NATIONAL CONSERVATION LANDS

Oregon/Washington

Cascade-Siskyou

National Monument

Annual Manager's Report—Fiscal Year 2014

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1 Cascade Siskiyou Profile

Designating Authority

Designating Authority: Presidential Proclamation 7318

Date of Designation: June 9, 2000

Acreage

Total Acres in Unit	64,025
BLM Acres	63,977
Other Federal Acres	48
State and Private Acres*	1,278

*State and Private acres are not part of the total of the unit acres

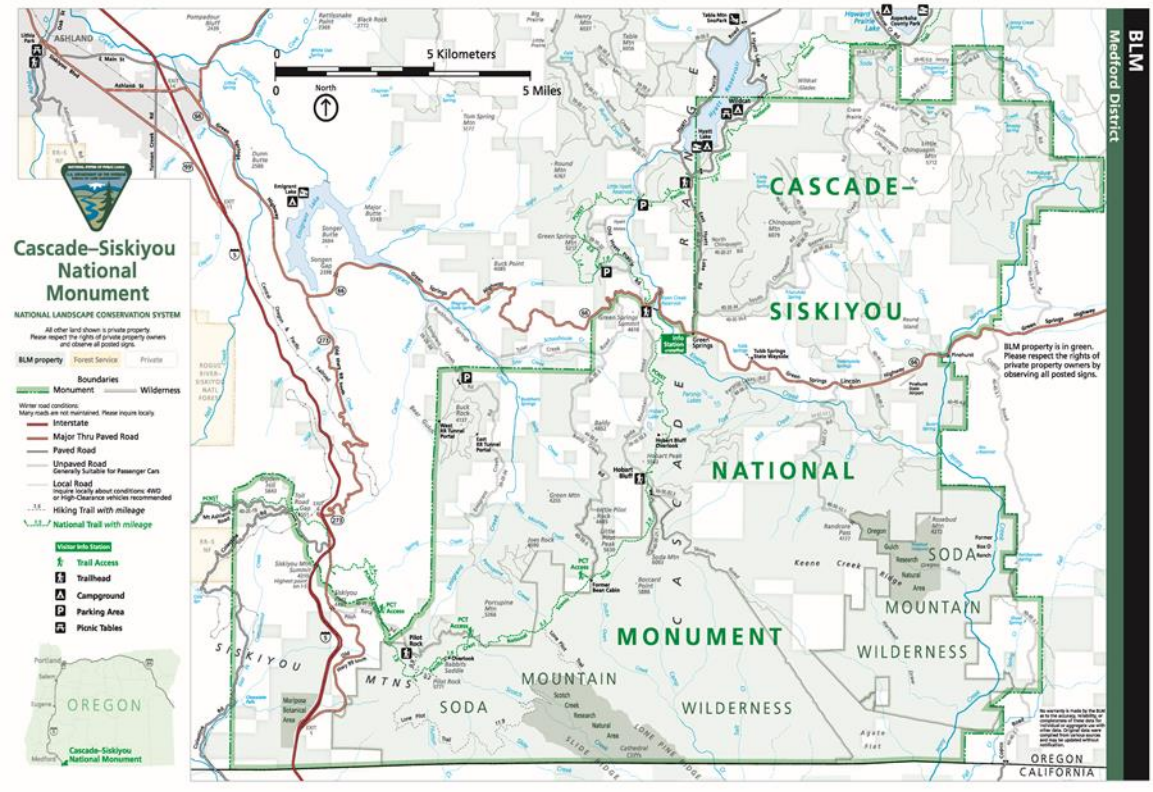
Contact Information

Unit Manager	John Gerritsma
Phone	541-618-2438
E-mail	jgerrits@blm.gov
Mailing Address	3040 Biddle Road, Medford, OR 97504
Field Office Name	Ashland
District Office Name	Medford
State Office Name	Oregon/Washington

Budget

Total Fiscal Year 2014 Budget	$732,546
Subactivity 1711	$198,860
Other Subactivities' Contributions	$563,686
Other Funding	$0

Map of Cascade-Siskiyou National Monument



Managing Partners

The Cascade-Siskiyou National Monument does not currently have established partnerships to assist with the management of the unit.

Staffing

The CSNM is administratively located within the Ashland Resource Area of the Medford District. Staffing for the Monument is accomplished in an ad hoc manner, using existing resource area staff with other competing priorities. Many of the staff positions that assist the Monument are Ashland Resource Area resource specialists whose primary duties are located outside of the Monument.

There is no dedicated Monument manager position. The Ashland Resource Area Field Manager, John Gerritsma, is the official Monument Manager and Joel Brumm, the Assistant Monument Manager, is assigned the operational leadership duties along with other resource area functions. The Ashland Field Manager reports to the Medford District Manager and is the line officer responsible for decision-making in the CSNM.

The CSNM has only three dedicated full-time staff positions: a Planning and Environmental Coordinator, an Interpretive Specialist, and an Outdoor Recreation Planner. The relevant sub-activities (1210, 1711, and 6711) fund portions of the resource area and support staff that contribute to accomplishing the work in the CSNM. The GS-9 Park Ranger and GS-11 Outdoor Recreation Planner positions were vacant from July of 2014 through the end of the fiscal year. The GS-6 Biological Technician position was only active from October 2013-February 2014 and was not refilled.

The following table summarizes the positions and funded percentage of time allotted to duties in the CSNM:

Position	Full Time/Seasonal/ Pathways	% Time Dedicated to Monument
Monument Manager (Field Manager)	Full Time	10
Assistant Monument Manager (AFM)	Full Time	65
Natural Resource Specialist (Planner)	Full Time	100
Interpretive Specialist	Full Time	100
Outdoor Recreation Planner	Full Time	65
Outdoor Recreation Planner	Full Time	35
Park Ranger (Hyatt Lake)	Full Time	50
Native Plant Specialist/Botanist	Full Time	50
Botanist	Full Time	10
Administrative Technician	Full Time	10
Hydrologic Technician	Full Time	20
Biological Technician	Seasonal	100
Recreation Technician	Pathways (Seasonal)	100
Human Resources Assistant	Full Time	10

View of Pilot Rock from footpath to Boccard Point

2 Planning and NEPA

Status of the Resource Management Plan

The Cascade-Siskiyou National Monument Resource Management Plan and Record of Decision (CSNM RMP/ROD) was approved in August 2008. It provides guidance and direction for a strategy aimed at protecting and enhancing the public lands and associated resources within the CSNM. The planning process for the CSNM addressed issues of public interest including vegetation management, transportation and access, livestock grazing, and recreation.

The Omnibus Public Lands Management Act of 2009, Public Law No. 111-11, provided for two land exchanges "for the purpose of protecting and consolidating Federal land within the Monument," where the public land involved in these two exchanges is located within the CSNM. These congressionally directed land exchanges brought to light differences between the CSNM RMP and the Presidential Proclamation about land exchanges. Presidential Proclamation 7318, which designated the CSNM, allows for "exchange that furthers the protective purposes of the Monument." Land tenure decisions in the CSNM RMP limited land exchanges in the Monument by requiring that the public land involved in the exchange be located outside the CSNM. The RMP was more restrictive than the proclamation by precluding exchanges that further "the protective purposes of the Monument" where the public land involved is located within the CSNM.

The RMP was amended in 2013 to allow the BLM to consider, in subsequent NEPA analyses, land exchanges where the federal land to be exchanged is located within the CSNM (including the two exchanges authorized by the Omnibus Public Land Management Act of 2009), as long as the exchange "furthers the protective purposes of the Monument."

Status of Activity Plans

Soda Mountain Wilderness Final Stewardship Plan

The Soda Mountain Wilderness Final Stewardship Plan was approved in April 2012. The plan focused on enhancing wilderness character through a combination of actions that include active and passive restoration and on enhancing opportunities for solitude and primitive recreation through actions such as roads-to-trails conversions.

Cascade-Siskiyou National Monument Transportation Management

As part of a settlement agreement on an appeal of the CSNM ROD/RMP, the BLM initiated transportation management planning in 2009. Agency staff developed a road inventory protocol, a database, and a photo directory for the project. In 2010, the former transportation system for the Soda Mountain Wilderness was inventoried (approximately 80 miles). In 2011, Monument roads and routes outside of the wilderness were

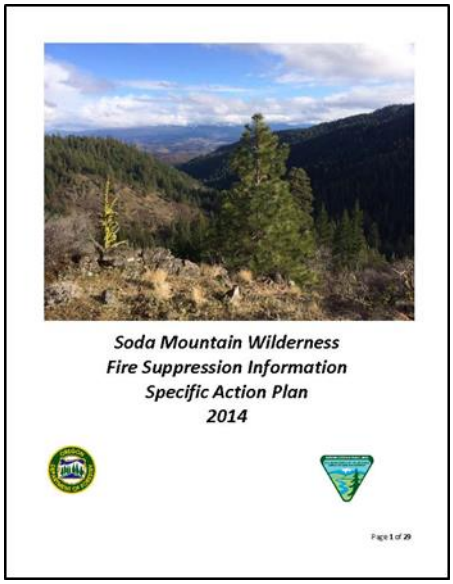
Legacy Transportation Route

inventoried. In addition, roads and routes on lands to be acquired were also documented. Inventories included information on road condition, drainage features (e.g., culverts, ditches, and drain dips), and any potential erosion concerns. A total of 295 linear miles were surveyed on Monument lands outside the Soda Mountain Wilderness. The interdisciplinary team completed additional field reconnaissance over the summer of 2012 and developed a preliminary proposed action in September 2012.

In 2014, the team continued to work with stakeholders to refine recreation access issues and survey newly acquired lands. The fire situation in Southwest Oregon during the summer of 2014 was significant to the degree that special bulletins were issued describing the unprecedented dryness of the forest fuels. All of the key staff involved in completing the CSNM transportation plan were supporting the local fire suppression efforts due to heavy fire activity. Staffing changes following fire season further hampered progress on the transportation plan. The interdisciplinary team is continuing to work on preparing the EA with a targeted release date of summer 2015.

Soda Mountain Wilderness Fire Suppression and Specific Action Plan 2014

The BLM contracts with the Oregon Department of Forestry (ODF) to provide fire prevention, detection, and suppression services. ODF is required to be consistent with BLM resource management objectives in selecting suppression action alternatives. Overall guidance for suppressing wildfires within the SMW is provided in the SMW Final Stewardship Plan. Each year since wilderness designation, BLM, in coordination with ODF, has developed a fire suppression plan for managing fire suppression actions in the SMW. The 2014 plan addresses firefighter safety, access, dispatch procedures, use of BLM resource advisors, prohibited uses under the Wilderness Act (Section 4(c)), and the process for requesting tools, equipment and suppression actions that would normally be prohibited. The BLM meets with ODF and their firefighters pre-season to review the annual fire suppression plan. This process helps to ensure that fires in the SMW are suppressed using the minimum tool and tactics necessary with the long-term goal of protecting wilderness character. This plan was utilized for the first time in 2014 during the Oregon Gulch Wildfire.



Cover page of the Soda Mountain Wilderness Fire Suppression Information Specific Action Plan

Status of the RMP Implementation Strategy

Although the CSNM has not yet completed a formal RMP implementation strategy, BLM has been implementing RMP decisions over the past 7 years in response to legislative and collaborative priorities. Actions include land acquisitions, road restoration/decommissioning, environmental education, transportation management planning, inventory and monitoring of Monument resources, noxious weed treatments, native seed collection, planning for pine plantation restoration, developing partnerships, and recreation projects.

Key National Environmental Policy Act Actions and/or Project Authorizations

Box R Ranch Land Exchange

In response to Congressional action which gave the Secretary of the Interior the authority to offer to convey two BLM parcels located within the CSNM in exchange for parcels also within the CSNM owned by private individuals (Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 1403 and 1404, 123 Stat. 991, 1028 (2009), Subtitle E – Cascade-Siskiyou National Monument, March 30, 2009), the environmental assessment (EA) to complete the land exchange for one of the parcels was completed in July 2014. The EA evaluated the proposal to exchange a 46-acre tract of federal land for an approximate 40-acre parcel of non-federal land. The CSNM stands to gain significant resource values as a result of the land exchange.

- The exchange would consolidate federal ownership within the CSNM by transferring adjacent private land (non-federal parcel) and consolidating it with a large block of public land.
- The exchange would resolve a long-standing inadvertent trespass on public lands within the boundary of the CSNM.
- Acquisition of the non-federal parcel would transfer into public ownership 0.3 miles of Lincoln Creek and between 0.2 miles and 0.3 miles of Keene Creek (depending on which configuration is ultimately transferred after the final parcel-size adjustment based on the appraisal). Both of these creeks contain valuable riparian and fisheries habitat that would be protected as part of the CSNM.
- The exchange will facilitate both the expansion and enhancement of recreation opportunities by consolidating federal ownership with public access. The non-federal parcel is surrounded on three sides by adjacent federal ownership that is unencumbered by improvements.

The exchange is expected to be completed in 2015.

Maka Oyate Sundance Ceremony

A determination of NEPA Adequacy (DNA) was prepared in 2014 to re-issue a one-year authorization to the Maka Oyate Sundance Society to conduct its annual Sundance Native American religious ceremony. The ceremony occurs during the summer over a two-to-three week period and is attended by 300-500 people. The authorization area encompasses

approximately 580 acres north of Pilot Rock on BLM lands within the CSNM. An EA was completed in 2007, with the authorization expiring after the ceremony in 2009. A DNA extended the authorization another three years and expired after the ceremony in 2012. A new EA will need to be completed to evaluate the event and changes to the permit requested by the Maka Oyate. The new EA is schedule to be completed in 2016.

3 Year's Projects and Accomplishments

General Accomplishments

Hyatt Lake Campground Repositioning

Hyatt Lake campground is slowly being repositioned to be more fully included as part of the overall Monument experience. Several projects have been completed to enhance the visitor experience and provide a more visually appealing environment to the visitor. A new entrance station was constructed in 2013 and became fully staffed and operational in 2014, providing visitors with personal contacts and services that were not previously available.

New Campground Reservation System

The Recreation team spent much of 2013 and 2014 putting in place the technology and infrastructure to support the campground's first-ever reservation system. Hyatt Lake Recreation Area became part of the Recreation.gov system on February 16, 2014. Two of the three developed campgrounds as well as the primitive Wildcat Campground are available through the system, as well as all three of the group use areas. User conflicts for sought-after sites and visitors attempting to stay longer than the 14-day limit were greatly diminished through use of the new system. Visitor data used in the reservation system reveals a wider range of geographic locations for recreationists visiting Hyatt Lake. Visitors from all over the US, as well as international travelers, are now better able to plan trips to Hyatt Lake and the Monument.

While Hyatt Campground rolled out a new entrance station and reservation system, Hyatt's

lake levels plummeted due to the severe drought affecting much of California and southern Oregon. Hyatt Reservoir was at 48 percent capacity in early June with the launch ramps having restrictions on the size of watercraft able to launch. By early July, the launch ramps were no longer usable, and by early August, Hyatt Lake was at dead pool level. While the lower lake level does not impact the camping experience directly, it continues to have a direct impact on the water-based recreationists.

Hyatt Reservoir at dead pool level

High and dry launch ramp

11-Mile Lone Pilot Trail Completed

Finalized in 2012, the Soda Mountain Wilderness Stewardship plan provided for the conversion of the Schoheim Road, along with three former logging roads and jeep trails, into the Lone Pilot Trail.

Clearing the trail with cross cut saws

Nearly completed in 2013, the 11-mile trail travels through the rugged backcountry of the Soda Mountain Wilderness and connects with the Pacific Crest National Scenic Trail, forming a 17-mile backpacking loop trail.

Trail construction was funded with matching Recreation Trail Program grant funds and agency funds. Through a partnership with Siskiyou Mountain Club, paid youth crews, volunteers, and SMC staff put in over 500 hours brushing, improving drainage, building trail bed and logging out the trail. In keeping with Wilderness Regulations, the entire trail was built using non-mechanized equipment. Final signage, tread maintenance, and water features were finished in September 2014.

Pilot Rock Trail Re-route Completed

New route takes advantage of scenic vistas.

In 2009, an Environmental Assessment (EA) was completed for the final Soda Mountain Wilderness Stewardship Plan. As part of the EA, analysis was completed for a re-route of the 1.2-mile Pilot Rock trail. This user-created trail is an extremely popular trail, located in the SW portion of the Monument. Users had made a direct route, heading straight uphill toward the prominent rock feature. At times, the trail exceeded a 43 percent slope, with unstable footing due to many small rocks on a talus slope. Severe vegetation loss and compaction of soils were the result of years of this type of use.

Partnering with the Siskiyou Mountain Club (SMC), the Monument recreation staff began to construct new trail in the wilderness in July 2014. The EA called for new construction to be within 200 feet of the existing user-made route, making portions of the new route challenging. While only 762 feet of new trail was constructed, it took five BLM staff, eight

SMC staff, and nine Job Council staff over two weeks to construct this new route within the wilderness. Numerous rock outcroppings made new development difficult; rock cribbing and stone steps had to be constructed to meet trail guidelines. Native seed and weed free mulch was applied to the user-made route after completion. Current visitors appear to be keeping to the new route, and vegetation has already begun to germinate on the old route.

New trail to base of Pilot Rock provides a safer visitor experience and protects surrounding resources.

Old Route to base of Pilot Rock

Soda Mountain Wilderness Restoration and Road Decommissioning

The Soda Mountain Wilderness Stewardship Plan calls for restoring and "re-wilding" about 23 miles of wilderness roads and removing 81 culverts. One of the most significant accomplishments for the year was completing the second phase of road restoration in the Soda Mountain Wilderness. The legacy road system in the SMW was surveyed and restoration was grouped into eight priority treatment areas based on the risk to the aquatic system, culvert density, and logistically feasible treatment areas. The BLM was able to amass funding from various sources to complete restoration work on a number of Priority Area 2 and 3 roads located near the Pacific Crest Trail and Pilot Rock, in some of the most scenic areas of the Soda Mountain Wilderness.

In the summer of 2014, restoration activities in the Soda Mountain Wilderness Area included removing legacy roads and abandoned livestock fencing. Mechanical excavation equipment was used to obliterate roads in the Soda Mountain Wilderness to restore hydrologic features (including streams, springs, and wetlands), reduce sources of sediment, and to meet the objectives of the Soda Mountain Wilderness Stewardship Plan. General restoration work included mechanically decommissioning roads with stream crossings, full and partial re-contouring of the road surfaces, out-sloping fill material,

removing all culverts including cross drains, blocking vehicular and motorized access with natural materials (logs, boulders, and earthen berms), and seeding and mulching of excavation areas with native seed. A total of 11 miles of legacy road were fully or partially re-contoured. On those legacy roads, culverts at 27 stream crossings were removed and the fill material was re-contoured to match the stream channel profile above and below the crossings.

Stream crossing after culvert removal—the stage is set for recovery

In addition to the mechanical decommissioning work, restoration activities included the removal of abandoned livestock fencing and grazing infrastructure. This fencing was no longer in use after the cessation of grazing within the Soda Mountain Wilderness Area. Under the direction of BLM staff, Jackson County Corrections crews removed 5 miles of barbed wire and high-tensile fencing, two corrals, 6 gates, and several water troughs. The excavation contractor dismantled two defunct corrals within the Soda Mountain Wilderness and a cattle guard adjacent to a parking area used to access wilderness trails. This short-term intrusion into the wilderness will provide for long-term improvements in wilderness character. There are eight priority restoration areas identified in the SMW Final Stewardship Plan. Work will continue on them, one by one, as funding allows.

National Public Lands Day- 2014

Members of National Public Lands Day crew taking a photo op

As part of National Public Lands Day, a small but energetic group met along Emigrant Creek Road, (located in the NW portion of the Monument), to rebuild a parking area that serves as a trailhead and staging area for equestrian and pedestrian users. A fence was constructed several years ago to keep OHVs out of the area that is immediately behind the fence and beyond. Unfortunately, vandalism had caused the fence to fall into disrepair and it was nearly to the point of failure. Volunteers showed up on an unseasonably hot and dry day to rebuild the fence, donating eight hours each of their sweat and time.

National Public Lands Day workers at Emigrant Creek Parking Area

Significant Natural Events

Severe Drought

The winter of 2013-2014 saw very little snowfall in the Southern Cascades. Overall snowpack was around 20% of normal. For the first time in fifty years, the ski resort on Mount Ashland (adjacent to the Monument, elevation 7533') did not open at all over the winter due to lack of snow. In 2014, Southern Oregon experienced one of the worst droughts in recorded history, and on May 6, Governor Kitzhaber declared a drought emergency in Jackson County.

Oregon Gulch Wildfire

These conditions led to a severe fire season in Southern Oregon. Over July 30-31, a lightning storm moved through southern Oregon. The Oregon Gulch Fire was first discovered on July 31st. The Oregon Gulch Fire rapidly moved southeast from the Cascade-Siskiyou National Monument into the Soda Mountain Wilderness, from Jackson County into Klamath County, and then into California.

Oregon Gulch Wildfire

The Oregon Gulch Fire was the first opportunity for Monument staff to implement the Soda Mountain Fire Suppression and Specific Action Plan. One of the successes of having a plan in place was Management's decision to dispatch a team of Resource Advisors to the fire in

the very beginning. Having the team on the ground allowed for closer adherence to the wilderness regulations during the firefighting efforts. After the fire was extinguished, the on-the-ground resource advisors were quickly able to develop rehabilitation plans that took wilderness characteristics into account, allowing rehabilitation efforts to get underway in a seamless manner.

Fire conditions during the Oregon Gulch fire favored extreme fire behavior, and firefighting resources at the time were limited due to numerous other fires. The total land area affected by the Oregon Gulch Fire was estimated to be 35,101 acres. Approximately 465 acres were burned within the Monument, all within the Soda Mountain Wilderness in the former Box O Ranch. Post-fire rehabilitation work was completed to restore the areas impacted by firefighting activities, and much of the burned area within the SMW was reseeded and mulched to retain soils.

Current Areas of Focus

In 2014, work continued in the Monument focused on implementing activities approved in the SMW Stewardship Plan (2012), land exchanges, land acquisition, developing the transportation management plan, and developing and enhancing partnerships. Improvements to the visitor experience were accomplished across the Monument and wilderness through interpretation, education, improvements in recreation facilities, and enhanced recreation opportunities.

Plan Implementation and Restoration

Implementation of the CSNM RMP (2008) and the SMW Stewardship Plan (2012) will require substantial funds and decades to complete. Work includes road closures and decommissioning, maintenance of existing roads, trail construction and maintenance, noxious weed treatments, removal of human effects from the SMW, removal of old range facilities, fences to be maintained to keep livestock and feral horses out of the wilderness/Monument, acquired lands to be restored, and fuels to be reduced in the urban interface.

In 2014, the BLM was able to creatively acquire funding to complete the next phase of road restoration within the SMW. Several miles of old fencing, barricades, and trash were also removed using the Jackson County Community Justice Crew. A total of 11 miles of legacy road were fully or partially re-contoured. On those legacy roads, culverts at 27 stream crossings were removed and the fill material was re-contoured to match the stream channel profile above and below the crossings.

Funding for the remaining priority restoration areas identified in the SMW Final Stewardship Plan is uncertain as there are no dedicated funds for this ecologically significant work. Additionally, the CSNM Transportation Management Plan will identify many more miles of roads outside of the SMW that need restoration work. The Monument

staff continues to explore possible ways to accomplish the remaining restoration within the CSNM/SMW.

Trespass Cattle

Congress authorized the retirement of grazing leases within the CSNM in 2009, and to date roughly 93 percent of public lands no longer allow authorized grazing. Trespass cattle at the former Box O Ranch in the SMW were a significant problem in 2013. BLM staff monitored the Box O Ranch on a weekly basis for trespass cattle in 2014. The situation improved at the Box O in 2014, with very few reported trespass cattle. However, there were trespass cattle north of Highway 66, likely displaced as a result of the nearby Oregon Gulch wildfire. In addition, exceptionally low water levels in nearby Howard Prairie Reservoir enabled cattle to wander past fences by travelling across the dry lakebed. In each instance, the BLM worked with ranchers to move cattle off the Monument as quickly as possible.

Commercial Recreation Permits

There was increased interest in commercial special recreation permits for recreational and educational activities in 2014. The Monument RMP does allow for limited commercial use for activities found to be consistent with CSNM objectives. The Monument team has recognized that guidelines and criteria need to be developed to identify what types of commercial activities will be permitted and to determine the Monument's capacity to accommodate these requests. A Special Recreation Permit (SRP) Evaluation Criteria process was established in 2014, identifying potential permit availability, thresholds, and adherence to existing Monument management plans and missions. The first SRP within the Monument was issued in 2014. The permit was a commercial SRP for an organization to conduct guided bird watching activities for profit. The permit was issued because the activity was scientific in nature, it furthered the Monument's mission of biological diversity and scientific exploration, and it would not impair Monument objects and values. The activity required a permit because the activity was a fund-raising endeavor.

Permits for Collection

Requests from researchers and scientists to collect flora and fauna in the Monument for research purposes increased in 2014. Monument staff carefully evaluated each request and made sure sampling was appropriate and accomplished in such a manner to protect objects of biological interest.

View of Mt. Shasta from the Pacific Crest Trail

Education, Outreach, and Interpretation

The Monument has an interpretive specialist that administers its Education, Outreach, and Interpretation program, as well as assists to the Ashland Resource Area and the Medford District.

Environmental Education – "Fall in the Field" Program

The cornerstone of the Monument's environmental education program is its partnership with Southern Oregon University's Environmental Education Graduate School, which delivers the annual "Fall in the Field" program. SOU graduate students develop and deliver field-based environmental education programming for community schools on behalf of the BLM's Cascade-Siskiyou National Monument.

In the program's fifth successful year, "Fall in the Field" from mid-September to late October, 648 students were hosted during the 2014 field season. With widespread community support for outdoor education on the Monument, our

Lesson on Monument landscape forms

A chilly day atop Hobart Bluff

programs are generally filled in advance of the season beginning.

About the "Fall in the Field" Program:
The project has an existing agreement in place between the BLM State Office and SOU, streamlining funding and project implementation.

Day programs are offered on the Monument and adjacent BLM lands. Through hands-on, experiential learning, SOU Environmental Education Master's students provide science education that is updated yearly and aligned to state standards in science, English, math, and social sciences. Programming follows the Monument's Interpretive Themes and Significance Statements and utilizes the latest in environmental education techniques and teaching theory, with a strong emphasis on field biology.

Geology lesson on Green Springs Mountain

Carrying capacity (number of students) and education settings are closely coordinated with the BLM in order to protect Monument resources. The "Fall in the Field" program length and student capacity is ideally suited to the weather variables, site availability, and resource protection issues of the Monument.

"Fall in the Field" on the Pacific Crest National Scenic Trail – Rogue Valley and Siskiyou Mountains in background

Take it Outside and Pinehurst School

Nestled among towering pines, firs, and redwoods, Pinehurst is a K-8 school that serves the communities located in and around the Monument. The agency makes a special effort to provide personal environmental education and interpretive services to Pinehurst. Agency fish biologists, wildlife biologists, and archeologists lend their expertise in these activities.

2014 Pinehurst School program highlights:

- Fire ecology hike of the recent Oregon Gulch Fire area located in the Soda Mountain Wilderness.
- This year's annual service learning project was centered on the Oregon Gulch Fire recovery efforts in the Soda Mountain Wilderness. Students assisted the BLM by spreading mulch and reseeding burnt areas.
- Annual Macro-invertebrate blitz and field day with BLM biologists at Jenny Creek.

Agency biologist teaching students how to locate macro-invertebrates

Pinehurst Student exploring Jenny Creek for Macro-invertebrates.

Service Learning- Reseeding part of the Oregon Gulch Wildfire burn area in the Soda Mountain Wilderness

Outreach:

Cascade-Siskiyou National Monument leads and participates in multiple outreach events throughout the year, ranging from 'Take it Outside" events like Free Fishing Day to hosting an interactive booth for Earth Day.

BLM Fire Ecologist at Willow Wind Fire Ecology Day

Youth Events:

- Free Fishing Day – 62 Children and 44 adults
- Bear Creek Watershed Symposium – 301 students and teachers from Rogue Valley schools.
- Willow Wind Fire Ecology Day-Hike the Oregon Gulch Fire – 3 classes, 103 students and chaperones.
- CAST for Kids – Sadly, for the first time ever, the event was canceled due to drought conditions and resulting low lake levels at Hyatt Lake Reservoir.

T-Shirt fish painting-Free Fishing Day

Swearing in Junior Explorers at the Bear Creek Watershed Symposium, using newly minted CSNM Junior Explorer Badges

Public Events and Fairs:

In partnership with the Friends of Cascade-Siskiyou National Monument and the BLM, interactive booths and children's activities were hosted at various community events. The events were strategically selected to provide an opportunity to highlight the Monument's role in the regional community as well as leverage the capacity of our partner to enlist volunteers and help on behalf of the Monument.

- Wilderness 50 Celebration, SOU Campus, Ashland Oregon
- Earth Day Festival – Ashland, Oregon
- Bear Creek Salmon Festival – Ashland, Oregon
- 3rd annual July Butterfly Count with the North American Butterfly Association
- Friends of CSNM- and BLM-sponsored CSNM Science Symposium featuring the latest research and project work being done in the Monument.

Wilderness 50 Celebration

Multiple Organizations joined the Bureau of Land Management in celebrating the 50th Anniversary of the 1964 Wilderness Act. Medford BLM's Cascade-Siskiyou National Monument Staff, the Friends of Cascade-Siskiyou National Monument, SOU's Ecology and Sustainability Resource Center (ECOS), Siskiyou Mountain Club, and the Rogue River-Siskiyou National Forest provided the core support for the daylong celebration that was hosted at Southern Oregon University's student union courtyard.

The courtyard event featured exhibits, demonstrations, and information booths from student, academic club, outdoor groups, local non-profits and businesses, and federal land agencies. Playing throughout the event in an adjacent auditorium was the Academy Award nominated Wild by Law documentary.

The event culminated with an evening keynote address by nationally recognized conservation advocate Andy Kerr.

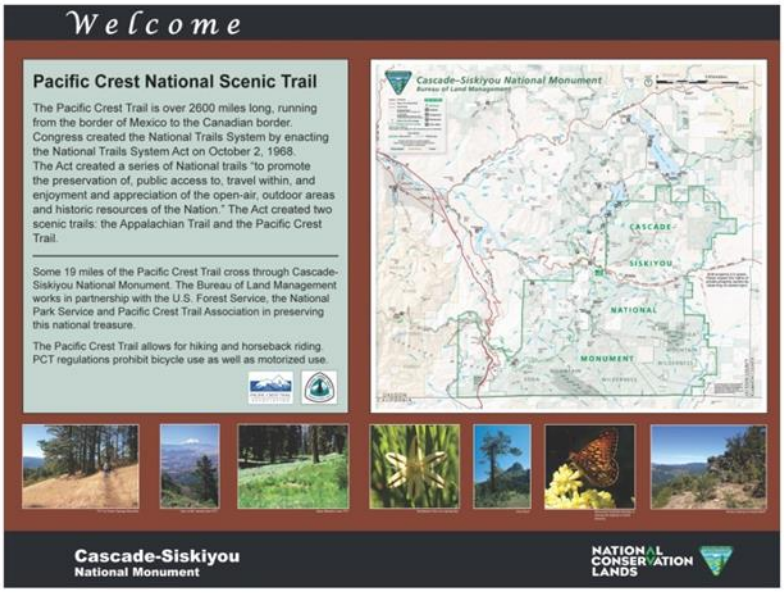
Wilderness 50 Celebration Photos

Interpretation:

Interpretive services for Cascade- Siskiyou National Monument are delivered via non-personal services and personal services.

Non-Personal Media:
Non-personal Interpretation is delivered in the form of brochures, websites, site bulletins and exhibits.

Outreach media is refined and updated to align with national graphic standards for 2014



Recreation and Interpretive staff continue to update trailhead and wayside exhibits to assist visitors with their trip planning.

Personal Services

Fulfilling the Monument's commitment to adult learners, one of the most well received personal services programs are our Friends of Cascade-Siskiyou National Monument "Hike and Learn" series. In its fourth successful year, the Friends invite local university professors and scientists to provide guided hikes to special features in the Monument, such as Pilot Rock and Hobart Bluff. For those who do not wish to hike, the friends added an evening lecture series at local libraries in both Ashland and Medford.

The lectures provided an opportunity to gain pre-knowledge before the hike and opened up the Monument to audiences that would prefer not to hike, but were otherwise interested in the Monument. Lectures included PowerPoint programs and demonstrations by local university professors and scientists.

The adult learner "Hike and Learn" series is well suited to our local demographics as well as our regional audience expectations. The program supports the Monument's interpretive themes and the National Conservation Lands theme of science and research. Six lectures and six guided hikes were conducted, serving 168 participants.

Native Plant "Hike and Learn"- Pacific Crest National Scenic Trail.

Butterfly Hike at Hobart Bluff

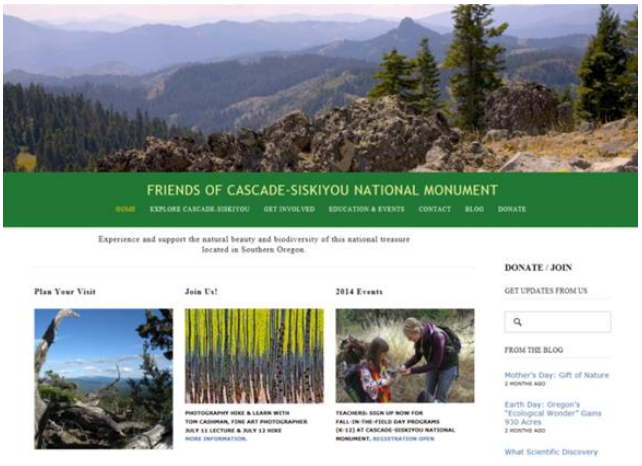
Partnerships

The Monument's partnerships fall into four categories: Science research done by academia, Non-profit science based research, recreation groups, and general land advocacy partnerships. Many of our partners generously volunteered their time on behalf of the Monument.

Summary of Primary Partners	
Academia	
Southern Oregon University	Scientific research and environmental education
Recreation Groups	
United Sportsmen and Hunters Association	Youth recreation and outreach
CAST Foundation	Youth recreation and outreach
Southern Oregon Nordic Ski Club	Nordic trails maintenance
Pacific Crest Trail Association	Trails construction / maintenance
Siskiyou Mountain Club (SMC)	Trails construction / maintenance
Non-Profit and Federal	
National Park Service / U.S. Geological Survey	Scientific research
Klamath Bird Observatory	Monitoring and research
Land Advocacy	
Pacific Forest Trust	Land acquisition
Conservation Land Fund	Land acquisition
Friends of Cascade-Siskiyou NM	Monument advocacy, education and outreach

Friends of Cascade-Siskiyou National Monument

In 2014, an assistance agreement was negotiated with the Friends of the Cascade Siskiyou National Monument that aligned with their 2013 MOU. The assistance agreement will enhance the Friends' capacity to help the BLM with more complex projects. The Friends are now part of the Conservation Lands Foundation and have embarked on extensive board and fundraising training over the past two years. The Friends have launched a new website that



Friends of the CSNM website

Friends of CSNM booth at Ashland, OR outreach event.

serves as a clearinghouse for all the activities that occur on the Monument. The Friends enhance and support the BLM's mission through staffing public outreach events and festivals, conducting adult learner programs, and assisting with SOU's Environmental Education program through supplying transportation stipends for area schools.

Pacific Crest Trail Association

The centerpiece to this vital partnership is the Big Bend Trail Skills College hosted by the PCTA and the BLM. In its fourth successful year, the three day college features certifications in crosscut saw and chainsaw use and conducts classes on tread construction techniques and hydrology management. The class is a hands-on projects-based course aimed at on-the-job training focused on real trail and maintenance issues. In 2014, 37 volunteer students were enrolled in the class, drawing participants from many federal agencies and partner groups. PCTA assisted the BLM in coordination of trail volunteers and projects contributing over 915 hours to PCT trail maintenance.

Waterbar demo

PCNST Trail Markers

Tread construction

Siskiyou Mountain Club

The mission of the Siskiyou Mountain Club (SMC) is to restore, maintain, and promote primitive backcountry trails within the local region, and to provide service-based outdoor experiences for the public. The SMC coordinates stewardship projects with youth, volunteers, and staff members. In 2014, SMC completed the re-route of the 1.2-mile Pilot Rock trail. The reroute addressed a variety of preexisting problems with the previous alignment, which in some sections had traversed directly up the fall line on a 43 percent slope over a talus surface. In 2014, SMC also created a hiking trail to Boccard Point over a road that was decommissioned and re-contoured in 2013. Additional SMC wilderness trails work included trail logouts, tread stabilization, and drainage maintenance.

Volunteers

The Monument is grateful to have partnerships and individuals who volunteer their precious time on behalf of the many activities that occur within and adjacent to the Monument. Many of our Partners accomplish much of their assistance to the BLM through attracting volunteers who are passionate about the Monument's mission and the work that needs to be done on its behalf.

Removing old fencing in the Soda Mountain Wilderness

Volunteer and Partner Highlight

Southern Oregon Nordic Club (SONC)

Volunteers hard at work – trail reroute

SONC is the cornerstone partner of the winter recreation program. SONC is a cross-country skier based user group with a mission to promote Nordic skiing and non-motorized winter sports through education, trail maintenance, and development, and the organization of group activities. SONC volunteers provided over 80 hours of work through the operation of BLM's tracked Polaris ATV to pull a track-setter and trail re-conditioner to groom trails within the Nordic Ski Area System. SONC also assisted the BLM in organizing volunteer trail work groups to install signs, kiosks, and maintain winter trails.

Other Volunteer Activities

Other volunteer activities include individuals who donate their time for trail maintenance, species monitoring, and outreach activities. Recreation staff hosted three impromptu volunteer events at Hyatt Lake, Hobart Bluff, and the Soda Mountain Wilderness. The Job Council and South Medford High School donated a cumulative of 300 hours for restoration and recreation activities. A total of 46 people donated time for these three events. There is still a great deal of "rewilding" work to be done in the Soda Mountain Wilderness for which volunteers will be needed. Projects include fence removal, range infrastructure removal, and road restoration and reseeding.

Volunteers working on trail log out

Land (or Interests in Land) Acquisitions

Include information on any land, title, covenant, or easement acquisitions from the fiscal year, if any have taken place. If not, enter "N/A."

There were no land acquisitions or interests in lands activities for SNCA completed in fiscal year 2014.

4 Science

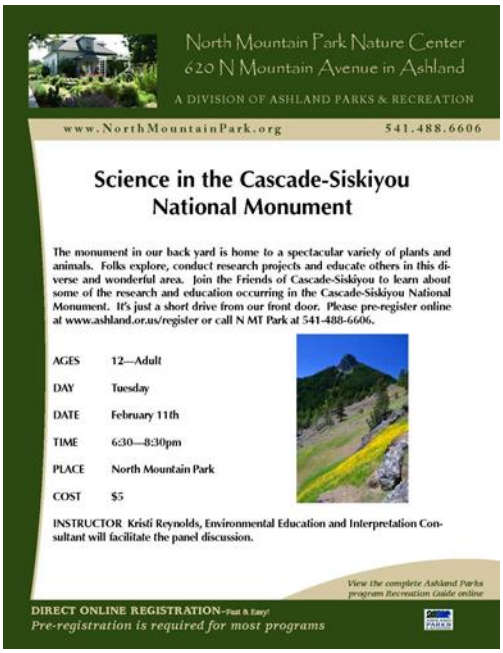
Science

Cascade-Siskiyou National Monument serves as an outdoor laboratory that attracts a variety of scientists, university researchers and their students.

The BLM sponsors and collaborates with numerous scientists, academic researchers, universities and other partners that fulfill CSNM research needs. Monument staff are guided by a draft Science Strategy in order to gain a better understanding of Monument resources and natural processes, and apply science to management, environmental education, and public outreach. For a complete list of science projects occurring in the CSNM, refer to Appendix A: 2014 Science, Monitoring and Inventory Programs.

2014 Science Highlight – Cascade-Siskiyou NM Science Symposium

In collaboration with the Monument's Science coordinator, Douglas Kendig, the Friends of Cascade-Siskiyou initiated the first ever **Monument Science Symposium**. The event featured summary presentations from university researchers, non-profits, and agency personnel from around the region regarding current research projects. The event not only sought to update the public on recent science on the Monument, but also to reinforce the NLCS national science strategy and the scientific basis for the Monument's designation.



Collaborative Research Development with SOU Faculty

Monument staff met with Southern OR University staff and students several times throughout the year to enhance cooperative research relationships focused on the CSNM and share research interests and opportunities.

Klamath Cooperative of Applied Sciences

A regional research cooperative organizational meeting was held in April 2014 with multiple federal agencies, nonprofits, and universities to collaborate and share research interests and results. This initial, exploratory meeting with broad interest of nearly 30 organizations was designed as a catalyst to motivate collaboration, leadership, and involvement.

Research Projects

- This past year, the USFWS listed the Oregon Spotted Frog as a threatened species under the Endangered Species Act and proposed critical habitat within the study area. As a result, the importance of this project has elevated. A comprehensive aquatic, riparian, and water quality survey of ten streams was completed in the Cascade-Siskiyou National Monument aimed at increasing understanding and providing detailed descriptions of the baseline physical habitat characteristics and structure of biotic communities.

  Status: awaiting final report (*Southern Oregon University, Dr. Michael Parker, Biology*).

- Dr. Meinke received funding from NLCS to research pollination and fecundity of *Fritillaria gentneri*, a USFWS federally endangered species. Individual plants will be selected and cross-pollination controlled and evaluated, and any resulting seed will be used in population augmentation and monitoring in the CSNM. Selected plants will be caged and flowers bagged and pollinated with pollen from plants in other recovery units to evaluate fecundity.

  Status: initiating project in 2014 (*Plant Division Oregon Department of Agriculture, Dr. Bob Meinke*)

- Few entomology studies are funded regarding meadow-associated insect species. This study is designed to sample a number of meadows to improve our knowledge of various Bureau sensitive species' range, population abundance, and habitat, and to assist in the management for persistence of these species. The target species and their rankings include:
  Chloealtis aspasma (Siskiyou short-horned grasshopper) G1 S1, ORNHIC List1
  Bombus franklini (Franklin's Bumblebee) G1 S1 ORNHIC List 1
  Bombus occidentalis (Western Bumblebee) GU S1S2 ORNHIC List 2
  Polites mardon (Mardon Skipper Butterfly) G2G3 S2 ORNHIC List 1

  Status: field data collected in 2014, awaiting report (*UC Davis, Dr. Robbin W. Thorp, Professor Emeritus, Entomology*)

- CSNM science strategy calls for "continued monitoring at suitable time intervals" in order to determine if objects of biological interest are being protected and if management goals are being met. Twelve years have elapsed since the first readings of vegetative transects placed in diverse plant communities and habitats and five years since livestock grazing ceased, a suitable time interval for repeat measurements. This project resurveys 65 transects and analyzes the data to gain an understanding of changes in plant communities in various habitats over the intervening years in the context of different grazing regimes, land use histories and particularly in light of removal of grazing in 2009.

  Status: Fieldwork completed, beginning data analysis. (*Southern Oregon University,*

Dr. Darlene Southworth, Professor Emeritus and Henry Whitridge)

- The BLM Seeds of Success program provided funding for two Chicago Botanical Garden interns in 2014. The project locates native plant populations, photographs, vouchers, and collects seeds of native plants from southwest Oregon for long-term germplasm storage at national repositories and for local restoration needs. The project targets the collection of diverse bio-types of native grasses, forbs, hardwood and shrub species from diverse eco-regions and elevations. In 2014, interns made 104 wildland seed collections of over 96 species. Thirty-three collections occurred in seven separate NLCS areas, including the CSNM. In addition, the interns digitized 3,300 vascular plant vouchers from the Medford BLM herbarium into an online, searchable database as a member of the Consortium of Pacific Northwest Herbaria and the Oregon Flora Project.

  Status: field results will be presented at the 2015 BLM National Native Seed Conference in Santa Fe, NM. (*Medford BLM, Douglas Kendig, Botanist*)

- Jenny Creek suckers will be collected and tagged at multiple locations in mainstem Jenny Creek during base flow conditions. Approximately 500 adult Jenny Creek suckers were captured and passive integrated transponders (PIT tags) inserted into the body cavity. PIT antenna arrays were installed at locations in the mainstem and at the mouths of three tributary streams to document seasonal movement of tagged individuals. Fish movement and direction will be assessed at two spatial scales: the stream-reach scale, and at the scale of a meter or less by walking along the bank.

  Status: 1st year field data collected. (Medford BLM, Chris Volpe, Fish Biologist)

- The CSNM is collaborating in a regional long-term research project, led by Phillip van Mantgem, Research Ecologist, USGS, of natural forest stands in the NPS Klamath Network (Crater Lake National Park, Lassen Volcanic National Park, Lava Beds National Monument, Oregon Caves National Monument, Redwood National and State Parks, and Whiskeytown National Recreation Area), and the BLM's Cascade-Siskiyou National Monument. The study installed 17 large 1-hectare forest plots to gather detailed forest structure data that will place forest patterns and dynamics within the context of the abiotic factors and biotic processes. An interim report was completed in 2013. The study measured and mapped over 8,000 trees. The data is intended to gain understanding of forest dynamics on biodiversity patterns, with a particular emphasis on land bird communities. Future analyses will include changes in species composition, geographic location, and climate (as estimated from the Parameter-elevation Relationships on Independent Slopes Model (PRISM)).

  Status: study plots established, field data collected, revisits every 5 years. (*USGS, Phillip van Mantgem, Research Ecologist,; Southern Oregon University, Dennis Odion; USGS Joan Hagar, Research Wildlife Biologist; National Park Service, Daniel Sarr.*)

- Historic Franklin's bumblebee sites are surveyed annually in an attempt to determine presence or absence of the species and critical parameters that affect this declining population and its persistence and viability.

  Status: Annual – Ongoing. 2014 negative results. (*UC Davis, Dr. Robbin W. Thorp, Professor Emeritus, Entomology*).

- A strategic survey and inventory of rare and little-known hypogeous fungi in under-surveyed hardwood and mixed conifer habitats in southwest Oregon: Eleven of 34 macro-plots are located in the CSNM. Plots are visited twice in the fall and twice in the spring for three years following a standardized "scuffling" protocol developed by the BLM for hypogeous fungi. Collections are vouchered and identified via morphology or DNA. DNA is extracted, sequenced, and validated in GenBank. Additional project proposals were funded in 2014 to: clarify characteristics that distinguish rare species from common ones, correlate morphological and molecular data from recent collections, and identify the fungal associates of rare sequestrate species.

  Status: expecting 4 to 5 publications, awaiting final manuscripts (*Southern Oregon University, Dr. Darlene Southworth, Professor Emeritus*).

Annual Inventory and Monitoring

Monitoring of water resources, wilderness values, and specific species continues both by agency personnel and through contracts and university research agreements.

Bureau Sensitive Species Update:

Peregrine Falcons - Agency biologists continue annual monitoring of nesting peregrine falcons (Falco peregrinus anatum) on Pilot Rock. Peregrine falcons were removed from the U.S. Fish and Wildlife Threatened and Endangered Species List in 1999 and are now in Recovery Status. These surveys are part of a national post-delisting monitoring plan to ensure that peregrine falcon populations are remaining stable.
Mardon Skipper - BLM wildlife biologists continue to serve on the ISSSSP working groups for the Mardon skipper and the Oregon spotted frog, helping design projects and monitoring efforts.

Oregon Spotted Frog - Dr. Michael Parker of Southern Oregon University is assisting with the study of the Bureau Sensitive Oregon spotted frog (Rana pretiosa). Through Challenge Cost Share projects and his own efforts, he is assisting the BLM to study the effects of landscape heterogeneity and wetland succession on spatial distribution, seasonal movements, and long-term viability of the Oregon spotted frog population within the CSNM.

Northwestern Pond Turtle - BLM continues to monitor the known pond turtle sites. Data collection on population size and age structure continues.

Dr. Michael Parker holding a spotted frog

Mardon Skipper

Northwestern pond turtle

Aquatic Ecosystems: Hydrology and Habitat

Objectives for water resources include (1) compliance with State water quality standards to restore and maintain water quality necessary to protect beneficial uses, and (2) to follow the Aquatic Conservation Strategy, which is to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public lands. The following summarizes our monitoring efforts of hydrological processes within the Monument.

- Precipitation Measurement - Monthly and annual summary of rainfall is collected near the stream gauging station on Jenny Creek.

- Stream Gauging Station - Water levels (stream stage) are recorded at the stream gauging station on Jenny Creek. Long-term stream flow regimes are determined based on monthly and annual summary information for each water year.

- Summer Stream Temperature Monitoring Program - Summer stream temperatures are recorded at 13 locations in the CSNM. This information is used to determine the long-term recovery of Clean Water Act, Section 303(d), Water Quality Limited Streams.

- Storm Event Grab Sampling - Turbidity, conductivity, pH, water temperature, air temperature, snowpack, and discharge are sampled during high stream flow events at 15 sites within the CSNM as opportunities arise.

Jenny Creek

Rare Plants

Gentner's Fritillary - Selected populations of Gentner's fritillary (*Fritillaria gentneri*) in the CSNM are monitored annually to track the long-term demographic trends of this Federally Endangered Species. As part of the Fish and Wildlife Service's Recovery Plan (FWS 2003), the BLM is collecting and growing Gentner's fritillary bulbets in greenhouses, out-planting them to increase population sizes in specific recovery zones, and monitoring for survival. As resources allow, BLM continues to treat weeds around some Gentner's fritillaria locations and in the Mariposa Preserve (Greene's Mariposa Lily), which results in improved habitat for these species.

Gentner's fritillary

Noxious Weeds

In general, weeds are declining in the CSNM due to continued treatments. As new properties are acquired, inventories are conducted and populations treated, as some properties include extensive weed infestations. Noxious weed treatments continue in the Monument, primarily in these areas:

- Box O: 200 acres, mostly starthistle, some Dyers woad and sulphur cinquefoil.
- Soda Mountain area: 500 acres, mostly Canada thistle.
- I-5/Old Highway 99: 100 acres starthistle and Dyer's woad, some spotted knapweed.
- Mariposa Preserve: 100 acres starthistle

Starthistle covered hillside.

5 Resources, Objects, Values, and Stressors

Rare and Endemic Plants

A number of rare plant species are documented within the Monument, and surveys have focused mainly in areas where recent BLM activities have occurred. There are 579 listed plant sites within the CSNM. Species are prioritized below based on rarity and perceived threats. Specific information is given when indicated.

1. Gentner's fritillary (Fritillaria gentneri).
2. Greene's mariposa lily (Calochortus greenei).
3. California milk-vetch (Astragalus californicus); one population in the Monument in the Scotch Creek Research Natural Area (RNA).
4. Tracy's peavine (Lathyrus lanszwertii var. tracyi); one population documented, also in the Scotch Creek RNA.
5. Bellinger's meadowfoam (Limnanthes floccosa ssp. bellingeriana); populations near Lincoln and one small occurrence in the Oregon Gulch RNA.
6. Clustered ladies slipper (Cypripedium fasciculatum); one existing monitoring plot.
7. Coral seeded allocarya (Plagiobothrys figuratus ssp. corallicarpus); vernal pool species.

Rare and Endemic Plants Status and Trend Table

Status of Resource, Object, or Value	Trend
Fair	Stable

Rare and Endemic Plants Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	37,055	6,000	4,000

Stressors Affecting Rare and Endemic Plants

Invasive species/noxious weeds and climate change are suspected to be the principal stressors affecting rare and endemic plants in the Monument. Illegal recreation (unauthorized OHV use, mud bogging, etc.) within the Monument is also a stressor on rare and endemic plants.

Range of Fauna - Freshwater Snails, Fish, Reptiles, Amphibians, Butterflies, Ungulates, Birds, and Small Mammals

The Monument occurs at a biological crossroads—at the interface of the Cascade, Klamath, and Siskiyou ecoregions—and supports an exceptional range of fauna from all three ecoregions, including one of the highest diversities of butterfly species in the United States. The Jenny Creek portion of the Monument is a significant center of fresh water snail diversity, including a long-isolated stock of redband trout. The CSNM contains important populations of small mammals, reptile and amphibian species, and ungulates, including important winter habitat for deer.

Range of Fauna Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Range of Fauna Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	37,055	61,728	25,000

Stressors Affecting Range of Fauna

Climate change, altered hydrology from impoundments and the road system, invasive species, and illegal recreation activities are all stressors on a range of fauna within the Monument. Fire suppression for the last hundred years has altered the natural fire regime, stand structure, and species composition, increasing the risk for catastrophic fires and modifying habitats. Trespass cattle adjacent to Jenny Creek in the northern part of the Monument were a stressor to Jenny Creek suckers in 2014. Numerous animals were observed grazing riparian vegetation, trampling banks, defecating instream, and contributing fine sediment inputs into Jenny Creek. The transportation system within the Monument also impacts fauna by facilitating human access and

Jenny Creek at former Box O Ranch

disturbance to wildlife; affecting hydrologic function and water quality; fragmenting habitat; and reducing connectivity.

Old Growth Habitat

Old growth mixed-conifer stand

Old-growth forests are generally over 180 years old and have the following special characteristics: a multi-layered, multi-species canopy dominated by large overstory trees; a high incidence of large trees, some with broken tops; numerous large snags; and heavy accumulations of wood, including large logs on the ground. In addition to old growth, the Monument RMP also refers to late-successional forests. Late-successional forests are considered mature forests that exhibit some or all of the old-growth characteristics identified above. The RMP delineated lands possessing old growth forest and late-successional habitat, or capable of becoming so within the Monument as an Old Growth Emphasis Area (OGEA). Late-successional and old-growth forests provide important habitat for species, such as the northern spotted owl, western bluebird, western meadowlark, pileated woodpecker, flammulated owl, and pygmy nuthatch.

Mixed conifer forests are the dominant forest community in the OGEA and support a variety of trees, including Douglas-fir, white fir, ponderosa pine, sugar pine, incense-cedar, and Pacific yew. Predominately white fir forests are found at higher elevations in the northern part of the Monument.

Old Growth Habitat Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Old Growth Habitat Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	24,340	10,000

Stressors Affecting Old Growth Habitat

Loss of habitat connectivity is one of the primary threats to the ability of the OGEA to function as habitat for late-successional species. Habitat fragmentation resulting from past timber harvests, road building, and other activities has limited connectivity by creating gaps in the mature forest larger than some wildlife species can successfully cross without being subject to predation or other mortality factors. Fire suppression for the last hundred years has altered the natural fire regime, changed stand dynamics and structure, reduced resiliency, and increased the risk for catastrophic fires. The loss of fire as a natural process has also resulted in a shift toward dense stands of white fir and Douglas-fir at the expense of sugar pine, ponderosa pine, and incense-cedar. Climate change and illegal recreation activities are stressors on old growth habitat within the Monument.

Special Plant Communities - Rosaceous Chaparral, Oak-Juniper Woodlands

These are special plant communities that are found at lower elevations, particularly in and around the Soda Mountain Wilderness in the southern half of the Monument.

Special Plant Communities Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Downward

Special Plant Communities Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	4,000	2,000

Stressors Affecting Special Plant Communities

Fire suppression for the last hundred years has altered the natural fire regime, affected fire-dependent plant communities, caused proliferation of younger age classes, increased cover, and increased the risk for catastrophic fires. Invasive species, climate change, and illegal recreation activities are all stressors on special plant communities within the Monument.

Rich Mosaic of Grass Shrublands, Oak Woodlands, Juniper Scablands, Mixed Conifer, White Fir Forests, and Wet Meadows

The mixed conifer and white fir forests are predominately located in the northern portion of the Monument classified as the Old Growth Emphasis Area (OGEA) in the RMP. Mixed conifer forests are the dominant forest community in the OGEA and support a variety of

trees, including Douglas-fir, white fir, ponderosa pine, sugar pine, incense-cedar, and Pacific yew. Predominately white fir forests are found at higher elevations in the northern part of the Monument. South of Keene Ridge, mixed conifer forests occur in isolated stands as opposed to the more contiguous stands in the north. These stands are often surrounded by the grassland and shrubland plant communities of the Diversity Emphasis Area (DEA). Conifer stands south of Keene Ridge are distinctive, biologically diverse islands and unique isolated communities that reflect the discontinuity between the southern Cascades and Sierra Nevada.

View from Boccard Point

The DEA is comprised of hardwood, shrub, grass, semi-wet meadow, and wet meadow plant communities. Unlike the conifer communities in the OGEA, the plant communities in the DEA are characterized by large changes in species abundance over relatively short periods of time in response to fire. This is because many plant species have short life spans, and are dependent on fire for reproduction. Herbaceous plants may thrive for only a few years before conditions change enough to prevent growth. Shrub species may become decadent after a few decades, and need to be renewed through activation of their seed bank by fire. Furthermore, many hardwood species are dependent on fire for creating conditions favoring their persistence on the landscape. Other plant communities associated with rocky meadows and rock outcrops are resistant to fire and may remain unchanged for long periods of time.

Rich Mosaic of Plant Communities Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Rich Mosaic of Plant Communities Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	61,728	15,000

Stressors Affecting Rich Mosaic of Plant Communities

The primary stressors in the coniferous plant communities of the OGEA are habitat fragmentation from past harvest, road construction and other activities that created gaps; fire exclusion that has caused changes in structure, tree size, and habitat for different species; the wildland urban interface increasing the risk of catastrophic fire; high road densities that impair hydrologic function, create ecological edges, reduce snags, and limit connectivity for some species; noxious weeds/invasive species; climate change; and illegal recreation.

The primary stressors on plant communities in the DEA are noxious weeds/invasive species; altered hydrologic function from past management activities; and removal of fire as an ecological process for fire-dependent plant communities.

Broad-leaf Deciduous Riparian Trees and Shrubs

Riparian areas consist of plants that grow adjacent to streams or lakes, as well as the aquatic ecosystem and the adjacent upland areas that directly affect this ecosystem. Riparian area habitat is critically important to the maintenance of ecological integrity at the landscape and local scales. Riparian areas and associated wetland habitats are some of the most productive, ecologically valuable, and utilized resources in the Monument.

Broad-leaf Deciduous Riparian Trees and Shrubs Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Broad-leaf Deciduous Riparian Trees and Shrubs Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	21,000	18,000	6,000

Stressors Affecting Broad-leaf Deciduous Riparian Trees and Shrubs

Past management activities (timber harvest, road construction, and grazing) have resulted in the fragmentation of the Monument's aquatic ecosystem, changed the plant community structure, composition, and function of riparian areas, and reduced the value of these areas for aquatic and terrestrial species. Throughout the Monument, fragmentation of the aquatic network has resulted in the disruption and loss of functions and processes necessary to create and maintain habitat required by fish, amphibians, and other riparian and aquatic-dependent plants and animals. The existing transportation system, invasive species, climate change, and illegal recreation activities are all stressors on broad-leafed riparian trees and shrubs within the Monument.

Ecological Integrity

Ecological integrity describes the structure, composition, and function of an ecosystem operating within the bounds of natural or historic range of variability. This includes healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landforms.

Ecological Integrity Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Ecological Integrity Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	52,935	10,000

Stressors Affecting Ecological Integrity

Fire suppression for the last hundred years has altered the natural fire regime, altering stand structure and species dynamics and increasing the risk for catastrophic fires. The transportation system continues to affect ecological processes by altering habitat connectivity and hydrologic processes. Invasive species, climate change, and illegal recreation activities are all stressors on ecological integrity within the Monument.

Example of altered hydrology on legacy road in SMW

Natural Processes

Natural processes within the Monument include nutrient cycling, energy flows, and the hydrologic cycle.

Natural Processes Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Natural Processes Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	52,935	20,000

Stressors Affecting Natural Processes

Fire suppression for the last hundred years has altered the natural fire regime, altering stand structure and species dynamics and increasing the risk for catastrophic fires. Aquatic impacts from the transportation system are a stressor due to sediment input into streams and alteration of hydrologic function. Invasive species, climate change, and illegal recreation activities are all stressors on natural processes within the Monument.

Diverse Vegetative and Biological Richness

The Monument was created to capture the biological diversity extant in the meeting of the Klamath, Cascade, and Siskiyou mountain ranges. Evolution, long-term climatic change, and natural geological processes (volcanism, mass wasting, erosion, etc.) operating across geological time continue to contribute to the high ecological richness of the area.

Diverse Vegetative and Biological Richness Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Diverse Vegetative and Biological Richness Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	52,935	18,000

Stressors Diverse Vegetative and Biological Richness

View from headwaters of Green Mountain Creek

The Monument's continued diversity depends upon the degree to which landscape-level ecological processes can continue to function. For example, plant communities in the Monument evolved with fire as a natural process. Fire exclusion has resulted in ecological changes for many plant communities throughout the Monument. Wildland fire has played an important role in influencing historical ecological processes and continues to be recognized as a needed component in the development and maintenance of vegetative diversity in fire-adapted ecosystems found throughout the Monument. Fire suppression for the last hundred years has altered the natural fire regime, increasing the risk for catastrophic fires. Aquatic impacts from the transportation system are a stressor due to sediment inputs into streams and disruption of hydrologic function. Invasive species, climate change, and illegal recreation activities are all stressors on diverse vegetative and biological richness within the Monument.

Natural Ecosystem Dynamics

Ecosystem dynamics reflect the effects of a range of forces (e.g., fire, succession, weed invasion, herbivory) that interact with the physical environment of the landscape to maintain objects of biological interest on the CSNM.

Natural Ecosystem Dynamics Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Upward

Natural Ecosystem Dynamics Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY14
61,728	52,935	52,935	37,055

Stressors Affecting Natural Ecosystem Dynamics

Fire exclusion, invasive species/noxious weeds, and climate change are suspected to be the principal stressors affecting natural ecosystem dynamics in the Monument.

6 Summary of Performance Measure

The Monument's overall natural resource trends are improving. Current management practices are directed at maintaining and accelerating the upward trend of improving wildlife habitat and plant populations. Some 970 acres came into Monument possession in 2014, bringing the total acres to 9,770 that have been acquired since designation. These recent acquisitions set the stage for natural resource trends to improve by providing opportunities to enhance habitat restoration and landscape-scale connectivity.

Pine plantation near Chinquapin Mountain

The Monument team is working to restore pine plantations through thinning and fuels treatments aimed at significantly shortening (20 years or more) the plantation's time to reach late-seral structural and compositional characteristics. More work is needed to address the fire and fuel issues, particularly in the wildland urban interface.

Proactive management has reduced the potential for both recreation-related impacts (off-road vehicle use, resource damage at access point parking areas) and transportation system impacts (sedimentation, drainage feature failures) on Monument resources. Proactive treatment of noxious weed infestations has helped restore native habitat.

The removal of cattle grazing from roughly 93 percent of the Monument in 2009 allowed for recovery of Monument lands that had been grazed for decades. The removal and restoration of approximately 11 miles of roads in the Soda Mountain Wilderness in 2014 assisted in the restoration of natural processes and aquatic integrity. Removal of interior legacy fences has improved habitat connectivity, as well as enhanced wilderness character.

Resources, Objects, and Values Status Summary Table

Resource, Object, or Value	Status	Trend
Rare and Endemic Plants	Fair	Stable
Range of Fauna	Good	Upward

Resources, Objects, and Values Status Summary Table		
Resource, Object, or Value	**Status**	**Trend**
Old Growth Habitat	Good	Upward
Special Plant Communities	Fair	Downward
Rich Mosaic of Plant Communities	Good	Upward
Broad-leaf Riparian Trees and Shrubs	Good	Upward
Ecological Integrity	Good	Upward
Natural Processes	Fair	Upward
Diverse Vegetative and Biological Richness	Good	Upward
Natural Ecosystem Dynamics	Good	Upward

Wintertime view from Soda Mountain

7 Manager's Letter

Successes

Soda Mountain Wilderness Restoration of the Legacy Transportation System
One of the most significant accomplishments for the year was completing the second phase of road restoration in the Soda Mountain Wilderness. The SMW Final Stewardship Plan (2012) approved restoration work on approximately 23 miles of former roads within the SMW. The legacy road system in the SMW was surveyed and restoration was grouped into eight priority treatment areas based on the risk to the aquatic system, culvert density, and logistically feasible treatment areas. The BLM was able to amass funding from various sources to complete restoration work on a number of Priority Area 2 and 3 roads located near the Pacific Crest Trail and Pilot Rock, in some of the most scenic areas of the Soda Mountain Wilderness. In 2014, restoration activities in the Soda Mountain Wilderness Area included removing legacy roads and abandoned livestock fencing. Road obliteration in the Soda Mountain Wilderness helped to restore hydrologic features (including streams, springs, and wetlands), reduce sources of sediment, and to meet the objectives of the Soda Mountain Wilderness Stewardship Plan. A total of 11 miles of legacy road were fully or partially re-contoured. On those legacy roads, culverts at 27 stream crossings were removed and the fill material was re-contoured to match the stream channel profile above and below the crossings. There are eight priority restoration areas identified in the SMW Final Stewardship Plan. Work will continue on each, one by one, as funding allows.

The 2013 road decommissioning work near Boccard Point was revisited in 2014. The Siskiyou Mountain Club established a single track, foot-worn hiking path in the previous road prism. Revegetation efforts were successful, and the decommissioned areas are quickly blending in with the surrounding vegetation.

Two views of 2013 road decommissioning work, 12 months later

Environmental Education, Interpretation, and Outreach

Environmental education, interpretation, and outreach continue to grow, successfully showcasing the unique diversity within the CSNM. BLM's partnership with Southern Oregon University completed its fifth successful year of delivering the Fall in the Field Environmental Education program. The program operated for six weeks, from mid-September to the end of October, and hosted 648 students during its 2014 field season. With BLM support, the Friends of the Cascade-Siskiyou National Monument deliver a "Hike and Learn" series targeted to adult learners. The Friends invite local university professors and scientists to provide guided hikes to special features in the Monument. The series offers evening lectures at local libraries for the non-hiker as well as field-based lectures and hikes on the Monument.

The Outreach Event highlight of the year was the Wilderness 50 celebration. Monument staff in partnership with the Friends of CSNM, SOU's Ecology and Sustainability Resource Center (ECOS), Siskiyou Mountain Club, and National Forest Service came together to celebrate the 50th anniversary of the Wilderness Act. The lively event was hosted on Southern Oregon University's campus featuring exhibits, demonstrations, and information booths from a wide variety of student, academic, non-profit, and outdoor groups.
The BLM is grateful to our many partners who help fulfill our outreach and education efforts on behalf of the Monument.

Lone Pilot Trail

The heart of the Soda Mountain Wilderness is more aesthetically accessible, via the newly completed Lone Pilot Trail, to backpackers, equestrians, and long-distance day hikers. The BLM and Siskiyou Mountain Club (SMC) collaborated in Lone Pilot's road-to-trail conversion over two summers. The wilderness trail was made possible through a matching $24,000 grant from the Oregon Recreation Trails Program (RTP). The trail circles Pilot Rock and follows Lone Pine Ridge, traverses old-growth ponderosa pine and white fir groves and oak woodlands, and skirts the headwaters of Scotch Creek, providing 11 miles of new trail, and forming a 17-mile loop with the PCNST.

Volunteers from the SMC started trail work in 2012. In 2013, the grant provided funds for a paid youth crew, augmented by volunteers and SMC staff. Work in 2013 included brushing the remotest 3-mile section, improving drainage, removing logs that had fallen over the winter, and signing junctions, all using non-mechanized non-motorized equipment. The Lone Pilot Trail reached initial completion in November 2013. Through a partnership with Siskiyou Mountain Club, paid youth crews, volunteers, and SMC staff put in over 500 hours brushing, improving drainage, building trail bed and logging out the trail. Final signage, tread maintenance, and water features were finished in September 2014.

Land Acquisition

The land acquisition program in the CSNM has made terrific strides in acquiring and protecting adjacent private lands from willing sellers. To date, approximately 9,770 acres have been added to the CSNM with Land and Water Conservation Funds. Acquisition of key

lands from willing sellers allows the BLM to better manage the diverse landscape that was formerly dissected into the "checkerboard" ownership that characterizes BLM land in western Oregon. The success of this program is a direct result of dedication of District, State, and Washington Office BLM staff and many partners including Pacific Forest Trust, The Conservation Fund, Meriwether Southern Oregon Land & Timber LLC, Brian and Kathleen Dossey, Ed Cottrell, Ada Rivera and many others.

Friends of Cascade-Siskiyou National Monument

The Friends of Cascade-Siskiyou National Monument (FCSNM) worked closely with Monument staff in 2014 to build capacity and position themselves to be a robust partner in accomplishing the Monument's mission. A new Assistance Agreement was signed with the FCSNM, highlighting not only their continued work on educational, outreach, and interpretive activities, but also expanding their role into assistance with restoration and land acquisition projects to enhance ecological integrity and habitat connectivity within the Monument. The Monument looks forward to working together with the FCSNM on a number of future projects.

Challenges/Opportunities

CSNM RMP, SMW Stewardship Plan, and CSNM Transportation Plan Implementation Funding for implementing the RMP, SMW plan, and the transportation management plan is being pursued. Priorities include forest restoration (pine plantations/fuels reductions), road restoration (decommissioning /obliteration), trailhead development, noxious weed treatments, removal of range infrastructure that is no longer needed (e.g., fences, stock tanks, cattle guards), restoration of unnecessary water developments, and removal of human effects from the wilderness (e.g., refuse dumps, irrigation pipe, structures).

Road Maintenance

In recent years, some of the roads that provide access to popular visitor sites and to private land within the CSNM have deteriorated. In the past, road maintenance was funded through road use fees from the extraction of timber from private land and by funds from BLM timber sales. The BLM has been successful in recent years in obtaining Secure Rural Schools and Community Self-Determination Act funds for road grading and brushing on selected high use roads within the Monument. In the future, Monument funding will be needed to help support maintaining the CSNM road systems now being used primarily for recreation and for inholder ingress and egress.

Hyatt Lake Recreation Complex

The majority of Monument facilities and infrastructure reside in the Hyatt Lake Recreation Area and Campground, which was established in 1969. Many of the facilities were built in the early 1970s. While some of the facilities are showing their age, regular maintenance and larger rehabilitation projects are attempting to keep the facilities functioning. Several projects have been completed this year to enhance the visitor experience at Hyatt and provide a more visually appealing environment to the visitor. A newly constructed and

staffed entrance station was built in 2013. A new sign package was designed and all signage was replaced throughout the campground.
The recreation complex is the only campground within the Monument and it is where the majority of Monument visitors are introduced to the Monument. Current funding is being leveraged with partner and volunteer support to maintain facilities on par with the area's National Monument status.

Recreation Permits

The number of hikes, tours, and commercial use that is occurring, without permits or authorization, is increasing in the CSNM/SMW. Monument staff frequently discover announcements regarding commercial and non-profit groups leading hikes and other events without prior notification or authorization. While there are a number of schools that visit on non-agency led hikes, the exact number is not known. Based on interviews with locals and finding journal caches, about a dozen schools probably visit the Monument annually. In the future, the staff will be looking at opportunities to better address this issue.

Law Enforcement

In 2013, the Monument received Title II funding to hire a seasonal law enforcement ranger to patrol the CSNM/SMW for approximately three months during the summer and fall. The law enforcement coverage and visibility helped to provide user education, encourage compliance with rules and regulations, and foster stewardship and awareness of the Monument and wilderness and their unique features. No additional funding was acquired for law enforcement in 2014. A steady funding source is needed to continue the positive trends in protecting the CSNM/SMW from trash dumping, illegal OHV travel, mud bogging, vandalism, and campground-related issues.

Staffing

Staffing for the Monument continues to be a challenge. In 2014, there were only two full-time positions dedicated entirely to the Monument. There is no dedicated Monument Manager for the Monument. A number of Ashland Resource Area specialists assist with special projects, but competing priorities complicate scheduling. For most of 2014, there were two Ashland Resource Area Outdoor Recreation Planners who assisted to the Monument, but had other competing priorities. Progress on planning and implementing projects within the Monument/wilderness is hindered by limited staffing.

In spite of the challenges, the Monument staff, our partners and our volunteers are extremely dedicated to the Monument and committed to its continued success. The accomplishments described in this report are a testament to that dedication. I am proud to be a part of the community-wide team that continues to raise the bar for Cascade-Siskiyou National Monument achievements.

Joel Brumm
CSNM Assistant Monument Manager

Cascade-Siskiyou

National Monument

Bureau of Land Management
Medford District Office
3040 Biddle Road
Medford, OR 97504
Phone: 541-618-2200

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