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# WILDERNESS RECORD

PROCEEDINGS OF THE CALIFORNIA WILDERNESS COALITION

ISSN 0194-3030

Vol. 20, No. 5

2655 Portage Bay East, Suite 5 Davis, CA 95616

May, 1995



Mt. Stanford reflected in an unnamed lake, Sequoia-Kings Canyon Wilderness. Current federal policy is to not name the geographic features of designated wilderness areas since names are a veneer of civilization. Photo by Eric Knapp

## Forest Service plans to log Lassen roadless area—for its own good

By Steve Evans

The Forest Service is soliciting public comments on its proposal to "salvage log" 2.5 million board feet of "dead and dying" trees on 250 acres in the Polk Springs Roadless Area of the Lassen National Forest. The public has until June 5 to comment on the plan outlined in the Barkley Fire Salvage draft environmental impact statement (EIS) which was recently published by the agency.

The proposed project is the result of the Barkley wild fire which burned through the area in 1994. Conservationists are incredulous that the agency is going to so much trouble to log relatively few trees, but the Barkley project somehow was included in the Forest Service's misguided Forest Health Initiative (see January 1995 WR), a plan to speed up logging in key roadless areas throughout the west on the dubious premise that a logged forest is a healthy forest.

The 9,700-acre Polk Springs Roadless Area encompasses a remote and rugged section of Deer Creek in the northern Sierra foothills southwest of Mt. Lassen (see map on page 5). Separated only by a road from the Ishi Wilderness, the roadless area was strongly supported for wilderness designation in public comments on both the 1979 roadless area review and evaluation (RARE II) and the 1992 Lassen forest plan. Because of its outstanding value for fish, wildlife, and recreation and its wealth of cultural sites, the Forest Service has recommended the section of Deer Creek that runs through the project area for national wild river status.

A major point of controversy regarding the proposed logging plan is its potential for harming spring chinook salmon and winter steelhead runs that are in danger of going extinct. Once numbering in the thousands, the anadromous runs in Deer Creek and in Mill Creek to the north have declined to just a few hundred fish in the last few decades, but they still represent the best remaining native runs of salmon and steelhead in the extensive Sacramento River watershed. Both species are under review by the National Marine Fisheries Service for possible listing as endangered species.

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## How the wilderness got its name

By Jim Eaton

"Of what value are forty freedoms without a blank spot on the map?" —Aldo Leopold

When looking for blank spots on the map, you will have to peer long and hard to find many in California. There are some in the desert, however, and the Cleveland National Forest is noteworthy for its No Name Roadless Area.

Though some Native American names have survived in our wilderness areas—Yolla Bolly, Cucamonga, Jacumba, and Kiavah, for example—most of our wilderness names reflect the heritage of Spanish settlers and Anglo explorers. Hence we have the Agua Tibia, San Rafael, Ventana, and Orocopia Mountains wildernesses along with the Desolation, Emigrant, Golden Trout, and Old Woman Mountains wilderness areas.

Sometimes names for wilderness areas are hard to come by. The map of the 31,000-acre Trilobite Wilderness is next to blank; it shows only one name: Marble Mountain. Since California already has a Marble Mountain Wilderness, the desert wilderness was named for a fossil site just outside its boundary.

Although Congress names wilderness areas when they are established, the U. S. Board on Geographic Names is entrusted with approving new names for topographic features throughout the United States. Established by

President Harrison in 1890 to resolve disputes over names and features, the Board now mainly considers new names.

The Board's policy, based on its interpretation of the Wilderness Act of 1964, is to keep features in wilderness areas nameless. "Though wilderness designations are a modern invention," the Board has decided, "a fundamental characteristic of elemental wilderness is that features are nameless and the cultural overlay of civilization is absent."

Consequently, the Board will not approve a proposed name, accept a name in local use, or adopt a name used by the administering agency in a wilderness area unless an overriding need exists, such as for purposes of safety, education, or administration.

Name proposals commemorating people are discouraged and will not be adopted unless there is a direct association between the person being honored and the feature and unless the person has been dead at least a year. These policies also apply to areas being considered for possible wilderness designation by Congress.

When popular wilderness ranger and author Jim Jenkins died in a traffic accident, family and friends proposed naming a peak in his honor. Their first choice was in the Golden Trout Wilderness, but they ran into the naming prohibition. Instead a peak traversed by the Pacific Crest Trail just south of Owens Peak was selected. Although the area was recommended by the Bureau of

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## Coalition news

### Monthly Report

Cruising along at 35,000 feet, my neck is wrenched to the right so I can discern all the wilderness areas (and potential ones) over which we are flying. The Sierra is clad in an endless mantle of snow, but still I can discern the peaks—Owens, Olancha, the Palisades, Ritter, and Banner. Beyond them are the Panamints, Inyos, and Whites.

Looking around the cabin on my flight home from Los Angeles, I am amazed that no one else savors this incredible view. Most of the passengers sitting by a window are buried in a book or business report; others are sleeping.

This is a much more pleasing view than the one I had flying home from Portland a week ago. I flew for mile after mile over a grotesque quilt of clearcuts that brought home the concept of habitat fragmentation. The mutilation of the Cascades' ancient forests is heartbreaking. I was cheered by the sight of Crater Lake until I realized the national park's square boundary is delineated by chainsaws. A small sanctuary with barbarians at the gate.

It was not until my first glimpse of California in the distance—Preston Peak in the Siskiyou Wilderness—that I felt better and strengthened my resolve. We cannot allow this to happen to our state. We do have our share of horrors, but nothing to compare to our neighbors of the north.

All this wandering was in support of The Wildlands Project, a visionary plan to restore the native biodiversity of the continent. The first trip was to Corvallis where Wildlands staff, including Dave Foreman and David Johns, joined scientists (Reed Noss, Michael Soule, and others) to hammer out details of assisting regional groups. Thousands of activists share this vision and already are working on specific plans to restore the wildlands of their home regions.

The second trip took me to the corporate headquarters of Patagonia in Ventura. Patagonia has adopted the project and is giving whatever assistance it can. We met with all the store managers and other high-level staff to discuss specific publications, materials, and events that will encourage Patagonia customers to become involved in wild-

lands preservation. The company also brought in environmental leaders from various parts of the country.

Along with the two Davids, my fellow Wildlands Project board member Roz McClelland attended. As I scrutinized the 50 people around the table, I was astounded to discover that the four of us clearly were the elders in the room. Foreman is creeping up on the big five-oh, and David and I are not far behind. I'm not about to disclose Roz's age, but she has a son older than some of the activists present.

Foreman, by the way, has just been elected to the Sierra Club's board of directors. Since he has to attend a May meeting in San Francisco, I talked him into coming to our fundraiser honoring Senator Alan Cranston. We hope to have some other celebrities there as well, but you'll just have to attend to see who shows up.

Back to the window. I've always enjoyed identifying peaks, rivers, mountain ranges, and wilderness areas from the air: looking at the places I've been and recalling backpack trips of yore.

Now I find myself looking between the wild areas, searching for corridors to connect the sanctuaries. If I were a mountain lion, how *would* I get across Interstate 5? Who allowed them to build that subdivision next to the Sespe Wilderness?

In Corvallis, it became apparent that we had made a transition from past environmental campaigns that looked mainly at wildlands, often with a recreational eye. Now we are looking at wild animals and plants. Our perspective is not on rights for individual animals but on the habitat needs of entire animal populations.

As Edward Abbey said, if the lion lies down with the lamb, it will be to eat it. Our goal is to give the mountain lions, wolverines, and fishers a chance to survive and thrive. And in the long run, to return their missing cousins—the grizzly, jaguar, and wolf—to the California wilds.

**By Jim Eaton**

### Dave Foreman joins May 14 tribute to Senator Cranston

#### Annual CWC fundraiser should be a howlin' good time

Join fellow wilderness lovers and diehard Democrats on May 14 at the California Wilderness Coalition's (CWC) tribute to Alan Cranston, the senator who brought us most of California's most beautiful wilderness areas.

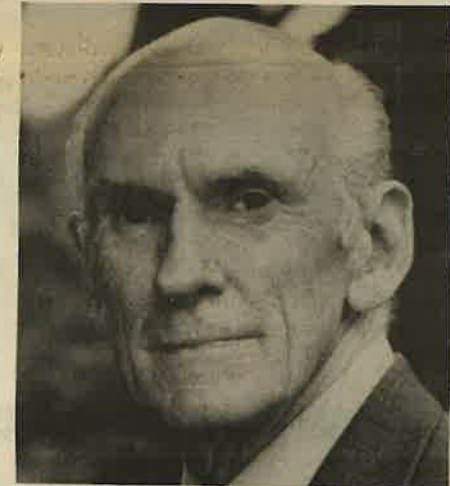
The evening program includes a slide show sampler of California wilderness and presentations by Dave Foreman and others. The program will be preceded by a reception where you can chat with the senator over drinks and hors d'oeuvres (French for munchies) from some of our favorite, ever-generous restaurants and bakers.

The tribute begins at 7:30 p.m. at the Veterans Memorial Theater, 203 East 14th Street, in Davis. The reception, also at the Veterans Center, runs from 5:30 to 7:00 p.m.

Tickets for the tribute are \$10 and can be reserved from the CWC office or purchased at the door (checks and cash only). To attend both the reception and the tribute, the cost is \$35. Since all proceeds support the work of the CWC, all donations are tax-deductible.

For tickets, directions to the theater, or information about sponsoring our tribute to Senator Cranston, call the CWC at (916) 758-0380.

### Renaissance man



What California native was sued by Hitler's publishers for his annotated, anti-Nazi translation of *Mein Kampf*, wrote a play, set a world track record, and dabbles in oil painting? More on the hidden life of Alan MacGregor Cranston—but only at the fundraiser!

### And now a word for our sponsors

We thank the following businesses and individuals for sponsoring our tribute to Alan Cranston and supporting wilderness preservation:

Cafe Roma, Davis  
Chevy's, Dixon  
Fleet Feet, Davis  
Patagonia  
Ray's Food Place, Davis  
Soga's, Davis  
Bonnie Beffa  
Alan Carlton  
Elizabeth Carlton  
Lillain Eaton  
Bill Julian & Robin Kulakow  
Don Morrill  
Robert Randolph  
Bob Schneider  
Mary Scoonover

### A testament to wilderness

Putting the California Wilderness Coalition in your Will is an excellent way to assure we can continue protecting and preserving California's precious wildlands far into the future.

Currently, the Coalition's Smoke Blanchard fund, an endowment honoring the late mountaineering guide, supports wilderness preservation efforts on the Sierra Nevada's East Side, an area Smoke particularly loved.

To leave a bequest, simply add a paragraph to your Will stating: "I bequeath to the California Wilderness Coalition the sum of \_\_\_\_ Dollars [or, for insurance policies, land, or other property, please specify]."

If you would like to discuss leaving a bequest to the Coalition, please call Executive Director Jim Eaton at (916) 758-0380. All information will be held in strict confidence.

### Yes, we had no numbers

The April *Wilderness Record* appeared without page numbers because of a problem at the printer's. We apologize for any confusion the absence of page numbers may have caused.

Please send a complimentary copy of the *Wilderness Record* to:

Name \_\_\_\_\_

Address \_\_\_\_\_

Area of interest (if known) \_\_\_\_\_

May we use your name? \_\_\_\_\_

California Wilderness Coalition,  
2655 Portage Bay East, Suite 5, Davis, CA 95616

### Wilderness Trivia Question (with thanks to Judy Anderson)

What California wilderness areas do not contain the feature for which they were named?

**Answer on page 7**

# Understanding fire

In this third installment of our series, *Understanding fire*, John Buckley explains how weather affects fire behavior in the Sierra Nevada. Although weather patterns vary around the state, the underlying principles are universal.

By John Buckley

Fire behavior depends to a great degree on weather. That may seem obvious, but the importance of weather can't be overemphasized. Think of the difference between a fire burning in a light rain with no wind and a fire burning in 110 degrees with a strong wind whipping the flames.

Although we have no control over weather, an understanding of the basics is critical to evaluating the merits of prescribed burns and other fire management activities.

Air temperature is directly related to fuel moisture and relative humidity. When the air is warm or hot, relative humidity is less, and the percentage of moisture in fuels begins to drop. Conversely, as air temperature cools, relative humidity increases, and fuel moisture begins to rise. As complicated as that sounds, it is one of the critical

## Fighting fire

Fire needs heat, oxygen, and fuel to burn. So:

We can cool a fire to reduce its heat, using either water or dirt or scattering fuels to reduce its intensity. Most cooling comes from the application of water around the fire's perimeter. "Wetlines" of sprayed water can stop a fire in light fuels immediately. Likewise, the natural cooling that comes with night often stops fires from spreading and allows containment or control.

We can smother a fire to eliminate its access to oxygen. Fire fighters use dirt as their main smothering technique, throwing shovelfuls of dirt at the base of the flames. Fire retardant from drop planes or helicopters both cools and smothers flames in light fuels, coating fuels with a slobbery, slimy, thick red liquid. But even fire retardant dries fairly rapidly under extreme heat or dry weather conditions, so the application of retardant only delays fire spread.

We can remove fuels to starve a fire. This is the main method of fire suppression for large fires. Fire crews cut either a hand line (a few feet wide) or a tractor line (up to four blades wide or more) along the burning edge of the fire. When the fire reaches the fire line, fuels have been removed down to the bare mineral soil and the fire, with nothing to burn, goes out.

Cooling, smothering, and starving are techniques used in combination on almost every fire. California Department of Forestry and Fire Protection crews in the foothills (where road access for engines and water tenders is easier) use water to a far greater degree than Forest Service crews do.

A final and very important fire suppression technique is using fire to stop wildfires. When "direct attack" by fire crews is too dangerous or just not effective, fire officials may use an "indirect" fire line strategy. In such a situation, rather than trying to stop a fire halfway up a mountainside, fire officials may back off to a road that runs along the crest of the mountain. As the fire burns up the hillside toward the crest, fire fighters will ignite vegetation between the road and the oncoming fire. If timed correctly, the resulting "back-fire" will be sucked in toward the main fire, drawing flames and heat away from the road and away from fuels on the other side of the road. If the backfire succeeds, the fuels between the road and the main fire are consumed, and the main fire suddenly dies out for lack of fuels.

—John Buckley

## Fire weather

basic points for understanding fire.

If a block of air has a certain amount of moisture (say one pound of water), it will still have the same amount of moisture as the air warms or cools. But air expands as it heats, so the same amount of moisture is spread through a larger block of air, making for lower relative humidity.

If that same block of air is cooled, it will condense, squeezing the moisture into a smaller area and increasing the percentage of water or relative humidity.

Dead, dry fuels gain or lose moisture more quickly than growing, green fuels. So if it's a hot, dry day with lots of direct sunshine on a dead twig,

that twig will dry as the air dries, wicking moisture out of the twig. If a fog bank rolls in, bringing high moisture, that twig will absorb the higher relative humidity fairly quickly and become a moister fuel that is less likely to burn.

As a rule of thumb, fuels ignite readily when fuel moisture is 20 percent or less. Under especially prolonged dry conditions, fuels may dry to less than 3 or 4 percent fuel moisture.

In old brush fields that haven't burned for decades, a high proportion of the branches and twigs of the brush will be old, dead limbs. In manzanita fields that are 50-plus years old, there may be more dead limbs than live. That means older brush fields are dominated by fuels that dry out quickly and ignite easily. When there are light, highly flammable beds of dry leaves and old twigs covering the ground beneath the standing brush, the total fuelbed needs only a source of heat and dry fire weather conditions to turn into an intensely burning fire.

Since many of the major river canyons that run east-west in the Sierra Nevada contain thousands of acres of brush fields along their lower, south-facing slopes, these fuelbeds create intense fires that burn on up into the forests above.

### Time of Day

Even when it's hot and sunny all day long, weather conditions vary throughout the day. At first, in the early morning, there will be mild temperatures and high relative humidity. By late afternoon, there's usually not only hotter temperatures and lower relative humidity, but along most of the west slope of the Sierra Nevada, a pattern of up-canyon, up-slope winds will develop during the heat of the afternoon.

The combination of warmer weather, drier air, and stronger winds means that light, dead fuels will dry out the most during that time of day. The lighter and flashier the fuels, the quicker they dry. So during the hottest time of day, fine fuels like grass, pine needles, and dead leaves become crispy dry, just waiting to cook.

Between midnight and dawn when the coolest temperatures prevail, fires that raged during the daytime can burn out on their own, or at least slow down to the point that fire fighting is easier and safer. The time of day, combined with current weather conditions, fuels, and wind, can make a tremendous difference in the ecological impacts of a wildfire or prescribed fire.

The easiest time to underburn a spotted owl habitat area (to reduce fuel loading and fire threat) may be during the middle of the night when conditions are cool and moist. Yet few fire managers can afford to pay their crews



Forest Service fire fighters use drip torches to burn the forest at low intensity during the cool fall season. Photo by John Buckley

the nighttime/overtime pay required to make fire fighters available at such a time. Politics, budgets, administrative constraints, and other human factors can greatly limit when and how prescribed fire can be used as a tool.

### Wind

The final and perhaps the most important weather factor in fire behavior is wind. Strong unexpected winds are a fire manager's worst fear, for a secure, controlled prescribed burn can quickly blow across containment lines, blow onto private property, or spot up to a half-mile or more away from the main fire.

Most strong winds blow from the west in the Sierra Nevada, similar to the weather patterns. But unusually strong gusts referred to as Mono winds blow in occasionally from the east, sometimes reaching speeds of 80-110 miles per hour. Such rare winds can (and often do) completely level patches of forest—tearing trees out of the ground, snapping off tops, and ripping limbs off everything. Called "blowdowns," these leveled patches of forests appear like natural clearcuts, and with the jackstraws of logs and trees twisted and piled by the wind, they also create breeding grounds for insects like bark beetles.

Local winds are caused by uneven heating of the Earth's surface; they vary from one area to the next. Wind patterns at Lake Tahoe will be much different from wind patterns at Mono Lake or Yosemite Valley. Local winds may blow stiffly across certain saddles of ridges everyday, even when there is no wind elsewhere.

But general wind patterns in the Sierra Nevada follow a basic pattern. In early morning, light up-slope breezes begin. In early afternoon, up-slope breezes pick up as up-canyon winds join in. After dark, mild downslope breezes start. And from midnight to dawn, combined downslope, down-canyon winds prevail.

By considering the general wind patterns in deciding when to light prescribed burns or piles of logging slash, fire managers can determine which direction the smoke blows. They can help control how much oxygen is available to the flames. And they can minimize spotting of embers across fire lines.

Based on these general patterns, fires will be blown up-slope and up-canyon during the heat of the day. Fires that start in the foothills (along the western fringe of the national forests) usually blow eastward into national forest lands. Fires that start in the oak woodlands or brush fields of the low-elevation river canyons generally blow up-slope, up-canyon into the pine and mixed conifer forests higher in elevation.

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# Ancient forests

## Wilderness primer

By Ryan Henson

For a decade or more, polls have revealed that the logging of old-growth groves on public lands is extremely unpopular with the majority of Americans. This fact has not been lost on the Forest Service, which has long sought to find a compelling justification for logging.

Having failed to convince the public that its timber sales are warranted on purely economic grounds, the Forest Service recently has begun to argue that certain kinds of logging are essential to maintain the health of forest ecosystems and prevent large-scale fires. Salvage logging—the removal of trees that are either dead or dying as the result of fire, disease, windstorms, insects, or other natural events—has emerged as the Forest Service's cure-all for "forest health" and fire problems.

Salvage logging composes an increasing proportion of the Forest Service's timber sale program. As a result, it is now the primary threat to old-growth groves and roadless areas in national forests in California and other states.

### Why are salvage sales conducted?

**Profit** To "salvage" the economic value of dead or dying trees before they decompose.

**Forest health** Though no scientific data exist to demonstrate that salvage logging contributes to fuels reduction, insect and disease control, or overall forest health, these goals are touted by the Forest Service and timber industry as the primary justification for salvage logging. Research into the relationship between salvage logging and the achievement of these goals has been slow and, thus far, fruitless.

**Agency budgets** Although the Forest Service must share a portion of its profits from conventional timber sales with counties, the agency is allowed to keep 100 percent of its salvage sale receipts. Consequently, these sales often are quite lucrative for the agency, though they cost the federal treasury millions of dollars annually since they typically are sold at below-market rates. Tellingly, as the Forest Service budget has shrunk in recent years, the number of salvage sales has risen dramatically.

**Fewer regulations** Salvage sales take a third of the time to prepare and sell than conventional timber sales. In addition, fewer safeguards are required for water, plants, animals, and soils during salvage sales, making it easier to log areas that usually are protected: streamside zones, steep slopes, erosion-prone regions, and areas where forests will not grow back.

### How much salvage logging occurs in California?

In 1993, 692.5 million board feet of wood was sold from

California's national forest lands, and 27 percent of that was derived from salvage logging. In 1994, 603 million board feet of wood was sold in California, with 40 percent from salvage logging. This increase in salvage logging is attributable to reduced budgets and the Forest Service's need to compensate for the reduction in conventional logging mandated by President Clinton's Northwest Forest Plan (Option 9) and the California Spotted Owl Report (a plan to preserve habitat for spotted owls in the Sierra Nevada and eastern Cascades). The Forest Service anticipates that salvage logging will continue to increase as the number of conventional timber sales is reduced in response to fiscal and environmental constraints.

### Why do conservationists object to salvage logging?

**Roadless area destruction** Roadless areas are the pristine, undeveloped lands identified by the Forest Service in the mid-1970s as part of the agency's roadless area review and evaluation (RARE) surveys. Many have since been designated as wilderness by Congress, but some two million acres of roadless areas in California remain unprotected.

Roadless areas are critically important for biological diversity and watershed health, sometimes even more so than the state's designated wilderness areas that feature

## Salvage made simple

high-elevation "rock and ice" habitat of little value to most plants and wildlife. As Representative John Porter (R-IL) argued last year in his attempt to pass a one-year moratorium on road construction in these areas, "Roadless regions exemplify the least . . . disturbed forest and stream systems, the last reservoirs of ecological diversity, and the primary benchmark for restoring ecological health and integrity."

Many roadless areas remain intact today only because their terrain makes them more expensive for logging and road construction than more accessible, developed regions. Many roadless areas have sensitive soils, steep slopes, fragile watersheds, and important wildlife and plant habitats. With the increased emphasis on fiscal and ecological responsibility by the Forest Service, fewer and fewer conventional timber sales are proposed for these areas. Since salvage logging is immune from many of the fiscal and environmental constraints imposed on conventional sales, however, salvage logging is now the primary cause of roadless area destruction in California. For example, of the 17 roadless area timber sales the California Wilderness Coalition has opposed since January 1, 1994, all but two have been salvage sales.

**Old-growth habitats threatened** Today, most of California's old-growth groves have been logged, leaving old-growth only in the most inaccessible and commercially marginal areas, over 95 percent of which is public land. Not incidentally, much of this ancient forest remains in roadless areas where difficult topography and fragile soil and watershed conditions make conventional logging economically infeasible and ecologically unjustifiable.

As mentioned above, however, salvage logging is not bound by traditional budgetary constraints and is immune from in-depth environmental review. These loopholes allow salvage logging to occur in isolated old-growth groves that could not be logged through conventional means before.

**Fire danger, insect infestations, and disease aggravated** Fire suppression, clearcutting, and other management practices in our national forests over the last 80 years have encouraged the growth of crowded clusters of small trees. Planting in the aftermath of clearcutting, for example, has created vast plantations of small, dense stands, and fire suppression has left many forest understories crowded with small trees that otherwise would have been thinned by fire. These crowded stands of trees have to compete

for scarce water and other resources, leaving them vulnerable to drought, insects, and disease. The stands also are a significant fire threat since their crowded conditions are conducive to unnaturally hot, fast fires. Where these crowded saplings grow among larger trees, the larger trees are threatened because the small trees act as "fuel ladders" that allow fire to reach the crowns of their taller neighbors. For these reasons, fire managers have long realized that the most fire-resistant forests are dominated by large, old trees; the most vulnerable ones by small, crowded trees. These crowded, small stands also perpetuate other forest health problems, including insect infestations and disease. Although fire, insects, and disease play crucial roles in natural forests by thinning stands and creating habitat for species of plants and wildlife dependent on standing dead trees and down logs, the dense plantations created by logging exacerbate these natural processes and intensify their effects.

Unfortunately, salvage logging does not always remove the small, dead and dying trees that increase the risk of fire, disease, and insect infestations. Instead, salvage sales often remove the larger, older trees that are worth far more money than small trees. Consequently, most salvage sales do nothing to reduce fuel loads or alleviate



Wolf lichen on old-growth, Duncan Canyon Roadless Area, Tahoe NF Photo by David Orr

insect and disease epidemics. Indeed, by creating slash (logging debris) and roads and by replacing mature, fire- and disease-resistant stands of trees with highly flammable plantations, salvage logging may do far more harm than good.

**Water quality and soil health impaired** By compacting soils and causing erosion, salvage sales often impair the ability of soils and watersheds to recover from fire. Studies conducted by the Public Forestry Foundation determined that soil recovery and forest regeneration are directly proportional to the number of burned trees left standing following salvage logging. When stand density falls below critical levels as a result of salvage logging, nutrient rebuilding and recycling in the soil is severely impaired and little or no forest regeneration occurs.

Although all logging, salvage or otherwise, has the potential to harm streams and rivers through siltation, removal of streamside vegetation, and soil erosion and compaction, salvage logging is particularly harmful because it often occurs in tandem with natural disturbances like fire or windstorms that themselves cause large-scale ecological disturbance. This two-fold disruption makes salvage logging far more threatening to watershed and soil health than the natural disturbances it ostensibly addresses, especially since salvage logging is allowed in streamside zones and other areas typically off-limits to conventional logging.

**Healthy trees salvage logged** The Forest Service's method of identifying dying trees is imperfect at best and often leads to gross miscalculations of mortality, with the result that healthy forests are cut down. In 1994, the Sierra Club Legal Defense Fund found that 25-75 percent of the trees marked as dead or dying in preparation for the Blue-Ray salvage sale in the Klamath National Forest were healthy. And recently, Trinity County activists found that 50 percent of the trees marked dead or dying seven years ago for the South Fork salvage sale in the Shasta-Trinity

*continued on page 5*

## Roadless areas

# Activists fume over geothermal wells planned for Mt. Hoffman Roadless Area

The Mount Hoffman Roadless Area in the Modoc National Forest of northeastern California rises like a wooded island from the dry, volcanic, jagged landscape of the Medicine Lake Highlands. An important corridor between the Shasta-Trinity and Klamath national forests to the west and the Basin and Range desert to the east, the roadless area's ancient forests provide a refuge for several threatened wildlife species, including the northern spotted owl, American marten, goshawk, bald eagle, pileated woodpecker, and peregrine falcon.

The volcanic nature of the Medicine Lake Highlands region has attracted the interest of mining and geothermal power companies since World War II. Recently, a consortium of geothermal power companies has proposed drilling five test wells and constructing ten drilling platforms in the region to assess its geothermal potential.

Although conservationists generally support alternative energy development, two of the five proposed test wells would be constructed within the Mount Hoffman Roadless Area. The project will require logging old-growth forest to construct nearly half a mile of new road in addition to well drilling and associated development.

## PacFish plan leaves salmon and steelhead on the hook

By Ryan Henson

The Clinton administration's plan to manage watersheds containing salmon, steelhead, and cutthroat trout in portions of California, Oregon, Washington, and Idaho was released by the Forest Service and Bureau of Land Management (BLM) with little fanfare last month. Known as PacFish, the plan is designed to address the precipitous decline in fish populations that has occurred over the last few decades until more thorough, watershed-specific guidelines can be developed.

In California, the new PacFish plan applies only to federally owned watersheds outside the range of the northern spotted owl since watersheds in owl territory are covered by Option 9, President Clinton's Northwest Forest Plan. Consequently, the PacFish plan includes only 800,000 acres of the BLM's Ukiah and Bakersfield districts and the Lassen and Los Padres national forests.

The plan directs the Forest Service and BLM to designate "key watersheds" within 18 months where the main-

tenance and rehabilitation of aquatic habitat will be emphasized. Logging and development are allowed in these areas, but only after a watershed analysis is conducted. Given that watershed analyses for other federal lands have not significantly altered management practices, conservationists are skeptical that this provision will help maintain aquatic ecosystems. Even the most egregious timber sales in prime salmon habitat, like the Barkley salvage sale in the Lassen National Forest (see article on page 1), are allowed under the plan.

The plan also designates riparian habitat conservation areas or RHCAs around streams, ponds, wetlands, and reservoirs. Within these buffer zones, conventional logging is not allowed, but salvage logging (the logging of supposedly dead and dying trees) is permitted once a watershed analysis is completed. Road construction, mining, resort development, and other activities are allowed in the conservation areas if the Forest Service or BLM determines they will not damage aquatic ecosystems. Conservationists estimate that a mere 20 percent of the

### What you can do

Write to Randall Sharp, Modoc National Forest, 800 West 12th Street, Alturas, CA 96101 by May 24 and request that the Forest Service:

- avoid logging any old-growth trees or constructing any new roads within the Mount Hoffman Roadless Area;
- prepare an environmental impact statement prior to developing the roadless area; and
- adopt alternative C as the preferred alternative in the final version of the EA.

tenance and rehabilitation of aquatic habitat will be emphasized. Logging and development are allowed in these areas, but only after a watershed analysis is conducted. Given that watershed analyses for other federal lands have not significantly altered management practices, conservationists are skeptical that this provision will help maintain aquatic ecosystems. Even the most egregious timber sales in prime salmon habitat, like the Barkley salvage sale in the Lassen National Forest (see article on page 1), are allowed under the plan.

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## Salvage made simple

*continued from page 4*

National Forest are still alive. Fortunately, both of these sales—and both were in roadless areas—were defeated in court, something that would be impossible under the salvage sufficiency riders currently before Congress.

### Is any salvage logging appropriate?

Most conservationists do not object to responsible salvage operations that:

- remove only trees that are confirmed dead (not simply assumed to be dying);
- focus on areas of "catastrophic" mortality (where 50 percent of the stand is confirmed dead) resulting from fire suppression, past clearcutting, or other unnatural disturbances;
- retain all living trees;
- avoid roadless areas;
- leave all large trees, whether living or dead, on site and attempt to recreate old-growth stand conditions;
- limit the use of bulldozers and other ground-based equipment that compact soils;
- protect riparian areas, soil fertility, and unstable areas;
- remove the flammable logging debris they generate.

Many salvage sales adhere to these principles. Excellent examples include the Green Springs salvage sale in the Modoc National Forest and the Warner Creek fire recovery plan in Oregon's Willamette National Forest.

Most do not. Examples of destructive salvage sales include the Barkley sale (see article on page 1) in the Lassen National Forest, the Woodfords salvage sale in the Toiyabe National Forest, and the Scorpion salvage sale in the Shasta-Trinity National Forest. All of these sales are slated for roadless areas, steep slopes, sensitive watersheds, and unstable soils. In addition, the sales fail to target areas of catastrophic mortality and rely on mortality prediction methods that have proven highly unreliable elsewhere.

Under current law, conservationists have an opportunity to alter or even halt these destructive sales. Unfortunately, some members of Congress are attempting to exempt salvage logging from environmental regulations altogether, thereby lending official sanction to the abuses of law and destruction of ecosystems that have long characterized the practice.

*Ryan Henson is the CWC's conservation associate.*

# Lassen Barkley sale evokes outrage

*continued from page 1*

Nonetheless, the Forest Service is proposing to build 2.5 miles of "temporary" roads in the roadless area to log trees adjacent to nearly 40 percent of the critical salmon and steelhead habitat in Deer Creek. Conservationists are concerned that erosion and sediment from the road building and logging will smother key spawning areas and fill the deep pools the fish need to survive the hot summer months.

Aquatic scientists have warned the Forest Service repeatedly about the hazards of logging in roadless areas and the resulting cumulative impacts on dwindling wild salmon stocks. Scientists consider it likely that salvage logging will further harm a burned area and slow natural restoration.

Another concern is the possibility of even temporary roads providing access for fish poachers and "pot hunters" who illegally strip Native American cultural sites of their federally protected artifacts. For the Barkley sale, roads will be open from 1995 when logging begins until 1998 when restoration activities are completed.

The issue of adequate protection for salmon habitat in general and the Polk Springs Roadless Area in particular is the subject of a three-year-old administrative appeal of the Lassen forest plan by Friends of the River, the California Wilderness Coalition, and other conservation groups. By proposing to build roads and log a roadless area before deciding the appeal, the Forest Service seems to be forcing a legal challenge to its plans.

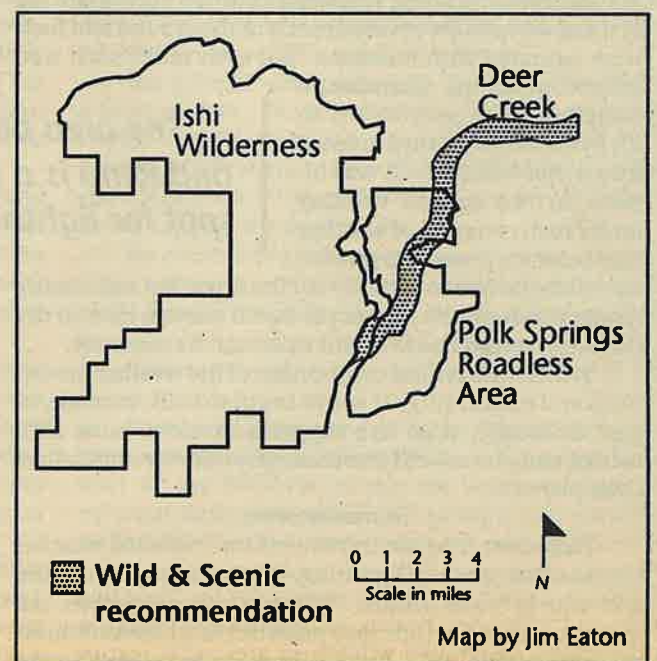
### What you can do

Write a letter to Mike Williams, Almanor District Ranger, Lassen National Forest, P. O. Box 767, Chester, CA 96020 and urge him to adopt Alternative A, the "no action" alternative for the Barkley draft EIS. In your letter:

- oppose any logging or road building in the Polk Springs Roadless Area;
- express your concern about the impact of logging on the wilderness character of the area and the wild-and-scenic river values of Deer Creek—particularly the imperilled salmon and steelhead runs and Native American cultural sites; and
- note that aquatic scientists believe that "salvage" operations often cause additional harm to burned areas and delay natural restoration.

Be sure to have your letter postmarked by Monday, June 5, 1995.

*Steve Evans is conservation director for Friends of the River and a director of the California Wilderness Coalition.*



## Wilderness news

### A wilderness by any other name

continued from page 1

Land Management for wilderness, the name was accepted by the Board prior to the introduction of the California Desert Protection Act. Jenkins Peak now is within the Owens Peak Wilderness.

Currently, there is a proposal to name a peak for Ferdinand Castillo, a seasonal employee of Yosemite National Park who recently died. The peak is a prominent rock buttress (known unofficially as The Lying Head) on the border of the Ansel Adams and Yosemite wilderness areas.

Castillo collected fees at the Tioga Pass entrance to Yosemite, where he was well-known for engaging in lengthy discussions with friends and visitors that would back up traffic and enrage impatient drivers. But he was popular with his co-workers who are spearheading the naming proposal.

The issue currently is before the California Advisory Committee on Geographic Names, which recommends names to the national Board. The state committee has five members, along with non-voting representatives from the Forest Service, National Park Service, and Bureau of Land Management.

Jim Trumbly, a member of the California committee, says they get five or six name recommendations a year. They try to match the magnitude of the feature to the importance of the person. He said the committee regards names "as a finite, non-renewable resource."

Of course, rules can be broken—they were for Ansel Adams. Only nine months after his death (and three months after the Yosemite Wilderness was designated), the Board named a wilderness peak in his honor. However, the peak had unofficially borne Adams' name for 50 years, and Adams certainly met the criteria that the honoree be directly associated with the feature or have made a significant contribution to the area or the state.

Congress can name whatever it wants, of course, and wilderness areas have been named for Ansel Adams, conservationist Dick Smith, Representative Phillip Burton,

and Ishi, last of the Yahi Indians.

Ironically, environmentalists were rebuffed by a congressional committee in their efforts to name the proposed Pt. Reyes Wilderness for Clem Miller, the politician most responsible for protecting the national seashore (he is buried in the wilderness). Shortly after Rep. Burton's death, however, Congress named the wilderness at Pt. Reyes for him, despite it having been Phil's brother John who championed wilderness designation there.

Since Miller conceived the idea of the King Range National Conservation Area, environmentalists intend to ask Congress to name the proposed King Range wilderness for him.

Although people are honored on U.S. postage stamps, the Postal Service requires that a person be dead 10 years before being considered (an exception is made for presidents). The agency thinks a decision to honor someone should not be made in the upswell of emotion that follows a death. If after a decade the person still is considered worthy of commemoration, a stamp then will be considered. Shortly after the death of the astronauts and teacher aboard the space shuttle Challenger, a campaign was mounted to honor them with a stamp. The Postal Service held firm, despite pressure from members of Congress.



Jenkins Peak (background) was named to honor a wilderness ranger before Owens Peak Wilderness was established. Photo by Jim Eaton

Such a waiting period may also be appropriate for geographic place names.

"Name, though it seem but a superficial and outward matter, yet it carrieth much impression and enchantment."  
—Francis Bacon

Additional reading:

*California Place Names* by Erwin G. Gudde  
*Place Names of the Sierra Nevada* by Peter Browning  
*Names on the Land* by George R. Stewart

### Understanding fire weather

continued from page 3

Winds can be erratic or steady. They can take a single ember and deposit it in a punky log far from the main fire, or they can blow cascading showers of firebrands directly across a fire line. The stronger the wind, the more quickly the light fuels dry. The stronger the wind, the more oxygen is supplied to the blaze. So strong winds create spotting, high flames, more likelihood of crown fires, drier fuels, more difficult fire fighting conditions, and a greater supply of oxygen.

Over the years, there have been a number of fires in the Stanislaus National Forest that burned during late fall at times when snow covered much of the ground and fuels were saturated with moisture. But even under such wet, cold conditions, abandoned campfires have been blown to life by the wind and then erupted into major wildfires. It was bizarre for fire fighters working under such extremes of weather that hoses froze and the ground was often too frozen to easily cut fire lines. But sufficiently strong winds on the flames produced enough heat to dry the fuels, spread the fire, and maintain its intensity.

Winds are a critical component of fire weather predictions and monitoring. If winds begin to shift, increase, or gust erratically, then fire suppression crews must shift tactics, and prescribed burn managers likewise must adjust their plans.

#### Thunderstorms

Thunderstorms are infrequent but expected weather systems that produce lightning, varying amounts of rain, and strong, gusty winds. When a cumulonimbus cell moves overhead, winds may push out in numerous directions from that cell. Strong downdrafts create intense

winds that can blow a previously quiet fire to life. Dry lightning storms are especially dangerous because they produce little or no moisture to go along with the lightning. Even when rain pours down for a few minutes during the peak of a lightning storm, dry summer conditions can dry out the fuels within minutes or hours and allow a fire to spread rapidly.

Lightning will strike far more often in the less-flammable vegetation of the upper elevations than in the lower foothills and deep river canyons. During the summer season, cells may develop east of the Sierra crest for many days in a row, while the forests on the west slope see nothing at all. The area between Susanville and Reno is a

particular hot spot for lightning, but all along the east slope, lightning is an expected phenomenon during late spring, early summer, and early fall.

On the west slope, lightning storms are less frequent.

Thunderheads form over the upper elevations, move back westward over the middle-elevation forests during the late afternoon and early evening, then fade back to the east before dissipating. Only rarely will cells form out over the Central Valley and then push across in a steady west-to-east pattern.

Lightning strikes during the late spring ignite fires under conditions when grasses are green and growing or just beginning to sprout. Down logs and snags are saturated with moisture from the snows and rains of winter. Smaller dead fuels like twigs and branches may be dry enough to burn, but the green fuels (like brush, young trees, and ground covers) are so full of moisture that they may not burn easily even with a blowtorch. But fall

lightning fires occur when fuels have had all summer to dry, so the potential for fall fires to burn intensely is usually far greater, especially at lower elevations.

*John Buckley is a former Forest Service fire fighter who now directs the Central Sierra Environmental Resource Center in Twain Harte.*

**The area between Susanville and Reno is a particular hot spot for lightning.**

### PacFish plan: too little, too late

continued from page 5

Several lands covered by the plan are included in RHCAs.

Though conservationists worry that these provisions allow federal agencies an inordinate amount of latitude in planning timber sales, roads, and other potentially destructive developments within RHCAs, some of the plan's provisions are welcome. One particularly strong rule, for example, requires that off-road vehicle use and grazing be eliminated completely from RHCAs if the destructive effects of these practices cannot be mitigated.

Unfortunately, that is as strong as the plan gets. Conservationists are disappointed that PacFish concentrates only on narrow buffer strips and ignores watersheds as a whole (except for the watershed analysis provision, which does not in itself require any watershed protections). Consequently, destructive timber sales and road projects in key watersheds will be allowed to go forward as long as the narrow buffer strips are avoided. If only saving our dwindling fisheries were that simple.

*Ryan Henson is the California Wilderness Coalition's conservation associate.*

## Book review

# New wetlands manual: dive on in!

### **Wetlands Regulation: A Complete Guide to Federal and California Programs**

By Paul D. Cylinder, Kenneth M. Bogdan, Ellyn Miller Davis, & Albert I. Herson, Solano Press Books, Point Arena, CA, 1995, 362 pp., \$40.00.

When I first picked up *Wetlands Regulation*, I thought it was a "how to" manual for developers. After all, more than half the book is appendices on the Clean Water Act, Army Corps of Engineers and Environmental Protection Agency regulations, and Fish and Game Code. But when I actually read the book, I found it much different.

The authors clearly care for wetlands. They point out that California already has lost 91 percent of its wetlands. As early as 1930, all but 3 percent of the Sacramento-San Joaquin Delta had been leveed, drained, and converted to agriculture.

I was surprised to learn how many habitats contain wetlands. Though we think of wetlands as marshes and vernal pools, wetlands can be found in alpine meadows and desert washes, in redwoods forests and Great Basin scrub.

Federal and state regulations are thoroughly examined by the authors, with many court decisions cited as examples. The numerous laws that apply to wetlands are comprehensively described.

*Wetlands Regulation* is amply illustrated with photographs, sidebars, tables, flow charts, and graphs to explain the intricacies of wetland protection and mitigation.

Mitigation measures required by law are examined, along with techniques used to design, restore, and maintain wetlands. And although the laws allow such active forms of mitigation, the authors point out that "avoiding impacts on wetlands by prudent project planning is usually the most successful and cost-effective form of mitigation."

Yes, this is a book for developers who want to learn what is needed to develop lands that contain wetlands. But it also is a valuable reference for environmentalists and others seeking to preserve these rare and disappearing ecosystems.

—Jim Eaton

## CalOwl deadline extended

The deadline to comment on the Forest Service's plan to manage spotted owl habitat in the Sierra Nevada has been extended to July 10 to afford the public adequate time to analyze the document known familiarly as the CalOwl EIS (see April 1995 *WR*).

Comments should be sent to Janice Gauthier, EIS Team Leader, 2999 Fulton Avenue, Sacramento, CA 95821.

### Wilderness Trivia Answer

Caribou, Carrizo Gorge, Darwin Falls, Kelso Dunes, Picacho Peak, and Trilobite.

from page 2

## They're back!

### CWC logo T-shirts in fresh new colors



The California Wilderness Coalition staff—Ryan, Lora, Lucy, and Jim—decked out in our new T-shirts. The \$15 shirt features our logo in three colors on a background of jade, royal blue, birch, or cream.

Still available are our six-tone landscape shirt in jade, fuchsia, light blue, or pale green for \$15 and our animal design by Bay Area cartoonist Phil Frank (beige or light gray) for \$12. All shirts are 100 percent double-knit cotton. To order, use the form on the back page.

Photo by Sheila Kenward



**California Wilderness Coalition**

#### Purposes of the California Wilderness Coalition

...to promote throughout the State of California the preservation of wild lands as legally designated wilderness areas by carrying on an educational program concerning the value of wilderness and how it may best be used and preserved in the public interest, by making and encouraging scientific studies concerning wilderness, and by enlisting public interest and cooperation in protecting existing or potential wilderness areas.

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The *Wilderness Record* is published monthly by the California Wilderness Coalition. Articles do not necessarily reflect the views of the Coalition. Articles may be reprinted; credit is appreciated. Subscription is free with membership.

Submissions on California wilderness and related subjects are welcome. We reserve the right to edit all work.

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Printed by the Davis Enterprise on recycled paper.

## Calendar

**May 7** WILDERNESS WATCH meeting in Sonora. For details, call (209) 928-4800.

**May 8** COMMENTS DUE on issues that should be addressed by a joint management plan for Bright Star, Chimney Peak, Kiavah, Owens Peak, and Sacatar Trail wildernesses and the Dome Land wilderness additions (see April 1995 *WR*). Send to: Michael Ayers, BLM, Caliente Resource Area, 3801 Pegasus Dr., Bakersfield, CA 93308-6837.

**May 14** CWC FUNDRAISER, honoring Senator Alan Cranston and featuring Dave Foreman, in Davis (article on page 2). For information about tickets, volunteering, or sponsorships, call the CWC office at (916) 758-0380.

**May 20-21** GRAZING WORKSHOP for activists, sponsored by the California Grazing Reform Alliance, on the east side of the Sierra. For more information, call Dano McGinn at (916) 645-3288 or 991-9570.

**May 24** COMMENTS DUE on a proposal to drill wells in the Mount Hoffman Roadless Area of the Modoc National Forest (article on page 5). Send to: Randall Sharp, Modoc NF, 800 West 12th St., Alturas, CA 96101.

**June 2-4** BLM WORKDAYS to extend the Blue Ridge Trail near Cache Creek in Yolo County, part of a proposed wilderness complex. For more information, call Scott Adams at the Bureau of Land Management's Ukiah office, (707) 468-4071.

**June 3-4** FREE WORKSHOP to train activists in road-ripping techniques for wildland restoration, in Missoula, Montana. For more information, contact Tom Watts, 720 Hazel St., Missoula, MT 59801; (406) 721-7639.

**June 5** COMMENTS DUE on a plan to log portions of Polk Springs Roadless Area along Deer Creek in the Lassen National Forest (article on page 1). Send to: Mike Williams, Almanor District Ranger, Lassen NF, P. O. Box 767, Chester, CA 96020.

## Coalition Member Groups

Ancient Forest Defense Fund; Branscomb Angeles Chapter, Sierra Club; Los Angeles Back Country Horsemen of CA; Springville Bay Chapter, Sierra Club; Oakland Butte Environmental Council; Chico California Alpine Club; San Francisco California Mule Deer Association; Lincoln California Native Plant Society; Sacramento Citizens for Better Forestry; Hayfork Citizens for Mojave National Park; Barstow Citizens for a Vehicle Free Nipomo Dunes; Nipomo

Committee to Save the Kings River; Fresno Conservation Call; Santa Rosa Davis Audubon Society; Davis Desert Protective Council; Palm Springs Desert Survivors; Oakland Eastern Sierra Audubon Society; Bishop Ecology Center; Berkeley Ecology Center of Southern California; L. A. El Dorado Audubon Society; Long Beach Friends Aware of Wildlife Needs (FAWN); Georgetown Friends of Chinquapin, Oakland Friends of Plumas Wilderness; Quincy Friends of the Inyo; Lone Pine Friends of the River; San Francisco Fund for Animals; San Francisco Hands Off Wild Lands! (HOWL); Davis High Sierra Hikers Association; Truckee Kaweah Flyfishers; Visalia

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Peak Adventures; Sacramento People for Nipomo Dunes Nat'l. Seashore; Nipomo Peppermint Alert; Porterville Placer County Cons. Task Force; Newcastle Planning & Conservation League; Sac. Range of Light Group, Toiyabe Chapter, Sierra Club; Mammoth Lakes Redwood Chapter, Sierra Club; Santa Rosa Redwood Coast Law Center; Mendocino The Red Mountain Association; Leggett Resource Renewal Institute; San Francisco Rural Institute; Ukiah Sacramento River Preservation Trust; Chico Salmon Trollers Marketing Ass'n.; Fort Bragg San Diego Chapter, Sierra Club; San Diego San Fernando Valley Audubon Society; Van Nuys Save Our Ancient Forest Ecology (SAFE); Modesto Sea & Sage Audubon Society; Santa Ana Sequoia Forest Alliance; Kernville Sierra Ass'n. for the Environment; Fresno Sierra Club Legal Defense Fund; S. F. Sierra Treks; Ashland, OR Soda Mtn. Wilderness Council; Ashland, OR South Fork Watershed Ass'n.; Porterville South Yuba R. Citizens League; Nevada City Tulare County Audubon Society; Visalia U.C. Davis Environmental Law Society W. States Endurance Run; San Francisco The Wilderness Society; San Francisco Wintu Audubon Society; Redding Yolano Group, Sierra Club; Davis Yolo Environmental Resource Center; Davis

*"If a block of air has a certain amount of moisture (say one pound of water), it will still have the same amount of moisture as the air warms or cools. But air expands as it heats, so the same amount of moisture is spread through a larger block of air, making for lower relative humidity."*

From *Fire weather*, page 3

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_____	_____	_____	_____
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