July 9, 2021

Chair Liane M. Randolph
California Air Resources Board
PO Box 2815
Sacramento, CA 95812

Re: 2022 Scoping Plan Update Kickoff, Focus Area: Natural and Working Lands

Dear Chair Randolph:

We appreciate your holding in-depth topical workshops, and the opportunity to provide additional comment and input. Climate change is a massive stressor and driver of change in California, from loss of species and habitats to increases in the size and severity or wildfire, as well as its exacerbating inequities particularly in urban heat islands.

Given how much of this work is predicated on modeling and generalization, we strongly urge adaptive management and localized measurements be included in the plan—including the identification of data gaps for future plan updates. For example, belowground carbon storage is less well known, but is key in valuing and prioritizing and managing biodiverse and fire-resilient habitats such as grasslands. Data gaps should be made clear, and any programs relying on modeled or non-local data for benefits should include regular measurement and refinement. With so much uncertainty, this is essential to ensure programs are performing as proposed—and we do not have embarrassments such as underperforming cap-and-trade offsets.2

Priority should be given to known no-regrets solutions such as avoiding land conversion particularly in carbon-rich vegetation types such as wetlands, coastal forests, and perennial grasslands but also in areas with “ancient carbon” such as deserts.

We also support the use of restoration as a multiple-benefit solution to our climate, biodiversity, and equity crises. It is essential to include certain aspects into restoration to ensure these triple goals are met:

- **Prioritize the use of locally native plants and seed sources in planting.** Cover cropping, urban tree planting, and reforestation after fire should require or subsidize local seed sources which are better adapted to survive and support the greatest diversity of animals. Local seed selection can prioritize the best-adapted plants to current and

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1 “In wildfire-prone California, grasslands a less vulnerable carbon offset than forests” UC Davis
2 “The climate solution actually adding millions of tons of CO2 into the atmosphere” ProPublica
future climate, rather than risk losing unique local genetics that form the basis of biodiversity.

- **Require strong standards for restoration materials.** Best practices for seed collection, wildland seed certification, and *Phytophthora* prevention\(^3\) must be promoted to avoid restoration failure. These best practices exist but are not mandated or even promoted in state-funded projects.

**Land management is an important part of reaching our biodiversity and climate goals.**

- Most areas of California require active management to maintain processes necessary for the mosaic of landscapes that support local diversity.
- Private lands have an important role to play in advancing conservation, biodiversity, and climate priorities alongside economic value.
- Urban green areas not only improve access to nature but also provide buffers against climate-related issues such as extreme heat, sea level rise, and flooding.
- Natural and working lands management can be combined with better water management and renewable energy planning to:
  - aid the transition from water-intensive agriculture to the development of local native seed farms to supply the demand for restoration;
  - inform placement of solar or wind development; and
  - create pollinator habitat on fallowed land.
- California’s wildfire prevention actions can either help or hurt our climate goals; removal of small shrubs and trees can increase sequestration in large trees, but so often poor logging practices make fuel management and timber harvesting a carbon source not sink. Prescribed fire in particular can best prevent high intensity wildfire that leads to loss of soil carbon and mature trees, as well as smoke and water quality impacts.
- Grazing and rangeland management can either help or hurt climate goals, and must not be done in the absence of better management that includes promoting native perennial herbaceous species abundance.

**Recommendations for land management:**

- Incorporate sequestration metrics in protection, restoration, and management. Measures must have transparent, repeatable performance indicators.
- Reduce extreme wildfire in California’s forests by supporting prescribed fire in forested areas and removing barriers to cultural burning.
- Increase funding for home and community hardening in wind-driven wildfire areas and stop aggressive vegetation treatment projects that destroy habitat without increasing protection.

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\(^3\) *Phytophthora* species repeatedly introduced in Northern California through restoration projects can spread into adjacent sites[1] *Biological Invasions*
● Prohibit dangerous new development in high wildfire areas. These developments are often justified as solutions to the housing crisis but are often too expensive for low-income Californians and exchange human safety for lasting, climate-smart housing solutions.

● Provide solid incentives for use of locally appropriate native plant seed mixes, cover crops, and hedgerows on working lands to support pollinator habitat and halt rapid declines in insect and bird populations.

● Revise models and requirements for urban planting to prioritize locally native trees. Biodiversity is not currently a ranking factor, and carbon sequestration models stop at tree age 40, when many of our native trees begin their best bulking. Native trees survive just as well as nonnatives when saplings are appropriately established.

We appreciate the opportunity to comment and look forward to further involvement in this critical work.

Sincerely,

Andrea Williams
Director of Biodiversity Initiatives
California Native Plant Society

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4 Comparison of methods for estimating carbon dioxide storage by Sacramento’s urban forest, USFS
5 Stewardship matters: Case studies in establishment success of urban trees, Urban Forestry & Urban Greening