



North Cascades National Park

2012 Business Plan



Produced by
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Business Management Group
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National Park Business Plan Process

The purpose of business planning in the National Park Service (NPS) is to improve the ability of parks to more clearly communicate their financial and operational status to principal stakeholders. A business plan answers such questions as: What is the business of this park unit? What are its priorities over the next five years? How will the park allocate its resources to achieve these goals?

The business planning process is undertaken to accomplish three main tasks. First, it presents a clear, detailed picture of the state of park operations and priorities. Second, it outlines the park's financial projections and specific strategies the park may employ to marshal additional resources to apply toward its operational needs. Finally, it provides the park with a synopsis of its funding sources and expenditures.

National Park Service Mission: *The National Park Service preserves unimpaired the natural and cultural resources and intrinsic values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.*



Sunrise at Copper Lookout.

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Top to bottom: Jack Mountain; North Cascades Wild program participants; Buzzard Cabin.

Letter from the Superintendent

It is my privilege to present this business plan for the North Cascades National Park Complex, which is comprised of North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation Area.

The foundation for this business plan is the park's 2011–2016 Strategic Plan that was developed by the park's management team, with input from employees and partners. It was informed by long-term park planning documents, such as the General Management Plan, priorities of the National Park Service, and an understanding of the park's strengths and opportunities. The strategic plan identified numerous outcomes, actions, and programs to be implemented by 2016, to coincide with the centennial of the National Park Service. The next step after its development was to link the park's strategic plan to realistic fiscal planning (i.e., how we can accomplish these goals), particularly in light of an uncertain budget climate. While our employees have high aspirations we must operate the park within fiscal constraints, meaning that we must thoughtfully prioritize our objectives in case we cannot address them all.

Business plans in the National Park Service identify gaps between what an organization wants to accomplish and the resources it has available. They also identify strategies for closing these gaps by modifying what the organization wants to accomplish and/or the resources it has available. It is clear that, for the foreseeable future, we will face choices on how to pre-

serve and protect these public lands within financial constraints while still providing for their enjoyment. At the same time, we must take action to position the park to compete for funding when the financial climate turns more positive.

This business plan is about understanding how the park utilizes its financial and human resources, what work we ask employees to do, and how we can be more strategic over the next three to five years. This plan is about starting conversations that lead to alignment between our financial resources and the work of our employees and partners to accomplish the most important things that we need to.

We are fortunate that the people who work for the North Cascades are passionate and skillful. By aligning this passion and skill with the funding to support key operations and critical projects we can make a lasting impact on the ecosystem and the people who live, work, and find re-creation through recreation in the North Cascades.

We hope that this business plan will help you better understand how the park operates, but more importantly, the direction it needs to head and how your support is essential to its future.



Palmer "Chip" Jenkins
Superintendent,
North Cascades National Park



Backcountry trail marker.

Introduction

The North Cascades are a land of extreme diversity and complex human interactions, where one can hike the same mountain passes used by Native Americans for thousands of years or camp along the banks of a mighty glacier-fed river that now helps power the city of Seattle. Three park units—North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation Area—are managed as one, North Cascades National Park Complex (North Cascades, or the park), in this extraordinary ecosystem. Because the park's vertical elevation starts just above sea level and rises over 9,000 feet, and precipitation declines sharply from west to east, North Cascades supports a broad range of natural habitats for a multitude of plant, animal and fish species. Rugged mountains, lush vegetation, steep valley walls and challenging weather made exploration and human settlement by European-Americans difficult, while enabling the area to remain truly wild. From the jagged peaks of the Picket Range to the deep waters of Lake Chelan, North Cascades has rich outdoor opportunities for all. Access to the park may not always be easy, but it is always worth the effort.



Ross Lake from Desolation Peak.

Introduction to North Cascades National Park

Key Themes: Highlights and Challenges

The following key themes emerged during the business planning process at North Cascades. Some are inherent in features of the park—location, terrain, and climate. Others reflect deliberate management decisions. These themes will be discussed in more detail throughout the pages that follow.

- North Cascades is a **wilderness** park. As such, visitors have to work hard in order to access and appreciate its resources. While this creates a distinctive visitor experience, it also limits visitation and awareness of the park among large segments of the public.
- Park **visitation is highly seasonal; workload of the park staff is not**. As a result of dramatic climate variability, the vast majority of visitors come to the park during a five month summer season running from mid-May through mid-October. Weather conditions also dictate the window of time in which maintenance, construction and scientific field work can occur. The work of hiring and supervising seasonal employees, preparing funding requests, meeting reporting requirements, and planning and preparing for the peak field season keep the park's full-time staff busy through the late fall, winter and early spring. As a result, park management and operations can be viewed as three distinct periods: visitor and field operations (May–October), reporting and budget planning (November–December), and planning and preparation for the field season (January–April).
- The park has proven adept at developing **innovative and wide-ranging partnerships**, and leveraging those relationships to achieve shared goals. Through these partnerships with organizations like the North Cascades Institute, Seattle City Light, and Washington's National Park Fund the park displays an exceptional level of operational flexibility, coordinating activities to assist network partners while also working to achieve park goals.
- North Cascades has a **broad constituency of stakeholders**. A major hydropower development and a remote resident community lie within the park's boundaries; the park is also part of a broader ecosystem of federally managed land that spans multiple agencies and an international border. The complexity and interdependence of the ecosystem mean that effective collaboration across boundaries and with each of the stakeholder groups is essential in order to operate successfully.

Orientation

Orientation

North Cascades National Park Complex is located in the northwest region of Washington, approximately 100 miles northeast of Seattle. Three units comprise the 684,000 acre complex. Combining these three distinct units under a single administration recognizes their shared purpose of preserving the core of the greater North Cascades ecosystem and wilderness, while also advancing their individual purposes. The park stretches from the tip of Lake Chelan to the Canadian border. Visitors access the park primarily by State Route 20, which runs west-east through the complex. Ross Lake can also be accessed from the north via the gravel Silver-Skagit Road from Hope, British Columbia. Access to the Stehekin Valley and Lake Chelan National Recreation Area is limited to plane or boat service from the town of Chelan or by hiking or horseback riding on one of several trails.



Mission and Foundation

Mission and Foundation

President Lyndon B. Johnson signed the park's enabling legislation into law on October 2, 1968, establishing North Cascades National Park and Ross Lake and Lake Chelan national recreation areas. The legislation identified the purpose of each unit. The purpose of North Cascades National Park is to preserve "certain majestic mountain scenery, snowfields, glaciers, alpine meadows, lakes and other unique glaciated features...for the benefit, use and inspiration of present and future generations." The purposes of the two national recreation areas are to complement North Cascades National Park and conserve the scenic, natural and cultural values of the Upper Skagit River Valley, the Lower Stehekin Valley, Lake Chelan and the surrounding wilderness for outdoor recreation and education, while respecting the remote Stehekin community and the hydroelectric reservoirs and development on Ross Lake.

From its inception, North Cascades National Park Complex was envisioned primarily as a wilderness park, with the exception of the narrow hydropower corridor along the Skagit River (for more information, see box below). The park is part of a greater ecosystem which includes nearly three million acres of protected public land spanning two countries and a range of cultures, communities and ecological life-zones. This expansive landscape provides a rare opportunity in North America for biodiversity to reach its full potential with minimal human interference. A well-preserved ecosystem of this size benefits an abundance of migratory animals and provides habitat to threatened and endangered species. For centuries, the beauty of these landscapes has inspired locals and visitors alike—from the early indigenous people who called the area home, to artists, writers and beat poets such as Jack Kerouac, Gary Snyder and Philip Whalen (who served here as fire lookouts in the 1950s), to the local and urban youth who participate in park programs today.

"If future generations are to remember us with gratitude rather than contempt, we must leave them something more than the miracles of technology. We must leave them a glimpse of the world as it was in the beginning, not just after we got through with it."

— President Lyndon B. Johnson, on the signing of the Wilderness Act of 1964



Wildflowers along Sahale Arm Trail.

A Wilderness Park

With the passing of the Wilderness Act in 1964, Congress established the National Wilderness Preservation System. Today the Wilderness System encompasses over 106 million acres of public land, managed by the National Park Service, the US Forest Service, the Bureau of Land Management, and the US Fish and Wildlife Service in order to protect the four qualities of wilderness character: untrammeled, natural, undeveloped, and outstanding opportunities for solitude or primitive and unconfined recreation.

In 1988, Congress designated the Stephen Mather Wilderness. This land comprises 94 percent of the total area in North Cascades. While the wilderness designation provides visitors with unique opportunities to experience the

ecosystem in its natural state, it also poses special challenges to park management. From replacing a collapsed bridge to allowing television crews to film aerial footage of the park's glaciers for a story on climate change, nearly every decision the park makes can affect wilderness quality. In each case, the park must first determine if the contemplated actions are truly necessary in order to meet the minimum requirements for administering the wilderness. The park then determines the minimally disruptive means by which to act—for example, electing to deliver supplies to remote areas by foot or mule rather than by helicopter. To address these challenges, the park has developed an inter-disciplinary Wilderness Committee.

Resources

Resources

North Cascades National Park Complex spans the Cascade Crest from the temperate rainforest of the west side to the dry ponderosa pine ecosystem of the east. The park encompasses landscapes with over 9,000 feet of vertical relief, which results in a high diversity of thousands of species adapted to a wide spectrum of habitats.

The relatively new mountains, glaciers and streams of the North Cascades lie near a dynamic interface of tectonic plates and provide an opportunity to study geologic processes unfolding through time. Here, scientists seek answers to questions of global climate change, mountain building and erosion, volcanism, glaciation, stream dynamics and much more.

While North Cascades was originally created as a wilderness park, important archeological discoveries have uncovered evidence of human inhabitants in these mountains as far back as almost 10,000 years ago. The numerous archeological sites are now an important cultural resource and a significant part of the park's identity, providing clues to the rich history of the native people.



Clockwise, from upper left: Temperate rainforest stream; Mountain goat on Ptarmigan Traverse; Bumblebee; Redside shiners; Buckner Orchard; Black bear.

North Cascades National Park Complex spans the Cascade Crest from the temperate rainforest of the west side to the dry ponderosa pine ecosystem of the east.

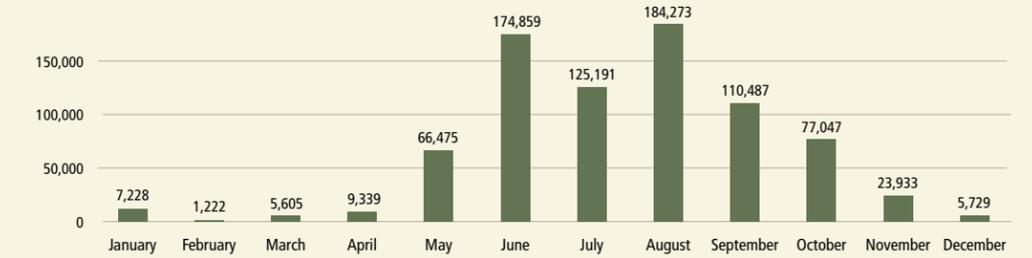
Visitor Information

Visitor Information

Outdoor recreation, scenic vistas, and educational opportunities abound in North Cascades. The park's wilderness provides premier backpacking and mountaineering experiences. The visitor centers host interpretive exhibits and ranger programs, and there are many camping and hiking trails accessible for the whole family. Lakes and streams can be enjoyed through boating, kayaking and fishing. The park is also home to cultural and historical resources such as the community of Stehekin in Lake Chelan National Recreation Area.

In total, the park welcomed 791,388 visitors in 2011. The large majority, 728,353, spent their time at Ross Lake National Recreation Area and along the Highway 20 corridor. Lake Chelan National Recreation Area drew 43,827 visitors and North Cascades National Park drew 19,208 visitors, most of whom stayed in the park overnight. In total, the park had 99,417 overnight stays. Visitation is highly seasonal, with the majority of activity occurring in June, July, August and September. Due to its climate and inaccessibility—Highway 20 is typically closed east of Ross Dam between late November and mid-April—the park sees very few visitors during the winter months.

**North Cascades National Park Complex
Recreational Visits, 2011**



In total, the park welcomed **791,388** visitors in 2011.

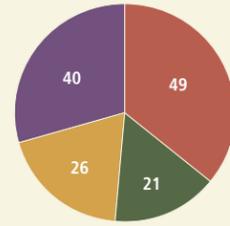


Clockwise, from upper left: Swimming in Ross Lake; Junior rangers discussing bears with a park ranger; Diablo Lake Boat Tour; Fisher Basin campsite.

Personnel

Personnel

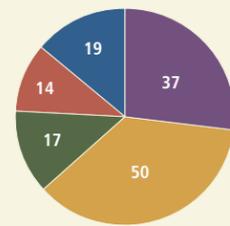
In Fiscal Year (FY) 2010 the park employed 246 people at the height of summer and a low of 84 in winter. Over the course of the year, the park employed 53 permanent employees who work year-round (PFT), 28 permanent subject-to-furlough employees who are not scheduled to work a full 12 months of the year (PSF), 45 term employees hired on short-term appointments for specific projects (TERM), and 200 seasonal employees who work less than six months (SEAS), including student hires and National Park Service employees who do work for other parks (e.g., historic preservation, fire crews, trail workers, and inventory and monitoring technicians).



North Cascades Staffing (FTE) by Type, FY 2010

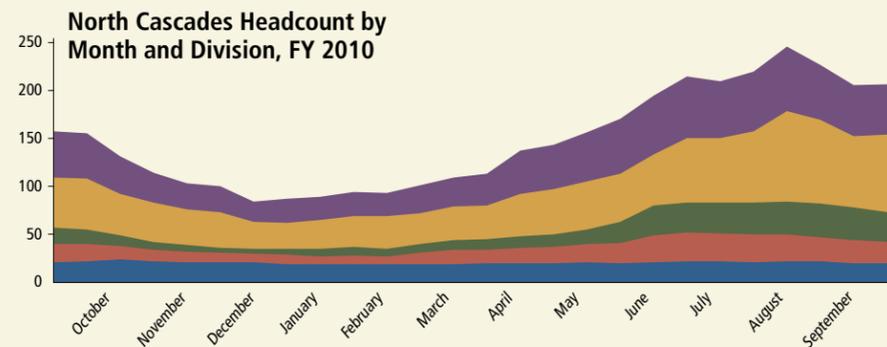
- PFT (Permanent full-time)
- PSF (Permanent subject-to-furlough)
- TERM (Hired on short-term appointment)
- SEAS (Seasonal/less than six months)

Total hours worked by all employees was equal to 136 full-time equivalents (FTEs), calculated based on 2,080 working hours per year. Employees are organized into five divisions with 37 FTE in Facility Management, 50 in Resource Management, 17 in Visitor and Resource Protection, 14 in Interpretation and Education, and 19 in Management and Administration.



North Cascades Staffing (FTE) by Division, FY 2010

- Facility Management
- Resource Management
- Visitor and Resource Protection
- Interpretation and Education
- Management and Administration



52 Facility Management
82 Resource Management
30 Visitor and Resource Protection
22 Interpretation and Education
20 Management and Administration

The numbers above indicate total headcount for each division at the end of FY 2010.

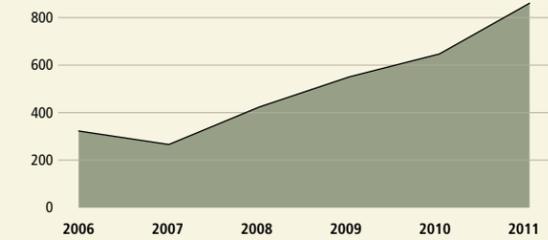


Top: Stehekin-based Centennial Seasonals; Bottom: Wilderness ranger on trail with visitors.

Volunteers

North Cascades National Park has an active volunteer program, with the goal of creating stewards of the park and ecosystem through service and connection to the North Cascades. In FY 2008, the park received a base operating increase dedicated to improving the Volunteers-in-the-Park (VIP) program, which has resulted in a steady increase of volunteers. In FY 2010, the park hosted 645 volunteers who contributed 34,469 hours of service work to the park, engaging in activities ranging from maintaining trails to greeting guests at the visitor centers. In FY 2011, the volunteer program grew more than 30 percent, to 851 volunteers. In effect, the park leveraged a \$48,000 base budget increase to double the size of its volunteer program, managing total volunteer hours equivalent to 17 full-time employees.

Volunteers at North Cascades National Park, FY 2006–2011



In FY 2011, the volunteer program grew more than 30 percent, to 851 volunteers.



Artist-in-Residence Becky Fletcher. The North Cascades has inspired artists throughout the centuries; paintings, poems and photographs are all ways to explore and appreciate the park.



A Student Conservation Association volunteer prepares for backcountry work at the Cascade Pass trailhead.



Elementary school students construct a native plant garden at the Diablo Lake Overlook.

Partnerships

Partnerships

North Cascades has been very successful in engaging partner organizations to assist in achieving park goals. Key partnerships include:

North Cascades Institute

The park has worked closely with the North Cascades Institute (NCI) for 25 years. With the support of park staff, NCI manages most of the curriculum-based educational programming within the park. NCI offers a variety of experiential learning opportunities such as residential educational programs for students, summer youth camps, family getaways, adult seminars and retreats, volunteer stewardship opportunities, and a graduate program leading to a Master of Education in Environmental Education with a Certificate in Leadership and Nonprofit Administration. The North Cascades Environmental Learning Center, located in the park at Diablo Lake, is managed by NCI in partnership with Seattle City Light and the National Park Service. NCI also acts as the park's Cooperating Association and manages six retail sales areas that provide books, maps, and art to enhance visits to the park.

Regional NPS Networks

National Park Service units in the Pacific West Region have joined together to form networks in order to implement mandated programs by leveraging park employees' specialized expertise across several parks. North Cascades is part of the North Coast and Cascades Network (NCCN), which consists of eight parks and was created in 2001 to implement and manage a long-term natural resources inventory and monitoring program. The network has since grown to support human resources (Servicing Human Resources Office), contracting and procurement (Major Buying Acquisition Office), information technology, and a Science Learning Network. North Cascades hosts positions that service network parks as part of a Major Acquisitions and Buying Office (MABO four positions), Servicing Human Resources Office (SHRO two and one-half positions) and Information Technology (two positions) and Science Learning Network (one half-time position).



Map of the parks comprising the North Coast and Cascades Network.

Seattle City Light

Seattle City Light's Skagit River Hydroelectric Project within Ross Lake National Recreation Area currently produces approximately 20 percent of Seattle's power. The facilities predate the establishment of the park—the Skagit Hydroelectric Project originated in 1919 with the construction of the Gorge Dam, followed by the Diablo Dam in 1929 and the Ross Dam in 1949.

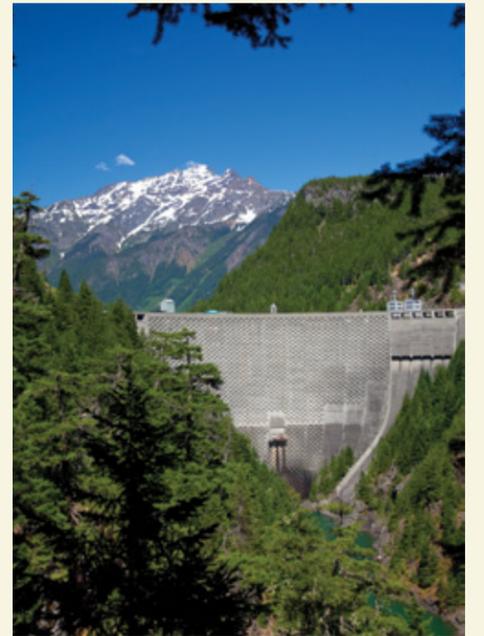
In 1995, Seattle City Light entered into a landmark settlement agreement with twelve stakeholders, including the park, as part of Federal Energy Regulatory Commission (FERC) project relicensing. As a result, Seattle City Light agreed to provide the park with \$11.5 million over the 30-year license period to fund mitigation actions related to fisheries, recreation and aesthetics, erosion control, wildlife, and cultural resources. Under the agreement, Seattle City Light funded construction of the North Cascades Environmental Learning Center and continues to cover a portion of the center's ongoing operating expenses. Environmental impact mitigation funding—over \$4 million through 2010—has paid for improvements to recreational facilities (e.g., docks, trails, and campgrounds), erosion control and ecological restoration (e.g., salmon recovery, riparian vegetation restoration, and fisheries and wildlife research). The partnership with Seattle City Light has evolved to include collaboration on visitor education, park information, emergency services, and youth engagement activities.

In 1984, a treaty between Canada and the United States to not raise Ross Dam, which would have increased the level of Ross Lake, flooding parts of British Columbia, resulted in the creation of the \$5 million Skagit Environmental Endowment Fund. Managed by the Skagit Environmental Endowment Commission (SEEC), this "endowment" is managed to provide annual project funding through 2065 when the treaty expires. This funding is provided by the Canadian government, for the enhancement of recreational opportunities and environmental protection in the area above Ross Dam. Grants to the park have funded interpretive programs, trail and campground rehabilitation, ecological restoration and scientific research.

Washington's National Park Fund

Washington's National Park Fund is the official non-profit fundraising partner of North Cascades, Mount Rainier and Olympic national parks. The Fund raises money from the sale of national park specialty vehicle license plates—\$28 of every registration goes to the Fund—and from private donors and philanthropic organizations. Each year North Cascades submits a range of project proposals for consideration by the Fund's Board of Directors. The park has received between \$75,000 and \$100,000 annually in grant funds. Examples of projects completed with these funds include a new, award-winning Junior Ranger Program, a volunteer shelter at the Marblemount Ranger Station, research on the status of the park's pika populations, and youth participation in backcountry trail and campground rehabilitation.

Partnerships (continued)



Ross Dam is the largest of Seattle City Light's three dams within Ross Lake National Recreation Area.



The Marblemount Volunteer Shelter was funded by Washington's National Park Fund to create a gathering place for volunteer groups.

Strategic Goals

Beginning in 2009, the management team at North Cascades undertook a collaborative planning process to define the park's primary goals through the NPS centennial in 2016 and delineate a strategy for achieving them. The park has already made substantial progress toward these goals, and the management team has identified specific opportunities and objectives to continue guiding the park forward.



Goal 1: Manage the park's natural and cultural resources

Manage the park's natural and cultural resources in unimpaired condition through scientifically informed stewardship, protection, research, restoration, education and public involvement.

Recent accomplishments:

- Completed the Ross Lake National Recreation Area General Management Plan.
- Completed and conducted public review draft of the Stehekin River Corridor Implementation Plan and Environmental Impact Statement.
- Implemented the Mountain Lakes Fishery Management Plan.
- Demonstrated the success of the fuels management program—thinning and prescribed fire allowed the park to protect life and property during the 3,600-acre Rainbow Bridge Fire in the Stehekin Valley.
- Developed and implemented eight Inventory and Monitoring Vital Sign Protocols for the network.
- Completed primary research documenting the use of high elevation areas by aboriginal people for nearly 10,000 years.
- Increased Facility Management Software System data completion to 96.7% and used the system to set priorities for maintenance work and funding proposals.
- Completed preservation of two historic fire lookouts.
- Attained Climate Friendly Park status and formed a Green Team to develop and implement energy and emission reduction actions.

Moving forward:

- Develop a Natural Resource Condition Assessment, in partnership with the US Geological Service, which will provide a summary status of the focal resources of the park and guide future research and management actions.
- Implement the high priority NCCN Inventory and Monitoring Vital Sign protocols at a sustainable level and make the information available to park staff, other agencies and educators.
- Develop an interdivisional Wilderness management program to enhance the four qualities of Wilderness character.
- Continue to integrate climate change mitigation and adaptation tactics into the park's Asset Management Plan.



Goal 2: Actively welcome visitors

Actively welcome visitors to the North Cascades through a variety of educational and recreational experiences.

Recent accomplishments:

- Awarded 10-year contract to operate concession for lodging, food service, shuttle, and other visitor services in Stehekin.
- Developed a new, award-winning, Junior Ranger Program.
- Built an ADA-compliant ferry boat landing.
- Constructed the Rainbow Mist Trail in Stehekin.
- Completed reconstruction of Happy Creek Forest Boardwalk, a primary accessible trail in Ross Lake NRA.
- Created a new Stehekin Pocket Guide designed for quick trip planning.
- Provided assisted listening devices, open captioning, and audio descriptions to ensure accessibility of visitor center audio-visual programs.
- Rehabilitated the Wilderness Information Center and the Upper and Lower Goodell Group Campgrounds
- Performed annual maintenance on 90% of the park's 396-mile trail system.

Moving forward:

- Use electronic media to improve visitor trip planning and wayfinding.
- Establish a new long-term contract for Ross Lake Resort to ensure visitor access to lodging within the park.
- Improve the Facility Condition Index (FCI) of the park's 97 "highest" and 28 "high" priority assets.
- Reduce by 25% the 2010 deferred maintenance backlog on critical systems.
- Implement plan for a sustainable road network in the lower Stehekin Valley.
- Provide text and images to regional tourism publications and websites.



Goal 3: Foster a diverse, well-trained staff

Foster a **diverse, well-trained staff** that works collaboratively and efficiently in a safe, rewarding and respectful environment.

Recent accomplishments:

- Created the "Pathways For Youth" program to engage over 200 diverse youth from elementary school through college in educational and service programs that lead to internships and employment in the National Park Service.
- Employed eight youths in 2010 and 17 youths in 2011 that had previously participated in volunteer or internship opportunities in the North Cascades.
- Provided interpretive coaching and mentoring to all interpretive staff by using the park's Regional Lead Coach and four local registered coaches.
- Created and used Safety First Awards to recognize employees who take tangible steps to ensure employees' well-being.
- Established a Green Award to recognize noteworthy staff contributions towards sustainability and addressing climate change issues at the park.
- Supported employee participation in NPS Fundamentals and the Leadership Skagit program with the Economic Development Association of Skagit County.

Moving forward:

- Retain high-performing employees and use annual turnover to recruit strategically for high-priority functions.
- Train all employees in Operational Leadership to improve employee safety and teamwork.
- Seek regular input from employees to identify best practices and reduce operating costs while achieving park goals.
- Ensure that all new permanent and term employees complete National Park Service Fundamentals training.
- Support individual employee education and professional development goals.



Goal 4: Inspire stewardship and foster engagement

Use innovative methods to help park staff, visitors and communities explore the meanings and significance of the North Cascades, **inspire stewardship and foster engagement.**

Recent accomplishments:

- Hosted 851 volunteers in 2011, two-thirds of whom were under the age of 25.
- Hosted seven "Tapping into Science" talks at the Chuckanut Brewery and Kitchen.
- Constructed a Volunteer Shelter at Marblemount Ranger Station to provide a place where groups can prepare and eat meals.
- Recruited and supported numerous Artists-in-Residence.
- Hosted an Electronic Field Trip focusing on climate change that provided a live, interactive educational experience for over 150,000 4th through 8th graders across the country.
- Created park social media tools on Flickr, YouTube, Facebook and Twitter; had over 100,000 views of photos on Flickr in 2011.

Moving forward:

- Work with local tourism councils, hospitality and recreation industry, schools, and other partners to increase diversity of park visitors and volunteers.
- Expand the North Cascade Institute's Mountain School to Newhalem Creek Campground.
- Provide youth-serving organizations, such as Big Brothers/Big Sisters, with targeted trip planning materials.
- Provide regional military bases with trip-planning materials aimed at military families.
- With NCI and SCL, promote Skagit Tours to diverse communities.
- Develop trip planning information and Junior Ranger Program in Spanish.



Goal 5: Employ effective partnerships

Employ effective partnerships to accomplish our goals and build a constituency for the future.

Recent accomplishments:

- Established a Cooperating Association relationship with the North Cascades Institute (NCI) to operate the park's retail sales areas.
- Began leading Skagit Tours and managing the Skagit Information Center in partnership with Seattle City Light and NCI.
- Collaborated with British Columbia Provincial Parks to present interpretive programs and conduct aquatic resource and fisheries research.
- Partnered with the US Forest Service to station a Wilderness District Ranger in the Winthrop Ranger Station to provide trip planning and issue permits.
- Partnered with the Student Conservation Association to employ 35 interns, and with Washington Conservation Corps. to employ 20 crew members as part of "Pathways For Youth" work.
- With NCI and US Forest Service, held two North Cascades Youth Summits involving over 100 high school and college students.

Moving forward:

- Maintain and grow partnerships that connect diverse communities to the North Cascades.
- Work with NCI, US Forest Service, University of Washington, Western Washington University, University of British Columbia, British Columbia Ministry of the Environment, and other organizations to develop a community of people contributing scientific work.
- Work with Washington's National Park Fund to grow support of private philanthropy for the park.
- Continue to pilot and expand youth-serving education and stewardship programs.

Panorama from Copper Lookout.

North Cascades recently awarded a new 10-year contract to operate concession for lodging, food service, shuttle, and other visitor services in Stehekin.

One recent example of effective partnership is North Cascades' collaboration with British Columbia Provincial Parks on interpretive programs and research.

Funding Sources and Expenditures

During FY 2010, North Cascades expended a total of \$15.2 million. Funding for park operations can be broken into five categories, as described below.

Funding Sources

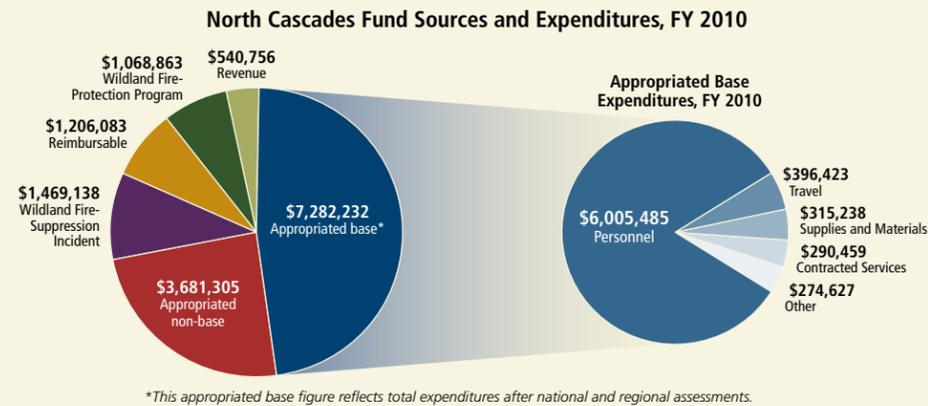
1. Appropriated Base: North Cascades' most stable source of funding, its appropriated base budget, is set annually by Congress to cover the cost of permanent staff and regular recurring operating expenses. Appropriated base funding totaled \$7.7 million in FY 2010, before assessments, and remained flat in FY 2011. After assessments, which support a number of regional and national services, the park's base expenditures totaled \$7.3 million. Much of this operating budget—83 percent in FY 2010—goes toward personnel costs.

From FY 2001 to FY 2011 the park's appropriated base budget grew at an average annualized rate of 3.6 percent. This compares to a regional average of 4.0 percent, and a national average of 3.2 percent. When adjusted for the effects of inflation, the real annualized growth rate of North Cascades' appropriated base budget since 2001 is just 1.4 percent.

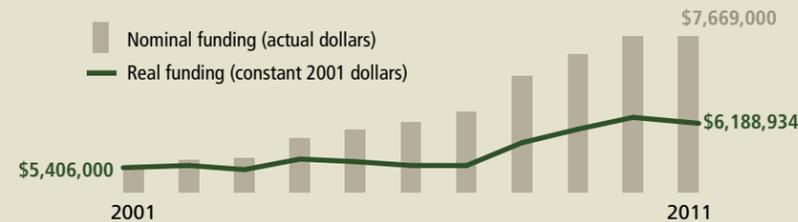
2. Appropriated Non-Base: Awarded on a competitive basis at the national and regional levels among all NPS units, appropriated non-base funds are allocated by Congress to support special projects and capital expenditures. While North Cascades has traditionally proven successful at securing project funding, this portion of the budget is less stable, and can fluctuate significantly from year to year. Appropriated non-base funding totaled \$3.7 million in FY 2010.

The most significant projects of FY 2010 and FY 2011 included:

- Construction of a new, ADA-accessible, ferry landing in Stehekin. (\$985,000)
- Completion of mandated park-wide narrowband radio conversion. (\$247,000)
- Initial work on the Stehekin River Corridor Implementation Plan—a plan to relocate the park road, maintenance facilities, and housing out of the floodplain. (\$500,000)
- Rehabilitation of Marblemount Ranger Station/Maintenance Yard drainage system. (\$400,000)
- Construction of the ADA-accessible Rainbow Mist Trail in Stehekin and Happy Creek Forest Boardwalk on Highway 20 (\$199,000 and \$307,000, respectively)
- Cyclic maintenance on Whatcom Pass and Rainbow Creek trails. (\$300,000 and \$200,000, respectively)
- Youth Internship and Youth Conservation Corps projects. (\$78,000 and \$173,500, respectively)



North Cascades National Park Appropriated Base Funding History



While it may look like the park's appropriated base budget has grown steadily, many of the increases have been targeted to address specific issues or regional/national initiatives (e.g., establish mandated administrative processes, respond to border and drug interdiction issues, and increase volunteer engagement). Additionally, unfunded increases in employee pay have slowly eroded the park's budget over time. Consequently, the park's overall budget flexibility and basic operational capacity has

not increased commensurate to its base budget increases. For example, the park received a \$346,000 increase in FY 2004 to address border security. In FY 2008 the park received a \$48,000 increase to enhance the volunteer program, and FY 2009 saw increases to fund shared contracting positions and combat marijuana growing operations in the park. At the same time, pay rates for employees duty stationed in the western part of the park were reclassified into the higher Seattle-area locality level, increasing personnel costs.

3. Wildland Fire: Funds from the Department of the Interior Office of Wildland Fire are used to support fire protection activities in North Cascades, as well as Lake Roosevelt National Recreation Area in eastern Washington. This funding amount varies significantly from year to year, depending on the need for fire protection activities. Initial budget allocations in recent years have ranged from \$700,000 to \$900,000, with additional funding available for major fire incidents in the park. In FY 2010, Wildland Fire funding totaled \$2.5 million, an amount that was particularly high due to the 3,600-acre Rainbow Bridge Fire in the Stehekin Valley.

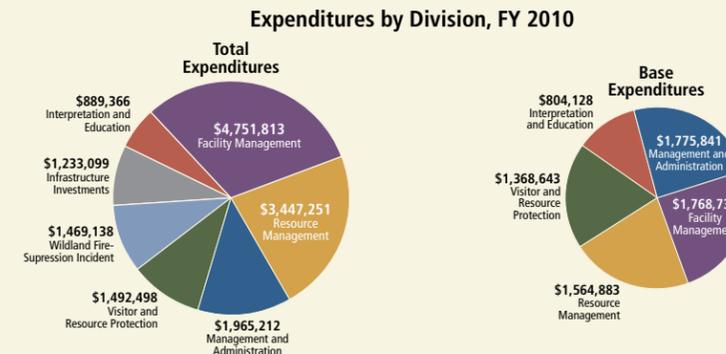
4. Reimbursable: These are funds resulting from cost-recovery for services provided to other agencies, for example the US Forest Service, the Bureau of Land Management or the Washington Department of Transportation. The largest component of this category is funding from Seattle City Light for Federal Energy Regulatory Commission and Skagit Environmental Endowment Commission-related projects. This category also includes rent collected for employee housing. Reimbursable expenditures totaled \$1.2 million in FY 2010.

5. Revenue: North Cascades does not charge entrance fees or backcountry permitting fees. Sources of revenue include campground fees, concessioner franchise fees, special use permit fees, and donations. These sources contributed \$540,000 to the park's budget in FY 2010.

Division Allocations

The Facility Management and Resource Management divisions typically make up the largest shares of total park expenditures, and this trend continued in FY 2010. These divisions were followed by Management and Administration—which includes the park superintendent—Visitor and Resource Protection, and Interpretation and Education.

A large portion of expenditures in the Facility Management and Resource Management divisions are special projects funded by appropriated non-base, wildland fire, and reimbursable sources. Looking only at appropriated base funding presents a more balanced picture. The Management and Administration division accounted for the largest share of appropriated base-funded expenditures, but a small share of non-base expenditures. Differences in funding sources are often driven by the nature of a division's work; each division supports the others in myriad ways, and importance to the park should not be judged by funding.



Funding Sources and Expenditures (continued); Division Allocations

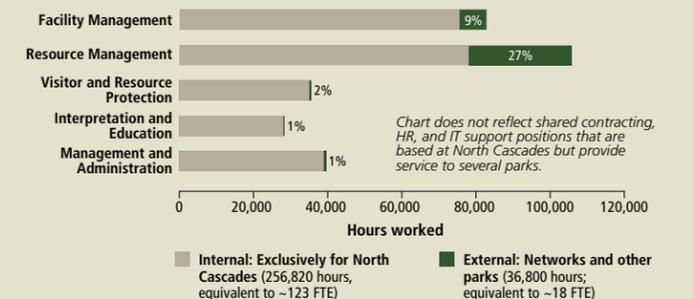
Supporting Networks and Other Parks

The staff at North Cascades spends a substantial portion of their time supporting other parks in the National Park Service. This support falls into three major categories:

1. Support under the umbrella of an established network relationship, such as the Inventory and Monitoring Network, Information Technology support, or managing the fire program at Lake Roosevelt National Recreation Area.
2. Support for projects that utilize the skill and availability of staff, but for which the park is reimbursed (e.g., the historic preservation team working on a project at Ebey's Landing National Historical Reserve, Great Basin National Park, Minidoka National Historic Site, and other parks).
3. Support for projects that utilize the expertise of staff in special situations or emergencies (e.g., cleaning up the Gulf Oil Spill, training a new administrative employee at Channel Islands National Park). The park is also reimbursed for this work.

While some components of these projects are funded through Network structures or reimbursable agreements, most of the managerial and administrative costs are generally shouldered by North Cascades appropriated base funds. The time and energy contributed directly by North Cascades employees and the planning and oversight provided by managers and administrative support, along with the synergies and achievements that result from employees sharing their knowledge and expertise, all add up to an invaluable contribution to the National Park Service and its mission.

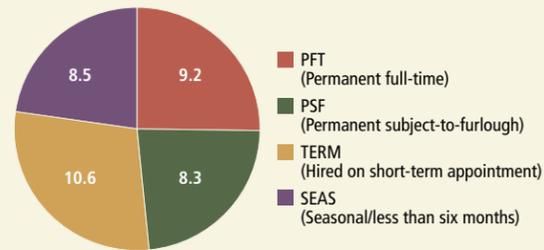
Hours Worked: Internal and External, FY 2010



Facility Management

Division at a Glance

Facility Management Staffing (FTE) by Type, FY 2010



North Cascades National Park Complex offers a variety of unique experiences to the public. With that comes the need to manage a complex portfolio of assets, which comprise the infrastructure necessary to operate the park. This includes 396 miles of trails, multiple wastewater and water treatment systems, photovoltaic, fuel and radio systems, boat docks and ramps, and 260 buildings totaling 138,430 square feet.

In total, the Facility Management division (Facilities) directly manages 697 assets with a current replacement value of \$152 million. The division also oversees 56 concessioner-managed assets worth \$7.4 million, most notably the visitor lodge in Stehekin and floating rental cabins on Ross Lake. The geographical expanse of the park, the ruggedness of the terrain, and the seasonal variability of the climate all add to the challenge of managing these assets. The work of the Facilities division can be divided into four primary areas:

- 1. Regular and Recurring Maintenance:** Work activities that recur based on normal wear patterns on a period cycle of 1–10 years. Examples include painting, carpet replacement, and trail rehabilitation.
- 2. Preventative Maintenance:** Regularly scheduled periodic maintenance activities on selected equipment. Examples include inspection, cleaning, lubrication, and minor adjustments.

Facility Management FY 2010 Division Expenditures



- 3. Component Renewal:** Proactive replacement of a component at the end of its design life. Examples include replacement of roofs, pavement, motors, and trail bridge components.
- 4. Operations:** Activities performed throughout the year to meet the routine daily operational needs of the park. Examples include custodial, groundskeeping, operating water and wastewater treatments facilities, brushing trails, and snow removal.

When the division is unable to complete scheduled maintenance and component renewal due to staff or budget constraints, the gap becomes “deferred maintenance.” Facilities staff track and prioritize deferred maintenance based upon an asset’s importance to park visitation, resource protection and operations so it can be reduced as funds and capacity become available. The level of sophistication with which the division prioritizes and manages operations and maintenance work across the park requires skillful data management through the Facilities Management Software System (FMSS).

The Facilities division also operates two auto shops, located in Marblemount and Stehekin, to perform maintenance and repairs on the park’s fleet of vehicles, watercraft, and heavy equipment. Much of the maintenance and repair work on park vehicles and equipment is performed in-house, particularly in Stehekin, due to the high cost and logistical challenges of transporting vehicles down Lake Chelan.



Top: Trail crew rebuilding trail at Whatcom Pass; Bottom: Diablo Lake Overlook construction.

Highlights and Challenges

Over the past several years, the Facilities division has made substantial improvements to visitor service facilities, with efforts concentrated on reducing the backlog of deferred maintenance at the concession-operated visitor lodge in Stehekin and improving campgrounds. This work has been accomplished while also responding to emergency repairs from three “100-year” floods in the past 15 years, regularly occurring avalanches, and myriad other weather-related damage to the park’s roads and facilities, all of which is difficult to forecast.

The Facilities division has established very successful youth and volunteer programs that contribute to park-wide goals and support work across all divisions (see sidebar for more information). The division has also built a highly effective trail maintenance and historic preservation crew composed of veteran staff with specialized expertise. Since much of North Cascades is accessible only by foot, trail maintenance plays a vital role in visitor access and enjoyment. In addition to ensuring that the park’s 396-mile network of trails remains useable and safe, this team frequently undertakes project work for other parks and agencies.

Deferred maintenance, currently exceeding \$20 million, presents a constant challenge. Given historical gaps between maintenance needs and funding, in addition to the current budget climate, this backlog will continue to grow into the foreseeable future. In order to address deferred maintenance in a strategic way, the Facilities division developed a comprehensive Park Asset Management Plan in 2008. The plan prioritized existing park assets and planned projects with the goal of improving conditions of high priority assets while saving money—where doing so will not compromise park operations.

A second key challenge stems from the division’s dependence on appropriated non-base funding. The division has proven very successful at securing non-appropriated funding, but has come to rely heavily on this source. While this has enabled the division to complete large-scale improvements to park facilities, it also places the park in a tenuous position in the event that these funding sources decline.



Renovated Happy Creek Forest Walk beckons visitors to take a stroll in the forest.

Facility Management (continued)

Pathways for Youth

North Cascades has developed a number of youth programs aimed at fostering the next generation of environmental stewards and NPS employees. The idea behind the “Pathways for Youth” initiative is to link existing programs that engage youth and create a continuum of meaningful park-based experiences—a pathway to stewardship and employment. The goal is to create engaged citizens and active stewards, and to increase the diversity of park employees, visitors, and friends. The number of youth engaged in Pathways for Youth programs has nearly doubled since 2009, to approximately 200 in both 2010 and 2011. Pathways for Youth is not a formally defined program, but rather a series of steps, broadly organized into three categories:



Two EarthCorps members learn about national parks and gain valuable work experience.

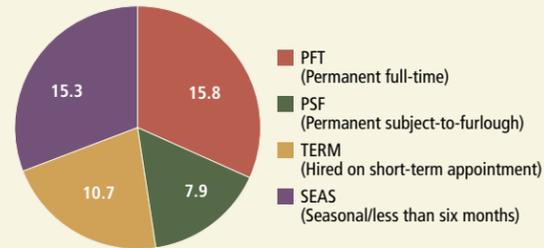
- 1. Educational Programs:** Introduce elementary and high school students to national parks through fun, curriculum-based approaches. Three signature programs are also aimed at developing leadership skills in high school students: North Cascades Wild, Cascades Climate Challenge and the North Cascades Youth Leadership Summit.
- 2. Internships:** Offer real-world work experience, often supplemented by stipends and/or school credit, for high school and college students, often through partnerships with organizations such as the Student Conservation Association (SCA) and Washington Conservation Corps.
- 3. Employment:** Hire students for seasonal and permanent positions that provide opportunities for higher-level engagement and responsibility in fulfilling the park mission. The park actively uses the Student Temporary Employment Program (STEP) to hire students into entry-level seasonal positions, utilizing 20 STEP employees in 2011.

The success of Pathways for Youth depends upon strong partnership with non-profit organizations such as the North Cascades Institute and the Student Conservation Association. It also relies critically on the dedication and collaboration of park staff across divisions.

Resource Management

Division at a Glance

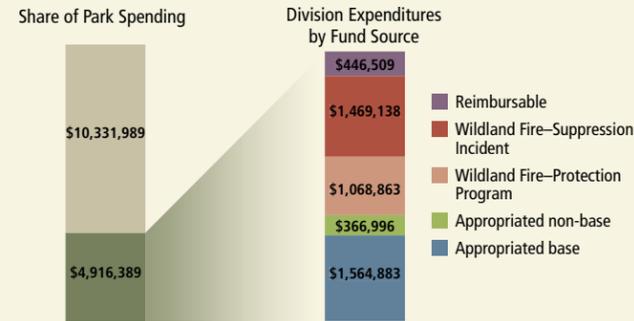
Resource Management Staffing (FTE) by Type, FY 2010



The Resource Management division is responsible for developing information to help understand the natural and cultural resources in the park, identify potential resource impacts, evaluate the associated risk, and identify appropriate mitigation strategies. The division consists of key disciplines in aquatic/fisheries, physical sciences (geology/geomorphology/weather), vegetation, and wildlife. Staff members in these disciplines are actively involved in a robust inventory and monitoring program in which twelve “vital signs”—biological, chemical, and physical indicators—are monitored to track ecosystem health (see sidebar, opposite page). To ensure that resource information is stored and utilized effectively over the long term, the division maintains an active Information/Data Management component, including a geographic information system (digital mapping and modeling), digital database, and physical collections.

The North Cascades region is a fire-adapted ecosystem, and the park has an active fire management program. Since fire is an important ecosystem driver in North Cascades, fire management is organized under the Resource Management division. The goal of the fire management program is to protect human life and property while ensuring that fire plays a healthy role in the ecosystem. The park has a Fire Management Plan that directs how staff respond to fires in different areas of the park. Due to the historic fire suppression and presence of a small community, the Stehekin Valley is the highest priority for fire management activities; over the last decade the park has expended major effort to reduce fuel loads and limit the necessity of fire suppression. This work includes thinning forests, hand piling and burning fuel, prescribed burning and, when possible, allowing naturally-occurring fires to run their course. Fires that threaten human life and property

Resource Management FY 2010 Division Expenditures



are actively suppressed. The fire management program also works in Lake Roosevelt National Recreation Area, roughly 150 miles east of North Cascades.

Working closely with other divisions, the Resource Management planning and compliance team conducts impact assessments, communicates with the public to solicit feedback on planned initiatives, and ensures that all projects in the park conform to environmental standards. Integration of current ecosystem information with planning for sustainable visitor and administrative facilities in the Stehekin River Corridor Implementation Plan is a prime example of Resource Management’s planning role. This project is utilizing the most current information available to provide roads, housing, maintenance facilities, and campgrounds in sustainable locations—out of floodplains or sensitive resource areas.

While North Cascades is known as a large wilderness ecosystem, the park is home to many cultural resources as well, including hundreds of archeological sites—some demonstrating human habitation and use for almost 10,000 years. Research by park archeologists has greatly contributed to the understanding of the history and characteristics of the native people of this region. Studies conducted here have proven that Northwest Indians used high-elevation areas, contrary to the previous assumption that they stayed exclusively in lowland areas. The Resource Management division manages the Marblemount Curation Facility which houses over two million objects from North Cascades, Ebey’s Landing National Historical Reserve and San Juan Island National Historical Park.



Top to bottom: Aquatic biologist at work in laboratory; Firefighters observing Panther Creek Fire; Glacier monitoring.

Highlights and Challenges

The Resource Management division is accomplishing a great deal of important work through the implementation of long-term ecological monitoring and active restoration. The division shares resources with other parks in the North Coast and Cascades Network; together the parks have developed a robust set of inventory and monitoring protocols that benefit the entire ecosystem. Managing the priorities and work of both the network and the park requires substantial time and administrative support. If park budgets decline in the future, the inventory and monitoring program will necessarily be pared back as well, focusing resources on designated “Tier 1” vital signs and reducing or ending monitoring of “Tier 2” vital signs.

The division faces the continual challenge of effectively managing and delivering resource data

to inform management decisions at the park and ecosystem levels. Beyond management decisions, resource data and discoveries, presented in an intuitive and compelling way, can serve as a huge resource for park and partner education efforts and can provide great benefit to the public. Diminished funding will mean adjusting priorities for resource leads and field staff to focus attention on data management and information delivery tasks.

A tremendous amount of inter-agency coordination is occurring across many programs, from aquatic and fisheries programs to fire management to exotic plant management and research programs. This work is critical to the long-term protection of the ecosystem, particularly in the face of a rapidly changing climate.

The division faces the continual challenge of managing and delivering data to inform decisions at both the park and ecosystem levels.

Creating a Science Community

North Cascades National Park Complex is committed to developing a robust science and research community in the park and the North Cascades ecosystem. The park’s varied landscape and biodiversity make it an ideal place to conduct a wide range of scientific work. With a dedicated park science and robust professional resource staff, North Cascades can continue to cultivate relationships, attract research, engage citizen scientists and work with partners to establish the North Cascades ecosystem as a science hub. The Inventory and Monitoring Program produces a foundation of data to build upon, and in 2010, 20 independent researchers conducted projects in the park.

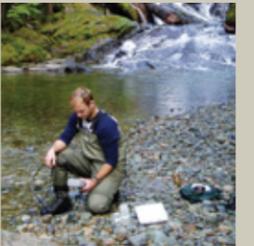


The study of lodgepole pinecones contributes to our knowledge of fire-dependent ecosystems.

Resource Management (continued)

Inventory and Monitoring

The North Coast and Cascades Network (NCCN) has a very strong Inventory and Monitoring (I&M) Program with the purpose to develop, implement and communicate the results of Vital Sign monitoring. At the seven parks active in the network, I&M is integrated into park operations, which is substantially different than how the majority of I&M networks are organized across the country.



This means that personnel based in each park are responsible for leading and accomplishing the majority of the I&M goals and objectives, with the support of four permanent full-time staff dedicated to NCCN’s I&M program. NCCN’s current plan is to implement 14 Vital Signs protocols for 12 basic inventories—one of the largest programs in the National Park Service. North Cascades has ongoing activities in eight of the 12 inventories: water quality, landscape dynamics, climate, mountain lakes, glaciers, land birds, forest vegetation and alpine-subalpine vegetation. The Resource Management staff based at North Cascades are deeply involved in the I&M program and frequently assist other Network parks in the field.

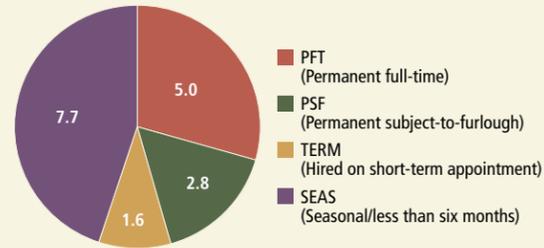
Network I&M inventories are prioritized in two tiers:

TIER 1 PRIORITIES:	TIER 2 PRIORITIES:
<ul style="list-style-type: none"> Water quality Landscape dynamics Climate Mountain lakes Glaciers Land birds Intertidal 	<ul style="list-style-type: none"> Forest vegetation Prairie vegetation Subalpine ecosystem Fish assemblages Elk <p><i>Purple indicates inventories not present or relevant at North Cascades.</i></p>

Visitor and Resource Protection

Division at a Glance

Visitor and Resource Protection Staffing (FTE) by Type, FY 2010



Visitor and Resource Protection FY 2010 Division Expenditures



Ranger at Sourdough Lookout.

The Visitor and Resource Protection division (Protection) is primarily responsible for protecting the park's natural and cultural resources, and ensuring the safety of park visitors. The division also plays an active role in educating visitors about resources, regulations, and safety, thus enhancing visitors' experiences in the park and their appreciation of its resources.

The division is organized into two districts: Skagit (covering the Highway 20 corridor, Ross Lake, and the Stehekin Valley), and Backcountry (covering the park's designated wilderness areas). Functionally, the division is organized into five areas: law enforcement, emergency medical services, search and rescue, dispatch services, and wilderness management and education.

Commissioned law enforcement rangers conduct regular patrols, provide emergency medical services and conduct search and rescue (SAR) operations. In 2010, rangers conducted over 3,000 miles of foot patrols throughout the park. Law enforcement rangers typically try to educate visitors rather than issue a citation. That said, the bulk of the citations issued in North Cascades are for traffic violations, camping without a permit, and illegal fishing or hunting. Law enforcement rangers have also dealt with several large-scale organized criminal activities within park boundaries, including smuggling and marijuana-growing operations—both of which can cause significant damage to natural resources.

The jagged peaks of North Cascades attract mountaineers from around the world, but they also pose an inherent danger that can result in serious injuries—even to seasoned mountain climbers. Rangers in the protection division are typically the first responders in emergency situations, leading SAR operations and providing emergency medical services throughout the park. Park-wide, 12 staff members are certified first responders and 17 have emer-

gency medical technician (EMT) certification. Coordinating prolonged SAR operations involves drawing on people from other divisions, partners, and volunteers. These operations typically conclude with a helicopter evacuation or victim carry-out by park staff and volunteers. In a typical year, there are 60 EMS incidents in the park, and park staff conduct 10-15 SAR operations. Approximately half of the medical incidents in a given year involve either community residents in Stehekin or injuries resulting from accidents on Highway 20.

Given the park's size and remoteness, dispatch services are critical to the safety and security of employees and visitors. The protection division operates the dispatch center, which serves park employees and partners—monitoring radio traffic, dispatching safety services, and conducting radio check-ins with employees in the backcountry. The park does not have 24/7 dispatch operation or a year-round dispatch operator, instead relying on dispatch services based in Olympic National Park during the winter and overnight hours.

The North Cascades National Park Complex is 94 percent designated wilderness, and the park uses a variety of approaches to preserve wilderness character. A primary tool is the permitting system for backcountry camping, which helps to disperse visitors throughout the backcountry, preventing resource damage and maintaining a sense of solitude for visitors. Permitting also ensures that visitors are aware of safety risks and park regulations and aids in potential SAR operations. The protection division manages the North Cascades Wilderness Information Center (WIC), located in Marblemount with seasonal satellite offices in Sedro-Woolley, Glacier, and Winthrop. In 2010, the WIC received nearly 15,000 visitors, fielded an additional 5,000 phone calls, and issued permits totaling 36,426 visitor-use nights, the highest figure in over a decade.

Highlights and Challenges

The same distinct characteristics that attract visitors to the park—its expansive and rugged alpine wilderness—also attract a highly skilled and motivated workforce. This is evident in the Wilderness District staff, who are widely recognized for their expertise in a wide range of ranger skills, from helping visitors plan their trips, to educating about and enforcing laws and regulations, to conducting highly complex technical rescue missions.

Given the highly seasonal nature of park field operations, the division relies heavily on seasonal staff. This creates complex recruiting, training and supervisory responsibilities. It also can create difficulties in employee retention, which can lead to inconsistency in employee skill and inexperience.

At the same time, the park represents the only stable law enforcement and emergency services presence in the remote community of Stehekin.

Compliance issues ranging from illegal parking to hunting without a state license arise in Stehekin, and the division works hard to maintain positive relationships with local community members. Officer safety is always a concern with the remote and isolated nature of the park, and radio communications are a key element of employee and visitor safety. Mandated conversion to narrow-band radio system has posed significant communications challenges that the division continues to address.

The Protection division provides significant emergency medical response, both on Highway 20 (principally for motor vehicle accidents) and in Stehekin (for visitors, residents and in recent years supporting emergency response to the community of Holden Village). The park has mutual aid agreements with other jurisdictions and has been taking on an increasing share of medical response duties.



Ranger on patrol. In 2010, rangers conducted over 3,000 miles of foot patrols.



SCA intern assisting backcountry visitors at Wilderness Information Center.



Above: Wilderness District Ranger Kelly Bush.

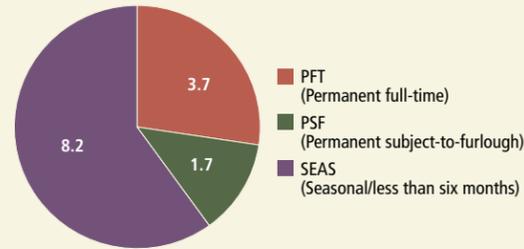


North Cascades is authorized to use "short-haul rescue," a technique that requires extraordinary experience and expertise to quickly retrieve individuals from areas where safely landing a helicopter is not possible.

Interpretation and Education

Division at a Glance

Interpretation and Education Staffing (FTE) by Type, FY 2010

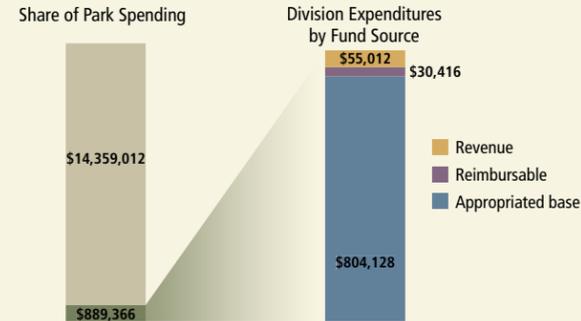


The Interpretation and Education division (Interpretation) welcomes visitors to the park, supports curriculum-based education and youth engagement programs, provides interpretive services to connect visitors to the park, and manages the park's public affairs programs.

The Interpretation team welcomes approximately 75,000 visitors to the park at four information and visitor centers. Interpretive rangers answer questions and conduct formal programming, including boat and bus tours, guided hikes, educational talks and interactive programs for children, families and adults. In addition to traditional media and signage, the division also develops content for the park's website and is building a strong social media presence to encourage people to stay connected to the park—currently utilizing Facebook, Twitter, Flickr, and YouTube. The park's website receives over 1.2 million visits annually and the Flickr site has over 100,000 page views. All of this work is aimed at welcoming people to the park and helping them plan, keep engaged, and have a positive, memorable visit.

As a result of close collaboration between the park and the North Cascades Institute, NCI is now the park's primary education partner. Interpretive rangers actively participate in NCI's educational programming at the North Cascades Environmental Learning Center and elsewhere in the park—from seminars to extended outdoor leader-

Interpretation and Education FY 2010 Division Expenditures



ship and service trips. North Cascade's relationship with NCI represents an innovative way to leverage both organizations' resources and strengths (see sidebar on page 23). In addition, Interpretation works closely with Facility Management to lead and support the Pathways for Youth initiative to engage youth in education, internships and entry-level employment opportunities (see sidebar on page 17).

Interpretation staff strives to keep stakeholders, opinion leaders and the public informed about the park's plans and activities. This work ranges from coordinating public meetings in concert with Resource Management on major planning efforts, to participating in chambers of commerce and local tourism councils, to issuing press releases and working with members of the media.

Interpretation team members contribute to the Science Learning Network (SLN)—another example of the collaborative work of the North Coast and Cascades Network—that integrates research and education to better communicate park science to the public and NPS staff. In 2010, the SLN launched a website to serve as a science information gateway, began to produce an annual collection of Resource Briefs, and developed a series of videos and overviews about the Inventory and Monitoring program.



Top to bottom: Children's program; North Cascades Institute-led educational canoe trip on Diablo Lake; Many of the division's employees are college students working under temporary appointments in the summer.

Highlights and Challenges

The division continues to play a leadership role in developing critical partnerships for the park. In addition to successfully expanding the park's relationship with NCI, Interpretation has led work with Seattle City Light to partner in the operation of Skagit Tours, which includes the operation of the Skagit Information Center in Newhalem and boat tours on Diablo Lake and van/walking tours along Highway 20.

Unfortunately, this has left little time for comprehensive long-term interpretive planning and important interpretive media projects. The division has been successful in obtaining project funding, but has been unable to execute some projects within the mandated time frame. The division's goal is to dedicate time and energy to completing these projects, which will improve the interpretive experience for all future visitors. The division also would like to strengthen its community and public affairs function so as to more effectively engage surrounding communities and businesses. However, any budget reduction will likely require that the park choose to reduce community affairs work first, followed by basic interpretive services, in order to support to the central goal of welcoming and orienting visitors.



A ranger leads visitors on a tour of points of interest and short trails along Highway 20.

Interpretation and Education (continued)

North Cascades Institute

The North Cascades Institute (NCI) was founded in 1986 by former North Cascades park rangers with a mission to "conserve and restore Northwest environments through education." NCI helps people of all ages connect to nature through direct experiences in the natural world, hands-on study of natural and cultural history, science, art and literature through seminars, classes and stewardship programs. The relationship between the park and NCI continues to strengthen and develop in new and exciting ways. In 2010 alone, over 2,000 youths (8,000 participant days) participated in multiday, place-based programs NCI manages such as:



Mountain School: A residential curriculum-based education program for elementary through high school students.

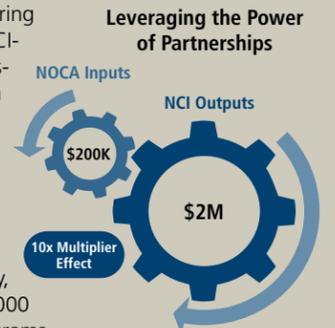


North Cascades Wild: Canoe camping, curriculum-based conservation service and leadership program for underserved high school students.

Cascades Climate Challenge: Regional high school summer curriculum based program studying climate change, field science and leadership.

The relationship between NCI and the park helped to construct the \$12 million, LEED Silver Certified North Cascades Environmental Learning Center in 2005. Funded by Seattle City Light as part of its licensing agreement, the Center is operated by NCI with some support from the park. In 2010, NCI also assumed operations of the park's retail stores and has greatly improved product offerings and customer service.

Embracing partnerships that leverage strengths and resources while furthering the mission of the National Park Service is an NPS-wide goal, and the NCI-North Cascades relationship is a model example. The park contributed an estimated \$200,000 worth of in-kind resources to the partnership, in the form of interpretive rangers leading educational programs, wilderness rangers coordinating logistics for youth backpacking trips, park scientists serving as instructors, maintenance staff operating the water and wastewater systems at the Learning Center, as well as management and administrative support. With NCI spending approximately \$2 million on educational programming in 2010, this represents a 10-fold leverage multiple and results in innumerable ancillary benefits to both organizations. Most significantly, in 2010 NCI introduced thousands of people—40,000 user days and 17,000 user nights in total—to the park through adult and family education programs, outreach programs, and volunteer stewardship programs.



Management and Administration

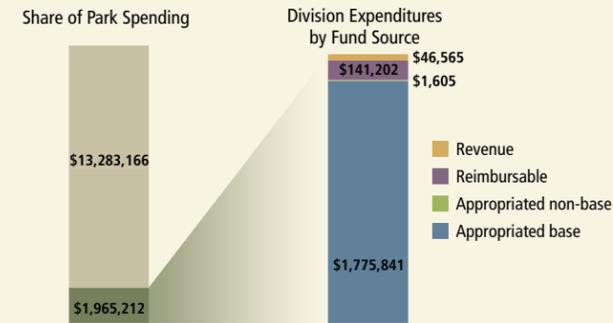
Management and Administration (continued)

Division at a Glance

Management and Administration Staffing (FTE) by Type, FY 2010



Management and Administration FY 2010 Division Expenditures



Ross Lake Resort, one of North Cascades' two concessioner-operated lodges.

The Management and Administration division combines the Superintendent with the Administration division. The Superintendent, along with the management team, is responsible for setting overall strategic direction, planning and coordinating internal park operations, and managing external relationships. The Administration division manages budgeting and finance functions, oversees commercial services, provides administrative support for all divisions, and works closely with centralized programs to coordinate the provision of shared services in contracting and procurement, human resources, and information technology.

Internal Park Services

The Administration division is responsible for initiating and overseeing the park's budgeting process by providing support to other divisions as they consider future needs and resources. The division also carefully tracks and analyzes expenditures in all park accounts to ensure that the park meets requirements for financial obligations and reporting.

North Cascades has three contracts with outside entities to provide visitor services. The *Ross Lake Resort* and the *North Cascades Lodge at Stehekin* provide lodging, dining, equipment rental, tours, and retail. *The House that Jack Built* offers local-made crafts. The Administration division manages these relationships, along with all Commercial Use Agreements (CUAs) and Special Use Permits (SUPs) within the park. In 2010, the park issued or renewed 47 CUAs for businesses that bring people to the park and provide services, and 18 SUPs for non-profit organizations or special events.

Centralized/Network Services

Federal contracting and procurement of goods and services are specialized activities subject to extensive legal regulation. The park hosts three contracting specialists and one contracting technician, organized under a virtual Major Acquisition Buying Office (MABO). The organization serves 15 parks with the MABO lead based at Olympic National Park.

Attracting and retaining talented employees is paramount to the park's success. With a large seasonal swing in operations and reliance on seasonal staff, the human resources workload at North Cascades is substantial. In FY 2010, the park employed 326 individual people, processed 1,150 personnel actions and 277 job applications, and initiated 62 background investigations. In providing these services, the park's Human Resources specialist works closely with the Servicing Human Resources Office (SHRO), which will also serve 16 other parks in the region. As with contracting, the SHRO is a virtual organization, with a team lead based at Mount Rainier National Park.

Effective data management and communication is crucial for every park division; North Cascades hosts two of the six information technology (IT) specialists who keep the seven parks of the NCCN up and running. The group is responsible for the design, configuration and installation of wide-area and local networks, servers and switches, configuration and maintenance of computers and printers, the Voice over Internet Protocol telephone system, server backups, security, and new user account set up/deletion. In 2010, a regional office review of the network IT program highlighted that the program was staffed at a 1:166 specialist-to-user ratio, compared to an industry standard of 1:50.

Highlights and Challenges

The Administration division provides routine administrative support (e.g., correspondence, travel, simple supply purchasing) to all other park divisions. When Administration's capacity shrinks, the other divisions must take on these tasks—sometimes with higher-graded specialists.

Regional and national centralization efforts in human resources, contracting, and IT have created several challenges for North Cascades. In each case, the park has committed permanent, full-time positions and support funding to implement these organizations and systems at required levels. Simultaneously reorganizing virtually all administrative systems has created uncertainty and forced all parks to adapt quickly,

creating frustration around requirements to learn and master new systems while performing regular duties. The staff and funding commitments made to administrative systems, particularly those that support a network of parks, has reduced North Cascades' overall budget flexibility, which could in turn impact frontline visitor services and resource protection.

Budgeting also presents a significant challenge for the park, and the division is working hard to establish a uniform and well-organized budgeting process across divisions. These efforts will prove particularly important in the coming years, as the National Park Service enters a tightening budgetary climate.

In FY 2010, the park employed **326** individual people, processed **1,150** personnel actions and **277** job applications, and initiated **62** background investigations.



Staff of the park's Administration division on the campus of the North Cascades Environmental Learning Center.

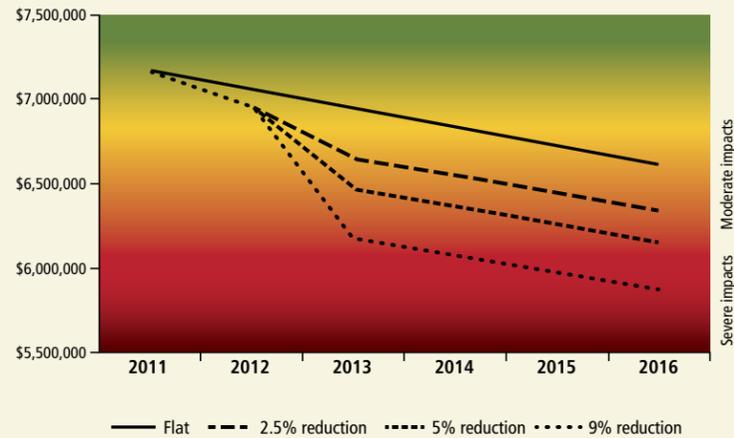
Potential Appropriated Base Budget Scenarios

These pages describe several potential budget scenarios and the corresponding impacts on park operations. These represent the park's internal estimates, for strategic planning purposes, and are not meant to communicate the intent of future congressional appropriations.

Potential Appropriated Base Budget Scenarios

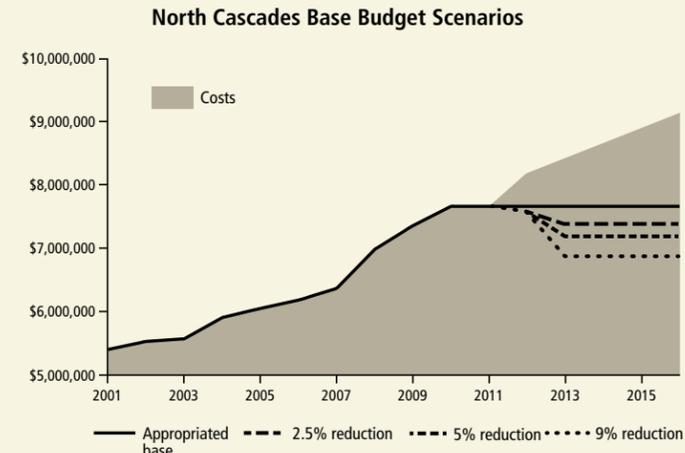
The park explored four scenarios for FY 2013 through FY 2016: (1) a flat budget, (2) a 2.5% reduction, (3) a 5% reduction, and (4) a 9% reduction.

Spending Power: Appropriated Base in Constant Dollars



With moderate levels of inflation over the next five years, a flat or reduced appropriated base budget means substantially diminished spending power, creating moderate to severe impacts on park operations.

Even with no additional hiring and a federal employee pay freeze in effect through FY 2012, the cost to operate the park is expected to increase substantially over the next five years. Employee advancement across the salary schedule, increasing health care and benefit costs, as well as fuel, supplies, and utility costs all combine to reduce the park's financial flexibility.



A flat or reduced appropriated base budget means substantially diminished spending power, creating severe impacts on park operations.

In past years, North Cascades has been able to successfully manage budgetary pressures in part through utilizing employee turnover. By strategically lapsing or choosing not to fill positions when they become vacant, the park gains a measure of financial flexibility. Looking forward, turnover among core-operations staff is anticipated to be below five percent over the next two years. At that level, position turnover will provide at most \$250,000 in budget flexibility, leaving any remaining deficit to be closed through other adjustments.¹

The park has also traditionally leaned heavily on project funding to achieve its goals. For FY 2011, appropriated non-base funding totaled an estimated \$3.7 million. Reimbursable funds and revenues contributed an additional \$1.2 million to the park's overall budget. However, in the current fiscal climate it is impossible to reliably project these funding sources. A reduction in appropriations available for special projects could have a dramatic impact on the park's ability to execute its strategic plan.

Both of these methods will be insufficient in reducing the park's projected future deficits. Moving forward, in order to operate within its allocated budget, the North Cascades management team is considering structural changes, based on park priorities and budget targets, to reduce the cost of operating the park.

¹Estimated based upon projected permanent-full-time salary and benefit costs over the next two years.

Potential Appropriated Base Budget Scenarios (continued)

North Cascades National Park Complex - Base Budget Projections Projected Finances FY 2011–FY 2016

	FY 2011 (actual)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Appropriated Base: Baseline Projection*	\$7,158,200	\$7,158,200	\$7,158,200	\$7,158,200	\$7,158,200	\$7,158,200
Projected Expenditures						
Labor Expenditures						
Management and Administration	\$1,507,080	\$1,618,435	\$1,670,813	\$1,726,270	\$1,786,215	\$1,841,869
Interpretation and Education	\$756,049	\$787,729	\$812,443	\$833,937	\$859,129	\$878,253
Visitor and Resource Protection	\$1,173,787	\$1,165,443	\$1,255,344	\$1,293,264	\$1,335,634	\$1,369,305
Resource Management	\$1,293,966	\$1,363,673	\$1,396,472	\$1,444,846	\$1,485,115	\$1,523,919
Facility Management	\$1,284,156	\$1,807,573	\$1,855,029	\$1,905,084	\$1,952,709	\$2,009,367
Total Labor Expenditures	\$6,015,039	\$6,742,855	\$6,990,101	\$7,203,401	\$7,418,801	\$7,622,714
Total Non-Labor Expenditures	\$1,143,161	\$921,536	\$939,967	\$958,766	\$977,941	\$997,500
Total Expenditures	\$7,158,200	\$7,664,391	\$7,930,068	\$8,162,168	\$8,396,743	\$8,620,214
Projected Deficit						
Baseline (Flat Budget) ^(a)	\$0	-\$506,191	-\$771,868	-\$1,003,968	-\$1,238,543	-\$1,462,014
Actual FY 2012 Enacted: 1.5% Reduction	--	-\$621,226	--	--	--	--
Scenario 1: 2.5% Reduction from Baseline in FY 2013 ^(b)	--	--	-\$1,075,752	-\$1,307,852	-\$1,542,427	-\$1,765,898
Scenario 2: 5% Reduction from Baseline in FY 2013 ^(b)	--	--	-\$1,264,601	-\$1,496,701	-\$1,731,276	-\$1,954,747
Scenario 3: 9% Reduction from Baseline in FY 2013 ^(b)	--	--	-\$1,566,760	-\$1,798,859	-\$2,033,435	-\$2,256,906

*Appropriated base after assessments and transfers, estimated at \$510,000

Note: Some column totals do not add up exactly, due to rounding.

^(a)Set at FY 2011 appropriated base budget level.

^(b)Scenarios reflect an actual 1.5% budget reduction in FY 2012 and then projected reductions of 2.5%, 5%, and 9%, respectively, in FY 2013.

Primary Cost Drivers

Some of the major factors driving costs up include:

Permanent staff: Permanent employee salary and benefits represent the park's biggest expense. Though the park usually has some amount of turnover, the level of permanent employee turnover is difficult to predict.

Shared service agreements and network obligations: The park has agreements with a number of networks and cannot reduce the staffing dedicated to these network support functions (e.g., MABO, SHRO, IT, I&M) without renegotiating the relationships. Among the permanent and subject-to-furlough positions, nearly eight percent of staff time is spent serving the NCCN and other service agreements—staff time and expenses that cannot be reallocated by the park.

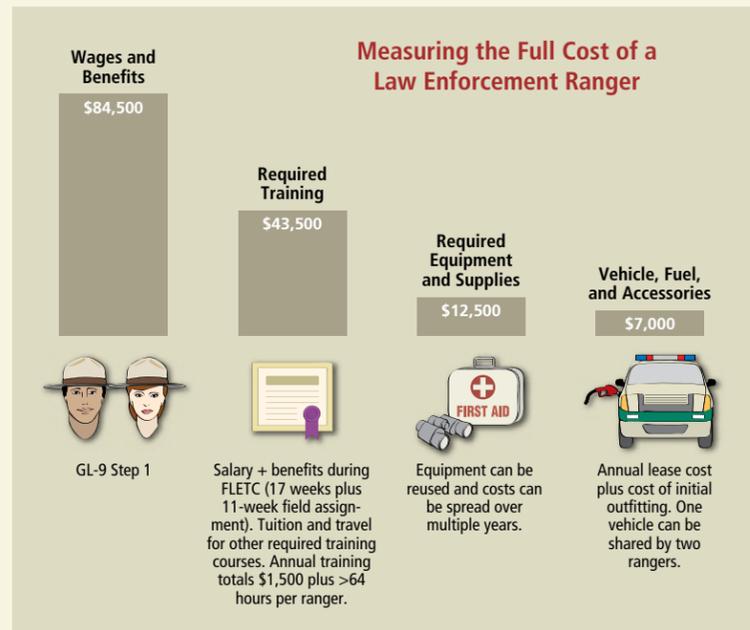
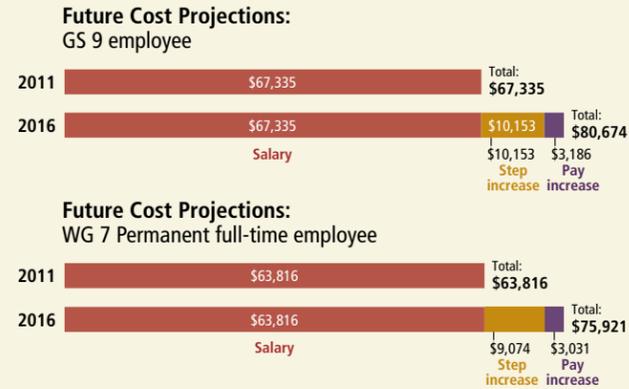
Additional factors beyond the park's control:

- **Inflation:** While the cost of goods and services grow, the park's budget may not, thus limiting purchasing power. Congress typically grants federal employees annual cost of living increases, ranging from one to two and a half percent to keep pace with inflation, though a freeze has been in effect for the past two years.
- **Mandatory (within-grade) pay increases:** Separate from the base salary increases mentioned above, Federal employees are banded in a grade/step pay system. With good performance, an employee is eligible for a "step" increase in salary each year, every other year, or every third year, depending on their tenure.

- **Support costs:** Many positions require specific equipment and training certifications. These costs are referred to as "support costs" and can vary dramatically depending on the type of position. New law enforcement rangers, for example, carry high support costs, including 17-weeks at the Federal Law Enforcement Training Center (FLETC). The graphic at bottom right depicts the support cost for a new law enforcement ranger. Some of the equipment costs can be spread out over time, but the park must invest significant resources early on in the ranger's career. Often overlooked, the opportunity cost associated with a ranger's salary during FLETC and required annual refresher training courses is significant.

- **Assessments:** Parks are assessed for contributions to national and regional support funds that pay for such things as Information Technology infrastructure, regional Human Resources support, employee uniforms, etc. The park receives valuable support from the regional and national offices, but the lack of control over the size of the assessments it must pay further limits base budget flexibility. In FY 2011, for instance, the park was assessed \$125,000 to support servicewide systems (e.g., software licenses).

Permanent employee salary and benefits represent the park's biggest expense, and future cost projections must account for step and pay increases.



Strategies: Cost Reduction and Operational Efficiency

Cost reduction decisions will be prioritized in a way that minimizes potential impacts on park resources and visitor experience.

North Cascades is committed to streamlining operations and reducing costs, regardless of future budget scenarios. However, it is important to differentiate between operational improvements spread out over several years and the shock of an abrupt appropriated base budget decrease. Any significant budget reduction will require the park to make some difficult decisions relating to staffing, visitor services and network support. These decisions will be prioritized in a way that minimizes potential impacts on park resources and visitor experience.

Strategies for reducing costs:

Permanent Staff

The park spends approximately 83 percent of its appropriated base budget on staff. This percentage is good by most standards; however, personnel costs as a share of appropriated base budget could grow to unacceptable levels through multiple years of actual budget reductions and increased staff costs as a result of step increases, cost of living increases and rising health insurance costs. The figure on page 28 shows how the costs associated with two common position types are projected to grow over the next five years. North Cascades has begun implementing a position management process to evaluate the long-term costs and benefits of filling each position that becomes vacant. Several divisions are already using vacancies to reorganize and reorient their staffing models to better match park needs.

Some general position management guidelines have already gained the park a measure of budget flexibility:

- ⊖ Utilizing the temporary budget relief associated with employee retirement and vacancies by lapsing positions for a period of time when feasible.
- ⊖ Gradually decreasing the total number of permanent full-time and permanent subject-to-furlough staff commitments; this will slowly increase financial flexibility.

Longer-term division-specific strategies will be implemented over a period of years:

- ⊖ **Visitor and Resource Protection:** Use vacancy of district ranger and patrol positions to focus on core priorities: visitor and employee safety, especially in high-use areas, resource protection (including operating the wilderness permit and information system) and physical security of property. The park will maintain a stable core of per-

manent supervisors, while utilizing more subject-to-furlough and seasonal employees. Non-supervisory protection ranger positions will be converted to subject-to-furlough. The division will also focus on improving retention of seasonal rangers for multiple seasons.

- ⊖ **Facility Management:** Use retirements of several key positions to reorganize the division and staffing to better align with highest priority work: maintaining facilities designated as high priority by the park's Asset Management Plan. These high-priority facilities include utility systems, park visitor centers, and selected trails and campgrounds. Deferred maintenance on low-priority facilities and assets will grow for the foreseeable future.

- ⊖ **Interpretation and Education:** Use vacancies to focus division on welcoming and orienting visitors to the park, supporting partner-led education programs and basic interpretive services. Several positions relating to curriculum development and community outreach have already been combined with other positions or left vacant. The park will meet its education mission through curriculum-based education programming provided by the North Cascades Institute. The supervisor of the Stehekin District's interpretive operation has become a subject-to-furlough position to reflect the seasonal nature of visitation in that area.

- ⊖ **Administration:** Integrate Budget Officer responsibilities into the Chief of Administration position. Centralize travel authorization and reimbursement processing under an administrative assistant rather than spread out under division heads. Make use of targeted base operating increases in FY 2010 and FY 2012 to fully staff MABO and SHRO functions.

(continued on next page)

Strategies: Cost Reduction and Operational Efficiency (continued)

Strategies for reducing costs (continued from previous page):

Shared Services and Partnerships

- ➖ Reduce or end funding for front desk/visitor information staff member at US Forest Service Chelan Ranger Station. Maintain funding for front desk/visitor information staff at US Forest Service Winthrop Ranger Station in order to support Wilderness permit system and high number of park visitors.
- ➖ Work with SHRO to implement standardized systems for recruiting, hiring and on-boarding/terminating seasonal staff; train supervisors in these systems in order to streamline the process of utilizing seasonal employees.
- ➖ Prioritize North Cascades National Park goals above activities that assist other parks or other agencies. When doing work for other parks and agencies, ensure that the full cost of each project is included in the reimbursement—including managerial oversight, planning and administrative overhead.
- ➖ Administration division and Superintendent work with North Coast and Cascades Network parks to evaluate MABO and SHRO workloads to determine if cost savings are possible within these organizations and operations.

Other Programmatic Adjustments

- ➖ **Facility Prioritization:** The Facility Management division will focus on improving the condition of the park's top 50 percent of priority assets. The division will develop management actions (e.g., mothball, demolish, minimal to sustain, or abandon) for the lower 50 percent of the park's assets (151 assets).

- ➖ **Employee Travel:** FY 2010 travel totaled \$153,000, most of which was "in-park travel" (i.e., travel to remote work locations and projects inside the park). The park has reduced travel costs each year for the past several years and will continue to do so. Reductions have been driven by lower staffing levels, standardization of policies governing in-park travel, improvements in chargeback for travel related to reimbursable projects for other parks and partners, and more efficient scheduling of training, among other factors.
- ➖ **Inventory and Monitoring protocols:** Resource Management will fully implement Tier 1 protocols and address Tier 2 protocols as resources allow.
- ➖ **Fire Management Program:** Wildland fire fuel reduction projects will be completed as funding allows, but reduced funding for this program will mean fewer fuel reduction projects in Lake Chelan National Recreation Area, which includes the community of Stehekin. The Prescribed Fires Specialist based in Stehekin will be transferred to nearby Lake Roosevelt National Recreation Area in order to supervise and manage the higher volume of funded projects in that area. The fuel reduction crew will be reduced to align with available funding.
- ➖ **Solid Waste Removal:** North Cascades will work with Chelan County to transfer solid waste removal and some associated expenses for the Stehekin community from the National Park Service to local jurisdiction.

Strategies: Increasing Funding and Capacity

Strategies for increasing funding:

Increasing Appropriated Base Funding

The NPS recognizes a need to increase the base operating budget for North Cascades National Park. Two targeted base increases for North Cascades have been high on the national priority list in recent years, but did not receive funding. These budget increase requests align with the goals and needs articulated in this business plan:

- ➕ *Provide Visitor Services in Response to New Facilities and Increased Visitation: \$378,000 (earliest: FY 2014).* Funding would be used to provide routine maintenance on facilities and support increased visitation related to the opening of the North Cascades Environmental Learning Center, and subsequent expansion of education programs by the North Cascades Institute. Additionally, funding would be used to provide visitor information, trip planning and interpretation in the Skagit District where 90 percent of the park visitation occurs.
- ➕ *Implement a Targeted Youth Education and Employment Program: \$390,000 (earliest FY 2014).* Funding would allow the park to support a minimum of 200 diverse youths in leadership development and internship programs and at least 20 diverse youths in entry-level employment positions. This will help to diversify the park and North Coast and Cascades Network workforce and visitors. Funding request and program targets are based upon a successful pilot of the program in 2009 through 2011.

Increasing Non-Appropriated Funding and Support

- ➕ Continue to build key partnerships and identify cost-sharing opportunities: North Cascades already enjoys very strong partnerships with the North Cascades Institute, Seattle City Light, and a host of local, national, and international organizations. The park will continue to foster these partnerships while actively seeking opportunities to build other mutually beneficial relationships.
- ➕ Continue to grow the volunteer program: The park's volunteer program has grown considerably since 2007, more than doubling the number of volunteer stewards working in the park. The park will build upon this success, continuing to grow the dedicated group of volunteers who contribute to North Cascades year after year.
- ➕ Pursue grants and private philanthropy: All divisions will work with the Superintendent to identify and pursue grants and philanthropic sources, such as the Washington's National Park Fund, to support high priority projects. For example, in 2011 the Washington's National Park Fund provided a \$50,000 grant to fund a youth work crew, supervised by a park trail crew work leader, to repair and rehabilitate the Monogram Lake Trail and backcountry campsite. Through this and similar grant opportunities, the park can work to address multiple goals—welcoming people to the park, engaging diverse youth, maintaining high priority assets—at the same time.

Acknowledgments

This plan is the result of the hard work, dedication and investment of many park employees who contributed their time, energy and ideas to the business planning process.

North Cascades National Park

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Stay Connected with North Cascades National Park Complex

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www.nps.gov/noca

Be our friend on Facebook to see photos and read what people are staying about North Cascades:
www.facebook.com/NorthCascadesNationalPark

See beautiful photographs of the park and share your own on our Flickr site:
www.flickr.com/photos/NorthCascadesNationalPark

Watch educational and inspiring video work we have produced on YouTube:
www.youtube.com/user/NorthCascadesNPS

Follow us on Twitter to stay up to date on park news and events:
www.twitter.com/NCascadesNPS

Participate in an educational program with our partner, the North Cascades Institute:
www.ncascades.org

Learn more about Washington's National Park Fund:
www.wnfpf.org



View of Mount Shuksan and Picture Lake.



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*Top: Kayaking on Ross Lake;
Bottom: Ranger and visitors on Happy Creek Trail.*