

Connecting People to Their Public Lands 2019

BLM Education, Interpretation, Outdoor Ethics, Volunteer, and Youth Employment Activities



The Bureau of Land Management's mission is to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations.

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GREETINGS FROM THE ASSISTANT DIRECTOR



In 2018, Bureau of Land Management (BLM) employees, together with numerous supportive community partners, provided thousands of exemplary education, interpretation, outdoor ethics, volunteer, and youth programs on BLM-managed public lands. Here we offer insights into just a few of the BLM's youth and adult programs representing the BLM's brilliant spectrum of education, youth employment, interpretation, volunteer, outdoor ethics, and partnership programs.

Hands on the Land outdoor classrooms and Teachers on the Public Lands sites reached teachers and students nationwide. In partnership with conservation corps, BLM staff members employed young people and hosted interns, shaping the next generation of public land managers. Families enjoyed BLM interpretation programs while reconnecting with the outdoors. Once again, more than 30,000 volunteers multiplied our efforts by working with us to improve public lands for all.

You may notice a connecting thread of partnerships running throughout these pages. Through partnerships with youth corps, universities, and other organizations, the BLM employed nearly 2,000 young people and veterans in work and training opportunities. Because of our partnership with Leave No Trace, the BLM staff can provide essential training about reducing human impact on public lands, while increasing public safety. In other words, effective, long-standing partnerships are key to our work, and we value our partners highly.

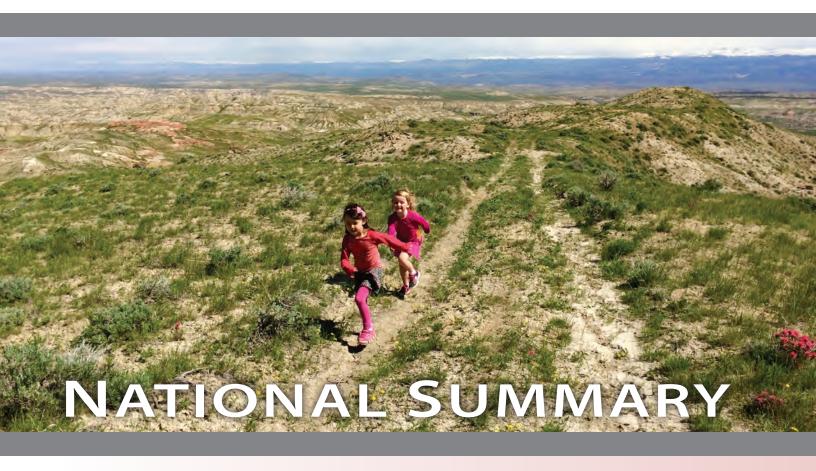
The education. interpretation, and youth engagement programs produced by the BLM staff, volunteers, and partners are among the nation's highest caliber programs. We know the health and productivity of our public lands depend on informed citizens willing to assist us in conserving America's natural and cultural legacy. Each program represents opportunities for Americans to access public lands and waters for career exploration, education, and service experiences.

These programs exemplify the BLM's commitment to sharing conservation stewardship, enhancing recreational access, and broadening public engagement. With renewed focus on engaging youth brought by the John D. Dingell, Jr. Conservation, Management, and Recreation Act, we anticipate continued commitment to sharing stewardship with local communities and all who treasure our public lands.

Nikki M. Haskett

Acting Assistant Director, National Conservation Lands and Community Partnerships

Nihh M. Haskett



The Bureau of Land Management's (BLM's) Division of Education, Interpretation, and Partnerships helps Americans of all ages understand, appreciate, and care for their public lands. Through local partnerships, the BLM offers **EDUCATION PROGRAMS** that help students and other public audiences learn about America's cultural and natural resources and outdoor ethics, **VOLUNTEER PROGRAMS** that bring stewardship to life, and **EMPLOYMENT PROGRAMS** that invite youth and veterans to discover career opportunities. These programs result in a growing appreciation for public lands and a better understanding of land management challenges.



EDUCATION PROGRAMS

Education and youth programs inform the public about the BLM's multiple-use mission and recreational opportunities on BLM-managed lands. When BLM employees educate, engage with, and support their local communities, they gain allies who understand and support the BLM's land management challenges. Encouraging young people to enjoy outdoor recreation, explore clues to our country's past, and discover how ecosystems work prompts them to become stewards to millions of acres of BLM-managed public lands.



More than 641,000 youths and their families engaged in thousands of organized recreational and service programs during fiscal year (FY) 2018. Programs included custom-designed summer camps, family hikes and bike rides, and children's fishing events. BLM offices also offered special events and programs for fourth grade students and their families through the **Every Kid in a Park** program, which aims to connect every child in America with their public lands and parks.

BLM Engagement Program I	Participation,	FY 2018
State Office	Number of Programs	Number of Participants
Alaska	200	3,265
Arizona	456	4,812
California	133	2,647
Colorado	37	8,261
Eastern States	495	21,050
Idaho	166	52,918
Montana/Dakotas	598	3,008
Nevada	3,330	279,573
New Mexico/Oklahoma/Texas/Kansas	77	8,995
Oregon/Washington	2,083	188,878
Utah	5,274	61,040
Wyoming	90	6,748
Total	12,939	641,195



In 2018, more than 167,000 students participated in a formal BLM education program, many of them at one of the BLM's 97 **Hands on the Land** (HOL) sites. HOL is a national interagency network of field classrooms that connects students, teachers, and volunteers to public lands in their local communities. The BLM hosts more HOL sites than any other land management agency. The BLM's HOL coordinators work with schools and community partners to create hands-on experiences using local, natural, historical, and archaeological settings as outdoor classrooms. Students form strong connections to the natural environment and learn about the BLM's multiple use mission and resource careers.

BLM Education Program Participation, FY 2018			
State Office	Number of Programs	Number of Participants	
Alaska	662	16,238	
Arizona	39	2,306	
California	598	6,962	
Colorado	153	6,231	
Eastern States	415	15,735	
Idaho	281	53,216	
Montana/Dakotas	706	9,600	
Nevada	415	20,785	
New Mexico/Oklahoma/Texas/Kansas	76	441	
Oregon/Washington	719	16,991	
Utah	268	9,555	
Wyoming	213	9,223	
Total	4,545	235,068	



NATIONAL SUMMARY



The BLM continued its partnership with the University of Colorado Denver to host 21 teacher "interns" through the **Teachers on the Public Lands** program. This program links teachers from both urban and rural school districts to BLM public lands in their local communities. Teachers spend the summer engaging with the BLM staff, learning about public lands management, and developing programs for the public that encourage participation in outdoor recreation and conservation stewardship. Teachers leave their internship with a greater understanding of the challenges and benefits of public land management and share that knowledge with their students, peers, and communities. The program increases stewardship, trust, understanding, and integration of the BLM's work into our local communities.



Every Kid in a Park

To support the Every Kid in a Park initiative, the BLM distributed just over 20,000 passes to fourth graders during the 2017–18 school year. This is 5,000 more than the BLM distributed during the 2016–17 school year. The program provides passes to fourth grade students and their families that allow them free entry to more than 2,000 federally managed lands and waters nationwide.



Outdoor Ethics

The goal of the BLM's outdoor ethics program is to encourage visitors, BLM employees, and partners to enjoy the outdoors responsibly and minimize individual impacts. The BLM partners with the Leave No Trace Center for Outdoor Ethics to implement a three-tiered approach to outdoor ethics education that includes awareness workshops, trainer courses, and master educator courses. Together, we presented nearly 100 sessions throughout 2018, providing tailored Leave No Trace education programs for more than 90,000 participants. These efforts ensure that outdoor enthusiasts practice minimal impact principles that support the long-term integrity of public lands through shared stewardship.



Project Archaeology

The Archaeology Resources Protection Act, as amended, requires federal land managers to increase public awareness of the significance of archaeological resources on public lands. The National Historic Preservation Act encourages federal agencies to provide leadership to those interested in preserving historic resources. The BLM's heritage education program and the Project Archaeology program have enlisted citizens in the shared conservation stewardship of archaeological and historic resources on public lands since 1990.

The BLM partners with Montana State University on Project Archaeology, which has grown from its origins in Utah to include 38 state or regional programs across the country. This partnership leverages federal funding to provide comprehensive archaeological stewardship, enhancing the BLM's leadership role in heritage and archaeology education with state agencies, nongovernment organizations, local communities, and individuals.

The BLM cannot effectively manage millions of archaeological sites on the vast public lands without the aid of informed and caring citizens who visit and enjoy America's great outdoors. Long-term public engagement through Project Archaeology is one aspect of the BLM's

management of cultural resources to benefit the public. The program balances preservation of cultural, educational, aesthetic, inspirational, and scientific values with recreational and economic benefits for today's communities and for future generations.

Project Archaeology Participation, FY 2018			
State	Educators Certified	K-12 Direct Instruction	Received Information at a Conference
Alabama	46	350	50
Arizona	3	0	0
Arkansas	90	395	50
California	9	20	0
Colorado	15	0	80
Delaware	20	0	50
Florida	96	267	75
Idaho	4	0	0
Iowa	30	415	30
Kansas	0	20	0
Kentucky	0	2,620	25
Maryland	2	60	0
Minnesota	0	60	50
Missouri	22	962	425
Montana	10	1,072	600
Nevada	3	498	0
New Hampshire	0	10	15
New Mexico	26	964	182
Oklahoma	0	0	20
Oregon	0	100	0
South Carolina	19	0	22
Tennessee	35	237	750
Texas	5	0	150
Utah	12	1,721	150
Wyoming	25	435	30
National	9	175	250
Total	481	10,381	3,004

Interpretation

The BLM cultivates community-based conservation, citizen-centered stewardship, and partnerships through consultation, cooperation, and communication. To support this good neighbor practice, the BLM's interpretation program provides quality visitor experiences that increase the public's understanding of resource management issues and build interest in conservation and stewardship. The program communicates the shared stories, heritage, and identities of the diverse audiences that visit public lands in person and virtually. Visitors derive meaning from resources and deepen their appreciation for America's precious places,



NATIONAL SUMMARY 5

history, and artifacts. In 2018, more than 5 million people participated in 35,000 interpretative programs throughout the BLM.

BLM Interpretive Program Participation, FY 2018		
State Office	Number of Programs	Number of Participants
Alaska	2,281	260,074
Arizona	647	139,464
California	2,444	834,363
Colorado	7,217	241,018
Eastern States	1,419	139,763
Idaho	525	55,630
Montana/Dakotas	4,088	148,412
Nevada	2,447	949,661
New Mexico	475	221,722
Oregon/Washington	5,587	1,488,634
Utah	6,546	502,487
Wyoming	1,618	302,884
Total	35,294	5,284,112

The nation's public lands inspire, engage, and attract artists who participate in the BLM's **Artist** in **Residence** program. The program, which provides a venue for creative expression and forging new community relationships, celebrated its sixth year with artists at eight sites who produced watercolors, poetry and other written works, movies, photographs, and music.

These artistic impressions of public lands provide the BLM with a meaningful way to connect visitors to cultural and natural resources, while the artists have the opportunity to live and work outside their usual environments, allowing them to reflect, explore, and innovate through art.



Every year, BLM employees pick an image for a national poster to highlight the program. In 2018, the winning black and white photograph depicted Pilot Rock in Cascade-Siskiyou National Monument, Oregon.

AWARDS

2018 INSPIRE (INSpirational Interpretation and Resource Education) Awards

Corrine (Cory) Coffman from Morley Nelson Snake River Birds of Prey National Conservation Area (NCA) in Idaho received the 2018 INSPIRE Award, formerly known as the BLM's Excellence in Interpretation and Education Award.

Coffman helped plan and coordinate events for the 25th anniversary of the NCA, including a kickoff party, the Snake River Raptor Fest, and a guided bicycle birding tour. More than 1,500 people attended each event. She also led the NCA's first Artist-in-Residence program, which featured a sketch artist, photographer, and musical group.



Cory Coffman

Coffman and her partners spread the message of shared conservation stewardship to thousands of people, school groups, and civic organizations in Idaho. She helped acquire a great-horned owl, prairie falcon, and red-tailed hawk for live raptor presentations and provided a Raptor Quest program for all third graders in the NCA's gateway community of Kuna. In addition, she expanded the NCA's hiking series and helped organize and oversee volunteers for Idaho's largest cleanup event, which resulted in approximately 600 volunteers removing more than 210 cubic yards of trash from the NCA.

2018 Public Lands Partnership Excellence Award

The BLM awarded the 2018 Public Lands Partnership Excellence Award to Trinidad Gateway, a group of local, state, and tribal partners working with the BLM to protect and manage the California Coastal National Monument.

The Trinidad Gateway partners have distributed more than 20,000 copies of a 32-page BLM Junior Explorer activity book highlighting the natural and cultural resources of the monument. They have also reached thousands of local residents and visitors through their naturalist training program, which enhances understanding of the history and resources of the Trinidad area through classroom and field study.

Trinidad Gateway has been a Hands on the Land outdoor classroom since 2010, hosting thousands of students who come to learn about tide pools, nesting seabirds, and Trinidad Head Lighthouse history; create monument-themed art; and help collect data about sea star wasting disease. The partners, along with the Arcata Field Office, have also increased community involvement through the North Coast Seabird Protection Network, an effort to prevent human disturbance to seabird populations.

From left, Janet Ady, BLM Division Chief, Education, Interpretation, and Partnerships; Chris Heppe, BLM Assistant Manager, Arcata Field Office; Ben Morehead, Executive Director, Trinidad Coastal Land Trust; and Trevor Needham, BLM National Partnerships Lead.

Making a Difference National Volunteer Awards

In May 2018, the BLM celebrated the contributions of our best and brightest volunteers:

- Lifetime Achievement: Tracy Greenwood, Mother Lode Field Office (CA); Walt and Kathy Horsfall,
 Safford Field Office (AZ); and Phil and Chriscinda Jamison, Northeastern States District (ES)
- Outstanding Achievement: Thomas Parkinson and Peter Kearns, Grand Canyon-Parashant
 National Monument (AZ); Blake Ramos-Manz, Sergio Ramos-Manz, and Dylan Brennan, Wild
 Rivers Recreation Area (NM); and Roy Thornton, Cottonwood Field Office (ID)
- Group Excellence: Pedal United Chapter of International Mountain Bicycling Association, Billings Field Office (MT)

Outstanding
Achievement Award
winners Dylan Brennan,
Sergio Ramos-Manz,
and Blake Ramos-Manz
of the Wild Rivers



VOLUNTEER PROGRAMS

The BLM relies on its dedicated, diligent volunteers to assist staff in managing our lands. In 2018, more than 30,000 volunteers of all ages contributed almost 1 million hours of service, valued at more than \$24 million. Volunteers serve in many different roles across a variety of BLM program areas including recreation, environmental education and interpretation, wild horses and burros, cultural and historical resources, and riparian activities. Many volunteers serve within the BLM's National Conservation Lands units, including national monuments and national conservation areas. Approximately one-third of all BLM volunteers are youth volunteers, age 25 and under.

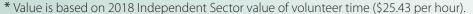
National Volunteer Totals by Program, FY 2018*			
Program	Volunteer Hours	Donated/ Hosted Worker Hours	Total Hours
Recreation	431,113	44,325	475,438
Biological Resources	60,024	34,974	94,998
Wild Horse and Burro	24,344	98,600	122,944
Cadastral Survey	341	67	408
Wilderness Study Areas	17,609	1,702	19,311
Riparian/Watershed	22,952	44,667	67,619
Cultural/Historical	64,066	3,911	67,977
Minerals	3,641	664	4,305
Support Services	40,116	5,083	45,199
Environmental Education/Interpretation	51,313	8,817	60,130
Other	16,982	5,940	22,922
Total	732,501	248,750	981,251
Funds Expended	\$553,045	\$660,315	\$1,213,360
Value of Work**	\$18,627,500	\$6,325,713	\$24,953,213

^{*} The term "volunteer" as used in this report includes donated workers. Volunteers do not receive pay for their service to the BLM. They donate their time, and in some instances, equipment and money, to assist the BLM with a variety of tasks. Donated or hosted workers, by contrast, receive compensation from another organization but work for the BLM at no charge.

^{**} Value is based on 2018 Independent Sector value of volunteer time (\$25.43 per hour).



Summary of BLM State Office Volunteer Contributions, FY 2018				
State Office	Hours	Value*	Work Years**	Number of Individuals
Alaska	15,826	\$402,455	8.8	1,984
Arizona	153,491	\$3,903,276	85.3	1,907
California	154,548	\$3,930,156	85.9	10,503
Colorado	192,859	\$4,904,404	107.1	3,529
Eastern States	34,585	\$879,496	19.2	690
Idaho	37,714	\$959,067	21.0	3,017
Montana/Dakotas	39,812	\$1,012,419	22.1	891
Nevada	57,479	\$1,461,691	31.9	2,302
New Mexico/Oklahoma/ Texas/Kansas	87,814	\$2,233,110	48.8	362
Oregon/Washington	115,055	\$2,925,849	63.9	3,081
Utah	83,034	\$2,111,555	46.1	2,181
Wyoming	6,060	\$154,106	3.4	445
Washington Office	2,974	\$75,629	1.7	9
Total	981,251	\$24,953,213	545.2	30,901



^{**} One work year is based on 1,800 work hours.

Events such as **National Public Lands Day** engage volunteers across the country. On Saturday, September 22, 2018, National Public Lands Day celebrated its 25th anniversary. The BLM was the leading federal partner, with 380 projects at 155 sites. More than 100 BLM offices hosted approximately 11,000 volunteers participating in these projects, removing debris and invasive species, beautifying campgrounds and trails, and helping with countless other activities. The National Environmental Education Foundation, working in concert with state and federal agencies, oversees National Public Lands Day, our nation's single largest 1-day volunteer event on public lands.









NATIONAL SUMMARY

EMPLOYMENT PROGRAMS

The BLM's Public Lands Corps (PLC) program is a public–private initiative to employ youths and veterans on public lands to protect, restore, and enhance our natural and cultural resources. Through compensated opportunities, the PLC helps to develop a generation of skilled workers, educated and active citizens, future leaders, and stewards of the land while providing the BLM with a cost-effective way to accomplish priority stewardship and conservation projects. The PLC hiring authority enables the BLM to attract and recruit entry-level employees by awarding corps members noncompetitive hiring status for up to 2 years after completion of PLC service.

The BLM's Division of Education, Interpretation, and Partnerships works closely with state youth coordinators, field staff, and qualified youth or conservation corps to implement policy, provide guidance, and clarify roles and responsibilities for engaging youth crews and interns. The BLM issued new PLC policy (Instruction Memorandum 2019-017) in early FY 2019 after coordinating with the BLM state office youth program leads, state office grants management officers, Office of Recruitment and Retention Programs, Division of Human Resources Policy and Programs, and Division of Business Resources.

The BLM's partnerships with youth and conservation corps allow field offices to address changing priorities and needs, including expanding opportunities for hunting, fishing, and other recreational activities on public lands as directed by Secretarial orders issued during 2018. To ensure access to recreation facilities, corps crews and interns engaged in trail building and facilities maintenance projects across all BLM states. In addition, crews and interns participated in numerous habitat improvement projects, expanding conservation stewardship and improving wildlife management.

Payroll and Partner Youth Hires, FY 2018			
State Office	Youth*	Other	Total
Alaska	116	21	137
Arizona	106	118	224
California	92	46	138
Colorado	198	156	354
Eastern States	14	0	14
Idaho	59	4	63
Montana/Dakotas	54	128	182
Nevada	52	2	54
New Mexico/Oklahoma/Texas/Kansas	63	6	69
Oregon/Washington	266	224	490
Utah	155	1	156
Wyoming	77	41	118
Total	1,252	747	1,999
* Youth age 35 and under: 80 hours or more			

^{*} Youth age 35 and under; 80 hours or more.

HOW THIS REPORT WAS COMPILED

The BLM collected data for this report from more than 300 staff members from state and field offices who contributed more than 1,100 reports on education, interpretation, volunteer, and youth employment programs during FY 2018. Articles published in the "BLM Daily," the online publication for BLM employees, provided additional data and photographs. The total number of participants reported in the state summaries includes only participants for educational and interpretive programs.





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By the Numbers

Education and Interpretation Program Participants	276,312
Volunteer Hours	15,826
Volunteer Contributed Labor	\$402,455
Youth Hires	137

In Alaska, the BLM connected people to their public lands by providing opportunities to learn, volunteer, and explore careers. The Campbell Creek Science Center worked with a charter school to provide a variety of educational activities during Science Week. To promote recreation, a BLM employee volunteered at numerous outdoor winter sports events. Young people gained hands-on job skills through an academy that trains them to be fly fishing guides, boosting career awareness along with recreational access.



Hands-On Activities Inspire Interest in Science

The BLM Campbell Creek Science Center partnered with Eagle Academy Charter School to kick off Science Week. The goal of this annual event is to help students explore natural resources management through hands-on activities and to get them excited about their science fair projects.

Science Week began with student assemblies.
Science center instructors Brad Fidel and Jen
Christopherson introduced students to the BLM
mission and led a lesson on the salmon life cycle.
The 75 students took on the role of salmon
fighting to survive in a fast-moving "river" in the
gym. The salmon had to dodge bears, eagles, and
anglers fishing in the river while finding food and
avoiding nets cast by fishing boats where the river
empties into the ocean.

That night in the school gym, 230 children and adults visited a dozen science fair stations designed by the science center staff. At one station, they examined the slow creep of glaciers portrayed by a slimelike substance oozing slowly down glacially carved valleys. At another station, they retrieved fake birds from a mist net and carefully placed them in canvas bags before weighing and measuring them. Other stations showed how to use paleontological tools to discover dinosaur bones and microscopes to view macroinvertebrates.

Science Center Manager Nancy Patterson said, "These experiences help learners investigate and apply natural resource and science principles used to manage public lands. In our programs, we know that a future public land manager may be sitting in the room. That gets us excited to go to work every day."





BLM Alaska Employee Goes the Extra Mile

BLM Alaska Planning and Environmental Coordinator Laurie Thorpe donated her time to several Alaska winter sports events. In January, she volunteered at the Mendeltna Creek Lodge checkpoint for the Copper Basin 300 sled dog race. Fire destroyed the lodge in December 2017, so members of the community set up a makeshift camp of heated tents to host volunteers and mushers.





February found Thorpe at the first checkpoint for the Iditarod Trail Invitational. Here she smoothed the 25 miles of the trail leading to the Yentna checkpoint with her "SnoMoGroomer," a snowmobile with a homemade grooming attachment. She also recorded the names and times of the competitors as they passed through on foot, skis, or fat tire bikes, giving them moral support and helping ensure their safety at the beginning of their 1,000-mile journey to Nome.

In March, Thorpe traveled to Eagle Island, a remote location along the Iditarod National Historic Trail, to support the 1,049-mile Iditarod sled dog race. Using snowshoes, her five-person volunteer team stamped down a nearly 1-acre camp, then set up tents, propane heaters, generators, and an outdoor kitchen (a glorified blue tarp over a simple board table).

Thorpe said what she likes most about volunteering is meeting other volunteers an learning about their lives, adventures, and reasons for helping out.

PLOYMENT

Young Alaskans Train as Fishing Guides

The Bristol Bay region of Alaska is home to the largest sockeye salmon runs in the world, but local jobs for the young people who grow up there are hard to come by. For the past 10 years, the Bristol Bay Fly Fishing and Guide Academy has been training young people of the region to become fly fishing guides at local lodges and leaders in salmon stewardship.

For most of those 10 years, Merlyn Schelske, a fish biologist in the BLM's Anchorage Field Office, has shared his knowledge and expertise with academy students. The BLM is a partner in the academy, along with the Bristol Bay Heritage Land Trust, the Bristol Bay Native Corporation, and Trout Unlimited, and has provided funding through grants and agreements.

The weeklong academy includes special presentations by experienced fishing guides, biologists, Native leaders and elders, historians, land managers, and other members of the community. Classes cover all aspects of becoming a fishing guide, including assembling a fly fishing rod, learning the correct knots, fly tying, outdoor safety, casting, client expectations, and safety. Classes also cover fish species and management, fish habitat requirements, healthy watersheds, land management, and resume writing.

For their capstone, the students guide local elders and members of the public on a fishing experience for Client Day. Some clients have never fly fished, while others have only used a spinning rod or caught fish commercially. Students teach them how to cast a fly rod and have a great experience enjoying the outdoors while fishing.



ALASKA

By the Numbers	
Education and Interpretation Program Participants	141,770
Volunteer Hours	153,491
Volunteer Contributed Labor	\$3,903,276
Youth Hires	224

In Arizona, land managers addressed key needs through the efforts of students, volunteers, and young career seekers. Volunteers from a high school softball team addressed illegal dumping, setting an example for others by cleaning up public lands in their area. Undergraduates majoring in archaeology explored a unique site, learning hands-on excavation skills while helping the BLM document cultural resources. An American Conservation Experience intern monitored an endangered desert plant and helped initiate a longer term inventory project.



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VOLUNTEE

Rangers and High School Students Clean Up Safford Public Lands

Illegal dumping on public lands is a longstanding issue that the Safford Field Office takes seriously. "Illegal dumping on public lands encourages others to dump there too," said Safford Field Office Manager Scott Cooke. "It affects the quality of the public land user's experience, and the cleanup costs the American taxpayer a lot of money."

When law enforcement staff spotted an illegal dumpsite on BLM-managed public land near a local housing development, Ranger Clayton Romero, who also serves as the assistant coach for the Thatcher High School varsity softball team, arranged for the team to participate in a trash cleanup day at the site.

The entire team was dismayed to see the condition of the area. "Public lands belong to all of us and we should take care of them," said Bryan McBride, the team's head coach. Seeing trash strewn about public land boosted the team's motivation to make a positive impact in their community.

The team, along with McBride, Romero, and Recreation Ranger Brian Brinkley, collected 1,540 pounds of illegally dumped trash. "The team did a great job cleaning up the area," said Romero. "I appreciate how our community's youth have stepped up to help keep their public lands clean, and hopefully it will set an example for others to follow."





Archaeological Expedition Uncovers Ancient Community

The University of Texas at San Antonio's Department of Anthropology and Colinas Cultural Resource Consulting of Albuquerque teamed up to conduct an archaeological investigation at the Sanchez site in southeastern Arizona. The BLM issued an archaeological permit for the work and the National Geographic Society provided funding.

The site, perched high on a 650-foot mountain above the Gila River, is located on BLM-managed public land near Safford. It is among the largest known sites of the Early Pithouse (AD 200–550) period in the Mogollon region, which includes large parts of central and southeastern Arizona, central and southwestern New Mexico, west Texas, and northern Chihuahua, Mexico. "This site is an exciting find since it is the first known site of its kind in the Safford valley," said Anthropology Professor Robert Hard.

Hard, his students, and John Roney of Colinas Cultural Resource Consulting conducted the archaeological work. Roney, a retired BLM archaeologist, recently discovered the site by inspecting Google Earth imagery. "The Sanchez site is remarkable because of its size," said Roney. "It contains over 130 rock rings that represent houses and storage features."

The team found manos and metates, which are stones used to grind seeds and corn into flour, in some of the houses. They also found broken pieces of plain brown pottery from small jars; these pieces allowed the team to estimate the age of the site.



The excavation work helped the team to understand why early inhabitants built a large village in such challenging terrain. "The difficult access and perimeter walls suggest the site was built for defense," explained Hard.



Intern Studies Endangered Plant

Peggy Monkemeier, an American
Conservation Experience intern in the
Tucson Field Office, initiated a study of
the endangered Huachuca water umbel.
"Since little is known about the Huachuca
water umbel, the study will provide
valuable information about this small
and elusive endangered plant," noted
Monkemeier. The study will also be the
starting point for the eventual inventory
of four pond sites, three at the Cieneguita
ponds on the Las Cienegas National
Conservation Area and one at
St. David Cienega on the San Pedro
Riparian National Conservation Area.

To assist with her study, Monkemeier met with Julie Stromberg, J.P. Solves, and Kara Barron at Arizona State University to learn about the field survey techniques they employed in their recent Huachuca water umbel seed bank study. Stromberg is a professor of ecology and plant biology, specializing in wetland ecosystems, and Solves and Barron are both graduate students of plant biology and conservation. Solves is following two populations of Huachuca water umbel near Phoenix, and Monkemeier is following three distinct occurrences of the plant at each of the three Cieneguita Ponds.



By the Numbers	
Education and Interpretation Program Participants	841,325
Volunteer Hours	154,548
Volunteer Contributed Labor	\$3,930,156
Youth Hires	138

Across California, the BLM used education, volunteer, and career awareness events to advance land management objectives. Volunteers were integral to an effort to protect newly purchased tule elk habitat. BLM staff members answered visitors' questions during a Blue Angels event. BLM lands provided an outdoor classroom for Union Mine High School students to learn about watersheds and ecosystems.



5

IBLN010A

Partners and Volunteers Improve Access Along Cache Creek

A century ago, only seven tule elk remained on the planet. Today, there are more than 4,000 tule elk, a unique subspecies found only in California. The BLM Ukiah Field Office recently teamed up with the Rocky Mountain Elk Foundation to help protect key tule elk habitat.

The Rocky Mountain Elk Foundation purchased a pair of parcels totaling 371 acres along Cache Creek, near Clearlake Oaks, California. The parcels, which are now part of the BLM's Cache Creek Natural Area and Berryessa Snow Mountain National Monument, link together other public lands and provide new access points to more than 1,000 acres for hunting, fishing, hiking, and wildlife viewing.

Previously, a dilapidated bridge was the only way for recreationists to access these newly acquired lands. The bridge was safe to walk across but was in need of serious repair. Wildlife Biologist Kathryn Barnitz worked with a group of Rocky Mountain Elk Foundation volunteers to replace the old, rotted planks and install a sturdy handrail during an Earth Day volunteer project. The BLM secured the necessary materials and the foundation provided the carpentry expertise, tools, and volunteers.





Air Show Attendees Visit BLM Booth

The BLM's El Centro Field Office staff hosted a booth at the El Centro Air Show held at the Naval Air Facility. The show featured the Blue Angels performing their spectacular, well-coordinated flight demonstrations, showcasing the pride and professionalism of the United States Navy and Marine Corps. The free show was open to the public, and visitors were able to play games, enjoy great food, and learn about local businesses and employment opportunities.

Approximately 150 visitors stopped by the BLM booth, where Law Enforcement Ranger Alexander Stewart and Outdoor Recreation Planner Alexia Williams passed out maps and answered questions such as: Where can I go target shooting? How did you get your position with the government? What is the Bureau of Land Management and what do you do? Ranger Stewart praised the event, commenting, "I truly believe it was a great opportunity to interact with, inform, and educate the public."

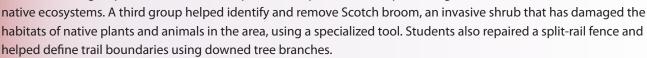




High School Students Gain Hands-On Science Experience

As part of a biannual class focusing on watersheds and ecosystems, Union Mine High School students rotated through different stations at the BLM's Greenwood Creek River Access. Jeff Horn, lead recreation planner for the BLM's Mother Lode Field Office, helped oversee activities and provided an overview of the fishing, hunting, rafting, biking, horseback riding, and other recreation opportunities available in this 20,000-acre area.

Students hiked to the South Fork of the American River, where one group measured phosphate, nitrogen, and pH levels in the river with a multiparameter water-testing meter. Another group learned about the importance of public lands in preserving



Union Mine High School teachers emphasized the importance of applying science studies in a real-world environment and allowing students to see how biologists and hydrologists conduct testing and experimentation. "For some kids, they have never been out on the river; they have never been on trails and hikes, so this is just a good experience to get them out of their comfort zone and hopefully make them want to come back out," said Chad McGowan, a biology teacher and Science Department chair at the school.



By the Numbers	
Education and Interpretation Program Participants	247,249
Volunteer Hours	192,859
Volunteer Contributed Labor	\$4,904,404
Youth Hires	354

Interns, college students, and teens all supported the BLM's mission in Colorado while advancing their personal career and recreation goals. Middle school students learned history and science during a 4-mile hike in Escalante Canyon. College students helped combat the spread of cheatgrass by spreading native plant seeds over a 20-acre site. A direct hire intern conducted a survey of cultural resources to ensure that an off-highway vehicle recreation event did not harm archaeological sites.



Seventh Graders Explore Dominguez-Escalante

EDUCATION

The Colorado Canyons Association, The Nature Connection, and Colorado Parks and Wildlife partnered with the BLM to host an event for 371 seventh graders in Escalante Canyon. During the event, the students learned about pioneer history and the web of life. They hiked 4 miles to the Gunnison water wheel, which was once use to help irrigate crops. The students also explored the desert around a log cabin homestead built by Captain Smith in 1911 and learned how land managers use radio telemetry to monitor wildlife and habitats.

At this and other events on BLM-managed lands, the Colorado Canyons Association and its volunteers reached nearly 1,000 students with educational messages about ecosystems, land management, outdoor recreation, and other relevant topics.



Students Restore Native Plant Communities

The fuels program staffs from the Gunnison Field Office and Southwest Colorado Fire and Aviation Management Unit teamed up with botany students from Western Colorado State University to spread a native seed mix near the popular Hartman Rocks Recreation Area in western Colorado. The 20-acre unit is part of a larger project area that the BLM chemically treated to combat cheatgrass in 2015.

In just 1 hour, 23 students and 5 BLM employees made the short and slippery hike to the site and traversed the unit to toss handfuls of seed on sparsely vegetated areas once occupied by cheatgrass. Before distributing the seeds, BLM employees briefed the students on the history of the project and its value for wildlife and livestock and described how assessment, inventory, and monitoring on two plots in the unit will provide vital data on pretreatment and posttreatment vegetation conditions.

This project provided valuable opportunities for learning and interaction between the students and BLM employees. Before everyone departed, the BLM employees informed the students of upcoming seasonal and internship opportunities in the area and thanked them for their assistance.





EMPLOYMEN

Intern Helps the BLM Balance Preservation and Recreation

Danilo Giordano came to the BLM through the Direct Hiring Authority for Resource Assistant Internship Program. He helped the BLM with a cultural survey project related to a potential Enduro Race in the Sand Wash Basin off-highway vehicle open area in northwestern Colorado.

Giordano conducted an inventory of the land along the proposed track that would allow the BLM to direct off-highway vehicle traffic away from areas known to have cultural resources and from potential sites with unrecorded resources. He helped analyze the proposed racecourse, made suggestions for rerouting it away from cultural resources, and adjusted some routes to be more in line with preexisting surveys. He also created maps for each resource.

Giordano gained invaluable experience working on this archaeological project for the BLM. He learned to use the same tools as professional archaeologists, including ArcMap and GIS, to manage compliance with sections 106 and 110 of the National Historic Preservation Act, and to haul a trailer and drive a UTV to access isolated areas for survey.





By the Numbers	
Education and Interpretation Program Participants	155,498
Volunteer Hours	34,585
Volunteer Contributed Labor	\$879,496
Youth Hires	14

Across the vast Eastern States footprint, the BLM promoted heritage education, volunteer engagement, and career awareness. Archaeology students practiced their craft by excavating a site at Florida's Jupiter Inlet Lighthouse Outstanding Natural Area (ONA). Field sites in Wisconsin and Virginia hosted volunteer events for National Public Lands Day to help restore local sites and improve recreational access. A management assistant intern discovered numerous career opportunities offered by the BLM.



M

EDUCATION

BLM Hosts an Archaeology Boot Camp

The BLM's Southeastern States
District partnered with Florida Public
Archaeology Network, Florida Atlantic
University, Lynn University, and Jupiter
Inlet Lighthouse and Museum to
host a 3-day intensive workshop for
archaeology students. Approximately
50 students from across Florida and
from as far away as Missouri attended
the workshop.

The workshop, which focused on a specific time when the Coast Guard occupied the area, included afternoon workshops and evening lectures featuring local archaeologists. The students learned about different tools used during a dig, archaeological mathematics, site monitoring, phases of a dig, and artifact collecting methodology. They also excavated a trash pit. Artifacts identified during this project, such as fragments of plates and a nail polish bottle, confirm domestic use of the site.

"It was fantastic to have all these young people interested in archaeology onsite at the ONA," said John Sullivan, a BLM archaeologist. "They had the opportunity to get some handson experience with a dig and even excavated a few artifacts." The program culminated in a public archaeology day, where students had the opportunity to share what they learned with the public.





Volunteer Projects Help Restore Sites on National Public Lands Day

The Northeastern States District celebrated National Public Lands Day by holding events at Bike Path Island on the Wisconsin River in Grafton, Wisconsin, and at Meadowood Special Recreation Management Area in Lorton, Virginia. These two unique places provided volunteers the opportunity to build and restore public lands in their local communities.

In Wisconsin, volunteers from the University of Wisconsin–Milwaukee participated in an invasive species control project on the Wisconsin River islands. They worked with the BLM staff to eradicate buckthorn seedlings on an island where the BLM had conducted a number of treatments to control mature buckthorn trees. The volunteers found and removed several large buckthorn trees that were heavy with seeds, drastically reducing the number of buckthorn shrubs that will require removal in the future.



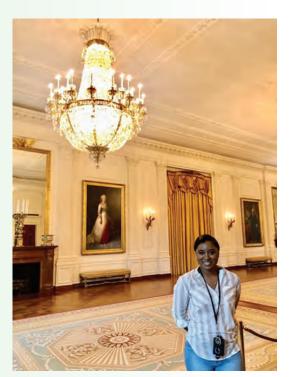
At Meadowood, volunteers from local communities, young people from Freedom High School, and the BLM staff participated in community service projects. They restored 10 acres of land damaged by trespassers on all-terrain vehicles. Volunteers also planted native trees, picked up litter and debris, and removed jumps on the trail to restore the area back to its natural state.



Greening Youth Foundation Intern Assists Eastern States

The BLM provides internship opportunities for college students and recent graduates under the Direct Hiring Authority for Resource Assistant Internship Program. The BLM Eastern States Office, in partnership with the Greening Youth Foundation, offered a management assistant internship to Tyesha Butler, a student at North Carolina A&T State University. The Greening Youth Foundation's mission is to engage underrepresented youth and young adults, while connecting them to the outdoors and careers in conservation.

During her 11-week rigorous summer internship program, Butler completed many tasks, including updating budget documents, for the BLM Eastern States Office, located in Washington, DC. She also visited several sites, attending a BLM wild horse and burro adoption event and shadowing the BLM Eastern States Deputy State Director on visits to Jackson, Mississippi, and Milwaukee, Wisconsin. Butler also was able to tour the White House.



By the Numbers	
Education and Interpretation Program Participants	108,846
Volunteer Hours	37,714
Volunteer Contributed Labor	\$959,067
Youth Hires	63

In Idaho, the BLM reached out to students and volunteers to help improve recreational access and address public land issues. Eagle Watch Week provided numerous opportunities for the public to see bald eagles at Lake Coeur d'Alene and learn about their migration. High school students developed a public education campaign to encourage stewardship after talking with BLM staff about the most challenging behavior issues on public lands. A youth intern helped the Challis community develop a plan for expanding local recreation trails.



EMPLOYMENT 💟

Youth Employment Program Helps Develop Community Trails Plan

Last year, the City of Challis and the BLM's Challis Field Office received an assistance grant to develop an action plan for the trails in and around the community. The grant was through the National Park Service's Rivers, Trails, and Conservation Assistance Program.

To begin the planning process, local outdoor businesses, various interest groups, land management agencies, the health community, and most importantly, a representative of the community's youth formed the Challis Trails Committee. The committee's goal was to create a network of trails that connects popular destinations in Challis with parks and trails on surrounding public lands. The committee hosted a Trails Summit, in coordination with the Challis Health Fair, to solicit public input on the plan. The summit featured informative presentations and fun trail-based activities.

The BLM employed the committee's youth representative through an agreement with the Youth Employment Program of Salmon and Challis. The student distributed questionnaires at the high school, provided invaluable insight into the recreation needs and desires of local youth, attended monthly planning meetings, provided important information about area trail uses, and developed the plan's first draft. The student also made valuable connections with community leaders and gained hands-on experience with a real world partnership effort.



Visitors Track Eagle Migration in Idaho

The annual bald eagle migration at Lake Coeur d'Alene attracts visitors from across the country. Each winter from November through February, a migrating population of over 300 bald eagles descends upon the lake to feed on the spawning kokanee salmon. The eagles congregate on the east side of the lake, where the Coeur d'Alene Field Office manages several recreation sites.

Tracking the annual migration has become a favorite winter pastime for the public. The Coeur d'Alene Field Office conducts weekly counts and updates them on its Eagle Watch webpage. The number of eagles returning to the area varies from year to year. During the 2017-2018 season, the BLM counted over 370 on 1 day—a record number.

The BLM hosts Eagle Watch Week in late December at both the Mineral Ridge trailhead and boat launch. The 5-day event allows the public access to high-powered spotting scopes and interpretive information about bald eagles. Thousands of visitors stop in to learn more about the majestic birds.

The BLM staff and volunteers also travel throughout northern Idaho to provide interpretive presentations to schools and groups



in the area. Through these presentations, thousands of youths and adults learn about bald eagles and other raptors. Many of the schools charter a cruise boat on Lake Coeur d'Alene for a 2-hour tour of some of the bays and shorelines where the eagles congregate.



Compass Academy Students Address Public Land Issues

One hundred thirty sophomores from Compass Academy joined the BLM Upper Snake Field Office recreation staff west of the Menan Buttes to see lands littered with trash, appliances, and gun shells and to learn about some of the perpetual challenges of public land management. The BLM partnered with Compass Academy, a project-based learning high school located in Idaho Falls, to present students with a real-life problem and have them develop an awareness campaign that the BLM could implement statewide.

The campaigns focused on two problem areas—illegal dumping and human-caused fires. The BLM held several planning sessions with the students and provided the necessary resources and materials. "Then we got out of their way and let their imaginations and creativity run wild," said Marie Rasmussen, an outdoor educator for the BLM.

The students pitched their proposals to focus groups to get feedback and suggestions. "Most students felt encouraged they were going in the right direction," said Anna Durfee, a facilitator at the academy. The students made revisions and presented their final proposals to the BLM staff. Their presentations received coverage in the regional newspaper.

The students came up with unique slogans, such as "Nature Fights Back" and "Save a Spark," and proposed using a variety of media to reach their audiences. "This was a great program to engage youth on helping BLM manage public lands," said Upper Snake Field Manager Jeremy Casterson. "We have



some good products and ideas that we will be able to continue to use in southeast Idaho."

By the Numbers	
Education and Interpretation Program Participants	158,012
Volunteer Hours	39,812
Volunteer Contributed Labor	\$1,012,419
Youth Hires	182

Across Montana and the Dakotas, the BLM brought young people onto the public lands to learn about and contribute to conservation and stewardship. University students took part in a longstanding campaign against invasive weeds. High school members of the Montana Conservation Corps gained job skills and helped remove conifers to protect sage-grouse habitat. And for the sixth consecutive year, a friends group planted and maintained cottonwoods along the Upper Missouri River.







Campaign Increases Noxious Weed Awareness

The BLM teamed up with Montana State University on the Montana Noxious Weed Education Campaign, which has been teaching Montana citizens and visitors about noxious weeds and invasive species since 1996. The campaign enlists private citizens and federal, state, and nongovernmental organizations to protect Montana's natural resources from the threat of noxious weeds.

The campaign uses a concise, statewide noxious weed educational message jointly developed by stakeholders. It stresses practical solutions so citizens understand how to help prevent the spread of noxious weeds and know whom to contact if they discover infestations. It also generates new partnerships and shared resources to support noxious weed education goals.

The partners in the campaign deliver their message through a variety of media, such as public service announcements, television and radio commercials, and outdoor advertising. They have created a searchable website that includes all

materials developed for the campaign, including a "Monthly Weed Post," and maintain a Facebook page. The partners also provide an online training program for Montana realtors, coordinate an "Adopt a Trailhead" program, and distribute and provide teacher training on a noxious weed curriculum for grades K-9. In addition, they staff information booths and provide presentations at various natural resource-related events throughout Montana.









Partnership Extends BLM Capacity at Badger Pass

Facing a backlog of projects, the BLM's Dillon Field Office sought partner support for a conifer removal project at Badger Pass, about 15 miles west of Dillon. Invading conifers such as juniper were crowding out native brush species and degrading habitat used by sage-grouse for nesting and brood rearing.



High school students working for the Montana Conservation Corps were an important element of the Intermountain West Joint Venture partnership. The corps crew and other partners worked with the BLM and U.S. Fish and Wildlife Service to remove conifers and construct simple rock structures designed to slow erosion on the site. The students not only improved sage-grouse habitat, they also gained work experience and learned about careers in natural resources.



Volunteers Plant Cottonwoods Along the Upper Missouri River

The BLM and the Friends of the Missouri Breaks National Monument hosted their sixth annual cottonwood planting event to promote revegetation along the banks of the Upper Missouri River. Planting efforts focused on two sites, Upper Eagle Creek

and Bailey Hazlewood, where cottonwood galleries are reaching the end of their life cycles.

Volunteers used a skid steer to auger planting holes 6 to 7 feet deep to reach the water table. To bolster the trees' odds of surviving, interns from the Friends of the Monument watered the planting sites weekly throughout the summer. Inventories of past project sites showed that after 2 years, more than 80 percent of the trees survived and developed roots to the water table.

Injecting new life into cottonwood galleries along remote stretches of the Upper Missouri National Wild and Scenic River is no small task, but with volunteers as force multipliers, these areas are experiencing positive results.





By the Numbers	
Education and Interpretation Program Participants	970,446
Volunteer Hours	57,479
Volunteer Contributed Labor	\$1,461,691
Youth Hires	54

In Nevada, youth programming focused on responsible recreation and stewardship of damaged resources to promote recreation and preserve habitat. The Las Vegas Field Office developed a new Junior Ranger book as part of a broader effort to promote outdoor ethics and awareness of recreational opportunities. On National Public Lands Day, volunteers restored recreation assets that vandals had damaged. Interns learned job skills while also sowing sagebrush seedlings in an area that had recently burned.



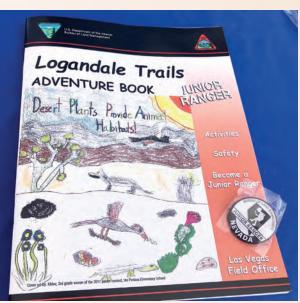
Junior Rangers Learn About Responsible Recreation

The BLM Las Vegas Field Office and Partners in Conservation produced an innovative Junior Ranger adventure book to highlight responsible recreation and natural resource protection in the Logandale Trails area. The area is a popular destination for off-highway vehicle use, hiking, horseback riding, and camping.

In May, the BLM and Partners in Conservation held an event to introduce the book and provide interactive experiences for young people. The activities included examining off-highway vehicle rider safety, taking a nature hike, exploring Tread Lightly! principles, and working on a stewardship project. At the conclusion of the activities, the BLM held a swearing-in ceremony for the participants, making them the inaugural class of Junior Rangers for this area.

The Southern Nevada District Office uses its Junior Ranger activity book for Logandale Trails, as well as its book for Red Rock Canyon National Conservation Area, to help kids learn more about the resources in these areas and introduce them to the BLM's multiple use mission.









Community Helps Rehabilitate Water Canyon Recreation Area

The BLM's Humboldt River Field Office held a successful National Public Lands Day event at Water Canyon Recreation Area in Winnemucca, near the Bloody Shins Trail System, a popular mountain biking destination. Volunteers helped rehabilitate the area and repair damages after a spate of vandalism.

Volunteers replaced the rusted remnants of an old disc golf course with a new nine-hole course, reseeded a winter sledding hill, and established a new bat house. They also created a pollinator garden, planting a variety of native plants needed by bees, butterflies, and hummingbirds. They installed decomposed granite, a rock pathway, an irrigation system, and an interpretive sign to inform visitors about the importance of pollinators and plants.

Local youths from the Winnemucca area engaged in stewardship efforts by restoring graffiti-covered picnic tables and tagged dumpsters. The Lowry High School Art Club painted murals on the four vandalized dumpsters at Water Canyon, instilling a sense of ownership among the students.

Nevada Outdoor School provided assistance and educational activities for children during the event, along with partners from the Nevada Monarch Society and the U.S. Fish and Wildlife Service. Through this event, the BLM forged new relationships with partners and the community, which will



assist in the continued protection and enhancement of these great outdoor recreation resources.



EMPLOYMEN

Partnership Accelerates Sagebrush Return

In July 2016, the Anderson Fire in northwestern Nevada burned more than 14,400 acres, taking out much of the area's sagebrush. Sagebrush provides important cover, nesting habitat, and a food source for sage-grouse as well as crucial summer habitat for mule deer, pronghorn, bighorn sheep, and other wildlife. It can take decades to recover on its own.

Last year, the BLM's Eagle Lake Field Office in Susanville, California, had acquired 2,000 sagebrush seedlings through the Sagebrush in Prisons Project and offered them to the Carson City District. Katrina Krause, a wildlife biologist, jumped at the chance to obtain the seedlings, which came at no cost to the Carson City District.

Through a cooperative effort with the U.S. Geological Survey, Nevada Department of Wildlife, Lahontan Chapter of the Audubon Society, Eagle Lake Field Office, and interns from the Chicago Botanic Garden, the Carson City District planted all 2,000 seedlings in 3 days, despite inclement weather. Krause noted that the seeding

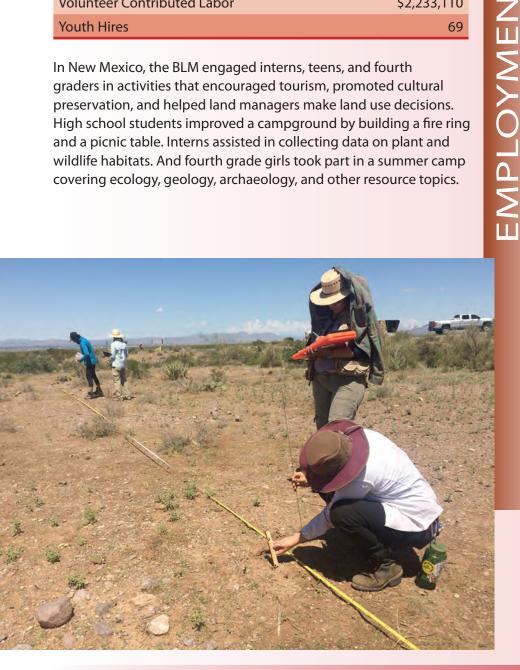


project nicely rounded out the interns' career exploration experience. "They spent their summer doing seed collection, plant surveys, and weed inventories. They like variety in their work, so were excited to do something different. Their work was really helpful."

NEW MEXICO/ OKLAHOMA/TEXAS KANSAS

By the Numbers	
Education and Interpretation Program Participants	222,163
Volunteer Hours	87,814
Volunteer Contributed Labor	\$2,233,110
Youth Hires	69

In New Mexico, the BLM engaged interns, teens, and fourth graders in activities that encouraged tourism, promoted cultural preservation, and helped land managers make land use decisions. High school students improved a campground by building a fire ring and a picnic table. Interns assisted in collecting data on plant and wildlife habitats. And fourth grade girls took part in a summer camp covering ecology, geology, archaeology, and other resource topics.



Interns Collect Resource Data

Every year, the Las Cruces District Office hosts a number of interns, including university graduates and students currently working toward degrees, to work with BLM specialists on projects that protect, maintain, and enhance public land and resources. Some of these interns also do crossover field work for other BLM and Forest Service areas in the state, allowing them to gain experience in their field of study and learn about various careers in land management.

In FY 2018, interns took part in projects for the aquatic and terrestrial assessment, inventory, and monitoring program. Project crews had several interns who collected data on aquatic sites and plant and wildlife habitats. The information they collected will help the BLM better manage the resources and process public land use authorizations.

The BLM Las Cruces District also had several interns working on archaeology, interpretation, and watershed and land restoration projects. These interns collected data to identify and map sites that need special attention for cultural resource inventories and completed on-the-ground projects to clean up areas affected by illegal dumping.



International Students Lend a Hand at Datil Well Campground

A group of 40 high school students from Menaul School in Albuquerque visited Datil Well Campground, managed by the BLM Socorro Field Office, for a campout and service project. BLM employees Denny Apachito and Mike Comiskey coordinated the event.

The Reverend James Menaul founded Menaul School in 1896 as a boarding school for Spanish speaking boys. Now coeducational, the school offers a number of English as a second language classes, which makes it appealing to international students. Students from China, Japan, Vietnam, and Spain were a part of the group that volunteered at the campground.

Students built a dry-laid apron around a culvert and spread native seed and mulch nearby at a new restroom facility. They also installed railings for the ramp to the visitor center and a new picnic table and fire ring. BLM archaeologists Michael Papirtis and

Brenda Wilkinson gave presentations on unauthorized collection of artifacts and the history of the Magdalena Trail, including the installation of the campground's well in 1938 for ranchers to water livestock as they moved them along the trail.

John Sitler from the Menaul School said, "Our sophomores had a fantastic experience at Datil Well! The work was meaningful and the supervisors were great with the students, making sure everyone was involved. We look forward to coordinating with BLM on future service and learning projects."





Summer Camp Shapes Future Public Land Ambassadors

In July, 13 fourth grade girls from Sunrise Elementary School in Las Cruces, New Mexico, participated in an Every Kid in the Park summer camp. The weeklong camp is a collaborative effort between federal land management agencies and Friends of Organ Mountains-Desert Peaks.

The BLM's Las Cruces District staff, including Volunteer Coordinator Eileen Davis, Monument Park Ranger Daniella Barraza, and Department of the Interior VISTA Volunteer Amanda Munro, hosted and transported the girls to public lands all over southern New Mexico. They visited the White Sands National Monument, managed by the National Park Service; Lincoln National Forest, managed by the Forest Service; and Prehistoric Trackways National Monument, Dripping Springs Natural Area, and Aguirre Spring Recreation Area and Campground, managed by the BLM.

Through hands-on activities and outdoor exploration, the girls learned about ecology, wildlife biology, geology, botany, archaeology, wildland firefighting, "Leave No Trace" outdoor ethics, and the agencies' missions from female land and resource agency professionals. The girls made their own walking sticks from sotol stalks and paintbrushes from yucca leaves, and they recorded reflections in their nature journals.

One camper wrote the BLM guides a letter saying, "The camp changed my life . . . and I went from not wanting to go outside to take out the trash, to loving nature and wanting to go hiking and exploring."



By the Numbers	
Education and Interpretation Program Participants	1,505,625
Volunteer Hours	115,055
Volunteer Contributed Labor	\$2,925,849
Youth Hires	490

In 2018, National Public Lands Day events spanned the state of Washington as volunteers improved recreation areas and wildlife habitat. A summer youth crew built trails and fences, and elementary students made a wild and scenic river the focus of a multidisciplinary learning adventure in Oregon.





Students' Art Celebrates the Crooked Wild and Scenic River

For the past 5 years, the High Desert Museum in Bend, Oregon, has partnered with local elementary schools to produce the Kids Curate program. Through this program, students work with museum curators throughout the school year, learning how to merge science and art. The program is fully funded by grants and supported by various artists in residence.

Fifth graders from Crooked River Elementary School in Prineville, Oregon, took part in this year's program, which celebrated the 50th anniversary of the Wild and Scenic Rivers Act. The students explored the natural and cultural history of the Crooked Wild and Scenic River with the help of experts from the BLM's Prineville District Office.

Using this information, each student designed and drew or painted an aspect of the river, from its ecosystem and rich geologic history to the wildlife and the cultural history of the area. Artists also helped instruct the students in creating large charcoal drawings representing different landscape views of the river.

The program culminated in an exhibition of the students' work at the museum. The young artists and their families and friends joined the BLM and High Desert Museum on opening night for a celebration of their accomplishments. In addition, the BLM installed four interpretive panels that include the kids' art along the Chimney Rock segment of the Crooked Wild and Scenic River, where the kids and future visitors can enjoy them for years to come.

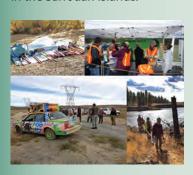
EDUCATION 学





Volunteers Pitch In Across Washington

From eastern Washington to the state's Pacific Coast, National Public Lands Day projects supported outdoor recreation and protected sage-grouse habitat. Work at the Fishtrap Loop Trail in eastern Washington involved more than 50 volunteers, who built and performed maintenance on the nonmotorized trail. At the Saddle Mountains in central Washington, nine volunteers repaired and painted the entrance kiosk, spread gravel, replaced BLM signs, removed noxious weeds, and picked up litter. Additionally, at nearly the westernmost point in the state, 145 volunteers picked up more than a ton of garbage during the Great Islands Cleanup in the San Juan Islands.





Lane County Youth Crew Builds Job Skills

Looking Glass' Lane-Metro Youth Corps provides work experiences on public lands each summer for Lane County youth. In the summer of 2018, a dozen youths, ranging in age from 15 to 23, tackled projects such as constructing trails, erecting fences, and maintaining fisheries habitats. In addition to improving environmental conditions, the program introduces participants to the world of work, building their teamwork, communication, and problemsolving skills.

Looking Glass has operated the program since 1990 in partnership with the Lane Workforce Partnership, Oregon Youth Conservation Corps, and the Oregon State Marine Board.





By the Numbers	
Education and Interpretation Program Participants	512,042
Volunteer Hours	83,034
Volunteer Contributed Labor	\$2,111,555
Youth Hires	156

Youths, volunteers, and partners worked with the BLM on resource projects throughout Utah. Staff members from many Utah field offices helped youth corps members learn about and experience land management careers. A candidate for the rank of Eagle Scout organized volunteers to protect bike trails from erosion. Students undertook a service–learning project to photograph and map rock art sites, helping land managers locate these cultural resources.



Cedar City Field Office Hosts an Archaeology Field Work Day

A group of students from Entheos Academy participated in a day of archaeology field work organized by Utah's Project Archaeology program and Southern Utah University. About 50 sixth grade students visited an archaeological site on BLM-managed public lands near Cedar City with Courtney Mackay, the Cedar City Field Office archaeologist.

The program provided hands-on exercises for the students, teaching them to record rock art panels and conduct an archaeological survey as part of a

service-learning project. The students used global positioning system devices, measuring equipment, and photography to document 11 previously recorded and 13 unrecorded rock art panels. They identified artifacts near the rock art panels during the archaeological survey.

Southern Utah University currently houses all of the site updates from this field work.

"Experiencing what an archaeologist really does was exciting," said one student while conducting field surveys with Mackay. In addition to engaging the students, the project promoted stewardship of significant archaeological resources on public lands.







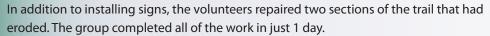


VOLUNTEER

Mountain Bikers Improve McCoy Flats

Stephanie Cooper, an outdoor recreation planner with the BLM's Vernal Field Office, worked with 30 volunteers to improve the visitor experience at McCoy Flats. Volunteers included the Northeastern Utah Mountain Bikers, who had recently approached the BLM about sections of the trail system plagued by erosion, and Tate Watt, who wanted to translate his love for riding his bike at McCoy Flats into an Eagle Scout project.

These volunteers came together to install 21 new signs, including a new and improved interpretive sign at the trailhead. They installed 15 directional signs at intersections so users could more easily navigate the many looping trails in the system. They also installed five trail etiquette signs to educate trail users about acceptable conduct on the trail. One of the newly installed signs reads, "Do Not Ride Wet Trails, #RutsSuck."









BLM Utah Celebrates Youth Program Superstars

Each year, the BLM in Utah recognizes employees and partners who have conducted outstanding work with youth in their communities. Several of the 2018 awardees focused on youth employment.

Emily Jencso, a wildlife biologist in the Salt Lake Field Office, mentored five youth interns, helping to enrich their skill sets for future employment. The interns helped Jencso provide several fourth grade classes with hands-on lessons and a field trip for National Public Lands Day. Over 100 students, teachers, and parents attended this "BioBlast" event, where they learned about the water cycle, macroinvertebrates, wildlife, and plants.

The Intergovernmental Internship Cooperative has worked with the BLM's Cedar City Field Office to provide internships to youth for the past 10 years. In 2018, this partnership between Southern Utah University; Native American tribes of southern Utah, northern Arizona, and eastern Nevada; and federal land management agencies provided 46 BLM internships, accounting for 14,317 hours of work. Many former interns have since obtained permanent positions with federal land management agencies in various fields.

Raymond Brinkerhoff, a botanist for the Grand Staircase-Escalante National Monument, is a strong advocate and supporter of the BLM youth education and employment program. Brinkerhoff managed and mentored Native American Youth Conservation Corps participants supporting the Native Plant Restoration Project. Their work on this project helped the interns learn plant identification, monitoring techniques, and cultural traditions.





By the Numbers	
Education and Interpretation Program Participants	312,107
Volunteer Hours	6,060
Volunteer Contributed Labor	\$154,106
Youth Hires	118

In Wyoming, youth corps members were force multipliers, helping the BLM with conservation and restoration activities as they gained job skills. Volunteers assisted with projects at the Weston Hills Special Recreation Management Area for National Public Lands Day. The BLM hosted a field day for elementary students, who rotated through a variety of learning stations.









Conservation Crews Help the BLM in the Northern Red Desert

For the second year in a row, the BLM, Wyoming Conservation Corps, and Wyoming Wilderness Association partnered to conserve important areas managed by the BLM's Rock Springs Field Office. "The crew focused their work in the Northern Red Desert, a place that is important to the public and essential for wildlife," said Shaleas Harrison, organizer for the Wyoming Wilderness Association. The crew improved trails, reclaimed roads, repaired fences, and placed signs around two BLM wilderness study areas.

At the White Mountain Petroglyphs, the Wyoming Conservation Corps crew rehabilitated a mile of highly eroded trail. Nearby, they reclaimed several routes that encroached on the hillside of the Boar's Tusk, a dormant volcano that offers outstanding views and recreational opportunities. The crew also placed signs marking the boundaries of the Sand Dunes and Buffalo Hump Wilderness Study Areas and repaired a buck and rail fence circling the historic Crookston Ranch.

The Wyoming Wilderness Association sponsored the crew and worked as a liaison between the BLM and the Wyoming Conservation Corps. The corps organized a crew of eight university students, while BLM Recreational Planner Georgia Foster prepared the details of the project and worked with the crew in the field. "This is one of the most rewarding parts of my job, and projects and partnerships like this tremendously help us restore and conserve public lands," said Foster.

EMPLOYMEN

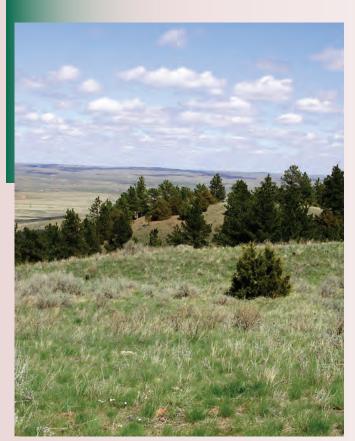




Volunteers Clean Up at Weston Hills

For National Public Lands Day, the BLM's Buffalo Field Office hosted volunteer projects that promoted restoration and resilience in the Weston Hills Special Recreation Management Area. The recreation area is about 25 miles north of Gillette.

The Weston Hills area is home to mule deer, antelope, elk, turkey, and eagles. It is also a popular spot for four-wheeling, riding all-terrain vehicles, and hunting. Volunteers cleared trash, removed weeds, repaired fencing, and did some general site maintenance, all of which made the area more accessible for recreational uses.



ATION

Students Explore Wildlife During Field Days

Employees from the Rock Springs and Kemmerer Field Offices helped host Field Days, an annual event held each May for local third through sixth grade students at the Seedskadee National Wildlife Refuge. ("Sisk-a-dee-agie" is a Shoshone word meaning "river of the prairie hen.") The refuge is a 27,230-acre area of wetland, riparian, and upland shrub ecosystems along the Green River near Wyoming's Wind River Range. It includes an important migration route and nesting area for various migratory waterfowl, as well as prime habitat for many insects and fur-bearing mammals.

Upon arriving at the refuge, students formed five groups and rotated through stations that revolved around the wildlife and the extraordinary habitat within the refuge. Some stations offered hands-on and up-close looks at local macroinvertebrates, including crawfish, stonefly larvae, leeches, and several other water critters. Other stations involved bird watching, scavenger hunts, and an obstacle course.

The U.S. Fish and Wildlife Service manages the refuge.
Representatives from Trout Unlimited, the Wyoming Game and Fish Department, and other organizations contributed to the events.







