13 December 2018

Kevin Elliott, Forest Supervisor
Los Padres National Forest

Dear Mr. Elliott,

On behalf of the John Muir Project of Earth Island Institute, the Center for Biological Diversity, and Los Padres ForestWatch, I am submitting the following new information—specifically, my analysis of the stand examination data sent by the Forest Service to Los Padres ForestWatch recently regarding the Cuddy Valley and Tecuya projects.

On page 3 of the Cuddy Valley CE Proposed Action, and page 4 of the Tecuya Proposed Action, the Forest Service states that, historically, there were 93 trees per acre in the forests in question, citing Minnich et al. (1995) (attached), and then asserts that there are currently 480 trees per acre in the project areas, citing U.S. Forest Service stand examination data. The historical data from Minnich et al. (1995) is based on an early 20th-century field survey that did not include trees less than 4 inches in diameter, oaks or other non-conifers, pinyon pines, western junipers, or snags (standing dead trees). It only counted live trees 4 inches in diameter or larger, and only for several conifer species: Jeffrey pine; ponderosa pine; sugar pine; white fir; and incense-cedar. When I examined the Forest Service's "stand exam" data for the Cuddy and Tecuya projects, I found that, in order to claim that there are currently far more trees per acre than there were historically, the Forest Service improperly and inaccurately included saplings, non-conifers, and pinyon pines, thereby creating a false comparison with the historical tree density data from Minnich et al. (1995), upon which the projects rely.
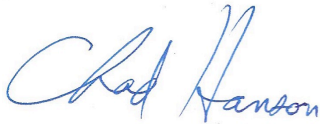
I applied the Minnich et al. (1995) methodology—the same methodology that the Forest Service endorses in the project documents—to the Forest Service's stand exam data, and inserted columns in their Excel spreadsheet to record the results (see attached). For stand exam plots containing one or more of the conifer species analyzed by Minnich et al. (1995), there were a total of 125 of such plots, and the <u>current</u> average tree density is 83 trees/acre (41/acre for trees 4-11.9 inches in diameter, 32/acre for trees/acre for trees 12-23.9 inches in diameter, 8/acre for trees 24-35.9 inches in diameter, and 2/acre for trees 36 inches in diameter and larger). This is *less* than the historical tree density of 93 trees/acre identified by the Forest Service.

I also analyzed the stand exam data with regard to current trees per acre in the project areas for pinyon pine forests which did not contain the mixed-conifer tree species analyzed by Minnich et al. (1995). For this analysis, I included saplings 1-4 inches in diameter, along with larger pinyon pines, but not seedlings. I did this to provide a comparison with the historical findings of U.S. Geological Survey researchers that pinyon pine tree density in southern California forests was 100-400 trees per acre, and often 500-1000 trees per acre, in the late 1800s (Leiberg 1900—attached). My analysis of the Forest

Service's stand exam data for the Cuddy and Tecuya projects revealed that the current pinyon pine tree density is 216/acre in the pinyon pine forest type, based on a total of 69 stand exam plots. This is within the natural range of tree densities for pinyon pine forests, albeit near the *lower* end of the natural, historical range.

Given that the Cuddy and Tecuya projects fundamentally rely on the claim that current forests are unnaturally dense, in order to justify the logging projects, and given that this claim is demonstrably false, based on the Forest Service's own data, the project decision and supporting documents for Cuddy Valley should be withdrawn. Similarly, the documents upon which the Tecuya project is based should be withdrawn, and a new analysis prepared that is not based on misrepresentations.

Sincerely,

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John Muir Project
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