

# FOREST NEWS



The Newsletter of Forest Service Employees For Environmental Ethics

Fall 2021

# Restoring Wetlands for Forest Resilience



## Inside

30X30 / NEW FOREST SERVICE CHIEF / 227 /  
BLM RE-RELOCATING / 4FRI BOONDOGGLE

# The Costs of Mining the West

Once upon a time in the West, miners dug hundreds of thousands of holes looking for gold and silver before ultimately abandoning a half million mines. Many of these sites still drain toxics into streams, killing native species and multiplying water treatment costs. Not cleaning up these sites is not an option, but it will cost about \$35 billion. Since those who profited from the mining are essentially long gone, the public will have to cover most of this bill. On the plus side, the majority of the cleanup will only require a one-time investment thanks to state-of-the-art engineering. It's a big job, but doable.

With mining came logging. Like mining, logging removed only the biggest and best veins of trees, leaving forests scarred with roads, invasive plants, and compacted soils. The first trees cut were used to build mining flumes and stabilize mine shafts. Mining towns and ore-hauling railroads were also built from locally logged trees. Mining-related logging left its own legacy that continues to be felt in the forest health crisis that dominates today's Forest Service.

From Colorado's Front Range to California's Sierra Nevada, the search for mineral riches left a forest health reclamation bill for future generations. It's a debt that dwarfs mining's remedial cost. The Forest Service says about 80 million acres in the West have too many small trees that are salad for insects and kindling for fire. The Forest Service solution is to garden the national forests with assiduous thinning and prescribed fire to restore historic tree densities.

At a cost of \$1,000 per acre, that's an \$80 billion bill. With an annual Forest Service budget of \$6 billion, thinning the problem away would be a very heavy lift. And unlike mine reclamation, \$80 billion isn't a one-time cost. Fire-prone firs and flammable brush will re-grow promptly. Our financial commitment to thinning and prescribed fire must be perennial if it is to make a difference.

The sheer expense of gardening the West's vast landscape explains why so little thinning actually happens. Consider, for example, Sequoia and Kings Canyon National Parks, where the KNP Complex fire threatens giant Sequoia trees. If there's one place where prescribed burning has been endorsed enthusiastically, it is in these national parks. But funding has never kept up with need. As I write, the fire has burned over 76,000 acres in these parks at a fire suppression cost of \$86 million, exceeding the Park Service's nationwide prescribed fire budget.

There's no easy answer to mining's troubled legacy, but that legacy is costing us billions of dollars every year. So why does Congress not repeal the 1872 General Mining Act that promoted these abuses? In 1872, we could claim ignorance of its long-term costs. Today, only political graft can account for Congress' failure to repeal this law.

Sincerely,



Andy Stahl

## Inside

### 3 | Featured Forest

Green Mountain National Forest, Vermont

### 4 | In Depth

Low-tech process-based wetlands restoration can improve forest health and wildfire resilience in the face of climate change.

### 7 | Briefly

Severe Wildfire Frequency · 30x30 Update · 227 · BLM Re-relocating · Unexplained Deaths and Toxic Algae · Collaboration on Private Forest Management

### 9 | Dispatch

New USFS Chief · 4FRI · Wildfire Threat to Sequoias

*Cover photo: Wetlands created and maintained by beavers, like this one in Idaho, can help mitigate the worst effects of climate change, including drought and wildfire.*



The Hapgood Pond Recreation Area of the Green Mountain National Forest displays its fall foliage.

# Featured Forest

## Green Mountain National Forest

Located in Vermont's Green Mountains, Green Mountain National Forest is a temperate broadleaf and mixed forest typical of the New England and Acadian forests ecoregion. The forest supports a variety of wildlife, including beaver, moose, coyote, black bear, white-tailed deer, and wild turkey.

Established in 1932 in response to over-logging, fire, and flooding, the forest originally consisted of 102,100 acres, but it has grown to include 821,040, of which 399,151 acres are federally owned and administered. The Green Mountain National Forest is one of only two National Forests in New England. The other is the White Mountain

National Forest in New Hampshire.

Green Mountain National Forest includes eight designated wilderness areas:

- Bristol Cliffs Wilderness, **3,750 acres.**
- Breadloaf Wilderness, **24,986 acres.**
- Joseph Battell Wilderness, **12,336 acres.**
- Big Branch Wilderness, **6,725 acres.**
- Peru Peak Wilderness, **7,825 acres.**
- Lye Brook Wilderness, **18,122 acres.**
- Glastenbury Wilderness, **22,400 acres.**
- George D. Aiken Wilderness, **4,800 acres.**

The forest includes parts of the nationally designated Appalachian Trail, the Long Trail, and the Robert Frost National Recreation Trail. The forest also includes seven Nordic ski areas, three alpine ski areas, and approximately 900 miles of multiple-use trails for hiking, horseback riding, bicycling, cross-country skiing, and snowmobiling.

The most popular season for recreation in Green Mountain National Forest is autumn, when the trees display their brilliant fall colors. Hunting is also popular in autumn while summer brings hikers, campers, equestrians and anglers to the forest. Spring brings an abundance of wildflowers and mud, so hiking and other trail uses are discouraged during mud season.

## Low-Tech Restoration for Forest Health

The devastation caused by catastrophic wildfire has sparked an overdue federal reaction to climate-driven crises. Proposed and approved budget increases will ramp up forest thinning and firefighting efforts, but Jackie Corday would like to see a more balanced approach that looks beyond wildfire mitigation and containment to ecosystem health and resilience. Corday is a Colorado natural resources consultant and former Colorado Parks and Wildlife Water Resources manager. She advocates for stream and wetlands restoration in parallel with wildfire mitigation efforts, starting with headwaters regions where restoration efforts will generate the most benefit.

Corday believes the Forest Service is “the agency that can make the greatest impact for improving headwaters health in Colorado and other Western states.” Therefore, the Forest Service “can and should be a leader in scaling up headwater restoration of streams and wetlands — our natural water infrastructure — on our National Forests to improve water security and climate resilience to wildfires and drought.”

The Forest Service would seem to agree with Corday since its [Water Facts webpage](#) identifies water as “one of the most important natural resources

flowing from forests. National Forests and Grasslands are the largest source of fresh water in the U.S. under a single manager .... Some 180 million people in over 68,000 communities rely on these forested lands to capture and filter their drinking water.” A [2010 report](#) from the Forest Service Pacific Northwest Research

### Water Security:

*the adaptive capacity to safeguard the sustainable availability of, access to, and safe use of an adequate, reliable and resilient quantity and quality of water for health, livelihoods, ecosystems and productive economies.*

**[Sustainable Water Partnership](#)**

A beaver lodge sits in wetlands maintained by beaver activity in Colorado wilderness. A 2006 study conducted in Rocky Mountain National Park concluded that increases in aquifer recharge and groundwater storage “may be the most important beaver-related factor in mitigating effects from climate change.”

Station documents the particular importance of high-elevation forests, which store vast quantities of water as snow during the winter then release it gradually through spring and summer, sustaining downstream water supplies.

But as Corday points out, due to current budgeting, staffing, and directives, the large majority of the agency's time and resources "are spent on timber harvest plans and fighting wildfire," even though National Forests are "the largest source of municipal water supply in the nation." With so much of the Forest Service budget dedicated to timber harvests and wildfire programs, the agency's restoration capabilities have suffered budget and staffing cuts. Those cuts have come at a time when National Forests and their water supplies face growing threats from climate change, including longer and more frequent droughts, reduced snowpack, increased tree mortality from insects and disease, and catastrophic wildfires.

These climate-related issues are exacerbating the fundamental problem of thousands of miles of degraded, incised waterways.<sup>1</sup> In the National Forests of Colorado and the West, stream degradation began in the 1800s when the fur trade decimated beaver populations. Estimates of the North American beaver population prior to European settlement vary from 60 million to 400 million, but by 1899, beavers were considered rare. The removal of beavers from the landscape altered critical ecosystems that naturally conserved water in wetlands and alluvial aquifers, which in turn

<sup>1</sup>Forty-nine percent of all river miles in the West are modified from their natural state.



North American beaver (*Castor canadensis*).

sustained streams and rivers during drought years.

Without beavers maintaining the dams they'd built for millions of years, rivers began to flow faster, carving channels below their floodplains, and water drained out of the landscape, including the alluvial aquifers. The resulting ecosystem is drier, less resilient to drought, and more prone to catastrophic wildfire. Given the time frame, historical records cannot even document the extent of wetlands loss from over-trapping beavers. Historic mining and logging practices added to the stream-health problem, as have unmanaged grazing of livestock, riparian vegetation removal, alteration of stream flows, and channelization.

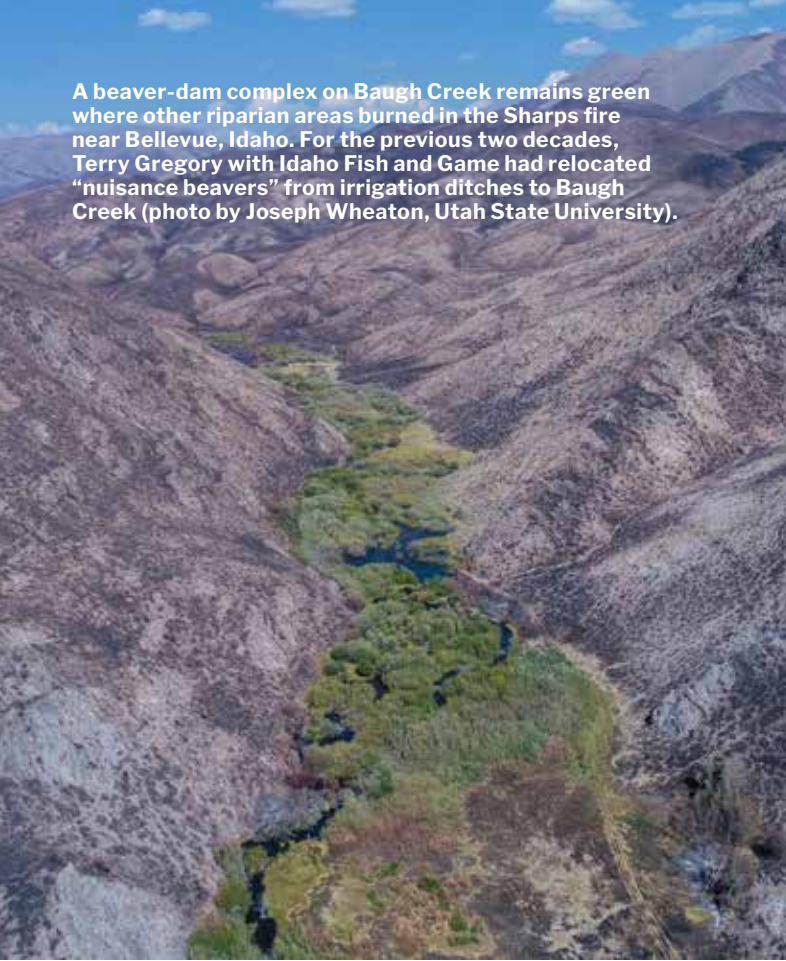
To begin restoring waterways and increase resilience to the effects of climate change, numerous agency reports and [academic studies](#) indicate that taking a [low-tech, process-based restoration](#) (LTPBR) approach provides an economical, scalable natural solution. Utah State University Watershed Sciences Professor Joe Wheaton and his colleagues are leading the way. They currently work with the Forest Service, BLM,

Natural Resources Conservation Service, U.S. Fish and Wildlife Service, state wildlife agencies, conservation organizations, and private landowners. Their LTPBR work relies on local, natural materials to create temporary structures that mimic the influence of beaver dams.

As these "beaver dam analogs" trap sediment, stream levels gradually rise, floodplains reconnect, and aquifers rehydrate. "When using BDAs to restore incised streams, the goal is that beavers will return and take over the structures because members of this keystone species are the most beneficial long-term agents of maintaining river health," said Mark Beardsley of EcoMetrics, who specializes in stream restoration. Over time, this type of process-based restoration can effectively reconnect incised streams to their floodplains and costs substantially less per mile than traditional engineering approaches with heavy equipment.

With thousands of miles of degraded streams and thousands of acres of degraded wetlands in National Forests, Corday advocates for, "in addition to fuels reduction, an equal and parallel effort to

A beaver-dam complex on Baugh Creek remains green where other riparian areas burned in the Sharps fire near Bellevue, Idaho. For the previous two decades, Terry Gregory with Idaho Fish and Game had relocated “nuisance beavers” from irrigation ditches to Baugh Creek (photo by Joseph Wheaton, Utah State University).



restore the natural water infrastructure in source watersheds ... with low-tech process-based methods.” She cites multiple benefits of restoring headwaters streams and wetlands:

- Improved water quality because floodplains and wetlands filter out sediments and other pollutants.
- Attenuated snowpack runoff and storm flows in floodplains, which improves later season flows.
- Improved riparian habitat and ecologic function.
- Improved resilience to wildfire and drought as documented by [research](#) showing vegetation around beaver complexes has a three-times greater survival rate than in other riparian areas.
- Reduced flood risks as healthy floodplains and wetlands absorb storm runoff.

Specifically, Corday recommends that the Forest Service “undertake an effort to substantially scale up protection and restoration of our National Forests’ natural water infrastructure — the source watershed streams, wetlands, and meadows that capture annual snow melt and storm events. Restoring, protecting, and managing this natural water infrastructure will improve wildlife habitat and water security for thousands of communities across the west.”

On the political front, Corday is educating lawmakers about the need for stream restoration and lobbying them to support a new national directive to protect water security, prioritize funding for natural water infrastructure restoration, and increase Forest Service restoration staffing. “Funding is essential for these strategies to be scaled up effectively,” she said. However, without additional Forest Service staff positions to design, plan, oversee, track, and monitor successful projects, increased budget alone will not lead to successfully upscaling this work across National Forests.”

In April, Senators Michael Bennet (D-Colo.) and Ronald Wyden (D-Ore.) introduced Senate Bill 1248, the Outdoor Restoration Partnership Act “to establish an Outdoor Restoration Fund for restoration and resilience projects.” Corday sees this bill as an opportunity for the Biden administration and Congress to provide the leadership needed “to ensure a more secure water future by protecting healthy watersheds and restoring degraded streams and wetlands in the face of increasing water scarcity and climate change.”

If passed, the bill would establish a grant program to fund increased capacity for planning, coordinating, and monitoring restoration and resilience projects. The bill would also establish a Restoration and Resilience Partnership Program through which the Agriculture Department would carry out “restoration and resilience projects that reduce wildfire potential, improve community resilience in the wildland-urban interface, or restore wildlife habitat.”

Corday also points out that LTPBR “fits perfectly into helping achieve existing priorities” as stated in the Forest Service Strategic Plan:

- Conserve, maintain, and restore watersheds, ecosystems, and the services they provide to people.
- Use the Watershed Condition Framework to identify restoration priorities.
- Maintain water of sufficient quantity and quality to sustain aquatic life and support terrestrial habitats, domestic uses, recreation opportunities, and scenic character.

LTPBR is also an effective strategy to protect drinking water supplies by mitigating post-wildfire debris flows. More in-depth information about LTPBR’s many benefits and applications is provided in Professor Wheaton’s April 2021 presentation for the Natural Areas Association.

## *Study: Severe Wildfire More Common Prior to 1900*

A peer-reviewed study published in September finds that severe wildfires were less common during the past three decades than they were prior to the 20th century.

William Baker, professor emeritus at the University of Wyoming, authored the study, and his analysis shows, “The rate of recent high-severity fire in dry forests is within the range of historical rates, or is too low, overall, across dry forests and individually in 42 of 43 analysis regions.”

Baker told E&E News, “Recent severe fires have not increased because of mismanagement of dry forests or unusual fuel buildup since these fires overall are occurring at lower rates than they did before 1900.”

The Forest Service declined to comment for the E&E News article, citing former Chief Tom Tidwell’s testimony in April, when he told a House committee that forests are at risk “due to uncharacteristically severe wildfires.”

## *30x30 Update*

The Biden administration’s commitment to the “30x30” goal of conserving 30% of the planet’s lands and waters by 2030 remains enigmatic, in part because the administration has changed the playing field.

The original concept of conserving 30% of natural spaces addressed two goals — mitigating climate change and safeguarding biodiversity. The administration’s America the Beautiful initiative adds a social justice element, and the basic parameters for the initiative — baseline, targets, metrics — have not been defined.

An August statement from Interior Secretary Deb Haaland reads, “Increasing access to outdoor recreation opportunities is essential to advancing the Administration’s commitment to the conservation stewardship of our public lands.”

As reported by Jennifer Yachnin in Greenwire, Interior Department spokesman Tyler Cherry said, “The interagency work to implement the initiative is in its early stages and making steady progress.”

## *227*

Global Witness reports that 227 environmental and land-rights activists were murdered in 2020, the highest number since the organization began tracking lethal attacks against activists in 2012.

The report indicates almost one-third of the murders were linked to resource exploitation, with the logging industry implicated in more murders than any other industry — 23 cases in Brazil, Nicaragua, Peru, and the Philippines.

Indigenous peoples accounted for an additional one-third of cases, and Colombia had the highest number of recorded attacks, with 65 people killed last year. While no environmental activist murders were documented in the U.S., one such murder was recorded in Canada.

According to Global Witness, “As the climate crisis intensifies, violence against those protecting their land and our planet also increases.” Additionally, “Our figures are almost certainly an underestimate, with many attacks against defenders going unreported.”




*A severe wildfire burns in California.*



*The Forest Service Aspen Ridge Roadless Area provides this view of the Continental Divide. H.R. 803 would designate the area as wilderness and is touted by Rep. Joe Neguse (D-Colo.) as a legislative component of the America the Beautiful initiative.*



*In Nicaragua, 12 “environmental defenders” were murdered in 2020, making it the most dangerous country per capita for environmental and land-rights activists.*



The BLM rents space in this building for its current headquarters in Grand Junction. Oil-and-gas companies also have offices in the building.

## *BLM Re-relocating*

---

Under Trump administration leadership that a federal judge ruled was illegitimate, the Bureau of Land Management headquarters was moved from Washington, D.C., to Grand Junction, Colo. Current Interior Secretary Deb Haaland recently announced that BLM headquarters will move back to D.C.

Haaland's announcement provided few details but said the plan is to convert the Grand Junction office to a Western hub. Haaland criticized the "destructive" move to Grand Junction that "scattered employees and programs across the West" and isolated BLM leadership from Congress and the rest of the Interior Department.

The responsibility for overseeing the move will fall to new BLM Director Tracy Stone-Manning, whose five-month confirmation process proved contentious and controversial. The chief's early challenges will include hiring high-level staffers to replace those who resigned from BLM rather than relocate to Colorado.

## *Unexplained Deaths, Toxic Algae, and Fire Retardant*

---

The mysterious deaths of a California family and their dog in Sierra National Forest made headlines in August. A cause of death has yet to be announced, but toxic cyanobacteria associated with algae blooms is suspected.

Mariposa County Sheriff Jeremy Briese said test results from water samples show "high levels" of anatoxin-a, which the National Institutes of Health describe as "a potent neurotoxin produced by cyanobacteria." Exposure to anatoxin-a "at sufficiently high doses ... can lead to paralysis, asphyxiation and death."

According to NOAA, toxic algae blooms occur when nutrients like phosphorus and nitrogen "overfeed" algae. Aerial fire retardant contains compounds that can trigger algae blooms, and retardant was used to fight the 2018 Ferguson Fire that burned in the area where the family's bodies were found.

## *Conservancy, Investors Collaborate on Forest Management*

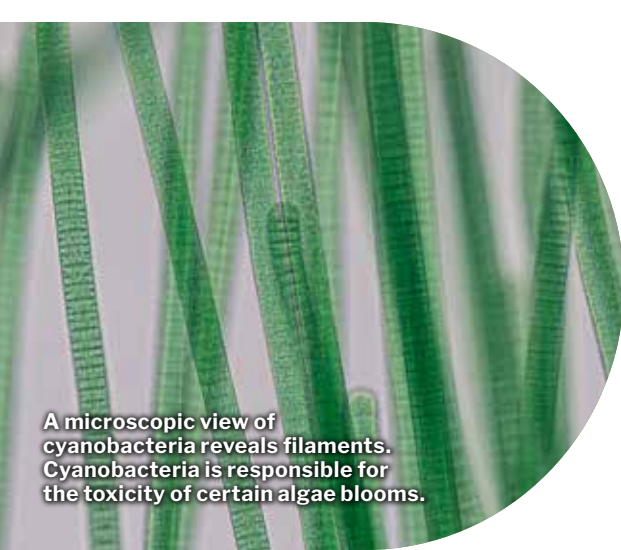
---

The Nature Conservancy has partnered with BTG Pactual Timberland Investment Group through an initiative to sustainably manage forests in 11 U.S. states from the South to the Pacific Northwest.

The initiative will address "the twin crises of biodiversity loss and climate change" and assess "a wide range of conservation opportunities, including supporting habitat restoration and connectivity and generating high-quality carbon offsets," according to a statement issued by The Nature Conservancy.

The initiative involves more than 500,000 acres managed by BTG Pactual, which sees the initiative as potentially "enhancing financial performance," given recent efforts by investors to align portfolios with environmental and social values.

The Conservancy will be the "conservation advisor" for these timberlands, citing the potential for U.S. forests to capture nearly twice as much carbon "if concerted efforts are made to conserve more forests, plant trees and adopt climate-smart practices for managing working forests."



A microscopic view of cyanobacteria reveals filaments. Cyanobacteria is responsible for the toxicity of certain algae blooms.



A forester assesses the trees under his management in a Pacific Northwest forest. The Nature Conservancy's partnership with BTG Pactual will attempt to manage private forests to balance sustainable timberland production with social values in a way that enhances investment portfolios.



## Four Forest Restoration Initiative

The Forest Service has halted the largest restoration initiative of its kind, the Four Forest Restoration Initiative (4FRI), an effort to thin forests on 2.4 million acres of land in northern Arizona to reduce the risk of catastrophic wildfire. FSEEE has consistently questioned this program, launched more than a decade ago to restore woodlands in the Kaibab, Coconino, Apache-Sitgreaves, and Tonto National Forests.

The Forest Service website indicates the overall goals of 4FRI are “to restore the structure, pattern, composition, and health of fire-adapted ponderosa pine ecosystems; reduce fuels and the risk of unnaturally severe wildfires; and provide for wildlife and plant diversity. In addition to creating sustainable ecosystems, one of the key objectives is creating and developing sustainable industries” that are “expected to create a variety of jobs across northern Arizona.”

When 4FRI was launched, it received widespread support from timber companies and environmentalists alike, but the initiative has never lived up to expectations. The first phase of the project was intended to treat 300,000 acres, but only a fraction of that acreage has received treatment. The latest setback comes with the recent Forest Service decision not to award a contract for the second phase of work on 812 square miles.

The Forest Service solicited bids for the work two years ago with a contract award expected by May 2020 and the work expected to last for 20 years. In deciding not to award the contract, the Forest Service cited “significant risks (that) compromise the likelihood of successful performance over 20 years.”

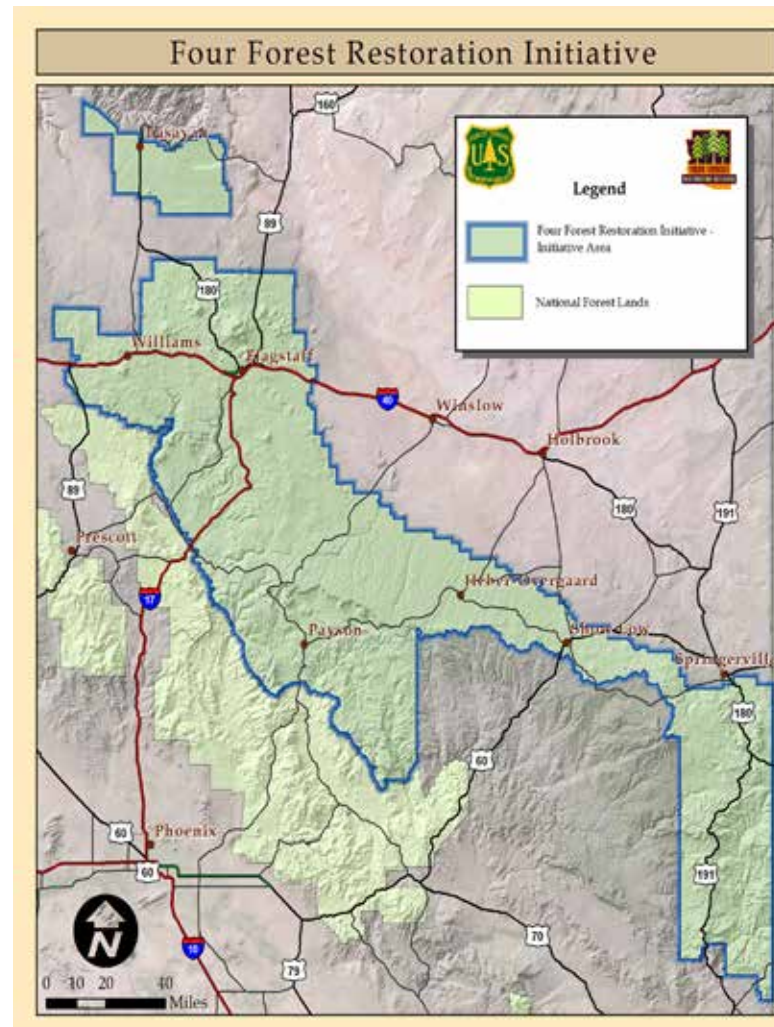
In 2011, the Forest Service and the 4FRI Stakeholder Group signed a memorandum of understanding to accomplish the ambitious 20-year project. The Stakeholder Group represents 45 entities, including local governments, state agencies, timber industry groups, and conservation groups, many of whom have expressed dismay with the Forest Service decision to cancel the phase 2 contract.

The 300,000-acre phase 1 contract for 4FRI was initially issued to Montana-based Pioneer Forest Products in 2012, but Pioneer left the project just a year

into the contract, and the U.S. Forest Service gave the contract to Good Earth Power. The company never met contract goals and faced lawsuits from a former partner alleging fraud and from former executives alleging unpaid salaries.

In 2019, Pacific Northwest logger Tom Loushin and his former Washington-based company invested in Good Earth Power, now known as NewLife Forest Products. Loushin brought more than 40 years of experience in large-scale timber operations to 4FRI from his time in Washington and Alaska, hoping to reinvigorate the lagging restoration operation, but as the phase 2 cancellation suggests, results have been less than stellar.

*A Forest Service map shows the extent of the troubled 4FRI project in northern Arizona.*



# New Forest Service Chief Randy Moore

In July, Agriculture Secretary Tom Vilsack named Randy Moore the new Forest Service chief. In announcing the appointment, Vilsack said, “Randy Moore has been a catalyst for change and creativity in carrying out the Forest Service’s mission to sustain the health, diversity and productivity of the nation’s forests and grasslands. ... In his role as regional forester, Randy has been a conservation leader on the forefront of climate change, most notably leading the Region’s response to the dramatic increase in catastrophic wildfires in California over the last decade. His proven track record ... positions him well to lead the agency into the future at this critical time.”

Moore’s background also includes managing state and private forestry programs in Hawaii, serving as regional forester for the Eastern Region in Wisconsin, and serving as forest supervisor for the Mark Twain National Forest in Missouri. He began his 43-year career in 1978, working in the Department of Agriculture’s Natural Resources Conservation Service in North Dakota.

The National Wildlife Federation applauded Moore’s appointment. “Randy Moore has demonstrated strong leadership in stewarding our nation’s forests and grasslands at time when they are under threat from climate change, megafires, invasive species, and drought,” said Mustafa Santiago Ali, vice president of environmental justice, climate, and community revitalization at the NWF.

E&E News reports that Moore also received a favorable response from industry groups like the California Forestry Association, where Steve Brink, vice president of public resources, praised Moore for moving quickly to work with nonfederal partners on projects like forest thinning in fire-prone areas. As a regional forester Moore emphasized wildfire response and, as recently as May, advocated for higher pay for firefighters.

Moore’s detractors include Susan Jane Brown, staff attorney with the Western Environmental Law Center, and Chad Hanson, forest ecologist and director of the John Muir Project. E&E News reports that Brown questions Moore’s commitment to addressing sexual harassment and that Hanson sees Moore as a typical



*Forest Service Chief Randy Moore*

Forest Service chief “focused on getting the cut out and promoting commercial logging” based on questionable science.

Several weeks after taking office, Moore told the Los Angeles Times, “Our forests are really in a state of crisis. ... Due to climate change, due to extreme drought that’s taken place, the fire intensity is just off the charts. ... I think you have to balance the conversation a bit by not only talking about the need to suppress these fires; we have to talk fuel treatments.”

# Climate-fueled Fires Threaten World's Largest Trees

**G**iant sequoia trees (*Sequoiadendron giganteum*) face an unprecedented threat from wildfires burning in California. The Windy Fire has burned through several sequoia groves in Sequoia National Forest, which includes Giant Sequoia National Monument, as well as on the Tule River Indian Reservation. Meanwhile, the KNP Complex Fire has burned portions of Sequoia National Park, home to General Sherman, the largest tree in the world. Both fires continue to grow as of this writing.

Firefighters have deployed water lines and sprinklers to help protect the massive trees; nonetheless, the Bench Tree, one of the sequoias in the National Forest's Trail of 100 Giants, was badly burned. Helicopters dropped water on the tree, dousing flames that had reached the crown, but damage to the iconic tree and other sequoias is still being assessed.

In the national park, employees wrapped the bases of giant sequoias, including General Sherman, in aluminum foil blankets and cleared needles and other fuel from the bases of the trees in an effort to minimize fire damage. Park officials credited previous prescribed burns with protecting trees in the National Park's Giant Forest, and firefighters have used prescribed burns to clear flammable vegetation from the stand of giant sequoias at nearby Muir Grove.

Giant sequoia trees have withstood frequent fires for millennia. Their thick bark protects them from flames, and their cones need the heat from fires to open and spread their seeds. But in a landscape parched by climate-driven drought, recent wildfires pose a serious threat. As last year's Castle Fire demonstrated, even giant sequoias will die if fire intensity overcomes their naturally-selected adaptations gained through millennia of fire exposure.

A preliminary report by the National Park Service estimates that the Castle Fire killed 31-42% of large sequoias within its footprint — 10-14% of all large sequoias across the tree's natural range in the Sierra Nevada. The number of large trees lost (those with trunk diameters of 4 feet or more) is estimated at 7,500-10,600.





# FSEEE

Forest Service Employees  
for Environmental Ethics

NONPROFIT ORG  
US POSTAGE  
PAID  
EUGENE OR  
PERMIT NO. 679

**P.O. Box 11615**  
**Eugene, OR 97440**  
**541-484-2692**  
**www.fseee.org**

Forest News is a publication of Forest Service Employees for Environmental Ethics. Our mission is to protect National Forests and to reform the U.S. Forest Service by advocating for environmental ethics, educating citizens, and defending whistleblowers. FSEEE is a 501(c)(3) nonprofit organization.

*Forest News is printed on post-consumer, recycled paper with vegetable-based ink.*

## Take Action

**The Congressional switchboard phone number is 202-224-3121, and it can connect you to your senators' offices. Thank you for helping us preserve our natural treasures!**

**Old-growth trees near Moonlight Dome in Olympic National Forest are a national treasure that provides clean water for salmon, unspoiled habitat for wildlife, and carbon sequestration for the health of the planet. Please help us protect this treasure as wilderness by contacting your elected officials in Congress.**

The ecological value of old-growth forest combined with the myriad of resident fish and wildlife species deserves the protection that only a wilderness designation can provide. That protection will also ensure that the forest continues to perform its invaluable climate role of sequestering carbon.

The Forest Service and FSEEE agree that Moonlight Dome's 9,000 acres of old-growth forests on the Olympic Peninsula deserve protection as wilderness. That's why we're asking all of you, yet again, to make your voices heard and call your senators to urge them to support Senate Bill 455, the Wild Olympics Wilderness and Wild and Scenic Rivers Act.

The House has already passed two versions of this bill this year alone!

When contacting your senators, first tell them who you are and that "I support S.B. 455, the Wild Olympics Wilderness and Wild and Scenic Rivers Act." Then mention two or three reasons why protecting wilderness is important. Examples include:

- Wilderness areas protect our sources of clean water.
- Wilderness stores carbon and protects against the effects of climate change.
- Wilderness promotes biodiversity.
- Wilderness reminds us that humans rely on the natural world for survival.

And if you have a personal story that illustrates the value of wilderness, please share it with your senators.