

FOREST LIFE

NEWS & INSIGHT FROM THE PACIFIC FOREST TRUST



Finding common ground

SUMMER 2019

Black Butte: Investing in forests for a healthy climate

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FROM CAP & TRADE TO THE URBAN-WILDLAND INTERFACE: THE STORY OF A PARTNERSHIP BETWEEN CAL FIRE, PFT, AND MICHIGAN-CALIFORNIA TIMBER COMPANY TO PROTECT THE ICONIC BLACK BUTTE WORKING FOREST

If you've driven along Interstate 5 near Mount Shasta in northern California, no doubt you've seen the iconic cinder cone of Black Butte. Maybe you've even hiked the trail to the top. (If so, well done!) As of December 2018, this iconic landscape was permanently protected with a Working Forest Conservation Easement (WFCE) funded through California's Climate Investments. It is a great example of how California is using cap and trade auction proceeds to create a more carbon-rich and climate-resilient landscape—a win-win for all involved.

The Black Butte Working Forest, held by family-owned Michigan-California Timber Company (MCTC), is nestled between the cities of Weed and Mt. Shasta City, bounded by I-5 and surrounded on its eastern side by the Shasta-Trinity National Forest. "Catastrophic fire is a real danger for these communities," says PFT Co-CEO Connie Best. "People talk about the urban-wildland interface, that place where the natural lands come together with the city. Well, this is it."

Considered a prime area for resort development, the Black Butte Working Forest instead will forever be part of Mount Shasta's forested flanks, sustainably managed by MCTC for wood products as well as for enhanced wildlife habitat and carbon stores, fire risk reduction, and watershed values.

Chris Chase, MCTC's Timberlands Manager, relates, "We wanted to maintain this particular tract in timber production. After developers approached us a number of times over the years, I connected with the folks at PFT and we were able to craft something that works for all parties involved."

Protecting Black Butte is the first phase of the Mt. Shasta Headwaters Forest Health and Resilience Project. This project integrates conservation and management, starting with the



PFT Co-CEO Connie Best and MCTC Timberlands Manager Chris Chase lead a tour of Black Butte Working Forest.

easement and continuing with fuels management, and will benefit the public through its contributions to resiliency, carbon storage, and wildlife adaptation, among others. Project partners include PFT, MCTC, and the California Department of Forestry and Fire Protection (CAL FIRE), which funded the easement through its Forest Health and Forest Legacy Programs.

“The Black Butte Working Forest project is exactly the kind of investment that the State of California will be making more of, preventing the expansion of the urban-wildland interface and helping landowners manage forests for fire resiliency. These are priorities for CAL FIRE, especially in communities like Weed and Mt. Shasta that depend on forests economically but which are also at risk of extreme wildfire.”

– Stewart McMorrow
CAL FIRE Deputy Chief of Forestry Assistance

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FORESTLIFE

THE NEWSLETTER OF
PACIFIC FOREST TRUST



Pacific Forest Trust's mission is to sustain America's forests for all their benefits of wood, water, wildlife, and people's well being, in cooperation with private landowners and communities. Find out more at <https://www.pacificforest.org/>.

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President's Letter

As we were preparing this newsletter, there were armed militia threats in Oregon, ostensibly protesting proposed legislation to address the very real and present dangers of climate change. While at least four major timber companies in Oregon supported climate action, loggers were out in front of Salem's capitol buildings protesting the same proposed action. The threats of climate change already in front of us are clear. A number of states—from Colorado and Wyoming to New York and Massachusetts—are taking bold steps to address them, even as others, like New Jersey and Virginia, are caught in partisan deadlock. It can seem that the "two sides" of this issue cannot talk to one another.



However, a recent study titled "The Perception Gap," conducted by D. Yudkin, S. Hawkins, and T. Dixon as part of the "More in Common" project, shows that Americans are actually far closer on their positions than they imagine. Media and more extreme groups dominate the debate, while the large majority of Americans actually recognize the climate crisis (even if they use different words to describe it) and support actions to lessen the dangers it poses, from floods to fires to the loss of life.

Where is the room for common ground? I believe we can find it literally in our *common ground*, the land that binds us together and binds us to future generations with whom we share this one and only planet home.

Land conservation, especially working lands conservation, has more support across party lines than any other issue in America today. From extending tax benefits for donations of conservation easements to fully funding the Land and Water Conservation Fund, recent legislative history confirms this at the national level, as do innumerable bond acts to support conservation at the local and state levels. We must build on this support, because we cannot solve the climate crisis without engaging the power of the lands sector for both mitigation and adaptation.

Addressing climate change is essential for survival—last year's fires and this year's floods across America underscore that. It is also essential for a richer and more resilient rural economy. California is acknowledging that with increasing investments in lands. From funding the conservation of working forests like Black Butte, to helping purchase cleaner logging trucks and methane digesters, to restoring wetlands and meadows and supporting carbon-rich farming and grazing practices, the state is modeling a way forward. These investments lead to more productive forests, farms, and wildlife habitats, and ensure clean, cool water for millions of people.

Right now, we have a unique opportunity—and responsibility—to unite across the political spectrum in support of conserving land for all of us and our climate, and a livable future our children can inherit.

Climate change isn't "on the way." It's already here.

WHAT IS BEING DONE TO ADDRESS CLIMATE CHANGE AT THE STATE LEVEL?

From massive floods in America's heartland, to last year's fires across the West, climate change is already upon us. Earlier this year, atmospheric CO₂ concentrations passed the 415 parts per million mark. This exceeds the projected "worst" timeline for increasing emissions and shortens the period we have to take effective action to stem the worst effects of climate change. As the October 2018 IPCC report noted, we have an all-too-brief twelve-year window. In the continuing absence of federal action, states are leading the way toward a healthy climate future. New York has agreed on a sweeping bill to reduce greenhouse gas emissions. New Jersey pledged to rejoin the Northeast's Regional Greenhouse Gas Initiative (RGGI). Washington, Massachusetts, and Colorado also all recently took meaningful actions to reduce CO₂ emissions.

California continues to refine its climate policy, which has been in place for more than a decade. In the last months of his administration, California Governor Jerry Brown issued an executive order for the state to become carbon neutral by 2045. To get there, the California Air Resources Board (ARB) is now turning its attention to the role of land in both mitigation and adaptation in climate change.

Mary Nichols, ARB Chair, pointed out at a public board meeting last November that "as we move forward, it becomes clear that we must be more active in protecting our natural and working lands as they become an increasingly important part of our climate change strategy. We have to take a much bigger look at what's possible from our natural and working lands." PFT is working closely with the ARB and partner organizations to help develop a plan to transform how we manage land for climate benefits. What we're already doing for the energy and transportation sectors to create a low emissions future, we must do for natural and working lands, rewarding landowners for enhancing sequestration, protecting the land base that is so vital for climate adaptation (as well as the production of water, food, and fiber), and promoting climate-friendly land management practices through market mechanisms.



Top: Satellite photo of wildfires in Oregon and California in 2018. Above: Factors such as wetter weather and rapid spring warming, exacerbated by climate change, resulted in major flooding in the Midwest this spring.

In May 2019, PFT President Laurie Wayburn gave a presentation to the ARB on ways to approach this, noting that the state has a variety of mechanisms in addition to regulations that can support landowners to make the move to climate-friendly management. These include taking lessons from the state's pioneering recycling efforts, with procurement and purchasing standards, synergistically layering grants and contracts, and mitigating for the climate impacts of land conversion and land use changes.

In Oregon, PFT is proud to be part of a broad coalition of Oregon businesses, organizations, and activists, alongside forest landowners, the Coalition of Oregon Land Trusts, and others, that is actively supporting climate policy that includes the role

of natural and working lands. The state legislature came very close to passing a climate bill in 2019; though the session ended without the passage of HB 2020, the Governor and legislative leaders are committed to enacting climate legislation with binding targets. PFT's work has advanced the commitment to including significant investments in natural and working lands as well as the communities most affected by climate change; we will continue these efforts going forward.

Improving the carbon richness and climate resilience of our watersheds, wetlands, and forests is one of the best and most cost-effective ways to reduce atmospheric carbon. As part of our response to the changing climate, we must significantly invest in these natural lands to mitigate its worst effects, such as more extreme year-round fires, flooding, and extreme heat events.

"Because it takes such a long time to change the landscape," Nichols notes, "action *now* is critical to achieving the long term gains this sector, our natural environment, can provide."

BLACK BUTTE, Continued from p. 2

California's cap and trade program, which was established by the state's Global Warming Solutions Act (AB 32), allows carbon emitters to bid for carbon allowances. Since 2013, these auctions have raised more than \$9 billion, creating the California Climate Investments Program which funds projects that help protect our climate. This includes the allocation of some \$4 billion to the lands sector, supporting projects like the Black Butte Working Forest to protect and steward forests, as well as conserving farms and ranches and restoring wetlands and wet meadows.

Natural and working lands provide some of the best opportunities to solve the climate crisis while also helping people and wildlife in so many ways, and are increasingly the focus of the state's Air Resources Board as a sector to address climate change (see p. 4). Linking climate and conservation, PFT ensures forests remain forests, well-managed for climate benefits as well as sustaining rural communities, wildlife, and water, forever.

Forests' vital role the focus at Forest Fete

Forest landowners, climate activists aged 8 to 80, forest stakeholders from every perspective, and policy leaders from California and Oregon joined us for Forest Fete on April 10th at the City Club of San Francisco. This committed and diverse group celebrated forests' vital role in solving our existential climate crisis. Kelsey Cascadia Rose Juliana, lead plaintiff in the Constitutional climate case *Juliana v. United States*, delivered an inspiring keynote, speaking eloquently to the fact that her climate activism is more than a "cause." The future of her generation and those that follow is at stake.

The significant investments California has made in working forests for climate benefits were reflected in this year's Forest Champion Award; we honored Michigan-California Timber Company for its role in protecting the Black Butte Working Forest (see p. 2). Oregon legislators Senator Michael Dembrow and Representative Ken Helm received our Outside-the-Box Award for their work to advance climate policy in Oregon with a focus on working and natural lands.

Many thanks to our dedicated supporters and partners for making Fete a memorable evening and supporting our work to ensure forests' role as a major climate solution; watch our video explaining this and find out more at forestfete.org.



Top left: Keynote speaker Kelsey Juliana. Top right: Sen. Michael Dembrow and Rep. Ken Helm of Oregon took time out of their busy legislative schedule to thank PFT via video. Bottom, from left: PFT Co-CEO Connie Best, Chris Chase of honoree MCTC, Helge Eng of granting agency CAL FIRE, and PFT President Laurie Wayburn.

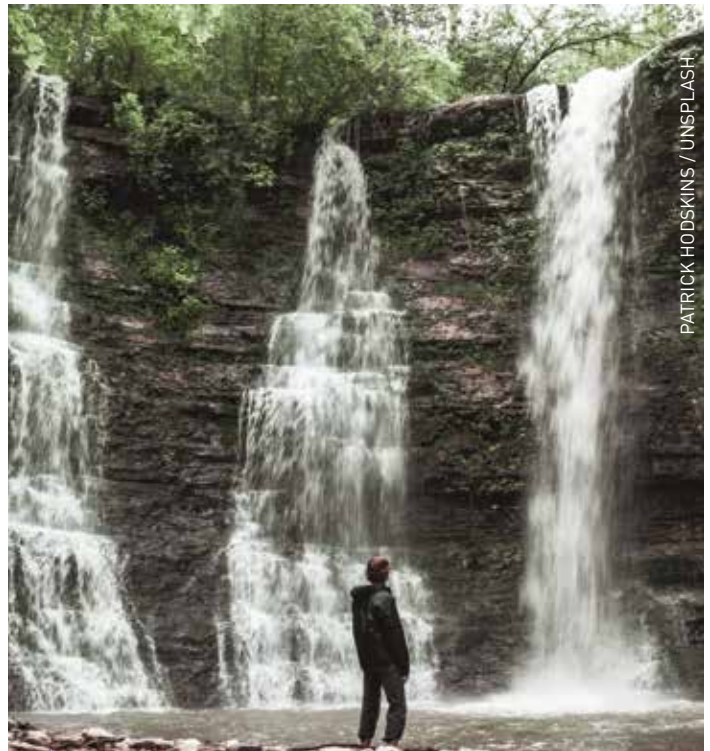
A new model for water security in the face of climate change

PFT'S HEALTHY WATERSHEDS CALIFORNIA PROGRAM IS TRANSFORMING THE STATE'S APPROACH TO WATERSHED HEALTH

The health of our forested watersheds is crucial to water security. The effects of climate change, where drought alternates with intense precipitation and flooding, only reinforce that vital role. Compared to degraded watersheds, healthy watersheds collect and retain more water, hold water longer into the summer, and reduce flood risk. That is why PFT's Healthy Watersheds California program is advancing the comprehensive restoration and conservation of the state's primary source watersheds as essential components of its water system infrastructure.

Restoring California's key source watersheds—the Feather, Pit, McCloud, Upper Sacramento, and Upper Trinity—will not only help ensure the on-going supply of cool, clean drinking water across the state, it will replenish key groundwater aquifers and provide habitat for threatened native fish populations. These five sources feed the Oroville, Shasta, and Trinity reservoirs and provide drinking water for more than 28 million Californians.

PFT is also focused on understanding the effects of climate change on the habitat and species specific to this region, which is a major climate refugium and considered to be the most important for wildlife adaptation statewide. With climate change accelerating, many species of wildlife are likely to move into this region; current modeling predicts it will retain more of its habitats than other regions of the state as it remains generally cooler and wetter.



PFT sponsored AB 2480 (Bloom) in 2016 and AB 2551 (Wood) in 2018 to ensure that California invests in maintaining and restoring its forested watersheds. Both bills were signed into law.



PFT recently received a \$400,000 grant from the California Wildlife Conservation Board to build a state-of-the-art model of the effects of climate change on the region and identify where habitats are likely to persist in a changing world. Working with Dr. Dean Urban of Duke University (and PFT's Board of Directors) and Dr. Jim Thorne of the University of California-Davis, this effort builds on our 2017 *Risk Assessment of California's Key Source Watershed Infrastructure*. Integrating Dr. Thorne's modeling of climate risk, wildlife species range shifts, and wildfire risk, and applying Dr. Urban's multi-criteria spatial prioritization methodologies for conservation actions, this project will help identify "best bets" for habitat and species conservation and restoration work, as identified under AB 2480. The new model will combine climate risk maps, species range models, connectivity, and climate vulnerability rankings to develop landscape-scale maps that show the relative risks and resilience within each of the five watersheds, which will inform critical planning activities in the years to come.

Additionally, the Healthy Watersheds Consortium, funded by the U.S. EPA, the USDA's Natural Resources Conservation Service (NRCS), and the U.S. Endowment for Forestry and Communities, renewed its support for the HWC project. Our partnership with the Consortium has added significantly to the national and regional conversation on water infrastructure development and climate adaptation, and it will continue to transform how California defines and manages its critical natural water infrastructure.

PFT has worked in this region for more than 25 years due to its extraordinary forest, wildlife and water resources. (Find out more in our report *California's Watershed in the Balance* at pacificforest.org/kc). Our 2017 *Risk Assessment* documented that this highly diverse and water-rich region is degraded, with significant impairment to its habitat and watershed functions. The region faces major and imminent risks of fragmentation, habitat simplification and loss, and fire—four of the five 2018 megafires occurred here. Advancing climate change exacerbates these risks, as vividly demonstrated by those fires and by the 2016 flood of the Feather River with concomitant failure of the Oroville Dam spillway. At the same time, climate and habitat response analyses by Dr. Thorne and others' research on how wildlife utilize the region indicated that it is likely essential for many species' future survival.

Making actionable steps out of these results and other policies and analyses requires broad collaboration and partnerships. We are pleased to be part of the Sierra Meadows Partnership and are increasing our work to engage local communities, landowners, and regional, state, and federal agencies. We welcomed Jill Harris as our new Project Manager for Outreach and Communications for the Healthy Watersheds California program to help with this. Jill has been working in the Mt. Shasta community for many years in a variety of relevant fields, from community economic development to community foundations and water. Jill and the rest of PFT's team look forward to continuing to put these important ideas into action.

Donor Profile: Ivan Samuels

Ivan Samuels is the Executive Director of March Conservation Fund (MCF) and the chair of the Pacific Forest Trust Board of Directors. Ivan's expertise spans the fields of ecology, ornithology, forestry, and land management. We asked him about why he's a dedicated supporter of PFT's work, both as an individual and through MCF.

Why are forests important to you?

Forests, and healthy forest ecosystems, achieve three immense goals of the conservation community: water, wildlife, and carbon sequestration. Intact forest ecosystems simultaneously determine the function of our watersheds, provide critical habitat for countless species, and suck huge quantities of carbon out of the air. Hiking, camping, and birding in forests are also important stress relievers for me—and in general.

How does supporting PFT help accomplish the goals of the March Conservation Fund?

Biodiversity conservation is the core of our work, but actually achieving that requires action at many levels. PFT helps accomplish this goal by working with private landowners to make working forests more resilient, improving understanding of watershed function, and directly influencing policies that keep forests front and center in the climate change crisis.

What do you think are some of the greatest challenges for conservation now and in the coming years?

Now and into the future, the challenge for the conservation community comes from the sheer momentum of population growth and economic expansion when we only have one planet. The next generation must be educated, energized,

In a hotter, drier world driven by climate change, forest watersheds need our help. More to the point, we need theirs—they supply life-giving water to millions of people. To that end, Pacific Forest Trust (PFT) has launched a new initiative, the **Springs for Life ForestWater Alliance**, an exciting new partnership between PFT and socially responsible businesses.



Springs for Life™
FORESTWATER ALLIANCE™



and engaged to turn things around, despite high levels of apathy and an increasing distrust of science.

What is most rewarding to you about contributing to PFT?

Aside from the obvious reward of seeing PFT's portfolio of easements grow, it's very rewarding to see our donations contribute to a broad-based collaborative working environment. PFT has taken on the challenge of bringing small and large private forest landowners, timber companies, local and state legislators, and government agencies to the table—and over time, we are seeing tremendous results for our forests.

PFT's work is based on partnerships, be it with with landowners, government agencies, communities, or businesses. For more than 25 years, we have successfully leveraged the resources needed to achieve our common goals of healthy forest watersheds and water security for wildlife and for people.

Businesses that join the Springs for Life ForestWater Alliance, such as our founding partner Crystal Geyser Water Company, show their commitment to protecting the sources of water that sustain us all. Through Springs for Life, they support conservation and restoration of source watersheds on the ground. Email us at give@pacificforest.org or visit <http://springsforlife.net> to find out how your business can become part of the ForestWater Alliance.

Back to the land at Green Gorge

In 1971, Hugh Brady was ready to leave San Francisco once and for all. As one of the original “back to the land” pioneers, he and his then-partner Nancy Dawson found what they hoped was a perfect place where they could live simply and self-sufficiently, raise a family and their own food, along a picturesque bend of the Garcia River, a few miles inland from the Mendocino County coast. They called the spot “Green Gorge,” honoring the deep redwood forest rising steeply from the beautiful floodplain. Today, Hugh and his family continue to practice organic agriculture, undertaking selective timber harvest and doing their own small-scale wood milling.

As a cousin of Jud Parsons and part owner in the Mountcrest Forest—conserved with Pacific Forest Trust in 2017—Hugh came to appreciate how a working forest conservation easement could help preserve his beloved Green Gorge, and support his two children in continuing his legacy of stewardship. So, he reached out to PFT to help him protect this beautiful and ecologically valuable landscape in perpetuity. Together, they have crafted a conservation easement that Hugh plans to charitably gift to PFT later this year.

The 341-acre Green Gorge Forest includes nearly a mile of essential habitat for Chinook salmon and steelhead in a broad, sinuous curve of the Garcia River, as well as an intact, older redwood forest ecosystem supporting two northern spotted owl activity centers and potential habitat for a host of threatened, rare, and endangered fish and wildlife. The river channel is surrounded by riparian woodland, more than twenty acres of floodplain terrace, and a network of eight shaded, cool-water streams flowing through the 263 acres of second-growth redwood forest. Situated on the San Andreas fault, Green Gorge also has a string of fascinating fault-line sag ponds with potential habitat for California red-legged frog and foothill yellow-legged frog.

The Green Gorge conservation easement now in the works with PFT will ensure these important habitats are conserved in perpetuity, by protecting basic river processes on the Garcia River—including sensitive in-stream habitat, floodplain connectivity, cool water sources, and water quality to benefit recovery of Coho, Chinook, and steelhead—and by guiding management of the well-stocked, relatively mature redwood forest for its rare habitat value, increased carbon sequestration, and recovery of imperiled wildlife and plant species. This project will benefit water quality for the impaired Garcia River, complementing other long-term conservation efforts in this key salmon watershed.



Above: Hugh Brady and PFT Co-CEO Connie Best at the bend in the Garcia River within the Green Gorge Working Forest. Below: The second-growth redwood forest at Green Gorge provides habitat for diverse wildlife.



“We are honored by Hugh’s generous intent to donate the conservation easement on Green Gorge, assuring its permanent conservation,” says Connie Best, Co-CEO of PFT. “This is an extraordinary expression of his enduring commitment to conserving and restoring the Garcia River and its forests.”



Rewarding landowners for doing the right thing

WORKING FOREST CONSERVATION EASEMENTS WORK IN SYNERGY WITH SAFE HARBOR AGREEMENTS TO SAVE WILDLIFE, WORKING LANDS, AND FAMILY STEWARDSHIP

PFT wants landowners to be rewarded for managing their land for public trust values, and not solely for the traditional market values of timber or development. PFT's working forest conservation easements (WFCEs) help landowners do both; our easements ensure their land continues to be a productive source of income, protected from conversion to other uses, while also being managed for endangered wildlife, cleaner water, or climate benefits.

Sometimes, though, laws passed with good intent, such as the Endangered Species Act (ESA), are written in a way that unintentionally discourages landowners from managing for the habitats that many vulnerable species need. How can these two potentially at odds tools be reconciled? By using such easements as the basis for a Safe Harbor Agreement (SHA) that enables landowners to continue managing their land

responsibly when endangered species do show up in those habitats! PFT successfully pioneered this approach on the van Eck Forest in Humboldt County, CA, where a conservation easement was used as the basis for a 99-year SHA—the maximum term—ensuring that sustainable timber operations on the land will continue along with long-term habitat restoration.

The Hart family has owned and managed Butte Creek Ranch for more than 150 years. They chose to conserve their land with PFT in 2015, helping ensure that the land would be well-managed as part of a larger landscape with important ecological, economic, and human benefits (see “Sustainability with Heart” in the Spring 2014 issue of *ForestLife*).

The Harts' responsible stewardship pays dividends for wildlife. In 2015, wolves came back to the area for the first time in years, and their ranch includes habitat that is suitable for

Northern Spotted Owls—though none have been spotted as yet—and they host Sandhill Cranes, among other vulnerable species. To have a degree of regulatory certainty, the Harts pursued the approach that PFT demonstrated in the van Eck Forest in California, pairing their easement with a Safe Harbor Agreement.

When rare, threatened, or endangered species show up after wildlife habitat is restored, that is a success, and it should not pose a threat to landowners' stewardship. Under a SHA, the landowner who is managing for desired species habitats is allowed to continue that management even after endangered species occupy it. "With a Safe Harbor Agreement, the agencies like USFWS and CDFW buy into the way we're going to manage the property," notes Susan Hart, one of the owners of Butte Creek Ranch. "On the off chance that you have some management activity that causes the loss of a protected species, you have an incidental take permit to protect you from being restricted under the ESA/CESA." Having a SHA for a long period of time—often 50 years or more—allows the landowners to continue the good management activities embodied in their WFCE. That's good for the landowners, wildlife, and all of us.

PFT President Laurie Wayburn describes Safe Harbor Agreements in combination with WFCEs as "a triple win." She explains, "Wildlife wins, because their habitat is enhanced and conserved. Landowners win, because they can manage their forests to encourage biodiversity without fear that doing so will cripple their operations if they're too successful in voluntarily attracting wildlife. The public, state and federal regulators win because this cooperative approach helps meet their goals of permanently preserving threatened species and their habitat."

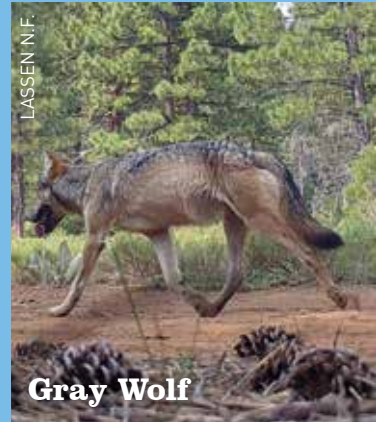
"The SHA provides regulatory assurances and protection if you do what you say you're going to do," notes Hart. "It also provides property owners a terrific opportunity to interface with scientists and experts to provide peer-vetted scientific input as to how the management is to occur."

Safe Harbor Agreements provide protection for landowners, wildlife, and other resources, a result that the Harts—and PFT—would like to see replicated. Says Hart, "We would love to see more landowners take this approach of open-door problem solving, from the Cascades to the Sierras."

Safe harbor for...



Northern Spotted Owl



Gray Wolf

The Safe Harbor Agreement at Butte Creek Ranch encourages the Hart family to continue to improve habitat for Northern Spotted Owls and Gray Wolves.

Other species that may be found at Butte Creek:



Sierra Nevada red fox



Willow flycatcher



Cascades frog



McCloud River redband trout



Northern goshawk



American wolverine



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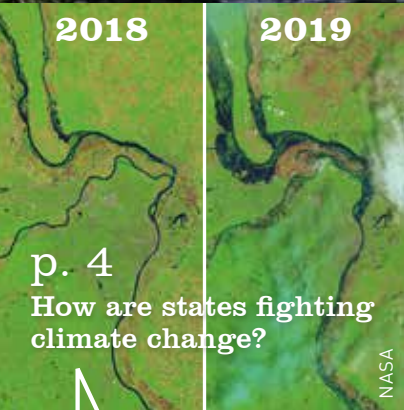
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A new model for water security
in a changing climate

Since 2013, California's cap-and-trade auctions have raised more than \$9 billion in climate investments, including nearly \$600 million in the last two years allocated to natural and working lands.



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Teaming up on an investment in forests



2018 2019
p. 4
How are states fighting climate change?

According to the National Academy of Sciences, investments in the land sector can provide 37% of cost-effective carbon mitigation needed through 2030 for a >66% chance of holding warming to below 2 °C.



"We must be more active in protecting our natural and working lands as they become an increasingly important part of our climate change strategy."
—Mary Nichols, Chair of the California Air Resources Board

Satellite images from the NASA Earth Observatory show Midwest floods in May 2019, due to well-above-normal precipitation, snowmelt, saturated soils, and frozen ground, conditions exacerbated by climate change.



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Safe harbor for wildlife—and certainty for landowners

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reported in May that, of the 8,000,000 species that now exist, more than 1,000,000 are at risk due to human activity.

