



United States Department of the Interior

NATIONAL PARK SERVICE
PACIFIC WEST REGION
909 First Avenue, Suite 500
Seattle, WA 98104



IN REPLY REFER TO:
1.A.2 PWRO-NR

March 16, 2017

California Forest Climate Action Team
fcac.fire@fire.ca.gov

Dear Forest Carbon Action Team:

The National Park Service (NPS) Pacific West Region (PWR) appreciates the opportunity to comment on the California Forest Carbon Plan. The NPS mission is to preserve and protect park resources while providing for public enjoyment of those resources now and for future generations. Given the current and future threat of climate change on forest viability in California, PWR supports the goal of the Forest Carbon Plan to transfer carbon stocks from many small, vulnerable trees into more resilient large trees. We also support policy and investment decisions that secure long-term stable carbon storage in National Park forests in California. We agree with the California Forest Climate Action Team that more of the following practices on a landscape scale are necessary to ensure healthy forests into the future:

- Prescribed and managed fire for resource objectives
- Under-story thinning
- Over-story thinning
- Thinning followed by fire for resource objectives

PWR also supports a collaborative effort among forest land management agencies, private land owners and the public to implement large-scale thinning treatments. We agree that extensive and timely thinning of California's forests, and re-introducing managed fires for resource objectives, will make them healthier and more resilient for many generations to come. These practices will also significantly reduce the threat to life and property and natural resources during high fire danger years.

We have the following specific comments.

Carbon Accounting: Carbon estimates can vary widely depending on the model resolution, remote sensing, and/or plot fusion techniques used to generate those estimates. Is the Forest Vegetation Simulator (FVS) model, used to calculate carbon in this plan, a reliable way to estimate the final amount of carbon benefit in an area of treatment without fire, when compared to the actual carbon that would be stored in larger more widely spaced trees? If not then the benefits this protocol is seeking to quantify won't add up because carbon stability, i.e., forest structure, is not counted. Has the FVS modeled carbon accumulation been compared to other spatial estimates of carbon, and to the LANDIS II based estimates used by Hurteau et al. 2017 (link below)

<http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0169275&type=printable>

Representation: Under the new climate scenarios we will not be able to save all forests the way they have existed for the last 100 + years. Many forest community types will contract, as seen in the historical record. However, the NPS goal is to strive for "representation" of the existing range of forest types on the landscape.

Resiliency: The focus of resource conservation in the age of climate change needs to be on the factors that drive resiliency, sometimes called slow drivers, or "stabilizing forces". These include soil organic matter, long-lived species, and biogeochemical cycles. Resiliency is a useful concept; agencies will need to find a common definition to make it a reality.

Permanence: The methodology described does not account for a permanent commitment to a particular treatment. The funding call associated with this plan is for projects ending in 2020. Implementing the proposed treatments without a long term commitment to further management in the impact area could undermine the project goals. To realize the projected carbon gains, calculated by FVS 50+ years out, will require ongoing management and a sustained commitment to expand upon and maintain the treatments. Emphasis should be given to projects that demonstrate the ability for a permanent commitment to a given treatment.

NPS looks forward to working with the FCAT on future forest structure projects. If you have any questions regarding our comments please contact Judy Rocchio, Regional Air Quality Program Coordinator, at 415-623-2203 or Robin Wills, Regional Fire Management Officer (acting) at 415-623-2216.

Sincerely,



Chip Jenkins

Deputy Regional Director Resource Management, Pacific West Region

Cc: Regional Air Quality Program Coordinator, Judy Rocchio
Regional Fire Management Officer (Acting), Robin Wills