

The CSERC Newsletter

Like a stone tossed into still water, knowledge about environmental issues can ripple outward far beyond its beginning point, and perhaps return in a wave of concern, active involvement, and greater awareness of nature in the mountains and foothills around us.



Iconic Mariposa Grove closed due to wind/snow damage

In January a powerful windstorm event whipped across the west slope of the mountains. The storm caused power outages, fallen trees, and blocked roads.

The Wawona area within Yosemite National Park was hard hit, with many structures damaged and countless trees downed. World-famous Mariposa Grove suffered storm damage as the weight of the heavy snow in tree canopies combined with the strong winds caused numerous trees to break or uproot within the Grove. At least 15 giant sequoias - including one large tree - fell due to the winds.

The recently constructed restrooms facility was smashed by a large fallen fir tree (photo at right). Yosemite officials have acknowledged that the restrooms will need to be rebuilt. Boardwalks that were part of the Grove's recent restoration project were also damaged. *(Photos courtesy of Park Service)*



Due to the still-hazardous conditions caused by unstable trees and fallen logs, the Park has closed the Mariposa Grove to public access until the risks can be mitigated.



What is “30 by 30,” and why is California making it a priority?



In October, Governor Gavin Newsom signed an executive order making California the first state in the nation to commit to “conserve” 30 percent of the state’s lands and waters by 2030.

California’s “30 by 30” plan is still in its beginning stages. If it unfolds as envisioned, it could lead to a far higher percentage of lands in the state gaining long-term protection as part of the 30 by 30 goal to reduce the loss of species and to protect at-risk ecosystems.

So what exactly is 30 by 30?

International bodies have been setting conservation targets for decades, but scientists have long debated how much nature is essential to protect. In a book published in 2016, biologist E.O. Wilson introduced his idea of “half Earth,” arguing that protecting half the planet would save as many as 90 percent of imperiled species. The movement was energized by Swiss philanthropist Hansjörg Wyss, who donated a billion dollars in 2018 to launch the Wyss Campaign for Nature, an initiative devoted to achieving 30 by 30. California joins 38 countries in support of the global effort to achieve that level of protection for the planet by 2030.

On January 27th this year, President Joe Biden issued an executive order committing his administration to the ambitious conservation goal of protecting 30 percent of U.S. land and coastal waters by 2030.

The U.S. is currently conserving 26 percent of its coastal waters, but only about 12 percent of its land in a largely natural state, according to the U.S. Geological Survey. To reach the 30 by 30 target will require conserving an additional 440 million acres, within the next 10 years.



To be updated on the State’s 30 by 30 plan and learn how to help shape its outcome, sign up with the state at: outreach@resources.ca.gov

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***CSERC is a 501(c)(3) non-profit organization working to
protect the water, wildlife, and wild places of the Northern
Yosemite region. CSERC relies entirely on grants and donations
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Look for the Common Merganser at lakes, streams, and rivers



Common Mergansers are unique-looking ducks

often seen in our region at lakes or along rivers where they dive beneath the surface in search of prey (mostly small fish). Spotting individuals or small flocks can be a real treat, so here are some facts about mergansers that can help you identify them:

Identification: Mergansers have straight and narrow red bills, unlike the wide, flat bill of most other ducks. During the breeding season, males are white-bodied, black-backed, and have iridescent-green heads. However, from late summer to autumn, males have non-breeding plumage similar to that of females. Females have white chests and shaggy crests on the back of their cinnamon-colored heads.

Nesting: Mergansers often nest in tree cavities near rivers and lakes, making mature forests important habitats. Their nests are typically within a mile of water and can be up to 100 feet off the ground. Females can have broods with as many as 18 ducklings!

Feeding: They can dive underwater for up to two minutes, but normally dive for less than 30 seconds.

Our CSERC staff has seen female mergansers in remote areas such as high in Yosemite Park with up to two ducklings perched on mom's back as she leads a flotilla of ducklings down fast-moving streams.



Updates on Phoenix Lake restoration and FERC hydroelectric planning



The **Phoenix Lake restoration project** was conceived 15 years ago by concerned area property owners, CSERC, the Tuolumne Utilities District (TUD), and various other interests who were frustrated by the Lake's degraded condition. The Lake suffered from stagnant water, high levels of sediment, and declining storage capacity.

With positive leadership by TUD and support from local stakeholders, major grant funding led to Phoenix Lake restoration treatments last summer after years of planning. Over 160,000 cubic yards of accumulated sediment were removed. Portions of the lake were deepened, and a new sediment capture basin was created to improve water quality.

Because wet conditions prevented dredging of the large east pool area, the flow of water through the Lake is still less than ideal, and shallow water may still result in the growth of invasive aquatic weeds. Until additional grant funding can be gained for the more expensive wet dredging work, the Lake's restoration won't be fully achieved. CSERC supports finding dollars to further enhance TUD's restoration of this important water storage reservoir and its adjacent wetland habitat for wildlife.



In the separate **Phoenix FERC relicensing planning process** for managing the South Fork Stanislaus River and Lyons Reservoir, more than four years of intensive debates are continuing to move toward a final resolution.

How much water PG&E diverts to serve TUD's water supply demands determines how much water gets left in the South Fork Stanislaus River. CSERC has pressed for years for more natural, adequate minimum flows and improved protection for aquatic species. A federal agency analysis of PG&E's hydroelectric plan for the Phoenix project for the next 40 years will likely come out in December, with a final decision likely in 2022.

Chicken Ranch Rancheria of Me-Wuk Indians reveal plans for a major new casino and hotel project west of Jamestown



(Chicken Ranch Rancheria artist rendering of proposed project))

Based on recently released tribal plans, there will soon be a new casino, hotel, and conference center beginning construction this year on an oak woodland site alongside Highway 108 near Jamestown.

The Chicken Ranch Rancheria Tribe currently operates a casino on a ridge overlooking the new project site. The project description states that the Tribe's current casino is operating "near capacity." The Tribe now plans to build **a new three-story casino and four-story hotel complex with two four-story parking structures on a currently vacant 42-acre site that is part of their Reservation lands.**

Starting in 1985, the Chicken Ranch Rancheria Tribe operated a bingo hall that brought many customers from nearby Central Valley locations. The bingo hall became a casino in 2000 when the Tribe added slot machines. The casino was renovated in 2011, adding a restaurant and more slots. In 2019 the casino expanded again with a coffee bar and more slot machines. The new project is intended to replace the existing casino, which will be shut down and converted to other uses once the new casino begins operations.

Due to the project being planned for construction on Reservation land, the Tribal environmental impact review process will narrowly focus on "off-reservation" environmental impacts such as traffic, utilities, air quality, water, and aesthetics. For a sense of the size of the project, the two parking structures alongside external parking lots will provide parking spaces for roughly 1,100 vehicles. There will be 190 rooms, a luxury day spa, a fitness center, a rooftop pool, and an event space. The primary focus will be gaming entertainment, along with dining, arcade, and conference center options.

The site's proximity to Jamestown and the already altered landscape of the area reduces the level of expected project effects. Key questions to be addressed for the project include water supply, wastewater treatment, GHG emissions, and how traffic effects on already busy Highway 108 will be mitigated.

Decades of CSERC photo surveys help locate at-risk wildlife



For more than 25 years, CSERC has conducted wildlife photo detection surveys in remote areas of our region in search of rare and elusive wildlife. Finding these species helps us justify to the Forest Service which areas within the National Forest need special protection - such as restricting the logging of large trees, prohibiting new development, or limiting other habitat-altering projects or actions.



CSERC primarily searches for at-risk furbearers -- the Sierra Nevada red fox, Pacific fisher, American marten, and wolverine. We've successfully detected three of those species while doing photo-surveys in the Stanislaus National Forest and Yosemite National Park. The marten photo (top left) was one of the earliest marten detections we got after more than a year of unsuccessful surveys. Since then, CSERC has located many of the charismatic martens in upper-middle and high elevation forests.



The endangered Sierra Nevada red fox (top right) is a species that is especially rare and challenging to detect. CSERC staff has at times hiked to remote elevations far above 10,000' in extremely rugged terrain to place cameras in crest-zone habitat suitable for the fox.

The fisher shown at right was attracted to a baited camera that our staff set up as part of studies in Yosemite Park. Years of CSERC surveys have not detected fishers across the vast majority of the Stanislaus Forest where historic records once showed their presence.



While searching for rare species, CSERC has often gotten pictures of other wildlife of interest



Porcupine



Badger



Ringtail cat



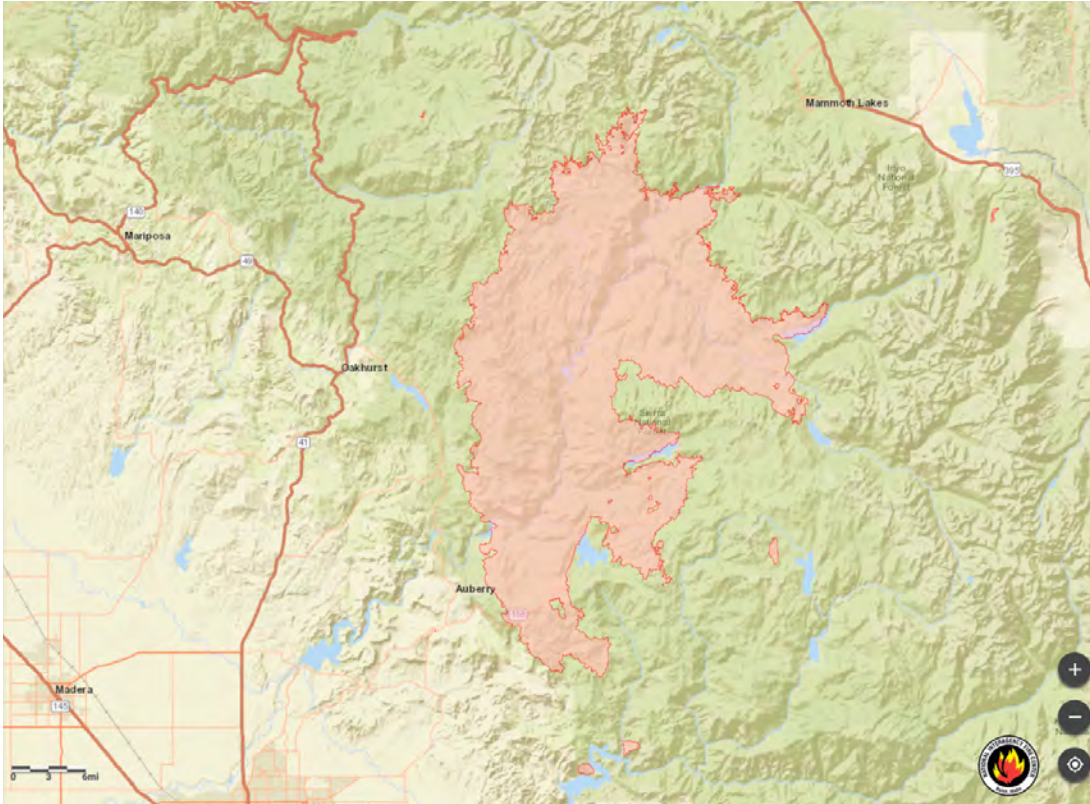
Black bear



Mountain lions

Setting up baited cameras always creates many possibilities of what might come to visit. The results help to better inform agency biologists and to broaden CSERC staff's understanding of wildlife in our region.

Last year's epic high-severity wildfires showed that decades of accumulated fuels haven't been effectively treated



This is a map of the gigantic **Creek Fire** that burned last summer on the Sierra National Forest to the south of our local region. When it was finally declared “controlled” in December, the massive fire had burned across 379,895 acres – more than **500 square miles**. It is hard to comprehend how huge an area that is.

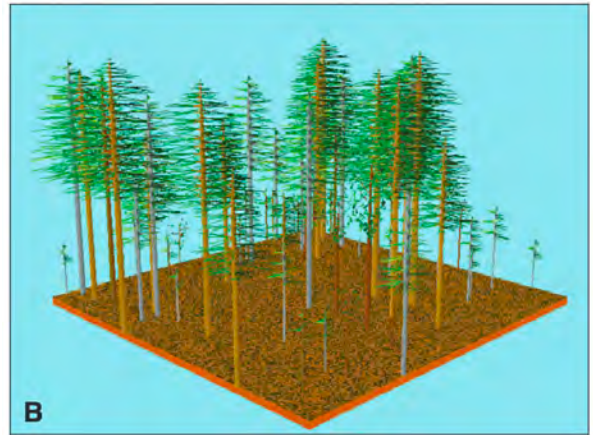
All six of the largest fires in California’s history have burned in the last three years. Unlike historic fires, recent megafires have burned with extremely high fire severity, so that instead of leaving a mosaic of burned and unburned conditions, widespread areas in the recent large fires ended up being severely incinerated.



Our local Northern Yosemite region has suffered from the huge Rim Fire in 2013, the 97,000-acre Ferguson Fire in 2018, and the 36,000-acre Donnell Fire in 2018. These vast forest areas have had valuable mature forest habitat devastated and recreational values lost for decades into the future.

Recent scientific studies about wildfire and forests reveal the obvious -- that dense brush fields and overgrown forests that have built up over many decades of fire suppression can burn intensely under windy conditions or when fuel moisture is extremely dry. The best available science provides a strong rationale for forest managers to act with urgency to make forests more resilient.

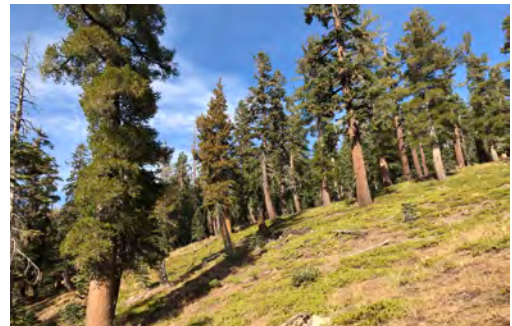
Heavily stocked forests that appear “natural” are actually far different from historic forests that evolved with frequent fires



For thousands of years, lightning fires and fires lit by indigenous California tribes burned frequently in the forests of the Sierra Nevada. At the Experimental Forest near Pinecrest, stumps studied by forest researchers showed that on average historic fires burned that site every decade. Such fires consumed forest fuels -- pine needles, branches, many small trees and bushes, as well as down logs on the forest floor.

The stumps showed that the multiple fires did not kill the trees. In fact, most trees had survived and thrived despite experiencing countless repeated wildfires prior to 1920. With only limited amounts of surface and ladder fuel that built up between the fires, the historic fires primarily burned at low to moderate severity -- “cleaning up” the forest and keeping it open and parklike. An early 1900’s forest inventory done near Yosemite Park found that the majority of forest areas contained many widely scattered individual trees amidst clumps of denser trees along with periodic open clearings.

Scientists describe the composition of such historic forests as “individual trees, clumps, and openings” (or ICO conditions). The mosaic of tree patterns and the low amounts of surface and ladder fuels not only made historic forests resistant to crown fires that might kill large trees, but the open, well-spaced trees also resulted in less competition for water during drought conditions.



For the past two decades, scientists have repeatedly promoted the need to “increase the pace and scale” of treatments to shift forests back toward a more historic, resilient condition. Prescribed burning is one important tool to apply to consume surface and ladder fuels. Selective thinning logging that primarily removes smaller and mid-size trees - while leaving the limited number of large, older trees - results in the residual trees having fewer lower branches and a higher resistance when experiencing low intensity fires.

One challenge has been the limited capacity of the U.S. Forest Service to plan and implement prescribed burns, thinning logging projects, and biomass removal treatments that can produce economic products while reducing decades of accumulated fuels. CSERC and both of the local forest stakeholder groups -- Yosemite Stanislaus Solutions (YSS) and the Amador Calaveras Consensus Group (ACCG) -- have attempted to get grant funds and political support to enable the Forest Service to significantly ramp up the pace and scale of needed treatments. Intentions have been good, but the actual amount of restoration treatments has been limited.

CSERC calls for “pyrosilviculture” as a key strategy - using prescribed burns and managed low-intensity wildfires to restore resiliency

Esteemed forest research scientists such as Dr. Malcom North, Dr. Scott Stephens, and other scientists have in recent years promoted the expansive use of prescribed burning and managed wildfires to consume forest fuels under cool or mild weather conditions that reduce the potential for high-severity fire impacts.

In the past, Forest Service decision-makers have often rejected doing prescribed burns in an area prior to the agency first doing logging or biomass removal—claiming that without the mechanical treatments, prescribed burning might do too much damage and kill too many trees.



In truth, many areas in the Sierra Nevada’s national forests are choked with far too many small and medium-size trees. If fuel-consuming managed fires end up killing scattered trees and creating openings in high-stocked forest stands, that is exactly what is needed to shift forest areas back to a more historic natural condition -- with scattered surviving large trees better protected from out-of-control wildfires.

During a recent presentation to a local forest stakeholder group, Dr. North pointed out that only a small fraction of USFS lands in California are mechanically treated or prescribed burned each year compared to the historic, natural rate of 487,000 acres a year of fire treatments that are actually needed. Without a giant increase in projects, the fuels build-up will always outpace the insufficient amount of USFS treatments.



Dr. North and other scientists have asserted that there’s no point in arguing over whether to do forest thinning or burning. It is essential to increase the pace and scale of both.

The Sierra Nevada has limited sawmill capacity, a limited work force, and constraints that prevent logging access to a large portion of forest lands. Pyrosilviculture is the most viable option for reducing excessive fuels, especially where thinning logging can’t be used. That means using the “blunt” and imprecise tool of prescribed fire and allowing low-to-moderate-severity managed wildfires to burn under the right conditions in the region’s forests.

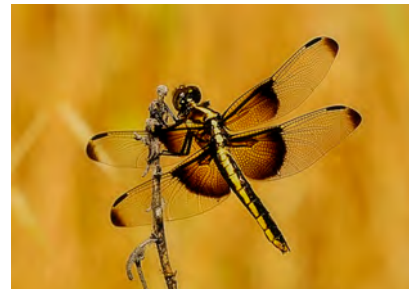
CSERC urges the USFS to begin applying pyrosilviculture on a large scale to reduce the risk of another local devastating megafire. It will take an adjustment of attitude by the public to accept far more open forests with scattered, visible charred snags, but it is long past the point where the status quo is acceptable.

On April 20th, the 2021 CSERC photo contest will open

As our staff works to defend water, wildlife, and wild places of our iconic region, we sometimes are awestruck by the beauty of a forest setting, or the brilliant color of a songbird, or the graceful agility of a Douglas squirrel leaping from tree to tree.

We know that many of you take photos of wildlife and scenic landscapes. This is an early notice to look at your photos to see which might be worth entering in CSERC's upcoming photo contest.

The contest will have prizes awarded in two Adult photo categories – the best **Wildlife Photos** of our local region and the best **Natural Landscape Photos** of our region. There will also be a cash prize for the best Wildlife and Scenic Landscape photo in the **teen/youth category** for photographers 18 and younger. Watch for details on how to enter in our April E-newsletter or check out the article we'll post on our CSERC website on April 20th.



Have you donated to CSERC in the past year?

The goal of donating is to make a difference. CSERC works on the frontlines of advocacy – often as the only environmental organization participating in land planning, water, and wildlife issues that affect our vast region.

CSERC consistently makes a meaningful difference for nature, recreation, and the legacy for this region that we will collectively leave for future generations.

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You can select your choice of season by traveling uphill or down



It's that time of year when on the same day, you can experience fresh snow covering the trees at our Twain Harte office's elevation, or you can enjoy some of the colorful spring wildflowers that are emerging along trails around New Melones reservoir.

Across the foothills, songbirds are calling in the early mornings, even as snow still blankets much of the higher elevations with frigid conditions. Choose your season and enjoy!

