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Keeping Northwest California wild since 1977

January 14, 2014

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RE: State Wildlife Action Plan 2015 Revision

Dear Armand and SWAP planning team,

I am writing on behalf of the Environmental Protection Information Center ("EPIC"), a nonprofit organization, representing 2000 members and over 10,000 activists and supporters, which work to protect and restore ancient forests, watersheds, coastal estuaries, and native species in northwestern California. Consistent with this mission we provide this comment letter to the California Department of Fish and Wildlife ("DFW") to convey insight on the State Wildlife Action Plan. We applaud and support your effort to conserve California's wildlife and vital natural areas before they become more rare. We ask that you consider our comments when planning the 2015 update. It is no small task to take on this goal and one as we see as being essential for all land and water managers to assist in for the protection of our amazingly rich but increasingly threatened state.

We thank you for the public scoping meetings. I attended the meeting in Eureka. It was informative and enjoyable. While we realize the State Wildlife Action Plan (herein as SWAP or Plan) is not an enforceable document, however, we do hope that the Department (DFW) does all that is can to implement and promote the intent of the Plan. One enlightening and thought provoking piece of information that came from the meeting I attended was that the DFW has power to influence legislation. This would be one way to enforce the intent of the plan.

Wildlife Connectivity and Habitat

There is no doubt that one of the primary keys to species recovery and conservation is the preservation of a connected landscape. We must protect habitat connectivity for wildlife health and survival. We urge DFW to work with all land management agencies to promote the acknowledgement and importance of wildlife connectivity corridors and linkages.

In 2010 a report entitled, *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*, was completed by the Department of Transportation for the DFW. One of the anticipated uses of this report is specifically for SWAP. For ease this document can be found online at (too large to send on internet, provided on a CD via USPS): http://www.dfg.ca.gov/habcon/connectivity/

In California, and especially in the northwestern part of the state, an outstanding opportunity exists for landscape connectedness and the preservation of wildlife corridor linkages. While some of these areas are protected as Wilderness most of the links are currently under protected and require formal recognition in order to secure their integrity well into the future.

Multiple studies have been completed on connectivity, please see Theobald 2011 (attached) *Assessing effects of land use on landscape connectivity: loss and fragmentation of western U.S. forests*:

> Despite urgent calls to inform national, regional, and state planning efforts, there remains a critical need to develop practical approaches to identify where important lands are for landscape connectivity (i.e., linkages), where land use constrains connectivity, and which linkages are most important to maintain network-wide connectivity extents.

In Theobald's 2013 (attached) research article he quantifies the ecological integrity of the landscape across the US.

We are asking that the Department identify these vital habitat linkages and corridors in the 2015 SWAP and elevate the importance of their preservation, sharing this information with all management agencies, specifically with Region 5 of the US Forest Service.

Also attached is Lacher 2013:

> Many SWAPs acknowledge the importance of wildlife linkage conservation and referenced specific habitats or general actions. However, most SWAPs did little more, with few identifying relevant geographic areas or developing maps. Conversely, interview responses from conservation professionals in the western United States overwhelmingly showed that wildlife linkage conservation is still a top conservation goal. These results reveal a discrepancy between the importance of wildlife linkages and the incorporation of wildlife linkage planning across the United States according to SWAP content.

Further, the 2012 National Fish, Wildlife and Plants Climate Adaption Strategy (attached, as well as a publication of highlights), which was produced by federal, state, and tribal representatives and was coordinated with a variety of other climate change adaptation efforts at national, state, and tribal levels, lists the number one goal as conserving and connecting habitat.

Need for Population Surveys

The number and duration of listing for *at risk* species in California is alarming. Many species have been at risk for decades. From our experience, in the work and involvement in pacific northwestern national forests, public lands and with large corporate land holders we are greatly concerned at the limited amount of knowledge on population numbers, especially when compared to the amount of forest extraction and habitat degradation that has and is currently taking place.

Specifically, we are greatly concerned with the lack of population information of the Pacific fisher and Humboldt marten and lack of current Northern Spotted Owl information. Out of hundreds of timber sales on our national forest we know of only one project that instituted surveys for the fisher, despite requirements from forest plans. Because so much habitat has been disturbed, degraded and removed we do not have adequate data to know where populations are or if these populations are viable or continue to decline.

We are asking that the Department prioritize regional surveys and collaborate with other agencies to determine the locations and actual population number estimates.

Marijuana Agriculture

As you may be aware, illegal marijuana agriculture is devastating our forests, water and wildlife. One of the largest problems with illegal agriculture is toxic rodenticides. We are asking that the Department make an official and public show of support for banning super toxic rodenticides and other poisons for sale in California.

Further, the SWAP revision should acknowledge and include all of the negative effects that unregulated marijuana agriculture is having in our watersheds, including, impacts to water resources, land conversion and affected wildlife species.

Grazing

The ecological costs of livestock grazing are extreme. By destroying vegetation, damaging wildlife habitats, spreading noxious weeds and disrupting natural processes, grazing wreaks havoc on water quality, riparian areas, rivers, deserts, native plants, grasslands and forests — causing significant harm to species and ecosystems. Please acknowledge the detrimental impacts that grazing is having on our natural resources and wildlife species in the revised SWAP. Prioritize influencing; future USFS land management plan revisions (in regards to grazing) legislation and education of Region 5 USFS land managers, especially in order to enforce the Clean Water Act.

Climate Change

The effects of a changing climate are beginning to have an alarming effect on our natural resources. The Pacific Coastal rainforests from Prince William Sound, Alaska, to the coastal redwoods of California, represent 35% of the world's temperate rainforests. The boreal rainforests of the Klamath-Siskiyou bioregion of Northern California are an effective natural tool to remove the greenhouse gas from the atmosphere. It is imperative to retain dense forest stands and canopy in regards to climate change as these areas will provide the highest amount of refugia for plant and animal species as described in these excerpts from Olsen 2012 (attached).

> *"The Klamath-Siskyou Ecoregion (KSE) contains globally important biodiversity–only five other temperate forests regions are as diverse or home to as many endemic species and ancient lineages (e.g., Caucasus, Southwestern China, Southeastern United States, Coastal Plain/Southern Appalachians, Valdivia rainforests of Chile and Argentina; Olson et al. 2001; Tecklin et al. 2011). The special location (latitude and coastal proximity), rugged terrain, climatic stability, and complexity of soils and microclimates have allowed the region to act as a refuge from past climatic changes for species and natural communities requiring cool and moist conditions (Whittaker 1960, 1961; Stebbins and Major 1965; Wagner 1997; Coleman and Kruckeberg 1999; Sawyer 2007).*
>
> *One might expect that the KSE will continue to function well as a climate change refugium as human-caused climate change progresses. However, cumulative land use impacts combined with projected climate change could have a profound impact on the ecoregion's species and ecosystems. In the KSE, over a century of land use activities (e.g., logging, mining, livestock grazing, damming of rivers, mining, and human-caused alterations of fire) have resulted in loss or degradation of mesic habitats (DellaSala et al. 1999) that may have previously functioned as refugia over millennia. Impacts include loss of contiguous habitat along intact elevational and other environmental gradients that may facilitate climate-related shifts in natural communities and loss and degradation of most of the mature and old-growth forests (e.g., only about 28% of the historic old-growth forests remain; Strittholt et al. 2006), particularly mesic lowland and mid-elevation habitats (Staus et al. 2002). Increasing prevalence of invasive plants and pathogens facilitated by road building and land use practices poses an additional threat to native species and communities (DellaSala et al. 1999).*
>
> *The existing protected area system (i.e., National and State Parks, Wilderness Areas, National Monuments, Botanical Areas) is inadequate for ensuring the persistence of most of the ecoregion's vulnerable biodiversity (DellaSala et al. 1999; Noss et al. 1999; Carroll et al. 2010). Existing reserves largely protect higher-elevation communities, while the lower-elevation reserves are limited in their geographic extent, thereby missing many distinct lowland species assemblages and areas that may act as potential microrefugia. We define microrefugia as sites with cool and moist conditions conducive to the persistence of species vulnerable to climate change.*
>
> *Securing a high level of protection and undertaking ecologically based restoration in degraded areas is important, as well as protection of large, complex landscapes with*

diverse terrains, soils, microclimates and other environmental gradients. ***In particular, low and mid-elevation habitats in higher precipitation areas (e.g., along the coast) will provide multiple local opportunities for persistence of vulnerable species.***

In order to maintain pockets of habitat for climate-vulnerable species, ***conservation attention should be aimed at securing microrefugia that may uniquely provide opportunities for many species to persist*** *and are particularly threatened due to ongoing habitat degradation and rapid warming. The importance of microrefugia for the long-term persistence of species that are sensitive to climate change is increasingly being recognized (Noss 2001; Loarie et al. 2008, 2009; Rull 2009, 2010; Ashcroft 2010; Dobrowski et al. 2010). In temperate regions, terrain positions and habitat types that maintain persistent cool and moist conditions favorable for effective microrefugia are increasingly well defined (e.g., Dobrowski et al. 2010)." (Olsen 2012)*

Further, as noted above, the National Fish, Wildlife and Plants Climate Adaptation Strategy was prepared in order to inspire and enable natural resource administrators, legislators and other decision makers to take action to adapt to a changing climate. Those actions are vital to sustaining the nation's ecosystems and natural resources—as well as the human uses and values that the natural world provides.

Please accentuate the vital importance of the preservation of California's forests as a connected landscape in terms of climate change in the SWAP revision.

Collaboration

In northwestern California a majority of the land and high quality habitat is within management of the US Department of Agriculture, Region 5 of the US Forest Service (USFS). It is imperative the upcoming National Forest Land Resource Management Plan revisions reflect and incorporate the SWAP. Please help make this possible.

Attached is our November 21 comment letter to the USFS Region 5 Ecological Restoration Implementation Plan that is concurrently happening in order share with you our stance on land management, particularly public lands, mainly national forests. In fact, we included multiple excerpts from the 2005 SWAP.

It is our view that in order to change the tide of species decline it is essential that all land and water mangers get on the same page and work towards a more collaborated effort.

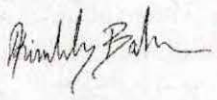
Conclusion

While the SWAP is not an enforceable document the Department can utilize the Plan to influence legislation and to inform and persuade other planning efforts and land managers to "do the right thing" in order to save California's wildlife from nearing extinction and to better prepare ourselves and our landscapes for a changing climate.

In brief we ask that the revised SWAP identify and officially acknowledge wildlife connectivity corridors in order to begin the preservation of these vital habitat linkages. Having a connected California landscape will also help to preserve species in the face of climate change. We strongly encourage the DFW to collaborate on and organize regional species surveys so as to have a better understanding of actual population numbers and locations for the prioritization of conservation efforts. Please discuss and disclose the detrimental effects of illegal marijuana agriculture and livestock grazing. Please do influence legislation to ban toxic rodenticide use in California and to enforce the Clean Water Act and other environmental laws in order to protect and preserve wildlife.

Thank you for the opportunity to provide comments. Please keep us apprised as the SWAP revision progresses.

Sincerely,



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