Southwest Wetlands Interpretive Association
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15 November 2021

California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 95814

(submitted 16 November 2021 via email to CaliforniaNature@Resources.ca.gov)

Subject: Natural and Working Lands Climate Smart Strategy Draft

Dear Natural Resources Agency:

The Southwest Wetlands Interpretive Association (SWIA) is a non-profit organization dedicated to helping preserve and enhance wetlands throughout southern California – and particularly in the Tijuana River watershed and South San Diego Bay. Historical losses of coastal wetlands (particularly vegetated and shallow-subtidal types) have occurred from development, and climate change and sea level rise represent significant additional threats to natural resources and essential infrastructure/developments along California's 1,100 miles of coastline. SWIA supports planning that will implement a long-term sustainable vision - and reality - for California's public trust tidelands (and water) and terrestrial habitats.

Although SWIA focuses on coastal wetlands, we have engaged with many plans and projects that affect uplands. Our comments echo many of those from other environmental advocacy groups that call for more effective conservation of natural resources on natural and working landscapes than the current draft provides. Our specific comments follow.

Introduction

We agree with the overall approach that calls for greater assured protection of natural landscapes (vegetation communities) as a fundamental precursor to all other climate change strategies. The current benefits in terms of carbon storage and sequestration are undeniable and reasonably well-documented. As climate change effects continue to impact those landscapes, it is essential that sufficient large areas are conserved and natural connections maintained so that inevitable shifts in community distributions, and landward encroachment by sea level rise (SLR), can be accommodated and adaptively managed for their biodiversity as well as climate change benefits. We also agree with the basic goals of the approach, as listed on Page 13.

The vast projections of climate change effects on the natural world argue for not just reducing habitat losses, but ideally reducing our current footprint. Ron Milo, a professor at the Weizmann Institute of Science in Israel stated that “humans have caused the annihilation of 83% of all wild mammals and half of all plants,” as reported in The Guardian. A study by The Cornell Lab and American Bird Conservancy quantified for the first time the total decline in wild bird populations in the continental U.S. and Canada, as a loss of 2.9 billion breeding adult birds, a decline of 30% since 1970 with devastating losses among birds in every biome. And population trends for bird species suggest are a harbinger for larger collapses: “These bird losses are a strong signal that our human-altered landscapes are losing their ability to support birdlife and that is an indicator of a coming collapse of the overall environment.”

These losses are even more dramatic for insect populations, which are disappearing at a rate eight times faster than mammals, birds and reptiles and twice as high as vertebrate species. The journal Biological Conservation reports that 40 percent of insects are decreasing and one third of insect species are endangered. Insects are a mainstay in food webs, are essential as pollinators and are critical as decomposers and saprophytes recycling nutrients back to the environment. They are essential in the structure and function of ecological systems. If the current trend continues they could be eliminated from the planet in a century resulting in a disastrous impact on global ecosystems along with the species inhabiting them including humanity.

Forests

The description of “Forests” doesn't effectively differentiate among the variety of forest types. As currently written, this section of the document appears to focus on coniferous forest types. While the introduction to the document notes that oak woodlands are within the "forests" landscape type, this community type has significantly different ecological processes and values from coniferous forests. It is also an important ecological "transition" landscape between shrublands/grasslands and coniferous forests. Many of the "forest nature-based solutions" seem applicable to oak woodlands. But the document should provide more clarity/distinction among the major forest communities where those distinctions have functional ramifications regarding nature-based solutions."

Shrublands and Chaparral

The widespread distribution of these vegetation community types in areas where urbanization is most pressing, and the increased ignitions and catastrophic extent of wildfires from both natural and human-caused sources, argue for more effective protection. Because these vegetation communities are often interdigitated with woodlands, grasslands and riparian communities, “shrublands” community types can support high biodiversity. Previous and current State programs to burn more shrublands (chaparral and coastal sage scrub have been the focus of statewide Vegetation Management and Vegetation Treatment programs) have not been effective as means to protect those vegetation types, and as

climate change effects proceed, the risks from excessive frequencies and extent of shrubland wildfires and their reduced ability for natural recovery will only increase (https://www.researchgate.net/publication/327351170_Drivers_of_chaparral_type_conversion_to_herbaceous_vegetation_in_coastal_Southern_California; https://pubmed.ncbi.nlm.nih.gov/34636412/). We oppose nature-based solutions that would increase the application of large-scale prescribed fire projects to shrublands and chaparral vegetation communities, which already suffer from too frequent and extensive wildfires (and development encroachment).

We support the solutions to reduce (urban) encroachments into these community types and ensure that the urban-wildland interface edge is designed and maintained to protect both shrublands and developments.

Wetlands

As one of the earliest advocates for coastal wetlands conservation in southern California, manager of the Tijuana River National Estuarine Research Reserve, and manager of estuarine/coastal wetland restoration projects, SWIA is extremely concerned about the future of coastal wetlands. California has lost a significant portion of its wetlands, about half of southern California's coastal wetlands remain (https://www.sfei.org/sites/default/files/biblio_files/826_Coastal_Wetlands_and_change_over_time_Aug_2014.pdf). Wetlands have significant carbon storage and sequestration potential, but sea level rise (SLR) – especially in areas where there are constraints to landward movement shorelines to create new/replacement wetlands – will result in less wetland acreage (particularly shallow subtidal, intertidal and marshes) and could actually reduce overall carbon storage and sequestration. SLR will reduce areas of high ("blue") carbon storage potential, especially coastal intertidal and high marshes.

We concur with the overall approach that focus on protecting, restoring and - where practicable - creating wetlands and the identified nature-based solutions. However, implementing those solutions presumes that landowners along the coastline will support such actions. In that regard, the State Lands Commission (SLC), which has control over public tidelands, should be a key participant. The fact that the SLC has conveyed in trust a significant amount of those tidelands to other entities - primarily local jurisdictions - complicates the implementation of long-term solutions (over 330,000 acres of tidal and submerged lands that are managed/developed by coastal cities and all the major ports). Because SLR will alter the delineated tidelands (that is, SLR will alter/raise the locations of those lands situated between the ordinary high water and ordinary low water mark of tidal waters), the SLC must review all public trust tidelands and develop guidelines for addressing SLR. Tidelands have been and continue to be diminished, pinned between open ocean and shoreline development or other protected/rigid infrastructure. More specifically, where tidelands (in trust or not) have been filled, raised, dredged or otherwise altered, the SLC should identify clear guidelines and priorities that would allow for removal,

repurposing, or modifications to maximize future adaptation to SLR. Historical and current uses must be viewed in light of future SLR impacts and where opportunities exist for increasing and enhancing coastal wetlands.

SWIA served on the Marine Life Protection Act Initiative stakeholder group working to enable the protection of linkages between estuarine and marine systems by establishment of Marine Protected Areas along the coast of California from Mexico to Oregon. We feel this program should be adhered to and enhanced into the future.

Seagrasses and Seaweeds

We agree with the identified nature-based solutions and our preceding recommendations regarding coastal wetlands would also apply to these vegetation types.

Developed Lands

The most fundamental "nature-based solution" for developed lands as they relate to climate change is to limit or preclude potential development (per County and City General Plan Land Use and Zoning) in high value natural vegetation communities. We agree that for existing development areas the proposed nature-based solutions would be an improvement compared to the current situation.

Sparsely Vegetated Lands

These vegetation types, particularly arid (desert) communities, are the focus for large-scale renewable energy facilities. The net "carbon balance" (loss of habitat carbon storage/sequestration vs. amount of renewable energy produced to replace fossil fuels) of those facilities may justify their (selective) location in desert areas. How does the first proposed solution ("Conserve desert lands to protect them from disturbance, particularly where these efforts protect public health and/or endemic species") comport with the reality of the extensive siting of current and planned large-scale renewable energy facilities?

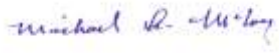
We strongly support a rapid transition to renewable energy to replace fossil fuels. But to the maximum extent feasible, we advocate for small-to-mid scale energy production located within and adjacent to urban areas. Desert and other sparsely vegetated lands are sensitive to disturbance and have long natural restoration cycles. Keep energy production closer to the communities that use it.

While the approach avoids singling-out specific locational concerns, an important concern is that biological connectivity be retained or even improved at the CA-Baja California border. In particular, wildlife movement for the Peninsular bighorn sheep between Anza-Borrego Desert State Park and the Sierra Juarez Mountains in Baja must be a part of the larger natural lands conservation effort.

We appreciate and support the State's efforts to identify reasonable and effective nature-based solutions to help California/Californians deal with climate change. Our comments and recommendations, along with many more from the environmental community, would improve the State's ability to manage, adapt to and even reduce some of the effects of climate change.

Our contact for this letter is Bill Tippets (billtippets@gmail.com).

Sincerely,



Mike McCoy (President) Bill Tippets (Board Member)

Cc: SWIA Board