Draft Draft

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Comments on Draft Oak Woodland Management Plan Attn: Monique Wilber 2850 Fairlane Court Placerville CA 95667

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Thank you for this opportunity to comment upon the draft Oak Woodland Management Plan (OWMP) and its adequacy for preserving oak woodlands as development proceeds in the County under the 2004 General Plan.

The General Plan and its EIR recognize the importance of El Dorado County's oak woodlands to both wildlife and the aesthetic quality of the County. The draft Oak Woodland Management Plan is intended to preserve oak woodlands and our quality of life as development proceeds in the County.

Since preparation of the EIR for the General Plan, global warming has increasingly come to the fore, especially with the succession of reports by the International Panel on Climate Change and action in 2006 by the California State Legislature to pass, and the Governor to sign, AB 32, committing the State to reducing its levels of greenhouse gas emissions to 1990 levels by 2020.

In its brief successfully challenging San Bernardino County under the California Environmental Quality Act for failure to consider its general plan's effects contributing to global warming, the State noted, among other factors, the importance of preservation of forested and vegetated land in sequestering carbon. This factor should be added to the mix of attributes that make it important to preserve El Dorado County's oak woodlands. Effects on El Dorado County's water supply—and that of the entire state—are predicted to be dire.^{1,2} We cannot depend just upon others to take measures to combat global warming; we must also do all we can ourselves to protect our future water supply. Every little bit counts. This issue should be taken up in the subsequent environmental document.

For all these reasons, the County should do its utmost to assure protection for its oak woodlands. I strongly support the general plan policies that address this goal, while also questioning whether the complete exemption for agriculture is appropriate.³

The OWMP tiers off the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8), but the INRMP plan does not yet exist.

Option B of Policy 7.4.4.4 states, "The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8."

The Settlement Agreement specifically says that Option B of Policy 7.4.4.4 (contributions to a mitigation fund) may be invoked for mitigation only after adoption of the oak woodland portion of the

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INRMP. The INRMP is needed for Mitigation Measures 5.12-1(d and e) and 5.12-3(a). According to Policy 7.4.1.6, "Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M)".

Moreover, again according to Policy 7.4.1.6, "The County Agricultural Commission, Plant and Wildlife Technical Advisory Committee, representatives of the agricultural community, academia, and other stakeholders shall be involved and consulted in defining the important habitats of the County and in the creation and implementation of the INRMP." Oak woodland is one of the important habitats and the County Agricultural Commission was consulted. I am unaware, however, that the Plant and Wildlife Technical Advisory Committee was consulted, nor any of the concerned agencies. This would appear to be a violation of policy.

How, then, can the OWMP precede drafting of the INRMP?

Does the draft plan sufficiently address the problem of fragmentation identified in the EIR and, in particular, connectivity between habitat north and south of Highway 50?

Policy 7.4.4.5 requires addressing connectivity ("Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand"). Policy 7.4.1.6 states, in part, "Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation."

Saving and Greenwood specifically pointed out the importance of connectivity ("For El Dorado County, our study concludes that the most effective way to maintain wildland oaks in large contiguous patches would be a land acquisition program focused on those critical areas of connectivity, often referred to as habitat corridors"). Lands close to Highway 50 are vital to address north-south connectivity for wildlife movement, yet are excluded from consideration as Priority Conservation Areas (PCAs). In fact, the most recent map of Priority Conservation Areas (PCAs) is notable for its removal of connecting corridors. Those PCAs in the western part of the County north of Highway 50 are far removed from other areas identified for preservation, again contributing greatly to fragmentation.

Is funding sufficient to obtain the objectives of the OWMP?

No mechanism appears to be set forth and funded to identify suitable parcels, obtain appraisals, and carry out negotiations toward acquisition of conservation easements or fee title. Development of fees seems to be based on land values much lower than currently obtain, as well as unrealistic prices of conservation easements. These deficiencies must be remedied. Provision should also be made for changes in these costs over time.

Does Option B, dealing with replacement of oaks removed during development, fulfill the intent expressed in the Final Environmental Impact Report (FEIR, p. 4.1-51) "to preserve [through acquisition or conservation easements] existing woodlands of equal or greater biological value as those lost"?

No definition of "important" woodlands is found. (This might appear in the INRMP, but that is not yet available.) No thresholds of significance for loss are identified. Thus there appears to be no standard to judge whether or not woodlands of equal or greater biological value as those lost are being obtained through mitigation. The potential loss of so much connectivity also argues for loss of

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biological value of what will remain.

Does the draft OWMP fulfill the General Plan's commitment in Policy 7.4.4.4. "to fully compensate for the impact to oak woodland habitat"?

Because of the foregoing points, it seems that the answer to this question must plainly be, "No."

I fully endorse the joint comments submitted elsewhere by the California Native Plant Society, the Sierra Club, the Center for Sierra Nevada Conservation, and the El Dorado County Taxpayers for Quality Growth.

1. Oakland Tribune, 12 Dec 2007, reporting from the annual meeting of the American Geophysical Union, "Humans threatening state water. Earlier melting of snowpack could lead to grim picture for the West, researchers in SF say."

Dwindling snowpack, earlier stream flow and rising temperatures in the western U.S. can be attributed directly to human activity and will seriously affect California's water supply, perhaps in a matter of decades, according to new research.

For the first time, scientists have linked several specific trends in a regional water cycle to global climate change caused by greenhouse gas emissions.

Since 1950, Sierra snowpack has decreased by about 20 percent, the temperature in the Rocky Mountains has gone up 3 degrees and spring water flow in the Columbia River has decreased significantly.

"These signals are the same no matter where you go in the West," marine physicist Tim Barnett of Scripps Institution of Oceanography said Tuesday at the annual meeting of the American Geophysical Union in San Francisco. "We've got a real serious problem."

By scaling down global climate models to bring greater detail of the region, a team of scientists led by Barnett and atmospheric scientist Ben Santer of Lawrence Livermore National Laboratory projected these trends into the future and found a grim picture for the West.

By about 2040, the Colorado Rockies will be nearly barren of snow as early as April 1 each year. And a similar story will play out in the Sierra.

As temperature rises, snowpack will disappear earlier, leading to a shift in peak stream flows to earlier in the year.

This could be a significant problem for California where the water supply is already performing a precarious balancing act.

The state's reservoirs are filled during the rainy winter season, and as they are drawn down in the spring, melting snow from the Sierra replenishes them.

"Mother Nature is acting like a tremendous reservoir for us," Barnett said.

His research shows that reservoir will shrink in the future, and even more problematically, will melt too early in the season.

This will not only leave California without much of its critical spring refill, it will also put reservoirs at a greater risk of flooding as meltwater arrives before the reservoir levels have gone down enough to accommodate it.

"It's the timing that's the problem," he said.

The team tested the accuracy of their climate models against past trends, and were able to closely match actual

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changes in snowpack, stream flow and temperature.

2. Stockton Record, 6 Dec 2007, reporting on a symposium held by the Sierra Nevada Conservancy. "Catastrophic threat facing Sierra; Climate change symposium has grim forecast for future"

The Sierra Nevada gazed upon by your grandchildren may be a vastly different range than it is today.

When they swim in its high mountain lakes, they may no longer see the bottom. The fish that tug on their poles may be different than the ones you catch today.

Wildfires may threaten their homes more often. And their favorite ski runs may no longer exist.

Global warming will have many undesired effects in California, but it will hit hardest John Muir's "Range of Light," experts said Wednesday.

The Sierra's plants and animals, its lakes and streams, and some of the charms that draw humans from the Central Valley and beyond are threatened, scientists and advocates said.

The Sierra Nevada Conservancy, a three-year-old state agency charged with safeguarding the region, held a symposium in Gold Rush country highlighting the many ways climate change will attack - or in some cases is attacking - the Sierra.

"It is simply unprecedented," said Dan Cayan, a meteorologist with the Scripps Institute of Oceanography in San Diego.

Global temperatures have jumped on average 1.1 degrees in recent decades, he said, and will increase another 2 to 10 degrees or more in coming decades, depending on how successful we are at reducing greenhouse gas emissions.

In the Sierra, the snowpack could shrink in half by the end of the century, Cayan said. Snow levels will climb on average 1,500 feet, and resorts may see lower-elevation ski runs turn to rock.

"You can see the changes coming," said Kathy Hubbard, deputy director of the California Ski Industry Association.

Already, runoff from winter snow is beginning up to three to four weeks earlier than normal, Cayan said. This is trouble for much of the state, which relies on the Sierra for 60 percent of its freshwater supply.

Water managers fear reservoirs will either be overwhelmed by massive amounts of rain that currently falls as snow and sits on hillsides until melting in the spring or will shrivel during extended droughts.

And there will be floods. In May 2005, the Yosemite Valley was swamped after a warm storm melted mountain snow. All it took was 1 inch of rain.

Expect more of the same, Cayan said.

Among other predicted changes:

» Global warming will force high-elevation species, such as tiny rodents and butterflies, to migrate uphill until they run out of room.

» Trees will sprout where they haven't grown before and die where they have grown in the past.

» More frequent wildfires of greater than 1,000 acres will threaten mountain and foothill communities, which will face longer summertime fire seasons, Cayan said.

» Ice on mountain lakes will melt earlier, producing algae blooms that cloud up the water and harm fish.

Lake Tahoe has heated by about one-half degree in the past 30 years, enough for warm-water invasive fish, such as bass, to flourish near the shorelines, threatening native species, said Sudeep Chandra, a water quality expert at the University of Nevada, Reno.

Organizers of Wednesday's event touted California as a leader in the search for solutions, including alternative

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energy projects and strict tailpipe emission standards.

The ski industry's Hubbard said some resorts are taking action. Kirkwood Ski Resort on Highway 88 east of Stockton has a new carpool program to encourage skiers to downshift on driving, she said.

But it's already too late to eliminate future warming altogether, Cayan said.

To a temperature increase of 2 to 4 degrees - enough to disrupt mountain ecosystems and cause water supply worries - we are already "committed," he said.

3. In one case, about 300 acres of oak-madrone woodland were destroyed and replaced with a vineyard about a third the size. The downed trees were sold off for firewood (the burning of which releases greenhouse gases) and the remaining land remains barren.