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June 23, 2017  
Secretary John Laird  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95816

**Re: Comments on the Draft Safeguarding California Plan: 2017 Update**

Dear Secretary Laird and staff,

On behalf of our 78,000 supporters in the Golden State, including 2,700 scientific experts, the Union of Concerned Scientists (UCS) is pleased to provide our comments on the Draft Safeguarding California Plan – 2017 Update (“Plan” or “Update”). As this past winter reminded us once again, California is vulnerable to the impacts of extreme weather and climate change and therefore must prepare for the changing climate future.

We appreciate the hard work and coordination by staff at Natural Resources and other sector lead agencies to develop this Update, and their continued engagement with the environmental justice community and broader stakeholder outreach. This important document outlines a strategy for state agencies and departments to address the impacts of climate change, both now and in the future, and a catalogue of available state resources and current state actions.

We believe that the final Plan could be strengthened in several key ways to better accomplish implementation of the outlined strategies in a manner that is consistent with the principles outlined in EO B-30-15. UCS is submitting a separate comment letter with The Nature Conservancy and several other organizations regarding our shared thoughts on the overall plan. Our comments in this letter therefore focus specifically on the following chapters of the document: the Introduction, the Comprehensive Strategies to Safeguard California, and the Energy and Transportation chapters.

**Introduction**

UCS appreciates the Update’s emphasis on integrating sectors; connecting research to action; creating a reporting structure and metrics for implementation; and an increased focus on vulnerable populations and equity.

The Vision and Organization describes how the plan is organized into two broad areas based on sectors: Social Systems and the Built Environment and Natural and Managed Resource Systems. Decision-making at the state and local levels often suffers from siloed thinking, despite the recognized interdependencies and potential synergies. The description on page 4 should be updated to mention this reality and that the state encourages cross-sectoral collaboration in implementation of this plan.

Another type of collaboration that should be highlighted is the co-production of data between local and regional practitioners and the researchers involved in future California Climate Change Assessments. This will be key to ensuring the Assessment's research findings are actionable at the local and regional levels, not just the state level. We recommend adding the following bullet to the Key Next Steps to Advance Climate Science: "Ensure that future California Climate Change Assessments consider input from local and regional practitioners concerning their specific research and information needs."

### **Comprehensive State Strategies to Safeguard California Chapter**

We appreciate and support that six overarching strategies outlined in the Update. The detailed discussion of each strategy, including how they've been implemented to date and potential opportunities, is a helpful addition as well. We look forward to the "State of the Science" Regional Assessments and the results from the impressive list of studies from California's Fourth Climate Change Assessment Projects on Infrastructure Vulnerability.

The brief discussion describing the six strategies should explain how these strategies are intended to interact with the specific sector strategies. We assume that they apply to each sector and therefore informed the development of each sector's strategies. However, for example, the Transportation Sector Chapter does not include specific actions to "partner with California's most vulnerable populations to increase equity and resilience through investments, planning, research, and education", which is Recommendation CA-2. The list of comprehensive strategies should also include Recommendation CA-7 "Increase investment in climate change vulnerability assessments of critical built infrastructure systems," which is listed on page 17.

#### ***Recommendation CA-1***

We recommend updating the description of the Technical Advisory Group (TAG) and Guidance Document to reflect that it was prepared by the Governor's Office of Planning and Research with guidance and input from the TAG, rather than authored by the TAG. In addition, the guidance has not yet been released, so the text should be changed to say that its release is forthcoming.

In addition, the list of steps to build a resilient California under EO B-30-15 should include prioritizing natural infrastructure solutions and solutions that reduce greenhouse gas emissions and increase climate resilience.

### ***Recommendation CA-2***

Meaningful participation by California’s most vulnerable populations in decisions about investments and planning will be bolstered by their access to easily understandable information on issues of most concern to the communities. The discussion of CalBRACE is a helpful example, but the text should specifically call out the need to develop this type of information across all the sectors and in concert with the communities, as feasible.

### ***Recommendation CA-3***

The development of climate research agendas and data tools should be informed by information and research needs at the local and regional levels, as well as state agencies. To the degree that the state already actively seeks this input, the Update should describe that. It should also identify additional vehicles (and resources) to gather further input. Moreover, some resources should be identified to provide feedback from users of existing data tools on user experience. CEC has begun to do this with its Energy Advisory Group for Cal-Adapt, but this should be implemented for other sectors as well. We recommend including this in the description for Cal-Adapt 2.0 and highlighting the need for future efforts to emphasize co-production of data and research agendas in other sectors, as well as the development and refinement of data tools.

### ***Recommendation CA-5***

The list of state actions under Recommendation CA-5 would be strengthened by highlighting actions from several additional sectors that both build climate preparedness and reduce greenhouse gas emissions, in addition to the natural infrastructure solutions already mentioned. For instance, in the energy sector, Renewable Auction Mechanism, Renewable Feed-In Tariff program and California Solar Initiative have successfully increased renewable distributed generation, reducing greenhouse gas emissions and increasing the resilience of the overall energy system.

### ***Recommendation CA-6***

The Sierra region should be added to the list of regional collaboratives on page 15.

## **Energy Sector Chapter**

We welcome this chapter’s discussion of the risks of climate change to the state’s energy sector, and its emphasis on an integrated energy policy and increasing resiliency in low-income and disadvantaged communities. We also agree with the stated need for more research on the water-energy nexus and coordinated research efforts with interdependent sectors, and the assertion that the state’s targets for renewable energy, renewable distributed generation, energy efficiency and building retrofits bolster resilience in the state to climate impacts.

In this chapter and the transportation chapter, the Update should clarify which state agency will be taking on each Next Step and Ongoing Action, and a specific timeline for initiation and completion.

### ***Recommendation E-3***

The final Plan should update the discussion of AB 2800 on page 9 to better reflect the scope of work for the Climate-Safe Infrastructure Working Group as outlined in the law, which extends beyond engineering codes and standards. The working group will at a minimum investigate: *“current informational and institutional barriers to integrating projected climate change impacts into state infrastructure design; the identification of gaps in the critical information that engineers responsible for infrastructure design and construction need to address climate change impacts; (and) how to select an appropriate engineering design for a range of future climate scenarios as related to infrastructure planning and investment”* and provide recommendations on: *“integrating scientific knowledge of projected climate change impacts into state infrastructure design; addressing critical information gaps identified by the working group; (and) a platform or process to facilitate communication between climate scientists and infrastructure engineers.”*

We recommend replacing the existing language with similar language as that describing AB 2800 on page 9, or listing out these tasks and highlighting that CEC will help support the effort. Alternatively, this section could borrow the language from Next Steps T-3.3 and its sub-steps.

The Plan Update should also expand upon what is meant by the RPS being “informed by the consideration of ongoing and inevitable climate impacts” in the Ongoing Actions section. In addition, it would be helpful for the Plan to clarify how SB 350 implementation takes climate impacts into account.

### ***Recommendation E-5***

As previously noted, the CEC established an Energy Advisory Group to provide user feedback on Cal-Adapt. It should replicate this effort for other sectors, which would likely require new non-energy restricted funding sources. We recommend including user feedback beyond the energy sector – and the resources to support these efforts – as a Next Step.

In addition to the information provided through Cal-Adapt, other state agencies, universities, NGOs and the private sector have produced other climate datasets and tools. It would be helpful for the Update to describe how Cal-Adapt (and the state) will interact with these other efforts in a complementary and efficient manner. There is an interest among practitioners for some type of an analysis or screen for existing tools to help them and the public navigate the spectrum of publicly available tools.

## **Transportation Sector Chapter**

As with the Energy Sector chapter, we appreciate the brief discussion of which climate impacts will affect transportation infrastructure in California, and the recognition that California must consider retreat as a possible solution, in addition to defending and accommodating current infrastructure.

### ***Recommendation T-1***

We agree that the state should “enhance cooperation across state agencies in furthering our understanding of climate science and trends to ensure a coordinated response to potential impacts.” As with the energy sector, there have been several local and regional efforts to develop climate data, such as BCDC and MTC’s sea level rise mapping for the Bay Area, including impacts that might affect transportation systems. This Recommendation should be updated to recognize these efforts and commit to a process to share this data. This language is similar to Recommendation T-2’s suggestion to share results of vulnerability assessments across government levels to ensure a comprehensive picture of vulnerabilities.

### ***Recommendation T-2***

The final Plan should therefore include additional specificity to clarify which impacts and which assets will be part of future vulnerability assessments for Next Step T-2.1, and by whom. Another Next Step should be for the California State Transportation Agency or Caltrans to integrate the various existing (and soon to be completed) vulnerability assessments for different transportation assets and systems for a more holistic sense of how the transportation system will be impacted across the state.

### ***Recommendation T-3***

The Update should include more detail or examples of how Caltrans is “ensuring consideration and incorporation of climate change and vulnerabilities across divisions.” It is a laudable effort, but less specific than other ongoing actions, making it harder to measure its progress.

UCS appreciates inclusion of the next step of developing economic assessment strategies to quantify the impacts of climate change on the transportation system. We recommend that this effort be replicated for other sectors as well. Public Resources Code 71155(a)<sup>1</sup> is an important requirement for state agencies with responsibility for state infrastructure, so it should be explicitly mentioned in other relevant sectors and highlighted at the beginning of the document.

### ***Recommendation T-4***

State transportation agencies should coordinate with the private sector in addition to local, regional, and federal partners to ensure consistency and compatibility of the solutions being implemented. Caltrans should also review the Highway Design Manual for potential updates based on the results of its vulnerability assessments and other relevant information.

### ***Recommendation T-5***

This section should identify specific solutions to address equity issues for transportation systems and partner with vulnerable populations in transportation decisions. For instance, differences in transportation

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<sup>1</sup> Consistent with this part, state agencies shall take into account the current and future impacts of climate change when planning, designing, building, operating, maintaining and investing in state infrastructure.

access between urban and rural areas, or across vulnerable groups (e.g., elderly, low-income, and disabled communities), could influence just how resilient a community is to climate change.

We look forward to the results of the evaluation of the data and methods employed for vulnerability assessments in Fourth Climate Change Assessment, DWR, Caltrans and others to identify best practices. This information will be very useful and should be made available publicly for feedback so that it can inform local and regional efforts as well.

In summary, UCS believes that the Draft Safeguarding California Plan: 2017 Update has made a strong start, and that the specific comments and suggestions we have included above can help make it more robust and effective. We have worked quite a bit with your staff in recent years in the challenging work of preparing for a future in which we cannot rely on past experience, given that historical climate and weather trends are no longer a good predictor of the future. We deeply appreciate both the difficulties of this work and your commitment to using good science to help guide protective policies.

UCS looks forward to working with your staff as this Plan is developed further. Please do not hesitate to reach out with any questions or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Jamesine Rogers Gibson". The signature is written in a cursive, somewhat stylized font.

Jamesine Rogers Gibson  
Western States Senior Climate Analyst