

Nellie Juan-College Fiord Wilderness Study Area Education Plan

FY 2014-2016



I believe that at least in the present phase of our civilization we have a profound, a fundamental need for areas of wilderness—a need that is not only recreational and spiritual but also educational and scientific, and withal essential to a true understanding of ourselves, our culture, our own natures, and our place in all nature.

Howard Zahniser, The Need for Wilderness Areas, 1955

Authorized By: _____
Tim Charnon, District Ranger, Glacier Ranger District

Prepared by Tim Lydon

Plan Objectives

This plan identifies goals, methods and venues for education surrounding the Nellie Juan-College Fiord Wilderness Study Area (WSA) on the Chugach National Forest. It draws on the historical connection between education and wilderness character to create programs that connect visitors to global ecological issues and the meaning of our public lands. It creates programs that will improve local wilderness character by reducing resource damage. The plan's three-year timeline, cost estimates, and prioritization of programs create a goal-oriented, efficient, and transparent strategy for managers and will help achieve Alaska Region and Chugach National Forest direction for WSA management.

Management Direction for the Nellie Juan-College Fiord Wilderness Study Area

In 1980, Congress designated 2.1 million acres of the Chugach National Forest surrounding western Prince William Sound as the Nellie Juan-College Fiord Wilderness Study Area (WSA). The central management directive for the area, described in both U.S. Forest Service Alaska Region policy and the 2002 Chugach National Forest Land and Resource Management Plan, is to preserve the WSA's "wilderness character." Regional and Forest policy emphasize that wilderness character should be preserved using the precepts of the 1964 Wilderness Act and provisions of the Alaska National Interest Lands Conservation Act (ANILCA).



Left: President Lyndon Johnson turns to Mardy Murie and Alice Zahniser after signing the Wilderness Act on September 3, 1964. Right: President Jimmy Carter signs ANILCA on December 2, 1980, with members of the Alaska Delegation and other lawmakers.

Education plays entwined and essential roles wherever the U.S. Forest Service is tasked with preserving wilderness character. First, the legislative history of the 1964 Wilderness Act shows that educating the American public about humanity's connection to the natural world is a central purpose for managing certain public lands as wilderness. Second, lands managed to preserve wilderness character carry a unique potential for connecting people to the natural world. Third, education is the most effective tool available to land managers for preserving wilderness character.

This plan provides a pathway for the Chugach National Forest to use education to meet its management direction in the WSA.

A Historical Connection between Wilderness and Education

The 1964 Wilderness Act resulted from several decades of steady advocacy by people inside and outside the federal land management agencies, including Aldo Leopold, Bob Marshall, Rosalie Edge, and Olaus and Mardy Murie. Howard Zahniser of The Wilderness Society played a particularly formative role, both as the law's principle author and the man most commonly credited with its passage.



Howard Zahniser

Zahniser, like others before him, identified wilderness as federal lands absent of roads and development and of sufficient size to provide outstanding opportunities for solitude and primitive recreation. He believed such areas offered a psychological environment wherein people could experience inspiration, spiritual renewal, and connectedness to the Earth's "community of life." To Zahniser, preserving such opportunities was necessary as increasing mechanization and a growing human population altered the American landscape, diminishing opportunities to directly experience wild nature. As he witnessed the humanitarian travesties of his era, including the Holocaust and the start of the nuclear arms race, Zahniser believed connecting people to the natural world was more important than ever.

The factors that moved Zahniser and others to advocate for wilderness preservation continue to test our connection to nature today. Increasing mechanization, especially advances in electronics, steers our attention toward computer screens and televisions, and away from the natural world that supports us. Of particular concern is the developing schism between tech-savvy young people and wild nature. Meanwhile, the nation's finite lands and resources must support millions more people every year, with the U.S. population projected to approach 450 million by mid-century. And the unfolding crises of global climate change and ocean acidification pose humanitarian challenges every bit as difficult and sobering as those Zahniser experienced fifty years ago.

But just as in Zahniser's era, wilderness holds a unique power to educate us about our place in the natural world. In wilderness, we find new perspectives, refreshed spirits, and inspiration. Young people—some of them tomorrow's conservation heroes—have experiences that shape the course of their lives. For the U.S. Forest Service, inviting the public to enjoy these experiences is a central part of managing a place for wilderness character.

The Nellie Juan-College Fiord WSA is no exception. Its mountainous landscape and protected waterways offer endless opportunities for adventure, challenge and solitude, experiences that open us to lessons about ourselves and our world. Its human history, including Chugachmuit culture, the Russian fur trade, gold rushes, the national forest, and the Exxon Valdez oil spill, offer additional lessons. Meanwhile, flowing glaciers and an interdependent mingling of land and sea provide dynamic classrooms to learn about global climate change and ocean acidification.

The WSA's popularity and accessibility are also relevant. While growing visitation offers many educational opportunities, it can also lead to resource damage, including litter, felled trees, cleared vegetation, unauthorized structures, intrusions from snow machines, helicopters, and other motorized equipment, and even conflict among user groups. Each detracts from the benefits of wilderness character, including its potential for education. As a result, while the Forest Service should pursue education programs that connect people to nature in a broad sense, it must also create programs that effectively reduce behaviors that harm local wilderness character.



Abandoned camp in the WSA



Alignment with Regional and Forest Priorities, Strategies, and Programs

Alaska Region Strategic Focus Areas, 2012

The programs outlined in this plan support the first of five Alaska Region Focus Areas, to:

Provide sustainable levels of world-class recreation, tourism and cultural experiences.

The Focus Area pledges to provide opportunities for Alaskans, visitors and youth to connect with the region's wild, intact, and remote landscapes and steward resources in collaboration with communities and partners. The WSA Education Plan outlines programs designed to increase connectedness to the natural world, engage visitors and youth in the Forest, and increase collaborative stewardship of wilderness character and other Chugach National Forest resources.

Chugach Forest Focus Areas, 2011

The WSA Education Plan aligns with the goals of the Chugach Forest Focus Areas, developed by the Chugach Leadership Team within the context of the Forest Plan. Like the Forest Focus Areas, the plan offers a strategy designed to resonate with the public and generate excitement about the WSA. The plan seeks to:

- *Further the Chugach as an economic engine.* The wilderness character of the WSA supports a thriving tourism and recreation economy that includes local, national and international businesses. The WSA Education Plan puts forth our best effort to celebrate and protect the resources that support these business. It is an investment in Alaska's tourism and recreation economy.
- *Engage Our Youth and Communities through the Chugach Childrens Forest.* The WSA Education Plan guides the continuation and development of programs that engage youth and communities. Examples include high school internships, trainings for school teachers, partnerships with schools, and the Voices of the Wilderness Artist Residency.
- *Highlight Areas and Programs Unique to Alaska and of Global Significance.* Western Prince William Sound is a uniquely Alaskan place, with healthy salmon runs, abundant wildlife, and unmatched scenery and recreational opportunities. In the era of climate change and ocean acidification, the glaciers, fisheries, and other interconnected resources of the Sound take on global significance. The WSA Education Plan outlines opportunities to highlight this special part of the Chugach.
- *Sustain Community Partnerships and Strategic Collaboration.* The WSA Education Plan promotes programs that will lead to myriad new partnerships and collaboration with schools, Native groups, NGOs and others.
- *Diversify Our Workforce.* This plan offers education programs and partnerships that can help diversify the agency's workforce and bring new groups to enjoy the Chugach National Forest. Examples include outreach in local communities, participation in culture camps, and annual student internships.

U.S. Forest Service Strategic Framework for Responding to Climate Change, 2008

The WSA Education Plan incorporates the vision and goals of the 2008 U.S. Forest Service Strategic Framework for Responding to Climate Change. The plan's mission and goals align with the Framework's vision that:

Citizens are knowledgeable about climate change and its impacts on ecosystems, and are prepared to participate in decisions and actions affecting their Nation's forests and grasslands.

By incorporating climate change awareness throughout its programs, the Education Plan also supports the climate change Framework's *Principles Related to People*:

Alliances and collaboration will be essential to achieving science-based, integrated approaches for adaptation and mitigation.

Institutional and public support and encouragement for implementing innovative approaches is essential.

The WSA Education Plan's action items also represent a local Chugach NF attempt to meet the goals of the climate change Framework:

EDUCATION - Advance awareness and understanding regarding principles and methods for sustaining forests and grasslands, and sustainable resource consumption, in a changing climate.

ALLIANCES - Establish, enhance, and retain strong alliances and partnerships with federal agencies, State and local governments, Tribes, private landowners, nongovernmental organizations, and international partners to provide sustainable forests and grasslands for present and future generations.

U.S. Forest Service Alaska Region Interpretation and Conservation Education Strategy, 2009

The WSA Education Plan helps the Chugach NF publicize the key messages of the Alaska Region Interpretation and Conservation Education (ICE) Strategy, including:

- Alaska's National Forests are dynamic ecosystems, shaped by nature, woven by culture.
- People can discover a unique combination of resources in the National Forests of Alaska. These world-class resources are important globally, nationally, and locally.
- We, and our partners, care for your National Forests in Alaska using the best information to sustain the use and protection of resources for today and tomorrow.
- Alaska's coastal lands and waterways have met people's social, physical, and spiritual needs for thousands of years. Alaska's National Forests will continue to nurture the region's natural and cultural diversity for future generations.

The WSA Education Plan also aligns with the three primary goals of the ICE Strategy, to:

- Coordinate the development and delivery of high-quality interpretive and conservation education programs and materials, both personal and non-personal
- Provide strong leadership and management of the Alaska Region interpretive and conservation education programs.
- Maximize partnerships to contribute toward agency mission successes using interpretive and conservation education program planning and implementation to reach traditional and previously underserved audiences.

Glacier Ranger District Conservation Education Plan, 2005

The WSA Education Plan is consistent with the general goals of the GRD Conservation Education Plan and targets some of the same audiences, offering opportunities for collaboration among District staff.



Goals of WSA Education Plan

The WSA Education Plan action items, described below, are designed to meet the following goals:

- Use the 50th anniversary of the Wilderness Act to celebrate the history, meaning, and values of the WSA locally, statewide and nationally.
- Create programs that provide opportunities for young people, including underserved populations, to experience the WSA through stewardship projects and other opportunities.
- Improve awareness and generate excitement about the WSA as a unique part of the Chugach National Forest by creating programs and materials to engage general public visitors in WSA meaning and values.
- Improve awareness and generate excitement about the WSA as a unique part of the Chugach National Forest by helping WSA outfitters, guides, and tour operators include wilderness education in their activities.
- Create institutional awareness and excitement within the USFS about the WSA history, goals, resources and concerns.
- Curb WSA resource damage through regular field presence and contacts with onshore visitors to highlight LNT practices and WSA management goals.
- Weave climate education efforts into existing programs and create new programs for climate change education. Forest Service personnel can set an example for outfitter/guides, tour operators, and others for positive and effective climate change education.

Audiences

Western Prince William Sound is a popular place, visited in a wide variety of ways throughout the year. Cruise ship passengers from around the world come to experience the grand scenery. Daily tour boats offer trips to remote fiords and glaciers. Wilderness kayakers seek solitude and challenge, often on multi-day trips. Alaskan families and friends spend time together camping, kayaking, boating, fishing, or staying at USFS cabins. Hunting is popular in spring and fall. Backcountry skiers come during winters. A host of researchers are present year-round.

The high visitation provides a diversity of audiences for U.S. Forest Service education programs in the WSA. Yet the almost infinite ways visitors access the WSA challenges education efforts. Additionally, lean budgets and a small staff limit the agency's potential for reaching visitors, requiring efficiency and careful prioritization. Just as important, preserving the area's wilderness character requires some restraint with education programs, so that visitors may experience the area with minimal intrusion.

To meet the overlapping opportunities and challenges and maximize efficiency, the WSA Education Plan identifies the following five priority audiences for education programs:

Summer Visitors Ashore

A primary thrust of the education plan is providing information to on-shore summer visitors, to reduce resource damage and increase understanding of WSA values and management goals. This audience includes kayakers, hikers, boaters, sightseers and other largely independent visitors. Education programs include field contacts by rangers, presentations for outdoor groups, and brochures available through visitor centers, water taxis, online, and elsewhere.

Hunters

Developing a stronger connection between the hunting community and the U.S. Forest Service is important for reducing resource damage and increasing understanding of WSA values and management goals. Education programs oriented toward this group include work with outfitters, guides, water taxis, and hunting organizations.

Outfitters, Guides, and Tour Operators

Outfitters, guides and tour operators include the myriad commercial services that help bring visitors to the WSA, including water taxis, kayak and hunting guides, providers of outdoor gear rentals, and tour boat and cruise ship staffs. Increasing awareness of WSA values, resource threats, and management goals among this group is an efficient way to reach thousands of visitors. Outfitters, guides, and tour operators are also important partners for education on broader topics, including natural and human history, climate change, biodiversity values, and more.

Communities (with an emphasis on young people)

WSA wilderness character is an important resource for local communities, socially, economically, educationally, and otherwise. Connecting south-central Alaskan communities, especially young people, to the values and management goals of the WSA is critical to the area's stewardship. The WSA also provides a platform for community education about broader issues such as climate change and ocean health. The WSA Education Plan outlines student internships, teacher trainings, engagement with youth groups, and other programs oriented toward local communities.

Internal Audience

Raising understanding and appreciation for WSA values and management goals among Chugach National Forest employees and partners is an efficient way to reach wide-ranging audiences. Partners include researchers, special use permit-holders, and other state and federal agencies.



An Artist-In-Residence program helps connect communities to the WSA and broader Chugach National Forest.

Education Plan Action Items

Issue

The Forest Service and other agencies plan Alaskan and national celebrations for the 50th anniversary of the Wilderness Act in 2014.

Goal

Use the 50th anniversary of the Wilderness Act to celebrate the history, meaning, and values of the Chugach WSA locally, statewide and nationally.

Actions

| Action | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|---|---|-----------------------|------------------------|-------------------|---|
| Traveling Voices of the Wilderness art show to celebrate wilderness values, visits Fairbanks, Anchorage, Juneau, Sitka, Petersburg, Ketchikan | 2013: 60 days WSA GS-6 2014: 40 days WSA GS-6 AKGEO | R10; | Throughout 2014 | High (for FY2014) | Solicit input in planning from NPS, BLM, FWS, USFS staff and other partners |
| Discount tour boat trip to WSA to celebrate 50 th , with focus on youth. Provide professional speakers/naturalists. | 2 days WSA GS-9 5 days WSA GS-7 AKGEO | R10; | May, 2014 | High (FY2014) | Feedback from AKGEO, CNF staff, passengers, teachers |
| Public presentations on 50 th Anniversary at REI, UAA, or other venues. Two in 2014 | 7 days WSA GS-7 4 days WSA GS-6 | Program Funds | September, 2014 | Medium (FY2014) | Feedback from hosts, public |
| Plan/participate in interagency public forum on values of wilderness | 10 days WSA GS-7 10 days WSA GS-6 Agency partners | R10 and Program Funds | April, 2014 | High (FY2014) | Solicit input from agencies, AKGEO, other partners; feedback from public |
| Create a 50 th anniversary display for GRD front office and BBVC (?) | 5 days WSA GS-6 APU/UAA student | Program Funds | May 2014 | Medium (FY2014) | Feedback from public and CNF conservation ed and other staff |
| First Friday Art Exhibit | 3 days WSA GS-6 | R10 | May 2014 | Medium (FY2014) | Feedback from gallery partners, featured artists, public |

Issue

In a national trend, young people spend less time in direct contact with the natural world. Electronic entertainment, busy schedules, and other factors limit opportunities for young people to experience wild nature.

Goal

Create programs that provide opportunities for young people, including underserved populations, to experience the WSA through stewardship projects

Action

| Action | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|---|---|-------------------------------|-------------------------|----------------------------------|---|
| Host Annual Education Tour Boat Expedition to WSA (see also 50 th Anniversary Wilderness Act Action Plans) | AKGEO; Grant to offset tour costs; 10 day WSA GS-7; 5 days WSA GS-6; | R10 in 2014; Program funds | Pilot trip in May, 2014 | High (FY2014, possibly annually) | Feedback from AKGEO, CNF staff, passengers, teachers |
| Host Student Intern for one field trip | 10 days WSA GS-6 | Program Funds | Annual | Medium (FY2015) | Participant evaluations Successful completion of follow-up extension projects |
| Teachers Expedition | 10 days WSA GS-7 AKGEO; DSE; UAA | Program Funds | Annual | High (Annually) | Class evaluations Successful completion of lesson plan assignment Continued popularity of the class |
| Participate in Chugach Schools District/AK GEO RAC-funded stewardship trips in WSA | 2 days WSA GS-5 AKGEO | Program Funds | Annual | High (Annually) | Evaluations with AK GEO |
| Participate in culture camps at Chenega and Tatitlek | 3 days WSA GS-7 3 days WSA GS-6 | Program Funds | Annual | Medium (Annually) | Post-season evaluations with culture camp leaders |
| Visit Chugach School District schools | 3 days WSA GS-5 | Program Funds | Annual | Low (Annually) | Teacher evaluations |

Issue

Chugach National Forest general public visitors demonstrate low awareness of the WSA management prescription and the goals and benefits of managing lands for wilderness character.

Goal

Improve awareness and generate excitement about the WSA as a unique part of the Chugach National Forest by creating programs and materials to engage general public visitors in WSA meaning and values.

Actions

| Actions | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|--|------------------------------------|-----------------------|------------------------|-----------------|---|
| Maintain Voices of the Wilderness artist-in-residence program | 30 days WSA GS-6 | R10 and Program Funds | Annual | High (Annually) | Track trends in applications, solicit feedback from CNF conservation ed and other staff |
| Update pamphlets for Blackstone Bay and Harriman Fiord. Include information on goals and benefits of WSA. Print 500 copies and make available at GRD, BBVC, CCIC, water taxis. Post on CNF website. | 5 days WSA GS-7 3 days WSA GS-6 | Program Funds | May, 2014 | High (FY2014) | Track distribution of brochures Solicit feedback from USFS conservation ed staff, visitors, outfitter/guides, others |
| Create a pamphlet for the WSA that includes map, general description, photos, goals and benefits, invites stewardship. Print 500 copies and make available at GRD, BBVC, CCIC, water taxis. Post on CNF website. | 5 days WSA GS-7 3 days WSA GS-6 | Program Funds | May, 2014 | High (FY2014) | Track distribution Solicit feedback from USFS conservation ed staff, visitors, outfitter/guides, others |
| Update pamphlet for SoundWAVES that includes description of WSA resource damage challenges, stewardship opportunities, WSA map and goals | 5 days WSA GS-7 3 days WSA GS-6 | Program Funds | May, 2014 | High (FY2014) | Track distribution Solicit feedback from USFS conservation ed staff, visitors, outfitter/guides, others |
| Update Chugach NF Visitor Guide with current WSA information | .5 day WSA GS-7 | Program Funds | Annual | High (Annually) | Solicit feedback from USFS conservation ed and public affairs |

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|---|------------------------------------|---------------------------------------|--|-------------------|---|
| Create postcards or other field-appropriate outreach materials to engage public in Forest Plan Revision (FPR) and its connection to WSA | SO | SO | Annual for duration of FPR | High (annually) | Create with SO/GRD staff. Monitor visitor responses to FPR. Solicit feedback from public, conservation ed staff and organizations |
| Offer presentations at hunting organizations | 2 days WSA GS-7 | Program Funds | Once in 2014; Evaluate possibly increase | Medium (FY2014) | Post-season contact with organizations |
| Create WSA display for GRD lobby | 5 days WSA S-6 | Program Funds | Sept 30, 2014 | High (FY2015) | Solicit feedback from CNF conservation ed and other staff |
| Provide public presentations during the winter to two of the following: REI, Whittier Boat Owners Association, KCK, artist guild (VOTW), other forums | 3 days WSA GS-7 3 days WSA GS-6 | Program Funds | Annual | Medium (annually) | Feedback from CNF staff and hosting partners |
| Update Chugach NF webpage to include WSA info | 5 days WSA GS-7 5 days WSA GS-6 | Program Funds and/or APU/UAA students | May, 2015 | High (FY2015) | Solicit feedback from outfitter/guides, CNF staff, public and partners on messages and effectiveness |
| Work with AMHS to put permanent displays about WSA aboard ferries | 10 days WSA GS-7 | Program Funds | May, 2016 | Low (FY2016) | |

Issue

Chugach National Forest outfitter/guides/tour operators demonstrate low awareness of the WSA management prescription and the goals and benefits of managing lands for wilderness character.

Goal

Improve awareness and generate excitement about the WSA as a unique part of the Chugach National Forest by helping WSA outfitters, guides, and tour operators include wilderness education in their activities.

Actions

| Action | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|--|--|------------------------|---|-----------------|--|
| Participate in guide training for various and key tour, outfitter, and guiding operations | 10 days GS-7 ranger 10 days GS-6 ranger | FDDS and Program Funds | Annual | High (Annually) | Post-season interviews with o/g's, tour operators |
| Meet with at least one hunting, fishing, flightseeing, or other charter operator | 3 days GS-7 ranger 2 days GS-6 ranger | FDDS and Program Funds | Visit one by May, 2014; Evaluate, possibly increase in 2015 | High (Annually) | Post-season interviews with o/g's, tour operators |
| Annually update WSA information for USFS interpreters working aboard tour boats | 2 days GS-6 ranger | Program Funds | Annual | High (Annually) | Feedback from District conservation education leads |
| Create WSA-specific education materials for outfitters, guides, tour boat and cruise ship staffs | 2 days GS-6 ranger 1 day GS-7 ranger | FDDS and Program Funds | May, 2014 | High (FY2014) | Post-season interviews with o/g's, tour operators |
| Create postcards or other field-appropriate outreach materials to engage O/G and clients in Forest Plan Revision (FPR) and its connection to WSA | SO | SO | Annual for duration of FPR | High (annually) | Create with SO/GRD staff and O/Gs. Monitor visitor responses to FPR. Solicit feedback from O/Gs. |

Issue

Chugach National Forest personnel have many opportunities to educate outfitter/guides, tour operators, the visiting public, and others about the meaning and values of the WSA, yet few internal WSA trainings or materials exist on the Forest.

Goal

Create institutional awareness and excitement within the USFS about the WSA history, goals, resources and concerns.

Actions

| Actions | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|--|---|--|------------------------|-------------------|---|
| Acquire Green Fire video. Provide lunchtime showings at the SO and GRD and upon request at other districts | Purchase Green Fire 1 day WSA GS-7 1 day WSA GS-6 | Program Funds | March, 2014; | Medium (FY2014) | Attendance and feedback from staff |
| WSA program seek partnerships with other programs | Existing staff | Program Funds | Annually | High (Annually) | Feedback from Recreation Operations, PA Staff Officer, other programs |
| Wilderness rangers incorporate WSA training sessions into GRD/PWS Zone seasonal trainings and on-site visits with crews working in WSA | 1 day WSA GS-7 1 day WSA GS-6 | Program Funds | Annual | Medium (Annually) | Feedback from Recreation Operations, PA Staff Officer, other programs |
| Carhart Center Unit Workshop in Wilderness Management | 2 days WSA GS-11 2 days WSA GS-9 3 days WSA GS-7 | Free session; travel & housing for host? | April, 2015 | Medium (FY2015) | Feedback from participants |

Issue

Resource damage from campers, boaters, and hunters is a regular occurrence in the WSA, degrading wilderness character

Goal

Curb WSA resource damage through regular field presence and contacts with onshore visitors to highlight LNT practices and WSA management goals.

Actions

| Actions | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|---|--|-----------------------|------------------------|-------------------------------------|---|
| Summer Field Contacts | 90 days WSA GS-7 90 days WSA GS-6 90 days WSA GS-5 90 days WSA GS-5 | Program Funds | Annual goal | High (annually) | Monitor wilderness character solicit o/g and public feedback |
| Spring, Fall hunting season contacts | 10 days WSA GS-7 10 days WSA GS-6 | Program Funds | Annual goal | High (annually) | Monitor wilderness character solicit o/g and public feedback |
| Provide WSA and LNT (incl. discouraging chainsaws, tree felling) information signs at the 6 USFS recreation cabins in WSA | 2 days WSA GS-7 | Program Funds | May 2014 | High (FY2014); Maintain annually | Monitor wilderness character |
| Establish USFS presence near Whittier Small Boat Harbor through information signs | 10 days WSA GS-7 | Program Funds | May 2014 | High (FY2014); Maintain annually | Consult USFS staff, outfitter/guides, water taxis, harbor master to shape message board content |

Issue

Global climate change and ocean acidification from burning fossil fuels will bring changes to biodiversity and natural resources. Improved understanding of the science behind the issues will help create solutions, awareness, and resiliency. Prince William Sound offers natural classroom for U.S. Forest Service, outfitters/guides/tour operators, and others to provide education, but little education on the issues is currently offered.

Goal

Weave climate change education efforts into existing programs and create new programs for climate education. Forest Service personnel set an example for outfitter/guides, tour operators, and others for positive and effective climate change education.

Actions

| Actions | Required Resources | Funding Source | Completion Date | Priority | Evaluation |
|--|------------------------------------|-----------------------|---------------------------------------|-----------------|--|
| Assemble quality climate change and ocean acidification education materials to distribute annually to WSA outfitters, guides, tour operators, others | 2 days WSA GS-7 2 days WSA GS-6 | Program Funds | Compile by May, 2014, update annually | High (Annually) | Post-season interviews with o/g's, tour operators |
| Make climate change/ocean acidification prominent part of annual Teachers Expedition, Artist Residency, Student Internship, and other WSA programs | 5 days WSA GS-7 5 days WSA GS-6 | Program Funds | Annual | High (Annually) | Include in evaluations for each project |
| Incorporate climate awareness into existing trainings for outfitter/guides, tour operators, etc. Encourage increasing education to public. | 1 day WSA GS-7 1 day WSA GS-6 | Program Funds | Annual | High (Annually) | Post-season interviews with o/g's, tour operators |
| Create a bibliography of quality climate and oceans information for guides and other educators, ranging from the introductory to research papers | 1 day WSA GS-7 1 day WSA GS-6f | Program Funds | Compile by May, 2015; Update annually | High (FY2015) | Post-season feedback from guides and other educators |
| Hold one-day workshop with other Chugach NF programs on effective ways to increase climate education | 3 days WSA GS-7 | Program Funds | May, 2015 | Medium (FY2015) | Exit interviews |

APPENDIX A: Schedule of Actions

| Fiscal Year 2014 Action Items | Target Date | Successful? |
|--|----------------------------|-------------|
| Fiscal Year 2014 High Priorities | | |
| Traveling Voices of the Wilderness art show to celebrate wilderness values, visits Fairbanks, Anchorage, Juneau, Sitka, Petersburg, Ketchikan | Throughout 2014 | |
| Discount tour boat trip to WSA to celebrate 50 th Anniversary of TWA, with focus on youth. | May, 2014, possibly annual | |
| Plan/participate in interagency public forum on values of wilderness | October, 2014 | |
| Teachers Expedition | Annual | |
| Participate in Chugach Schools District/AK GEO RAC-funded stewardship trips in WSA | Annual | |
| Maintain Voices of the Wilderness artist-in-residence program | Annual | |
| Update pamphlet for Blackstone Bay and Harriman Fiord. Include information on goals and benefits of WSA. Print 500 copies and make available at GRD, BBVC, CCIC, water taxis, online | May, 2014 | |
| Create a pamphlet for the WSA that includes map, general description, photos, goals and benefits, invites stewardship. Print 500 copies and make available at GRD, BBVC, CCIC, water taxis. Post on CNF website. | May, 2014 | |
| Create pamphlet for SoundWAVES that includes description of WSA resource damage challenges, stewardship opportunities, WSA map and goals | May, 2014 | |
| Update Chugach NF Visitor Guide with current WSA information | Annual | |
| Create Forest Plan Revision/WSA outreach materials (postcards) for field contacts | May, 2014, then annually | |
| Participate in guide training for various and key tour, outfitter, and guiding operations | Annual | |
| Meet with at least one hunting, fishing, flightseeing, or other charter operator | Annual | |
| Update WSA information for USFS interpreters working aboard tour boats | Annual | |
| Create WSA-specific education materials for outfitters, guides, tour boat and cruise ship staffs | May, 2014; annual updates | |
| Create Forest Plan Revision/WSA materials (postcards) for O/Gs and clients in field | May, 2014, then annually | |
| WSA program seek partnerships with other programs | Annual | |
| Summer Field Contacts | Annual | |
| Spring, Fall Hunting Season Contacts | Annual | |

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|---|----------------------|--|
| Provide WSA and LNT (incl. discouraging chainsaws, tree felling) information signs at the 6 USFS recreation cabins in WSA | May, 2014 | |
| Establish USFS presence near Whittier Small Boat Harbor through information signs | May, 2014 | |
| Assemble quality climate change and ocean acidification education materials for annual distribution to WSA outfitter/guides, tour operators, and others | Compile by May, 2014 | |
| Make climate change/ocean acidification prominent part of Teachers Expedition, Artist Residency, Student Internship, and other WSA programs | Annual | |
| Incorporate/encourage climate change awareness in existing trainings for outfitter/guides, tour operators, other WSA educators. | Annual | |
| Fiscal Year 2014 Medium Priorities | | |
| Public presentations on 50 th Anniversary at REI, UAA, or other venues. | 2 in 2014 | |
| Create a 50 th anniversary display for GRD front office and/or BBVC | May, 2014 | |
| First Friday Art Exhibit | April, 2014 | |
| Participate in culture camps at Chenega and Tatitlek | Annual | |
| Presentation to at least one hunting group | Spring or Fall, 2014 | |
| Provide public presentations during the winter to two of the following: REI, Whittier Boat Owners Association, KCK, artist guild (VOTW), other forums | Annual | |
| Show Green Fire video for lunch at SO, GRD | Spring, 2014 | |
| Wilderness rangers incorporate WSA training sessions into GRD/PWS Zone seasonal trainings and on-site visits with crews working in WSA | Annual | |
| Fiscal Year 2014 Low Priorities | | |
| Visit Chugach School District schools | Annual | |

| Fiscal Year 2015 Action Items | Target Date | Successful? |
|---|--------------------------------|-------------|
| Fiscal Year 2015 High Priorities | | |
| Host Annual Education Tour Boat Expedition to WSA (see also 50 th Anniversary Wilderness Act Action Plans) | Pilot in 2014, possibly annual | |
| Teachers Expedition | Annual | |
| Participate in Chugach Schools District/AK GEO RAC-funded stewardship trips in WSA | Annual | |
| Maintain Voices of the Wilderness Artist Residency | Annual | |
| Maintain supplies of pamphlets for Blackstone Bay and Harriman Fiord, update as necessary | Annual | |
| Maintain supplies of pamphlets for the WSA, update as necessary | Annual | |
| Maintain supplies of pamphlets for SoundWAVES, update as necessary | Annual | |
| Update Chugach NF Visitor Guide with current WSA information | Annual | |
| Maintain Forest Plan Revision/WSA outreach materials (postcards) for field contacts | Annual | |
| Create WSA display for GRD lobby | May, 2015 | |
| Update CNF Webpage to include WSA information | May, 2015 | |
| Participate in guide training for various and key tour, outfitter, and guiding operations | Annual | |
| Meet with at least one hunting, fishing, flightseeing, or other charter operator | Annual | |
| Update WSA information for USFS interpreters working aboard tour boats | Annual | |
| Maintain WSA-specific education materials for outfitters, guides, tour boat and cruise ship staffs | Annual | |
| Maintain Forest Plan Revision/WSA materials (postcards) for O/Gs and clients in field | Annual | |
| WSA program seek partnerships with other programs | Annual | |
| Summer Field Contacts | Annual | |
| Spring, Fall Hunting Season Contacts | Annual | |
| Maintain WSA and LNT (incl. discouraging chainsaws, tree felling) information signs at the 6 USFS recreation cabins in WSA | Annual | |
| Maintain USFS presence near Whittier Small Boat Harbor through information signs | Annual | |
| Assemble quality climate change and ocean acidification education materials for annual distribution to WSA outfitter/guides, tour operators, and others | Annual | |
| Make climate change/ocean acidification prominent part of Teachers Expedition, Artist Residency, Student Internship, and other WSA programs | Annual | |
| Incorporate/encourage climate change awareness in existing trainings for outfitter/guides, tour operators, other WSA educators. | Annual | |
| Create a bibliography of quality climate change and oceans information for guides and other educators, ranging from | May, 2015 | |

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| the introductory to research papers | | |
| Fiscal Year 2015 Medium Priorities | | |
| Host student intern for one field trip | Summer, 2015, possibly annual | |
| Participate in culture camps at Chenega and Tatitlek | Annual | |
| Provide public presentations during the winter to two of the following: REI, Whittier Boat Owners Association, KCK, artist guild (VOTW), other forums | Annual | |
| Wilderness rangers incorporate WSA training sessions into GRD/PWS Zone seasonal trainings and on-site visits with crews working in WSA | Annual | |
| Carhart Center Unit Workshop in Wilderness Management | FY2015 | |
| Hold one-day workshop with other Chugach NF programs on effective ways to increase climate change education | Spring, 2015 | |
| Fiscal Year 2015 Low Priorities | | |
| Visit Chugach School District schools | Annual | |

| Fiscal Year 2016 Action Items | Target Date | Successful? |
|---|-------------------------------|-------------|
| Fiscal Year 2016 High Priorities | | |
| Discount tour boat trip to WSA as an education opportunity, with professional speakers. | Pilot 2014, possibly annual | |
| Teachers Expedition | Annual | |
| Participate in Chugach Schools District/AK GEO RAC-funded stewardship trips in WSA | Annual | |
| Maintain Voices of the Wilderness artist-in-residence program | Annual | |
| Maintain supplies of pamphlets for Blackstone Bay and Harriman Fiord, update as necessary | Annual | |
| Maintain supplies of pamphlets for the WSA, update as necessary | Annual | |
| Maintain supplies of pamphlets for SoundWAVES, update as necessary | Annual | |
| Update Chugach NF Visitor Guide with current WSA information | Annual | |
| Maintain Forest Plan Revision/WSA outreach materials (postcards) for field contacts | Annual | |
| Maintain WSA display for GRD lobby | Annual | |
| Maintain CNF Webpage to include WSA information | Annual | |
| Participate in guide training for various and key tour, outfitter, and guiding operations | Annual | |
| Meet with at least one hunting, fishing, flightseeing, or other charter operators | Annual | |
| Update WSA information for USFS interpreters working aboard tour boats | Annual | |
| Maintain WSA-specific education materials for outfitters, guides, tour boat and cruise ship staffs | Annual | |
| Maintain Forest Plan Revision/WSA materials (postcards) for O/Gs and clients in field | Annual | |
| WSA program seek partnerships with other programs | Annual | |
| Summer Field Contacts | Annual | |
| Spring, Fall Hunting Season Contacts | Annual | |
| Maintain WSA and LNT (incl. discouraging tree felling) information at the 6 USFS recreation cabins in WSA | Annual | |
| Maintain USFS presence near Whittier Small Boat Harbor through information signs | Annual | |
| Assemble quality climate change and ocean acidification education materials for annual distribution to WSA outfitter/guides, tour operators, and others | Annual | |
| Make climate change/ocean acidification prominent part of Teachers Expedition, Artist Residency, Student Internship, and other WSA programs | Annual | |
| Incorporate/encourage climate change awareness in existing trainings for outfitter/guides, tour operators, other WSA educators. | Annual | |
| Fiscal Year 2016 Medium Priorities | | |
| Host student intern for one field trip | Summer, 2015, possibly annual | |

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| Participate in culture camps at Chenega and Tatitlek | Annual | |
| Provide public presentations during the winter to two of the following: REI, Whittier Boat Owners Association, KCK, artist guild (VOTW), other forums | Annual | |
| Wilderness rangers incorporate WSA training sessions into GRD/PWS Zone seasonal trainings and on-site visits with crews working in WSA | Annual | |
| Revive and expand SoundWAVES program | May, 2016 | |
| Fiscal Year 2016 Low Priorities | | |
| Visit Chugach School District schools | Annual | |
| Work with AMHS to put permanent displays about WSA aboard ferries | May, 2014 | |