Living with Fire

Flagstaff, Arizona, undertakes a multimillion-dollar experiment to protect the city from fire and flooding.

Inside

NEW LEADERSHIP FOR FOREST SERVICE / MOVING MOUNTAIN GOATS / URBAN FORESTS ON THE DECLINE / FSEEE 2017 ANNUAL REPORT
Time to Speak Truth to Power

“T he forest is not alone useful for the timber we get from it; there are the streams, recreation grounds, shade and comfort, and fertile soil.” So said Gifford Pinchot, first chief of the Forest Service, shortly before being fired for blowing the whistle on the Secretary of Interior’s cover-up of fraudulent mineral claims by two of America’s wealthiest families. During an era, as described by Pinchot, when there was a “general belief that the special interests are once more substantially in full control of both Congress and the Administration,” the first chief set a high bar for his successors. In modern times, former Chief Jack Ward Thomas reiterated Pinchot’s progressivism when he called upon Forest Service employees to “tell the truth and obey the law.”

The standard of principled Forest Service leadership set by Pinchot and Thomas is proving a tough one for the Trump’s administration’s newly appointed “interim” chief, Vicki Christiansen. In Chief Christensen’s first appearance before Congress, she linked the creation of “between 340,000 and 370,000 jobs” plus “more than $30 billion in gross domestic product” to her agency’s “active forest management,” including selling 3.7 billion board feet of timber and removing “hazardous fuels.” The truth, however, according to the Forest Service’s own 2018 budget, is that the vast preponderance of these jobs and economic activity result from “recreation and wildlife visitor use” of national forests, not logging.

Perhaps Christiansen is guilty only of telling her bosses what she thinks they want to hear. It wouldn’t be the first time that a civil servant has self-censored to curry favor with her superiors and politicians who hold the agency’s purse strings in their hands.

With history threatening to repeat itself, this is no time for toadies in the chief’s office. The American people deserve a Forest Service leader who is willing to speak truth to power. Chief Christiansen can be that leader, but she’s going to have to earn it.

Sincerely,

Andy Stahl

Inside

3 | Featured Forest.
A wild, diverse Louisiana landscape.

4 | In Depth.
A handful of cities in the West are thinning the surrounding forests to lessen the risk of wildfire. Whether it will work is an open question.

7 | Briefly.
A warbler recovery; moving a Montana trail; mines near monuments.

8 | Dispatch.
The Forest Service has a new (interim) chief—and a proposed new Trump administration overseer.

10 | 2017 Annual Report.
A review of FSEEE’s activities and finances.

12 | Take Action.
House Republicans sneak a bevy of anti-environment proposals into 2018 Farm Bill.
The Kisatchie National Forest, the only one in Louisiana, is a place of remarkably diversity.

You’ll find a remote slice of the South called the “Little Grand Canyon.” There are streams ambling past stands of bottomland hardwood trees. The Kisatchie boasts flat-topped mesas, rare natural prairies, sandstone bluffs and forests of longleaf pine.

That diversity includes wildlife—biologists have counted 155 species of birds here, 56 types of reptiles, 48 mammals and 30 amphibians. Its botanical holdings include wild azaleas, which bloom brilliantly every spring, and carnivorous plants.

At 8,700 acres, the Kisatchie Hills Wilderness represents the largest wild area in the state. Locals gave it the Little Grand Canyon moniker, as the wilderness offers unusually rugged terrain for this part of the country.

The Kisatchie serves as a natural getaway for residents of the Pelican State. There are more than 100 miles of paths, including two national recreation trails, the Wild Azalea Trail and the Sugar Cane Trail. Saline Bayou, part of the National Wild and Scenic River system, tempts canoeists with calm, dark waters that reflect the pine and cypress trees crowding its muddy banks.
Can Cities Be Saved from Wildfires?

Flagstaff, Arizona, Offers a Case Study

On June 20, 2010, someone (authorities never found the culprit) left a campfire unattended in the forested mountains just north of Flagstaff, Arizona. The day was sunny and warm, with a stiff afternoon wind blowing in from the southwest—perfect conditions for a wildfire. The flames broke loose and leapt eagerly through the arid woods.

The Schultz Fire burned fast and hot. Well over half of the conflagration’s 15,075 acres burned on that first day, lofting impressive billows of smoke skyward. It soon stalled; fire officials declared the fire 100 percent contained just ten days later. The flames came close to several houses but no structures were burned. A bullet had been dodged, or so it seemed.

But that was just the start. Two-thirds of the acres covered by the Schultz Fire burned at moderate to high intensity, much of it on very steep slopes. Fire that hot, on that type of terrain, leaves behind a landscape that is susceptible to flooding. The fire-scorched soil loses its capacity to soak up water. The vegetation that once anchored the soil is gone.

That year, Arizona's monsoon season began on July 16, when a moderate rain sprinkled down on the scorched slopes. The water flowed in ashy rivulets but did little damage.

Four days later, the rains arrived in earnest. A cloudburst drenched the San Francisco Peaks, including the area that burned in the Schultz Fire. In one 10-minute period, nearly an inch of rain fell. This time, the rainwater gathered and galloped. Rushing rivers, gray with ash and sediment, formed in just minutes. The muddy waters moved boulders and scoured gullies down to bedrock. Residents in suburban neighborhoods in the valley below heard the flood coming; they said it sounded like an avalanche or a jet engine. The floodwaters damaged dozens of homes and snapped a pipeline that provides water to Flagstaff. A 12-year-old girl died.

More debris flows and flooding followed that summer. The monsoon season of 2010 would prove to be the fourth wettest ever recorded in Flagstaff.

After the fire and flooding, residents were left to ponder. How did this happen? Why did this happen? Can anything be done to keep this from happening again?

In November of 2012, residents of Flagstaff went to the polls. One of the items on the ballot was a proposal for a $10 million municipal bond that would pay for thinning about 11,000 acres in and around the city. The
thinning would help firefighters stop wildfires like the Schultz Fire, bond supporters claimed, and thus protect Flagstaff’s sources of drinking water. And, by thinning the steep slopes of the Dry Lake Hills, which abut the city’s northern boundary, the project would lessen the chance that a wildfire would rage into the city itself.

The Schultz Fire, still fresh in people’s minds, proved more effective than any number of yard signs or campaign ads. The measure passed easily, garnering the approval of nearly three-quarters of voters.

In approving the bond, the voters gave the go-ahead to a forestry project unlike any that has been attempted before. The majority of the acreage that is to be thinned under the Flagstaff Watershed Protection Project is not under city jurisdiction, but rather is part of the Coconino National Forest, which surrounds the city. Money generated from a municipal bond has never before been used to finance a thinning project on land managed by the U.S. Forest Service.

The project started on a promising note, with crews thinning and conducting prescribed burning on portions of the project under city and state jurisdiction. Unlike parts of the project that are in the national forest, those areas required relatively little environmental review. All told, about 5,000 acres have been thinned and/or burned.

But the project ran into some trouble last year, when city staffers realized that the remaining work, which includes the areas that experts say pose the greatest risks, will be much more expensive than anticipated.

According to a city staff report prepared in February, the cost of thinning in the Dry Lake Hills area “will be anywhere from 2-5 times as expensive as previously anticipated.”

All told, officials overseeing the project estimate the funding shortfall stands at about $4.5 million. City officials are considering ways to fill the gap, possibly by asking residents to approve a supplemental bond.

The cost overruns for the Flagstaff project point to a fundamental reality that often stymies efforts to make wide stretches of forests in the West more “resilient” to wildfire: Doing so, it turns out, costs a lot of money.

In addition to the $10 million raised by the bond, other entities—mainly the U.S. Forest Service—have contributed nearly $5 million toward the project. According to the February city council report, funds are lacking for work planned on 3,766 acres. Given current estimates, that means thinning about 7,200 acres will cost about $15 million. That translates to more than $2,000 an acre.

That’s the sort of math that has frustrated much larger forest restoration projects in the Southwest, most notably the Four Forest Restoration Initiative, which aims to thin 2.4 million acres of national forests in northern Arizona. Only a fraction of the planned thinning has taken place.

Officials involved with the Flagstaff project point to a number of factors behind the ballooning expenses. Those include initial overestimates of the value of some of the timber slated for logging, the need to protect habitat for rare species such as the Mexican spotted owl, and a lack of infrastructure to handle the slash and debris that must be removed.

Helicopter logging had been planned for some of the steeper, more sensitive terrain in the Dry Lake Hills. Jessica Richardson of the Coconino National Forest, who is the Forest Service’s point person on the Flagstaff project, said that some of the quotes for helicopter logging came in as high as $10,000 an acre.

Despite the rising costs, however, Richardson said the Forest Service is pleased with how the project has gone. “We are very happy with the progress made so far, even though we have not seen the total number of acres treated that we had hoped for yet,” she said.

“There are lots of things happening behind the scenes.”

Flagstaff isn’t the only city that would like to lessen its vulnerability to wildfires. Santa Fe, New Mexico, has undertaken extensive thinning work, as well. And in 2010, the same year as the Schultz Fire, city officials and community partners in Ashland, Oregon, launched a similar project, albeit with different funding sources.

Ashland, home to the renowned annual Oregon Shakespeare Festival, sits on a forested slope of the Siskiyou Mountains. The Ashland Forest Resiliency Stewardship Project was launched after local officials landed a $6.2 million federal stimulus grant. Sometime in the next few years, officials expect to finish thinning on about 14,500 acres surrounding the city.

Like Flagstaff, the Ashland project aims to protect the city’s water supply as well as lessen the risk of wildfire. The city draws its water from Reeder Reservoir, which is fed by Ashland Creek. The watershed has burned before and can be expected to burn again. Ashland residents are hopeful that when the next fire burns, though, it can be controlled in a way that minimizes erosion and damage to the city’s
water supply.

The total cost for the Ashland project is expected to be about $26 million, according to Chris Chambers, who heads the city’s forestry division. That works out to about $1,800 per acre.

In 2010, according to a Forest Service study, 99 million people—about one in three Americans—lived in the wildland-urban interface, and were thus vulnerable to wildfires. That number has only grown in the years since.

Those people occupied an overall area that covered more than 190 million acres—nearly 10 percent of the total land area of the contiguous United States. Even the staunchest supporters of projects like the ones being undertaken in Flagstaff and Ashland acknowledge that thinning the entire wildland-urban interface would be prohibitively expensive; at $2,000 per acre, the final tally would be $380 billion—or roughly 75 times the Forest Service’s annual budget.

And there’s this: To be effective, treated areas will need to be thinned periodically in the future, either through mechanical thinning or prescribed burning. Vegetation, after all, grows back.

Like hurricanes and tornados, wildfires generate a visceral fear. Yet wildfires are different in one important respect. When hurricanes and tornadoes strike, no one tries to stop them.

When a wildfire burns in hot, dry, windy conditions—“fire weather”—even the most intense fire-fighting efforts often fail to make an impact. Members of the public and their elected officials expect firefighting agencies to extinguish the flames anyway, which is one of the main reasons that firefighting now consumes well over half of the Forest Service’s annual budget.

Emotion aside, though, the question of how and when to fight wildfires—and how to go about safeguarding the millions of people who live next to fire-prone forests—comes down to that question of dollars and cents.

In 2013, researchers at Northern Arizona University released a study showing that the Schultz Fire claimed a total cost of between $133 million and $147 million. That cost included about $59 million spent by government agencies and utilities to deal with the immediate emergency, and another $59 million in lost property values.

That means that every acre that burned cost about $10,000. If thinning the forest at a cost of $2,000 acres could prevent a fire like Schultz, the investment would be well worth it from a purely economic standpoint.

Supporters of the Flagstaff and Ashland projects acknowledge that they won’t know for sure how effective the work has been until the next wildfire strikes. However, they are confident that restoring the forests to a closer semblance of how they were before decades of fire suppression and logging will indeed make them less vulnerable to intense fires.

“I think we have a fairly high level of confidence that doing the work we’re doing will help prevent a high-severity fire,” said Matt Millar, who works for the Flagstaff Fire Department and serves as the operations specialist for the watershed protection project. “But fire is a natural ecological process. We can’t always control how it is going to behave.”
A Win for Warblers

Here’s an Endangered Species Act success story.

In April, the U.S. Fish and Wildlife Service announced it intends to remove the Kirtland’s warbler from the threatened and endangered species list. The small songbird was one of the first species to be protected under the act.

Kirtland’s warblers only build nests in stands of young jack pines—a habitat that was once common in the forests of Michigan before fire-suppression efforts allowed stands to grow into mature forests unsuitable for the birds.

Warbler numbers also tumbled due to competition from brown-headed cowbirds. Those birds lay their eggs in the nests of other species, including Kirtland’s warblers. The baby cowbirds out-compete the smaller warblers for the attention of the unwitting adult warblers, leading to the death of the warbler chicks.

By 1974, the warblers had declined to just 167 pairs, a low point that was reached again in 1987.

After that, state and federal wildlife officials, with the cooperation of nonprofit groups and volunteers, began a concerted effort to preserve stands of young jack pines and to capture and kill cowbirds, which have greatly expanded their range due to human activities.

Today, the warblers’ numbers have risen to more than 2,300 pairs—more than double the initial recovery goal of 1,000 pairs.

Most Kirtland’s warblers nest in Michigan’s Lower Peninsula, although they have expanded their range to the Upper Peninsula and parts of Wisconsin and Ontario. They spend their winters in the Bahamas.

Agency to Reroute Controversial Trail

The Forest Service wants to reroute a trail in Montana that crosses private land and has been at the center of long-simmering disputes between the agency and local landowners.

The plan calls for building eight miles of new trail to replace the Porcupine Lowline Trail, which provides access to a pair of Forest Service recreational cabins.

Most of the existing trail crosses private land. Although there is no recorded easement for the trail, the Forest Service maintains that it holds a “prescriptive easement” for the route, as it has been in continuous use for decades.

The new route would start at the existing trailhead and end at the same location as the old route. It would cost between $140,000 and $180,000 to build, according to Forest Service estimates. The majority of the new trail would pass through national forest land.

The Crazy Mountains, a popular hiking and hunting destination, are surrounded and interspersed by private land. A number of trails, documented for decades on official Forest Service maps, cross private parcels to access the high country. Several area landowners claim that people who use those trails are trespassing.

BLM Awards Drilling Leases Near Utah Monuments

Bureau of Land Management officials secured bids earlier this year for oil and gas leases on dozens of parcels in Utah, including land near the Bears Ears, Canyons of the Ancients and Hovenweep national monuments.

Oil and gas companies offered nearly $1.5 million for the leases, which include 43 parcels covering more than 51,000 acres in Utah’s red rock country.

Conservationists criticized the leases and vowed to fight drilling proposals in the region. They say such development would threaten rare species and degrade areas rich in cultural and archaeological treasures.

“BLM’s ‘lease everything, lease everywhere’ approach to oil and gas development needlessly threatens iconic red rock landscapes and irreplaceable cultural history in the ill-conceived push for ‘energy dominance,’” said Landon Newell, staff attorney with the Southern Utah Wilderness Alliance.

Several of the leased parcels are in an area containing significant cultural resources called Alkali Ridge. In 2015, BLM officials decided not to offer leases there, saying they needed more information about those resources.
Forest Service Leadership Changes Hands

T
he first months of 2018 brought change to the top ranks of the Forest Service, with a new (interim) chief and a nominee to oversee the agency as Undersecretary of Natural Resources and Environment.

In March, Forest Service Chief Tony Tooke resigned amid an accusation of sexual misconduct. Secretary of Agriculture Sonny Perdue quickly named Vicki Christiansen interim chief. Christiansen has worked for the Forest Service since 2010, most recently as Deputy Chief for State and Private Forestry. Previously, she served as the state forester for Arizona and Washington.

The next month, President Trump nominated James Hubbard for the undersecretary position. Hubbard served as Colorado’s top forester from 1984 to 2004. He then accepted a position as director of the Department of Interior’s Office of Wildland Fire Coordination. Two years later, he was named the Forest Service’s Deputy Chief for State and Private Forestry, a position he held until his retirement in January 2017.

Both Christiansen and Hubbard have extensive experience in wildland firefighting.

In an interview with the website treesource.org shortly after his retirement, Hubbard emphasized the need for greater public understanding of wildfires and the ways in which they are managed.

“You’ve got to explain things in a way that private citizens have some understanding of what might happen and of what kind of decisions fire officials might make,” he said. “It all starts right in that local community, with well-informed decision makers and a well-informed public.”

In an email to Forest Service employees announcing Christiansen’s appointment, Perdue outlined the administration’s priorities for the agency. Those include expanded use of “Good Neighbor Authority,” a program that allows state and local agencies to conduct logging and thinning projects on national forest lands in coordination with the Forest Service.

“With seven years at the Forest Service and 30 with the states of Arizona and Washington, Vicki knows what is needed to restore our forests and put them back to work for the taxpayers,” Perdue wrote. “As a former wildland firefighter and fire manager, she knows first-hand that failure to properly maintain forests leads to longer and more severe fire seasons.”

Feds to Remove Mountain Goats from Olympic Peninsula

Fed eral land managers will try once again to remove hundreds of nonnative mountain goats from the Olympic Mountains in Washington, hoping to reduce damage to rare plant communities and prevent conflicts between goats and humans.

On May 4, the National Park Service released a final environmental impact statement calling for capturing the mountain goats and transporting them across Puget Sound to the North Cascade Mountains, where they are native. Goats not captured would be shot.

The Forest Service is a cooperating agency in the project,
as is the Washington State Department of Fish and Wildlife.

In the 1920s, about a dozen goats were released on the Olympic Peninsula, to be hunted for sport. The animals’ numbers grew quickly. By the early 1980s, the population exceeded 1,000, with the goats concentrated in the eastern portion of Olympic National Park, but also in parts of the adjacent Olympic National Forest.

The expansive high alpine meadows offered ideal habitat for the goats—except for one component. Mountain goats crave salt, but the Olympic Mountains lack natural salt sources. So the Olympic goats look for alternatives.

The goats “often paw and dig areas on the ground where hikers have urinated or disposed of cooking wastewater,” according to the environmental impact statement. That rooting around, in addition to the goats’ wallowing behavior, kills plants, including ones that are endemic to the isolated Olympics.

The goats, which also seek out sweaty, salty boots and packs, have become habituated to humans. In 2010, an Olympic National Park hiker tried to scare a large male goat off of a trail. The goat gored the man and severed several arteries, killing him.

The plan calls for using helicopters to remove as many goats as possible. They would be released in the Mount Baker-Snoqualmie and Okanogan-Wenatchee national forests, in areas where wildlife biologists believe the goats’ numbers were historically greater than they are today.

In the 1980s, the Park Service removed more than 400 mountain goats from the Olympics. More than 100 more were killed outside the national park boundaries by hunters.

Wildlife biologists believe there are as many as 725 mountain goats on the peninsula, with their numbers growing by about 8 percent each year.

Helicopters would be used to capture the goats during two-week periods in July and August. Officials hope to remove at least 90 percent of the goats within three to five years.

Trouble for Trees

America’s urban forests are on the decline. Forest Service researchers found that tree cover in cities and towns dropped by about 175,000 acres per year between 2009 and 2014. That corresponds to a loss of about 36 million trees annually.

Over the same period, the amount of pavement and other impervious surfaces increased by about 167,000 acres per year. The net effect is a loss of benefits provided by urban forests, including lowering air temperatures and reducing summer energy costs, mitigating runoff and flooding, and reducing air pollution and carbon levels.

Other studies have put the economic benefits of urban forests at more than $18 billion annually.

The study, by David Nowak and Eric Greenfield of the Forest Service’s Northern Research Station, was published in the journal Urban Forestry and Urban Greening. The researchers used high-resolution images to analyze how tree cover changed over the five-year period. Overall, tree cover in cities and towns declined by 0.7 percent over that period.

Nowak and Greenfield estimated that the economic loss from the decline in urban forests was close to $100 million per year.

“Urban forests are an important resource,” Nowak said. “Urban foresters, planners and decision-makers need to understand trends in urban forests so they can develop and maintain sufficient levels of tree cover—and the accompanying forest benefits—for current and future generations of citizens.”
Safeguarding Our Forests

Our 2017 program highlights included:

**Stopping Harmful Legislation.**
The Republican-controlled Congress proposed a number of harmful bills in 2017, including ones designed to undermine landmark environmental laws such as the Endangered Species Act and the National Environmental Policy Act. We worked successfully to keep these bills from becoming law.

**Wildland Fire Management Reform.**
FSEEE pursued a lawsuit designed to compel the Forest Service to plan ahead for fighting wildfires. We argued that agency officials should conduct environmental reviews of firefighting tactics that they know they will employ every fire season.

**Ensuring National Forests are Open to All.**
We noticed a troubling trend in 2017: The Forest Service keeps wide stretches of National Forests closed to the public long after wildfires are extinguished. We challenged those closures, especially where the closures included congressionally designated wilderness areas.

**Combating the Militarization of National Forests.**
FSEEE continued to monitor and challenge improper use of our National Forests for military training. We pursued litigation against the Forest Service for issuing the Navy a special-use permit to conduct electronic warfare training on the Olympic National Forest in Washington state.

Educating the Public

One of FSEEE’s core missions is to educate the public about issues affecting National Forests and other public lands. We responded to multiple requests for advice about a variety of environmental issues and concerns. We commissioned a new user-friendly website and posted dozens of original informational items about National Forest issues. We published three editions of our newsletter, Forest News, and distributed it in both print and electronic formats to more than 25,000 recipients. We utilized social media to alert our followers about a variety of issues.

Advocating Ethics

We continued our efforts to encourage those who work within the Forest Service to carry out their vital mission of managing our National Forests with the highest ethical standards. We counseled Forest Service employees who contacted us with concerns about work-related issues. We maintained a confidential tip line on our website that allowed federal employees to share their concerns without jeopardizing their employment.
FINANCIAL HIGHLIGHTS:

FSEEE continues to be funded by the generous contributions from our members, whether it is through general dues and donations or contributions restricted to a specific program. FSEEE does not accept or solicit any contributions from government agencies or affiliates.

We would like to recognize a generous bequest received in 2017 from an anonymous donor.

2017 Foundation Support:
Cameron Foundation
Dunn Foundation
Elkind Family Foundation
FJC, a Foundation of Philanthropic Funds
Florsheim Family Foundation
Kohnstamm Family Foundation
Leatherback Foundation
Mills Family Foundation
Money/Arenz Foundation
The Mitchell David Solomon Foundation
The Price Foundation
The Silver Foundation
The Ungar Family Foundation
Winky Foundation
Zadek Family Foundation
Zurlo Family Foundation

Other Ways to donate to FSEEE:
- You can make recurring donations through our website. Just click on “Donate/Join” and choose the amount and frequency. Recurring donations give us steady income throughout the year.
- Many employers offer matching gifts when you donate to FSEEE. To find out if your employer does this, please contact your human resources representative.
- FSEEE is honored to receive bequests from members. Later this year we will have more information about our legacy program for you to consider when drafting your will or trust documents. In the meantime feel free to call us if you have any questions.
- Stock donations can be made through our stock account at TD Ameritrade. Their number is 800-669-3900. Our DTC is 0188, and account number is 875-138026.
What do National Forests have to do with “farms” and “crops?” Nothing! But that hasn’t stopped congressional Republicans from including all sorts of provisions that would harm our public lands in the 2018 Farm Bill.

Lawmakers have inserted language in the proposed bill that would allow massive clearcuts with no environmental review, gut the Endangered Species Act and open wide stretches of wild, roadless lands to logging. Even worse, the bill calls for handing control of our National Forests to local “Resource Advisory Committees” chosen by Trump administration officials.

We must stop this devastating proposal. Please call your senators today at:

202-224-3121

Tell them: “Proposals to plunder our National Forests have no place in the 2018 Farm Bill. That includes schemes to hand over control of these lands to Resource Advisory Committees. Do the right thing. Pass a clean Farm Bill and leave our National Forests alone.”