



Brandi Goss
Environmental Scientist
California Board of Forestry and Fire Protection
P.O. Box 944246 Sacramento,
CA 94244-2460

08 May 2019

Dear Brandi Goss,

I am writing to apply to be an Academic Representative on the Board of Forestry and Fire Protection's Effectiveness Monitoring Committee. I am a professional forest ecologist, and my background in forest assessment and monitoring, my research on the responses of California trees to climate, disturbance and land use and my experience interacting with public and private land managers are directly relevant to the work of the Committee. I received a B.A. from Stanford and a Ph.D. in Biology from the University of Washington. I am currently an NSF and NOAA postdoctoral fellow at UC Berkeley and Carnegie Institution for Science, and I will soon be starting a tenure-track faculty position as an Assistant Professor at UC Santa Barbara (start date likely 2020).

My research focuses on the response of forests in the western U.S. to climate change, with a particular emphasis on drought-induced forest mortality and California ecosystems, and I have written 20 peer reviewed scientific papers on these topics. For example, I have recently helped develop methods for identifying areas of California forests that are particularly resilient or particularly vulnerability to drought-induced stress using satellite data (Broderick, Anderegg & Asner, 2019), as well as early warning methods to identify forests that will soon succumb to drought-induced forest mortality (Anderegg, Anderegg & Huang, 2019). Both of these projects are explicitly management focused, aiming to provide useful deliverables to help both public and private land managers identify sensitive areas before trees start dying. Through my extensive fieldwork across California and the Western U.S., I have also developed strong working relationships with both private and public land managers and have developed a working knowledge of various forest management operations on forestlands of a variety of land tenure.

Thanks to my postgraduate training and research experience, I have intimate familiarity with forest monitoring efforts (plot-level inventories such as the Forest Inventory and Analysis, timber cruising methods, forest health flight surveys). I am also familiar with fundamental forestry principles drawn on in the California Forest Practice Rules such as the individual and stand growth determinants of Adequate Site Occupancy used to assess the Maximum Sustained Production of High Quality Timber Products requirements for THPs (Chapter 4; Subchapters 4,5,6; Article 3, Sections 913.11, 933.11, 953.11). I have a working knowledge of the silvicultural techniques (regeneration methods, prescriptions and intermediate treatments) references in the California Forest Practice Rules and an understanding of how these techniques can help meet the objectives of the 1973 Forest Practice Act (PRC 4512 and 4513), and I am a member of the Society of American Foresters. I also have a strong understanding of the scientific basis behind the guidelines around Biological Resources, Soil Productivity, Greenhouse Gas Impacts, and Watershed Resources that must be addressed in THPs (for example in Cumulative Impacts Assessments, Chapter 4; Subchapters 4,5,6; Technical Rule Addendum No. 2). Finally, I have general knowledge of the listing process and management mandates associated with rare, threatened and endangered species listed under the State or Federal Endangered Species Acts.

As a research scientist, I routinely work in collaborative groups, often including members from government agencies such as the USFS and USGS. I have also demonstrated my collaborative capacity as a Representative to the President for the Collaborative Workplace Initiative (CWI), a group designed to assess and improve the work environment at the Carnegie Institution for Science. In addition, I have a strong record of producing work products in a timely manner, as mandated by multiple grants that I have received from federal granting agencies such as the National Science Foundation and National Oceanic and Atmospheric Administration.

In summary, I meet all of the requirements for an Academic Representative to the EMC. I am passionate about the health and continued productivity of California's forestland, and have a strong understanding of the ecological and land-management challenges that face Californian ecosystems. I would be excited to lend my scientific knowledge and expertise to the Board of Forestry and Fire Protection through service on the Effectiveness Monitoring Committee. I have also attached my Curriculum Vitae for your reference. Thank you for your consideration.

Sincerely,



Leander D.L. Anderegg
Postdoctoral Fellow
University of California, Berkeley
and Carnegie Inst. for Science

