where we invite them to come and practice their skills here; in turn they are given free admittance to the park. They can perform a climbing patrol of the mountain while training. This allows them to be “proximal” to incidents when they are occurring. Mountain rescue’s participation in our search and rescue incidents is invaluable because for each MRA volunteer rescuing, we can keep an NPS ranger in their job and keep a ranger station open or a ranger on patrol.



Figure 19 – A rescue with climbing rangers and the 214th General Support Aviation Bridge, JBLM, Tacoma, WA

During the recent rash of rescues in January 2012, Mt. Rescue contributed nearly 2000 rescuer-hours, which is the equivalent of over \$40,000 of paid time. Climbers and all outdoors men and women owe Mountain Rescue a high honor for their efforts.

During the 2012 climbing season, Mt. Rescue contributed over 700 hours of volunteer time on Mt. Rainier training and contributing to SAR operations.

The units that participated in our program in 2012 were Tacoma, Olympic, Seattle, Everett, Inland SAR, and Central Washington.

Searches and Rescues

In fiscal year 2012, (Oct 1, 2011 – Sept 30, 2012) there were 32 search and rescue operations. This was an average year in the number of rescues. However, there were eight upper mountain fatalities and two major searches. These two categories of incidents cost more than simple, one-day rescue operations due to the number of resources searches and fatalities take. The main reason for the substantially higher rescue cost this year was due to the climbing ranger fatality. Most of this cost is not due to the rescue of Nick itself, but due to the staffing and backfill and much of the memorial organization which were charged to the SAR account. So the park didn't have to dig into its own pocket to pay for it.

Total Unprogrammend costs of Search and Rescue by Year

2012	\$359,342.85
2011	\$130,398.00
2010	\$160,689.00
2009	\$54,078.00
2008	\$68,740.00
2007	\$143,200.00
2006	\$62,303.00
2005	\$267,157.00
2004	\$272,451.00
2003	\$63,612.00
2002	\$136,566.00

These costs represent “un-programmed” costs, which are defined as overtime, gear, supplies, and aviation resources that are not a part of normal scheduled operations. This cost does not account for normal scheduled time rangers are on duty. In general, the larger years’ sums represent years where there were multiple major search operation or multiple fatalities.

No climbing fee money is dedicated to paying for any of these un-programmed costs. However, a small percentage of the climbing fee money does go to search and rescue in this way. The climbing fees do pay for climbing rangers. If during the course of their normal duty there is a search or rescue, their scheduled hours are billed to climbing ranger program. This most often represents about 5-10 % of the climbing ranger financial load. It is also important to remember that the entire climbing ranger program is roughly 80% funded by climbing fees and 20% funded by other monies.

Noteworthy Events

Ranger Margaret Anderson murdered: http://www.cbsnews.com/8301-201_162-57350762/park-ranger-killed-by-gunman-in-national-park/

Nick Hall climbing ranger fatality:

<http://www.nps.gov/applications/digest/headline.cfm?type=Announcements&id=12268>

Ranger Ted Cox dies: <http://blog.thenewstribune.com/adventure/2012/08/07/ted-cox-chief-of-maintenance-at-camp-muir-died-sunday/>

Once again, the USGS has also cooperated with the climbing program to research the surface temperatures on the crater rim at Columbia Crest. This project is common to all Cascade volcanoes. This will establish baseline data to help detect change and if the volcano is heating up or cooling down.

The Mt. Rainier climbing program is also partly funded by glacier research money. Each year stakes are drilled into the glacier on the Nisqually and Emmons glaciers. These stakes are measured throughout the year most notably at the end of the summer melting period. The difference between the spring max and the fall minimum determines the “glacier budget”. This study determines if the winter accumulation was greater or less than the summer melt. It is an indicator of advancing or retreating glaciers and of climate change. For more information on this study, go to: <http://www.nps.gov/noca/naturescience/glacial-mass-balance1.htm>

Income and Funding, Expenditures, and Budget 2012

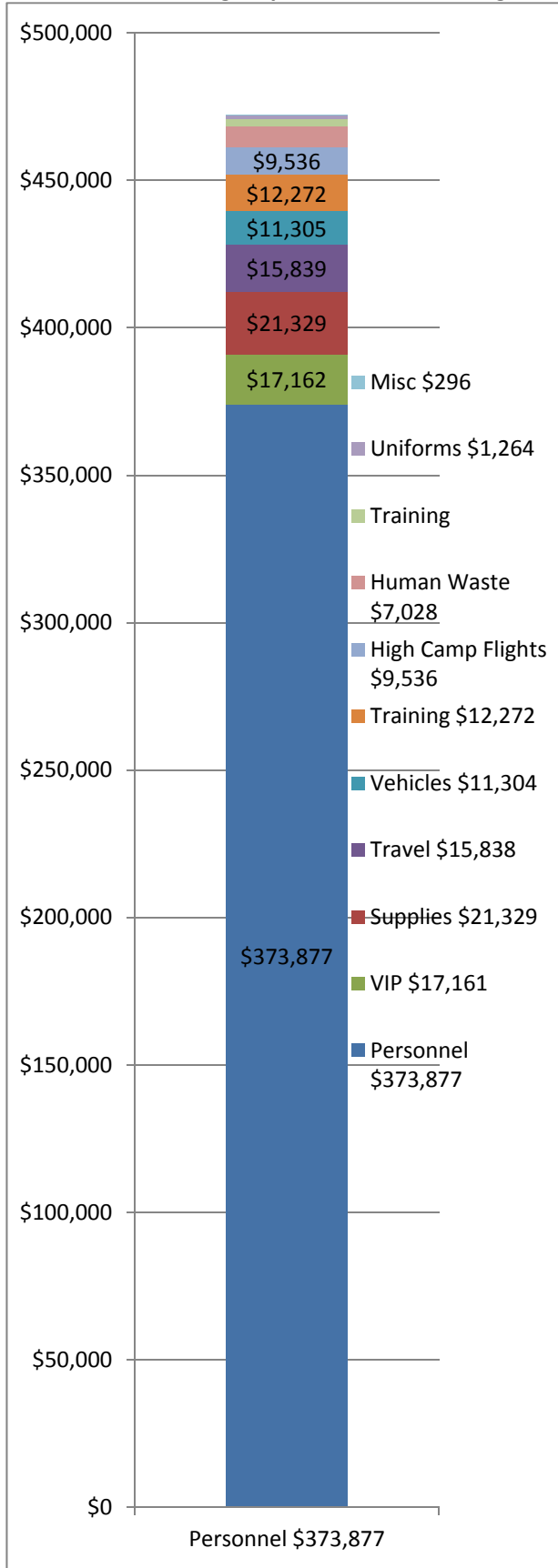


Figure 21 – Program Expenditures

The climbing program’s budget is difficult to manage. The budget cycle is by fiscal year (Oct-Sept). The planning, hiring, training, and equpage of the climbing program needs to be taken care of before the climbing season has begun, and thus before the fees have been collected! This means that we commit to spending money before we know exactly what our budget is. However much this seems like a poor business practice, we have been able to make this work since the fee’s inception in 1995. In a few years, this has resulted in some rash decisions, like laying off rangers prematurely in order to save money and make budget.

The entire climbing program’s budget in 2012 was \$474,476. This is about \$15,000 less than in 2011. The decrease is accounted for by almost 400 fewer climbers this year than in 2011. This sum does not include the climbing program manager’s salary who also has many park-wide responsibilities. This figure also does not include several hundred thousand dollars of help and assistance the climbing program gets from other divisions in the park who are just doing their job such as maintaining our radios, building and maintaining structures at high camps, and managing concessions operations.

In 2012, the climbing program consisted of 24 people. This breaks down into 1 program manager, 3 supervisors, 5 lead climbing rangers, 4 climbing rangers, 2 high camp maintenance rangers, 5 volunteers, and 1 administrative assistant.

Here are the expenditures of the climbing program roughly categorized from all funding sources combined.

Salaries of the permanent and seasonal staff account for roughly 76% of the climbing budget. These costs include regular hours, premiums such as overtime and hazard/environmental differential, background investigations, as well as other benefits such as paying into unemployment insurance.

Travel is mostly in park and reimbursed as backcountry per diem.

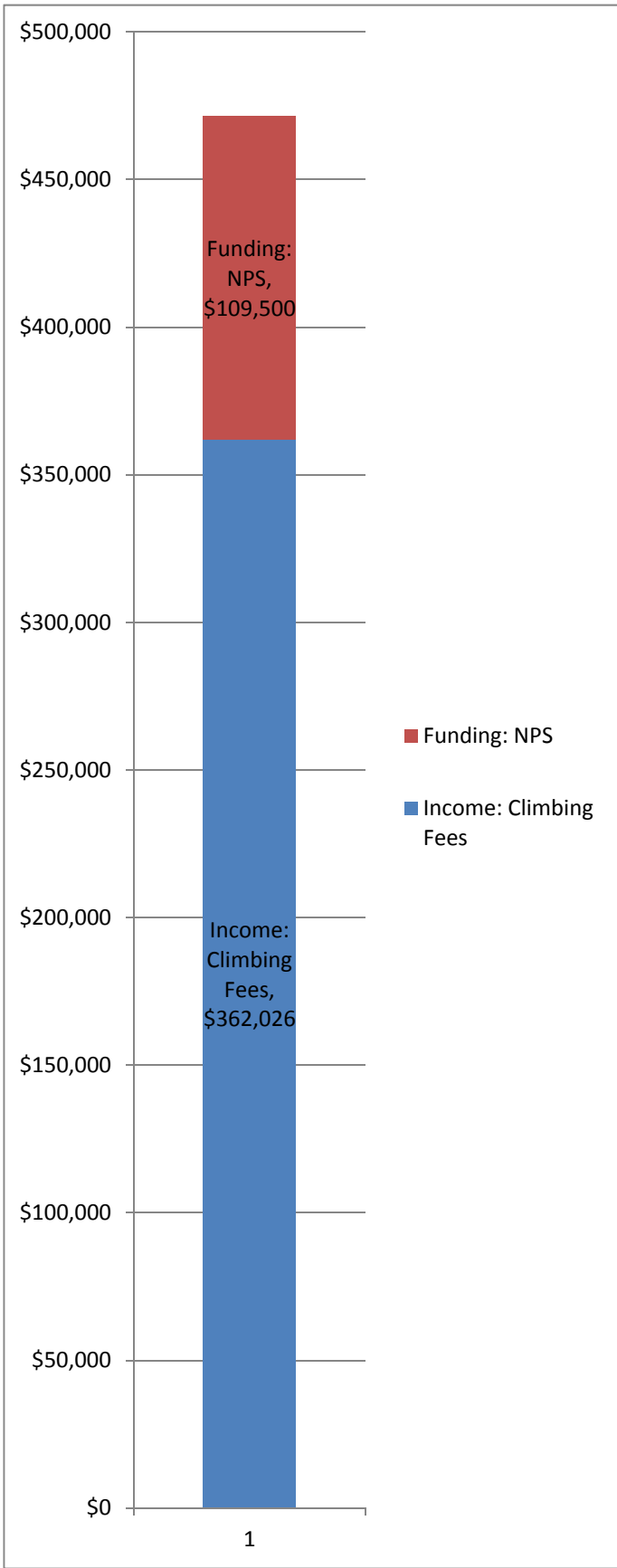
Training cost include EMT refresher training, aviation training, and technical rope rescue training.

VIP costs are all costs associated with the VIP's in the climbing program. This is their \$20/day volunteer reimbursement, a small amount of gear and equipment we buy for them, and paying for their housing.

Supplies represented here are both administrative supplies such as paper, forms, booklets, pocket guides, computers, IT equipment, as well as operation supplies like carabiners, ropes, crampons, jackets, and other equipment.

Vehicle rentals are strictly the 4 vehicles the climbing rangers rent from GSA in order to provide transportation around the park while in duty status.

The \$7,028 quoted for Human Waste is only a equipment/supply cost. The personnel staffing is bound up in the Salary Category, which would roughly equate to about \$45,000 of the large blue column. Also, not included in the \$4,978 is the cost of helicopter flights. That is also bound up in the "high camp flights" category and represents over half of that sum.



Program Income and Funding

\$362,000 were collected from the sale of climbing passes at roughly a 10% / 90% split between youth passes and adult passes (\$30 / \$43).

Roughly \$109,500 was allocated by the park to the climbing program. These funding sources included:

- \$71,000 concessions franchise fees
- \$28,000 centennial initiative
- \$3,500 glacier research/monitoring
- \$7,000 washington national parks fund grant

In fiscal year 2012, the climbing program was roughly 80% funded by climbing fees and 20% funded by Mt. Rainier National Park accounts.