

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.



For many species, hibernation is an amazing "time out"

Once the weather turns cold and food supplies dwindle, many kinds of wildlife hibernate. Traditionally the bear is the species that is often associated with hibernation. But many other species in our region become dormant or hibernate to conserve energy and survive challenging winter conditions. Frogs, snakes, lizards, turtles, marmots, salamanders, ground squirrels, some species of bats, and ladybugs all depend on some form of hibernation.

For a human, imagine going to sleep in November and not awakening until May.



Then consider that marmots at high elevations near the crest of the range hibernate six to eight months over fall, winter, and early spring. Studies have shown that a marmot's body temperature and heart rate drop dramatically; and they have long periods of up to two weeks of torpor (inactivity) interspersed with a few hours of mild activity before returning to their deep sleep condition.

Bears can spend months in a den, living off the fat they stored by gorging on available foods prior to hibernation. Reptiles and amphibians may "brumate" or become dormant for most of the winter. They may not eat anything and may congregate in dens or burrows. Ladybugs (like those in the photo below) cluster by the thousands around sites that are often near water and that don't freeze for extended periods of time.



Some turtles select deep piles of leaves to sleep the winter away; while other turtles can actually hibernate in mud all winter at the bottom of lakes, even surviving if the lake surface freezes as solid ice.

Frogs may hibernate in leaf litter (like some turtles). Chorus frogs can actually freeze with no heart beats until finally thawing and reviving in the warmth of spring. The various kinds of hibernation across the region are truly amazing.

Many forest enthusiasts may not know about yew trees in the region

CSERC staff recently happened upon a grove of Pacific yew trees (*Taxus brevifolia*) while setting up wildlife cameras in an isolated area in the northwest corner of the Stanislaus Forest. Pacific yew is relatively uncommon, and its presence in abundance was noteworthy. The yew trees were scattered throughout the stream-side understory vegetation, below mature conifer forest and amidst canyon live oak, interior live oak, and white alder. CSERC has shared the location of these Pacific yews with Forest Service staff so that they are aware of these special trees as planning moves forward for forest treatments in the massive MAC Forest Health and Resilience Project now being designed.



One of the most striking features of the Pacific yew, and often the first thing that draws your attention, are the bright red arils – fleshy fruit-like structures covering the seeds. Birds consume them and then disperse the seeds. In addition to the eye-catching arils, the overall growth form of Pacific yew is characteristic in that it is not strongly conical like most other common conifer forest species. Rather, its growth form could be described as similar to an apple tree, with horizontal to drooping branches and a broadly rounded canopy. Its leaves are reminiscent of white fir, about an inch in length, flattened, and arranged in two opposite rows.

The wood of yew is decay resistant, hard, heavy, and fine-grained. It was used by Native Americans for spear handles, bows, and fishhooks. **Taxol, an extract of Pacific yew, can be an effective treatment for ovarian cancer.** It has not been possible to produce Taxol synthetically. The only source has been extracting it from yew bark.

In the vast central Sierra Nevada region, the Pacific yew only occurs in a few isolated stands. A great place to view Pacific yew is at the North Grove of Calaveras Big Trees State Park, where scattered yew trees are visible beneath the giant Sequoias along the main trail.



Both photos courtesy CAL PHOTOS – U.C. Berkeley

This winter 2024-25 newsletter
Is a publication of the
Central Sierra Environmental Resource Center
P.O. Box 396, Twain Harte, CA 95383

Phone: (209) 586-7440
E-mail: info@cserc.org
Website: www.cserc.org

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 from people like you to do that critical mission.

Board of Directors

Tom Parrington Cris Barsanti Robert Rajewski Jason Reed Steve Hannon Julia Stephens Jeff Tolhurst

<u>Staff</u>

Stan Dodson, program director
John Buckley, executive director
Heather Campbell, website translator
Chelsea Lewandowski, conservation
Dr. Tom Hofstra, staff ecologist

After years of planning and preparation, a prescribed burn project reduces fuels in the South Grove at Calaveras Big Trees State Park

In late October, a long-planned prescribed fire was ignited in the South Grove at Calaveras Big Trees State Park. The project was a collaborative effort by California State Parks, CAL FIRE, the U.S. Forest Service, and other agencies. This controlled burn (a strategic forest management tool) was done to replicate natural fire processes and promote long-term health for the 1,000 giant sequoias and other large trees in the grove.

The project goal was to treat 1,300 acres with beneficial fire across a period of 7 to 11 days. Because the operation was limited by two rounds of precipitation, the broadcast burning lasted only four days with about 900 acres being treated by fire. Fire crews patrolled the perimeter in the following days, and extensive pile burning also took place.

According to Park staff, it was a good first entry. They successfully backed fire down from the perimeter road into the interior of the area, where many mature giant sequoias, incense cedars, ponderosa pines, and sugar pines had been prepped for the burn. Crews used fire-dropping drones as part of the treatments. Because weather limited how much could be burned, the agencies plan to burn the remaining acres next fall.



Many monarchs were hand-prepped by crews, who removed most of the fuels from around the base of the trees.



Fire was allowed to creep towards this giant sequoia, but the edge of the fire was stopped short of the tree.

Why do giant sequoias need fire? Reducing the fuel load in the South Grove can help protect the ancient trees from intense wildfire damage – and because of the Grove's proximity to the North Fork Stanislaus River canyon, the risk is significant. Low intensity burning creates favorable conditions for giant sequoia regeneration. The heat helps open the cones, releasing millions of seeds; fire on the forest floor creates bare mineral soil for seedlings to establish; and the nutrients released by the fire help maintain the ecological integrity of the forest as a whole.

The use of fire for forest management, while ecologically important, is not an exact or precise tool – resource damage (such as mortally damaging the precious giant sequoia monarch trees) is an inherent risk. But with positive reports coming in from State Parks, CSERC staff looks forward to touring the area when it reopens to public access in the spring. We hope to find all the large sequoia trees unharmed. Stay tuned.

Whether to use herbicides on fuel breaks in the national forests of the region is a controversial issue that divides forest stakeholders

Fuel breaks are often created on national forest lands as linear strips of treated forest that have low levels of flammable fuel. They usually contain scattered mature trees with minimal bushes, small trees, or dense groundcovers. They routinely are treated to eliminate all snags, fallen logs, or any build-up of fallen branches or other woody accumulations.

Fuel breaks do not stop wildfires, despite that misperception by many members of the public. Fuel breaks are instead intended to provide relatively safe areas for fire crews to work to suppress a spreading wildfire; or they can also be used as anchor points for intentionally lit prescribed burn projects.



In recent years, fuel breaks have become a topic of debate because the Forest Service has proposed spraying herbicides across thousands of acres of fuel breaks to kill resprouting vegetation in large Forest Service projects. In both the SERAL 2.0 project and the MAC project, the use of chemicals to kill undesired vegetation has been strongly promoted by the Forest Service and opposed by environmental groups.

Separate from whether to use herbicides on fuel breaks, CSERC and other conservation groups have generally accepted the limited use of herbicides to treat invasive weed infestations if chemicals are used as a last resort, rather than the first choice. We acknowledge that having non-native weeds spreading across public forest lands is a threat that justifies limited herbicide use if other methods are ineffective.



For fuel breaks, however, there are non-chemical options to control vegetation – including mowing, mastication, prescribed burning, targeted grazing by goats, and hand cutting of the resprouting brush.

Because environmentalists adamantly opposed herbicide use on up to 7,000 acres of fuel breaks in the SERAL 2.0 project, the Forest Service postponed its decision for that chemical use. Similarly, in the now-being-designed MAC project (which is also a large-landscape forest project), the proposed herbicide use on fuel breaks is also a highly debated topic.

A middle ground strategy could be to limit herbicides to a small number of fuel break acres, while assuring the lowest possible risk to water and wildlife.

The Sierra Nevada red fox is still one of the most endangered, at-risk species across the vast mountain region

Nearly a decade ago, the U.S. Fish and Wildlife Service agreed that it was warranted to list the Sierra Nevada red fox (SNRF) as Endangered in the central region of the Sierra Nevada. A formal rule to give the fox that "Endangered" status followed in 2021.

In partnership with U.S. Forest Service and National Park Service biologists, over many years CSERC staff has set out remote cameras to attempt to detect the rare and elusive fox. Despite thousands of days of cameras being up and functioning in suitable SNRF habitat, we have only had success getting photos of the fox in three separate crest zone areas across the vast local region.

That very low detection rate for the fox validates the U.S. Fish and Wildlife Service's estimate of SNRF numbers in the central region of the range being as low as only 18 to 39 foxes.



Photo - U.S. Forest Service

Due to its extremely small population size, the federal wildlife agency determined: "...the Sierra Nevada DPS of the Sierra Nevada red fox is presently in danger of extinction throughout its range."

Our Center has worked for years to identify threats to the SNRF and its high elevation habitat. We've networked with university researchers and agency biologists to assess which threats pose risk. While climate change or disease risks are not currently controllable, humans can reduce threats created by snowmobile use, military exercises in SNRF habitat, and effects of livestock on high mountain meadows.

Snowmobile use in the high elevation areas of the region creates packed snow. Coyotes that otherwise would not be able to traverse deep snow may utilize the packed snow trails to move high into the range of the fox – competing with the fox for food and potentially preying on the fox itself. CSERC has long urged that restrictions be placed on snowmobiles to keep their noise and the packed snow trails out of key SNRF areas.



Military maneuvers associated with the winter warfare training center on the east side of the Sonora Pass area can also affect the fox. Large number of soldiers are frequently present in the heart of fox habitat, often leaving behind food wrappers and other trash. That can lead to foxes being drawn to the dangerous highway corridor or becoming acclimated to humans.

In the big picture, the effects on the fox from climate change may be more significant than direct effects caused by humans. But we can control actions by humans, and any reduction in risk increases the potential for the fox to survive.

Public now has opportunity to comment on massive wood pellet project

In past newsletters, we've shared that a coalition of politically conservative rural California counties created a non-profit corporation named **Golden State Natural Resources (GSNR)** to attempt to find economic solutions for "too much biomass" (waste wood) in forest regions. After years of planning, GSNR launched an environmental review process for its mammoth biomass project. That plan is now open for public comments.

The plan proposes to construct two processing facilities that would each produce enormous amounts of wood pellets that would be sent by train to the Port of Stockton. The pellets would then be shipped overseas and burned as fuel in Europe or Asia.

One facility would be built in Lassen County, and one in Tuolumne County. To get feedstock for the processing facilities, the Project would collect waste wood left from logging projects as well as woody residuals from mills. The Project also proposes "biomass only thinning logging" to take mostly smaller trees from public and private forest areas.



PROS OF THE PROJECT

Waste wood left behind after logging (tops, branches, and cull logs) is currently burned in piles in the forest as shown in the photos at right that were taken last month by fire crews with the Calaveras District of the Stanislaus Forest.

Just this year alone, the Forest Service estimated 60,000 such piles needed to be burned by forest crews.

That wood and the woody residuals at mills would be burned one way or the other, so taking that woody material to turn into wood pellets does not create "new" or additional air pollution or emissions. In addition, if GSNR claims are accurate, some percentage of the wood pellets would be substituted to replace the burning of coal at power plants in Asia or Europe.



The scale of the project would result in gigantic amounts of air pollution, greenhouse gas emissions, and other impacts

What might be acceptable at a small scale may result in highly significant negative effects when done at a massive scale. The transportation and operational impacts of the proposed Golden State Natural Resources project are estimated by the draft EIR to be so enormous, they are beyond easy comprehension.

CONS OF THE PROJECT... AND THERE ARE MANY

A large percentage of the feedstock for the processing facilities would come from "biomass only thinning logging" projects that the DEIR says would be additive to the already huge amount of logging done by the Forest Service and Sierra Pacific Industries on public and private lands.

To put the estimated amount of GSNR logging into perspective, the plan is to log 85,779 acres of forest each year for 20 years. Overall, that would equal a strip of logged forest one-mile-wide, stretching from Sacramento to Boston.

Another obvious significant impact of the proposed GSNR plan is that the collection of the waste wood left after logging and the transport of the biomass to the processing facilities would result in an enormous amount of "vehicle miles traveled." Combined with travel to and from work by employees at the two facilities, the DEIR estimates that each year there would be 18 million miles of vehicle miles traveled. Overall, a total of 8 million gallons of petroleum fuel would be consumed annually by the Project.

Then there are the estimated **29 cargo ships** carrying wood pellets that are planned to travel back and forth to Asia or Europe each year; add that amount of transportation impacts to the estimated **100 trains per year** traveling to and from the Port of Stockton from the two processing facilities.







All the trucks, trains, shipping, and operations of the facilities would create a gigantic amount of air pollution and GHG emissions. Yet in the DEIR, the claim is made that millions of "vehicle miles traveled" or consuming millions of gallons of petroleum supposedly isn't a "significant" impact.

HERE IS HOW YOU CAN PROVIDE YOUR COMMENTS ON THIS PLAN

In our comments, CSERC will be strongly urging GSNR to revise the plan and commit to do highly meaningful mitigation measures to reduce GHG emissions, air pollution, train and vehicle traffic, and overall cumulative effects. You can echo those concerns, or you can point to other issues that you feel are important.

To comment (before January 20, 2025) go to: www.goldenstatenaturalresources.com/deir/
That also takes you to the lengthy, detailed DEIR. Simply opposing the project will not affect the outcome. Submitting specific comments or issues of concern can potentially result in positive, meaningful revisions.

A maze of unauthorized, user-created mountain bike trails has been built in the Stanislaus Forest - Will Forest officials just make them legal?



Over the summer, while CSERC staff was conducting wildlife surveys in the Eagle Roadless Area, we came across apparent illegal, user-created mountain bike trails that didn't appear on any Forest Service maps. Over the next few months, our staff started to survey these trails, mapping them with GPS — and one trail led to another. So far in the broad area around the Pinecrest and Herring Creek basins, we've mapped 18 unauthorized trails totaling 40 miles in length. Some of the trails are 2 or 3 miles long, and some were created as shorter alternate routes to bypass difficult-to-ride authorized trails.

CSERC's initial surveys of the unauthorized trails found many resource issues. There are illegal trails that intrude into Wilderness and cut through Roadless Areas. User-created trails enter Native American Cultural Sites and cross streams where Endangered Sierra Nevada yellow-legged frogs are known to breed. There are shoddy bridges and unofficial trail markers placed throughout the system that obviously don't meet Forest Service standards.

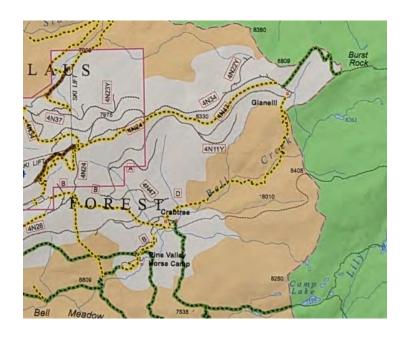
For most of the user-created routes that we've discovered, the use of the term "trail" would be generous. Many have been created as steep downhill mountain bike courses, rideable in one direction only. And while we've found many constructed jumps and bank turns, there are few examples of even the most basic erosion control techniques such as reverse grades and water bars.

Well-informed CSERC staff have attended two recent community meetings hosted by the Forest Service where these illegal trails were discussed. Most notably, a meeting in mid-November was dedicated to mountain bike trails in the local forest and the unauthorized trail issue, in particular.

At the main meeting, the conference room at the Supervisor's Office was packed. The Forest Service was well represented with 15 staff members, including leadership and trail crews. Also present were at least 60 advocates from the local mountain bike community along with just a handful of environmental representatives including CSERC staff.

Forest supervisor Jason Kuiken began the meeting by lightly admonishing those who've built illegal trails, but he then explained that the NEPA process could result in many of those trails becoming legally authorized "...because there is a need."





At the recent Trails meeting, Forest staff – using data from popular mobile apps like Strava, AllTrails, and Trailforks – had several large maps hanging on the walls that seemed to accurately show hundreds of miles of unauthorized trails throughout the Stanislaus Forest (the image at left is a detailed example.) Those in attendance were then asked to "mark-up" the maps, noting their "favorite trails" and those with "issues".

Forest staff explained they would use this exercise to inform an upcoming NEPA analysis, during which trails will be considered for inclusion into the Forest's authorized system.

That would potentially reward those who knowingly built the illegal trails.

Just one example (from the map above) is an unauthorized trail that connects Gianelli to the Crabtree trailhead. There are numerous issues of concern with this illegal, user-created mountain bike trail.

According to our GPS, this illegal route intrudes into the Emigrant Wilderness where bicycles are not allowed; the unauthorized mountain bike trail also cuts into the Bell Roadless Area, making the area less eligible for a Wilderness designation in the future if the trail were to be approved. The very poorly built trail crosses Bell Creek in an area where, in the past, our staff has observed Endangered Sierra Nevada yellow-legged frogs; and finally, this trail cuts through a flagged Native American Cultural Site.

The overall community planning and NEPA process to add trails to the existing USFS system will be lengthy. In general, CSERC will oppose mountain bike trails being approved in wild Roadless Areas; and we will contribute our staff's expertise with the various natural and cultural resources that also may be affected.

Will E-bikes also be allowed on trails now classified as non-motorized?

Another controversial issue currently being considered by Stanislaus Forest officials is whether some "non-motorized" trails should be reclassified as "motorized" to allow use by those with motorized E-bikes.

The increased speed, noise, and weight of E-bikes can diminish the integrity of the trail system and can also diminish the enjoyment of a trail by hikers and horseback riders. CSERC will be scrutinizing proposed reclassification of "non-motorized" trails to a "motorized" use. There is already a large system of backcountry forest roads and off-highway-vehicle trails in the Forest for those wanting motorized routes.



The end of the year is hopefully a good time to ask you to identify what's most important to you. What should CSERC prioritize in 2025?









CSERC will always focus our efforts on pivotal issues where there is urgency and when our efforts may make a meaningful difference. But above and beyond those matters of immediate, critical importance, our staff would value knowing which issues or actions are most important to YOU – our members.

The short list below represents many of the conservation issues that CSERC's small staff currently engages in during the year.

Please rate your top three picks for CSERC to focus on in 2025 – then e-mail us your selections.

- Defending wild roadless areas
- Protecting water quality and working to keep sufficient flows in rivers
- Setting up cameras to locate at-risk wildlife species
- Serving as forest watchdogs by doing monitoring and fieldwork
- Showing up to be a voice for nature at key meetings across the region
- Engaging in policies and projects that affect Yosemite Park
- Organizing hands-on restoration workday projects with volunteers

Which of the broad categories above may be most meaningful to you? **E-mail your top** three picks to us at: info@cserc.org









Please think how you might encourage a new donor to contribute to CSERC and trigger matching donation offers from two sources



We recently shared in our Enewsletter that between now and the end of the year, Jill and Shawn Seale (two longtime CSERC supporters) have generously pledged to match up to \$1,000 in contributions from new donors.

That inspired Keri Green (another longtime member) to offer to contribute an additional \$500 as matching funds if we reach at least \$800 in donations from new donors by year's end.

Combined, those two generous matching offers can bolster the value of contributions to CSERC from any new donors.

Photo: Kathy Mayhew

If you are a member who already contributes, perhaps you can encourage a relative, friend, or fellow nature enthusiast to take advantage of these matching donation offers for contributions from new members.

	And remember, there is sti	II time before the end of the	year for existing members to also
give	e a tax-deductible donation.	Your support truly matters.	Thank you!

"Here is my tax-deductible donation towards CSERC's many efforts." Name E-mail (optional) Address Donation: __\$30 __\$50 __\$500 __\$500 __other (monthly giving option is available on website) Mail your donation to: **CSERC** Questions? Call: (209) 586-7440 **Box 396** Twain Harte, CA 95383

Or donate online at:

www.cserc.org

Central Sierra Environmental Resource Center (CSERC) P.O. Box 396 Twain Harte, CA 95383

(209) 586-7440 e-mail: info@cserc.org

Nonprofit Organization U.S. Postage Paid Permit #113 Sonora, CA 95370

ADDRESS SERVICE REQUESTED

Looking out to what lies ahead on the horizon can be a challenge



In many ways, it was a highly effective year for our Center. Our staff was both dedicated and productive. Our CSERC Board provided solid support, and those of you who are our members collectively donated to enable us to do our work.

Tom, Chelsea, and Stan were vigilant forest watchdogs - visiting meadows, logging sites, wild areas, and wildlife cameras. We played a key role in stakeholder debates over designing a giant new MAC Project. We intensely engaged in Yosemite Park planning, and we put countless hours into water and river flow issues. We also built stronger relationships with Regional USFS officials and pressed local Forest officials to be more responsive.

Indian Rock Arch (at left) in Yosemite is promoted as the only natural granite arch in the entire mountain range. It bridges a gap between two granite knobs. **CSERC also attempts to bridge a gap** - between those focused on resource use and those of us who desire to protect our region's water, wildlife, and wild places.