FORESTLIFE

NEWS & INSIGHT FROM THE PACIFIC FOREST TRUST

Managing for Resilience

SUMMER 2017

Managing for **Resilience**

Pacific Forest Trust looks upstream to the source to help solve California's water problems, with the firstever infrastructure risk assessment of the state's key watersheds.

A working forest conservation easement will ensure that this iconic California landscape is well-managed forever.

> p.8 Watershed Report

Five watersheds feed two reservoirs that provide drinking water for 28 million people

168 forest projects in 29 states are at work offsetting carbon pollution for the California market

Black Butte Beauty

p.6



A two-year cooperative reforestation project planted 3 million ponderosa pines at the Goose Lake Working Forest.



Walter Sedgwick

Natural Dedication:

FORESTLIFE

THE NEWSLETTER OF PACIFIC FOREST TRUST

BOARD OF DIRECTORS

Andrea E. Tuttle, Ph.D., Chair Dean Urban, Ph.D., Vice Chair Robert C. Barrett, J.D., Secretary Stuart Bewley, Treasurer Laurie A. Wayburn, Co-founder, Co-CEO & President Constance Best, Co-founder & Co-CEO Linda S. Adams Susan J. Brown, J.D. The Honorable Wesley Chesbro Jerry Franklin, Ph.D. Zuretti "Zuey" Goosby, Jr. Susan Hart Margaret D. Lowman, Ph.D. Ivan Samuels

STAFF

Laurie A. Wayburn, President & Co-CEO Constance Best, Co-CEO Amie Dillon, Executive Coordinator Abby Halperin, Policy Associate Enrico Hernandez, CFO Timothy Hipp, Stewardship Associate Lisa Hulette, Project Manager: Forests & Restoration Colin Kelly, Project Manager: Healthy Watersheds California Paul Mason, Vice President, Policy and Incentives Maral Mokri, Accounting & Administrative Associate Nina von Nyssen, Development & Communications Associate Tom Porter, Director of Development Polly Springhorn, Development Manager Ed Stanton, Senior Conservation Project Manager Jolanta Zakrzewski, Senior Accountant & Administration Manager

Sara Zaske, Communications Manager

Photo credits: the following images were provided by the courtesy of these agencies and photographers: p.2 center, USFS; p.5 top, Roving-Aye; p.6 bottom, MCTC; p.7 bottom right, USFWS; p.8 top right, Paul Hames, CDWR; p.9 NPS; p.10 top right, Drew Altizer; p.11 Bob Wick, BLM.

Pacific Forest Trust's mission is to sustain America's forests for all their public benefits of wood, water, wildlife, and people's well being, in cooperation with private landowners and communities.

©2017 Pacific Forest Trust. All rights reserved. Reproduction permitted with attribution. Photos are property of the orginal photographers.

CONNECT WITH PACIFIC FOREST TRUST:



President's Letter HEALTHY FORESTS, HEALTHY PEOPLE



We live in stressful, uncertain times—for both people and forests. But stress is a fact of life; it won't go away. Indeed, climate change is exacerbating many forms of stress from uncertain and intense weather to introducing new pests and diseases that affect both people and forests. How we manage that stress makes all the difference to our quality of life and to our future.

And, for both people and forests, there are shared strategies for success.

First, there is no single "silver bullet" that can be relied on to restore and maintain health. So just as we need multiple approaches to addressing obesity, for example, needing to address diet, exercise, sleep patterns, and lifestyles—focusing just on fuels thinning to restore forest health in crowded young forests is good but insufficient. We need to look at restoring species composition and age structure as well as persistence and connectivity, among other factors.

Second, we have to approach the whole system and underlying causes of stress, rather than just the symptoms. Just as we recognize that healing people with physical or emotional challenges needs to not only engage their larger community of family and friends but also take economic, housing, and educational factors into account, so too, we need to look at forests through the landscape lens, recognizing the interactions across ownerships and taking into account financial, economic, and social forces impacting forests and forest landowners.

Third, we need to look at how we are naturally healthy and use that as guidance for maintaining health in the future. Humans evolved as very active beings. We know that the more active we are, the more we improve our brain function, emotional balance, and immune system response. So too, managing forests to promote more natural function and process is key to sustaining resilience in the face of increasing stress. A more natural stand structure is more fire resilient; a diversity of age classes enables larger, older trees to survive fires and pests. The more connectivity and the less fragmentation, the better the forest processes will function and enable forests to thrive across the landscape.

In this issue of *ForestLife*, we discuss several examples of how Pacific Forest Trust is seeking to restore and maintain resilient, healthy forests for the future: ours and theirs!

Jamie A. Nayhun-

CA Assembly Passes CARBON Act

NATURE-BASED SOLUTIONS WIN BIPARTISAN SUPPORT



In May, Assembly Bill 1433, the Climate Adaptation and Resilience Based on Nature (CARBON) Act, passed the California Assembly with solid bipartisan support—a major acknowledgment of the climate benefits of investing in forests and other working and natural lands.

Forests are California's—and the world's—largest, safest, and most expandable carbon sinks. Natural and working lands are also a great investment for climate, producing multiple benefits of reducing carbon dioxide (CO₂) emissions, while also enhancing clean water supplies, protecting habitat, and sustaining rural economies at very low cost. But until now, restoration and conservation of natural and working lands have received less than 3% of the total funds generated by California's cap-and-trade program.

AB 1433 has raised the profile of forests, farms, and other natural and working lands and their role in reducing CO_2 and promoting climate adaptation. It acknowledges the merit and impact of investing in this sector, equivalent with the transportation and energy sectors.

"Our natural and working lands play a vital role in stabilizing our climate," said the bill's author Assembly Member Jim Wood when the CARBON Act was introduced. "By investing in restoring and protecting these natural systems, we increase our ability to fight climate change and also promote sustainable rural economies."

The bill moved on to the Senate, where it continued to be debated and to evolve—but whatever the outcome, forests and other lands are gaining a more significant and appropriate place in the discussion about climate change solutions in California.

"There is enormous potential to reabsorb CO₂ emissions back into our forests, wetlands, and soils, and it will benefit all Californians."

-Andrea Tuttle, Pacific Forest Trust Board Chair

Van Eck Forest in California (pictured above and opposite) was the first early action forest carbon offset project under California's offset program. Now transitioned to a regulatory compliance offset project, the 2,200 acres are managed by Pacific Forest Trust in keeping with the legacy of Fred M. van Eck who believed in the synergy of economic and ecological benefits.

Forest Offsets Sequester 44 Million Tons of Carbon Dioxide

Carbon offsets are a key part of California's program to combat climate change. Offsets allow companies to compensate for their carbon dioxide pollution by paying for a project that helps take CO_2 out of the air or otherwise reduces greenhouse gases—and one of the best ways to do that is by investing in forests. California has set high standards for projects to be eligible for offsets, and all forest projects undergo a rigorous process of verification. There are more forest carbon offset projects than any other type.

Since the program began in 2013, 168 forest projects in 29 states have sequestered more than 44 million tons of carbon dioxide. The vast majority of these are "Improved Forest Management" projects. Others focus on reforestation or prevent the conversion of forests to other uses.

Forest offsets have not only reduced emissions, they've also provided cleaner water and strengthened rural economies. For example, a 21,000-acre project in Humboldt County is helping the Yurok tribe acquire more of their ancestral lands, restore the mixed conifer-hardwood forest for carbon gains, improved habitat for wildlife, and better water quality for people and salmon. Another project on over 600,000 acres of Oregon forest owned by Green Diamond is supporting restoration of depleted timberlands, vital to that rural economy.





Washington Includes Forests in Carbon Plans

Great ideas are contagious. The 2016 Paris Climate Accord elevated the role of forests as a key climate change solution. Now, as California looks to forest and other lands as climate tools, climate discussions in Washington state are also elevating the role of forests in sequestering dangerous carbon dioxide emissions.

This spring, the state legislature considered four carbon tax bills, three of which dedicated some portion of the resulting funding toward forests. While none of the bills are expected to pass this session, some of the language from one of the most promising bills, House Bill 1646, has recently been submitted as a 2018 ballot initiative—and its prospects for success are good, given state voter enthusiasm for climate change measures. Forest loss and depletion is the second largest source of the state's CO_2 emissions. This September, the Washington Environmental Council is hosting an all day seminar, co-sponsored by Pacific Forest Trust and others, on how forests can most resiliently, effectively, and durably store more carbon to reduce greenhouse gases and promote adaptation.

More than 60% of Washington voters support an initiative that places a price on carbon.

And that support rises to 67% if proceeds are directed to forest health and water projects.

- 2015 voter survey commissioned by The Nature Consevancy

Conserving a Working Forest on Black Butte's Iconic Landscape



PARTNERSHIP WITH MCTC AIMS TO ENSURE A LEGACY OF STEWARDSHIP

Black Butte is a California icon. Thousands of hikers take the trail every year which starts at its base on land owned by Michigan-California Timber Company (MCTC) and travels up to its tallest peaks for fantastic views. Even more travelers pass by the Butte's dark volcanic domes every day where it looms above Interstate I-5 like a shadow of Mount Shasta.

MCTC's working forest of over 5,000 acres provides a vital natural connection between Mount Shasta City and the town of Weed. A conservation easement on the property will enable the land to remain a well-managed, fire-resilient forest, enhancing the ecological integrity of the surrounding Shasta-Trinity National Forest as well as providing recreational opportunities and forestry jobs that benefit the local community and the region.

But Black Butte's famous landscape and recreational attractions also pose a major threat to its future, as the area attracts more recreational development. One forest near the Butte has already been slated for development with plans to put in a trailer park, a visitor center, and a golf course. That's not what Joe Gonyea III, managing partner of the familyowned MCTC, wants to see happen to the land his company has carefully managed for many years. MCTC is working with Pacific Forest Trust to secure a conservation easement to maintain the working forest and all its public benefits. Gonyea said one of the main advantages of the easement is that it will allow this forest to remain in sustainable production and give the company a chance to showcase how well it manages forests on a unique track of land well known in California and beyond.



"We're proud of how we manage our lands, and this easement will ensure sound stewardship of those lands in perpetuity. We view it as a win-win," -Joe Gonyea III, managing partner MCTC

Preserving water, wildlife, and wonder

The Black Butte Working Forest helps provide water sources that feed into critical California rivers. The land is part of the Spring Hill watershed, one of the sources of the Sacramento River, and home to the Black Butte Spring where an estimated 300,000 gallons of clear, cold water gushes out every day. The spring contributes to the Shasta River, which in turn is a tributary to the Klamath River, and a critical watershed for threatened salmon.

The forest also provides habitat to an estimated 136 wildlife species. Ten threatened or sensitive animal species are known to live on or near the property, including the gray wolf and Sierra Nevada red fox. Since it is located on the slopes of Black Butte, and interwoven with the Shasta-Trinity National Forest and wilderness area, the working forest represents a key piece of connectivity for flora and fauna alike.

It provides a key connection for people as well. The popular Black Butte trail begins on the private land of the working forest, taking hikers on a challenging 5-mile hike to the summit with its stunning views of the valley and Mount Shasta. The conservation easement will ensure that generations of hikers will have access to this experience.

Management of Black Butte under the terms of the conservation easement will make the forest more resilient, reducing fire risks through thinning and other forestry practices that will increase the diversity and age of the timber stands. The ongoing stewardship of the property will increase the forest's ability to store carbon, playing an important role in combating the effects of climate change.

The conservation easement will keep the MCTC land as a working forest, providing jobs while protecting habitat for a diverse range of flora and fauna found here.



Located at the edge of Black Butte, the MCTC's working forest provides a key natural corridor between the town of Weed and Mount Shasta City.

The partnership with MCTC will also ensure the land remains in production, providing forest jobs and a needed and sustainable source of timber products.

"This is a cooperative project that has benefits all around," said Connie Best, who has led this project for Pacific Forest Trust. "It shows what we can accomplish when we work together. We can find natural solutions that help both the environment and the economy."



Restoring Watersheds Key to California's Future Water Supply

PACIFIC FOREST TRUST TO RELEASE FIRST-EVER WATERSHED INFRASTRUCTURE RISK ASSESSMENT

California weather is becoming characterized by more extreme variability with climate change. After two droughts in ten years followed by record rainfall that filled dams and cracked a hole in the Oroville dam's spillway, water managers are struggling to fix dams to handle floods, while at the same time, preparing irrigation and other systems for the next drought.

A new report by the Pacific Forest Trust looks further upstream to find a long-term and highly cost-effective solution: repairing and maintaining California's watersheds.

The report, *A Risk Assessment of California's Key Source Watershed Infrastructure*, to be released in August 2017, provides the first comprehensive assessment of the seven million acres across five watersheds that feed the Shasta and Oroville reservoirs. These are the core of the state's utilized water supply. The report outlines a framework to restore and maintain them as resilient watersheds. Because these source watersheds will remain cooler and wetter than the rest of the state as climate change continues to advance, their healthy function grows even more critical to the state's water security over time.





Watersheds are areas defined by high ridges of land that determine the direction water flows, and naturally, California's key watersheds are found in its mountainous northern regions that are the sources for five major rivers: the Upper Trinity, Upper Sacramento, McCloud, Pit, and Feather rivers. These five areas feed the reservoirs that provide water for more than 28 million people and the large majority of prime agricultural land in California.

Degradation of the forests, meadows, and streams in these source watersheds has led to reduced natural water capture and storage, altered water flow regimes, and more intense flooding. This assessment analyzes the scale and type of restoration needed to repair and maintain these key watersheds in order to improve the long-term security of California's water supply.

The Pacific Forest Trust's report, *A Risk Assessment of California's Key Source Watershed Infrastructure*, will be available for download online in late August at pacificforest.org.

Working with Fire

PACIFIC FOREST TRUST HELPS SECURE \$10 MILLION FOR MANAGING FIRE

Wildfire is a part of life in California, but as we have seen increasingly over the past decade, our strategy of total suppression is not working. By trying to eliminate all fire, we have eliminated useful low-intensity burns while only the "unstoppable" fires escape, adding to more unhealthy forest conditions. Promoting new ways of working with fire for ecological and safety benefits is a key goal for Pacific Forest Trust (See President's Letter, *ForestLife* 2016).

This year, Pacific Forest Trust led an effort to gain additional funding for CAL FIRE's program to help rural forested communities prepare for wildfire. Our work resulted in an additional \$10 million of State Responsibility Area funds in the state budget to support projects that directly benefit homes and communities located in or near California forests. The funds will help pay for fuel breaks near towns and the use of prescribed fire to restore forest resilience.

California does not have a "no fire" alternative

Historically, periodic fire was a natural part of the California landscape. Decades of suppression has interrupted that cycle of low-intensity fire and contributed to today's unnaturally dense forests. Now, when fires do occur, they are often more intense and do more damage than the fires of the past.

California legislators, landowners, and agencies are starting to recognize the need to reintroduce fire into the landscape. Among the most forward-thinking is Chief Ken Pimlott, CAL FIRE director and California's State Forester. Last year, CAL FIRE joined in the "Fire MOU," a memorandum of understanding with more than 20 agencies, nonprofits, and stakeholder groups, including Pacific Forest Trust, to work together to promote the careful, increased use of fire.

"We need to double-down on increased community protection and education, at the same time recognizing that prescribed fire has a key role in reducing the intensity of these fires," Pimlott said when the MOU was announced. "Returning more prescribed fire to the landscape can help renew ecosystems and assist landowners in reducing the accumulation of flammable vegetation."

Pacific Forest Trust honored Director Pimlott for his work to restore ecological fire with the Outside the Box Award in 2017.



Toward a New Strategy KLAMATH-CASCADE ADVISORY COUNCIL

At a recent meeting, Pacific Forest Trust's Klamath-Cascade Advisory Council took on this burning issue. The Council brings together landowners, managers, mill owners, wildlife and water experts, and representatives from nonprofits and government agencies to provide guidance on Pacific Forest Trust's work in this key forest region.

While these groups don't always agree on every issue, when it comes to fire, there is now a strong consensus that total suppression, as a goal or a policy, is not tenable.

The group discussed challenges to bringing fire back to the landscape including economic barriers, permitting, and potential liability concerns. They agreed that there is an ongoing need to educate decision-makers and the public about the effects fire suppression has had on California forests. They also identified potential opportunities to restore fire to the landscape such as cross-ownership partnerships, prescribed burn trainings, and data-driven air quality monitoring as well as the potential to license private prescribed burn managers.

Walter and Jeanne Sedgwick

A DEEP DEDICATION TO FORESTS AND NATURE

The Sedgwicks have both poured their substantial energy and skill into conserving the environment. Long-time forest landowners, they have worked with many organizations dedicated to land and animals. Jeanne is currently the vice chair of WildAid and a former conservation program director for the David and Lucile Packard Foundation. Walter founded the Red Hills Land Conservancy which later became Tall Timbers in Florida. He has served on the boards of the National Audubon Society, the Land Trust Alliance, The Nature Conservancy-Florida, and here at Pacific Forest Trust. PFT asked Walter about his lifetime dedication to forests and nature.



Why are forests important to you?

First, I love all of nature, plants, animals—everything. And forests are a very special community. My family has owned property in southern Georgia for 110 years. It was just part of me from the beginning, and it's one of the reasons I love nature. We've managed that forest for multiple uses. For example, we cut timber on a selective basis. Some foresters might take the best trees and leave the worst. We do the opposite to make sure the forest of tomorrow is as high quality as possible.

How did you first learn about Pacific Forest Trust?

When I met the co-founders of PFT, Laurie and Connie, we were natural friends. I was the founder of Red Hills Land Conservancy which became Tall Timbers, and they have about 140,000 acres under easement. People hunt there. They cut timber. It all works well together. I learned about forest conservation through that experience and that made me naturally interested in the Pacific Forest Trust.

What do you find compelling about Pacific Forest Trust's work and its impacts?

Other groups do forest conservation, but in my view, nobody does it as well as Pacific Forest Trust. They've been national leaders in conservation easement forestry. Also, if you look at the impact PFT has had through AB 32—California's landmark climate change legislation—that is getting more and more traction and become part of the mainstream. Because they've helped make it real. That's enormous. And now they are working on water.

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

To me, it's a matter of staying the course. I know the financial issues facing conservation are challenging, but I really like the fact that PFT will work with all sorts of landowners and timber companies. They are really very creative. Pacific Forest Trust is really about multiple-use and wise-use, building better forests and leveraging the benefits of forest carbon storage and water services.

"I don't think there's anybody in the world doing better conservation than the Pacific Forest Trust."

-Walter Sedgwick



Walter Sedgwick on a forest field trip with Pacific Forest Trust President Laurie Wayburn

More Pacific Crest Trail Conserved

MOUNTCREST WORKING FOREST TRANSFERS OVER 300 ACRES TO BLM TO BECOME PERMANENT PART OF CASCADE-SISKIYOU NATIONAL MONUMENT

A beautiful stretch of the Pacific Crest Trail in Oregon has been preserved forever, thanks to the Parsons family and the Pacific Forest Trust. Under an agreement worked out by the Pacific Forest Trust, over 300 acres of the familyowned Mountcrest Working Forest, including a mile-long segment of the famous PCT, has been transferred to the Bureau of Land Management to become a permanent part of the Cascade-Siskiyou National Monument. This property was within the original Monument boundaries.

The Parsons have owned the approximately 2,100-acre Mountcrest property just south of Ashland, Oregon, for nearly a century.



Pacific Forest Trust is working with the family on an easement to conserve the remaining 1,800 acres as a working forest, honoring the family's legacy and providing both ecological and economic benefits far into the future. (For more about the Mountcrest Working Forest, visit pacificforest.org/conservation-project/mountcrest).



Make a planned gift to the Pacific Forest Trust.

To start the conversation, contact:

Tom Porter, Development Director tporter@pacificforest.org | 415.561.0700 x37

Searle Whitney's Gift to the Future

C. Searle Whitney was an economist, psychologist, and philanthropist who had a deep and abiding passion for nature. This was sparked by his childhood experiences in the Adirondacks of New York, and furthered by hiking adventures in the American West. He was also a deeply compassionate man who understood how much people need nature, and nature needed people.



Inspired by Pacific Forest Trust's efforts to conserve forests that provide benefits to both wildlife and rural communities, Searle left a generous bequest of more than \$1 million to carry on this vital work and engage young people with a fellowship program at the Pacific Forest Trust.



THE PRESIDIO 1001-A O'Reilly Avenue San Francisco, CA 94129

www.PacificForest.org

Three Million Ponderosa Pines Planted at Goose Lake Forest

After two fires ripped through the area, most of the Collins' Goose Lake Working Forest was scorched. The 2008 Fletcher Fire and the 2012 Barry Point fire left little behind except blackened dead, or dying, trees on 22,000 acres of this 33,000acre property in Modoc County.

Today, that same land is a huge nursery growing three million ponderosa pine seedlings, thanks to a partnership between Pacific Forest Trust and Collins, the family-owned forest management company that owns the property which spans the California/Oregon border.

The reforestation project took two years to complete with the majority of trees planted this past year. The extended rains this year will be a major boost for the new trees.

Pacific Forest Trust secured a \$2.5 million grant from the Wildlife Conservation Board to launch the massive planting. Additional grants have been made by CAL FIRE, the Sierra Nevada Conservancy, and the U.S. Fish and Wildlife Service.

The land is protected by, and managed under, a conservation easement, ensuring that this new forest will continue to grow for future generations, providing multiple benefits: jobs for Modoc County residents, cleaner water and air—not to mention habitat for some spectacular animals including greater sandhill cranes, bald eagles, and great grey owls, one of the largest owl species in the world.



Tree number 2,895,001 (more or less) being planted by Pacific Forest Trust President Laurie Wayburn.