



SIERRA PACIFIC INDUSTRIES

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March 10, 2017

Mary D. Nichols, Chair
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

RE: Proposed 2030 Target Scoping Plan

Dear Chair Nichols and Board Members:

This letter is submitted to provide the California Air Resources Board additional information on Sierra Pacific Industries and provide a written record supporting the points conveyed during my testimony to the California Air Resources Board on February 16, 2017.

Company Profile

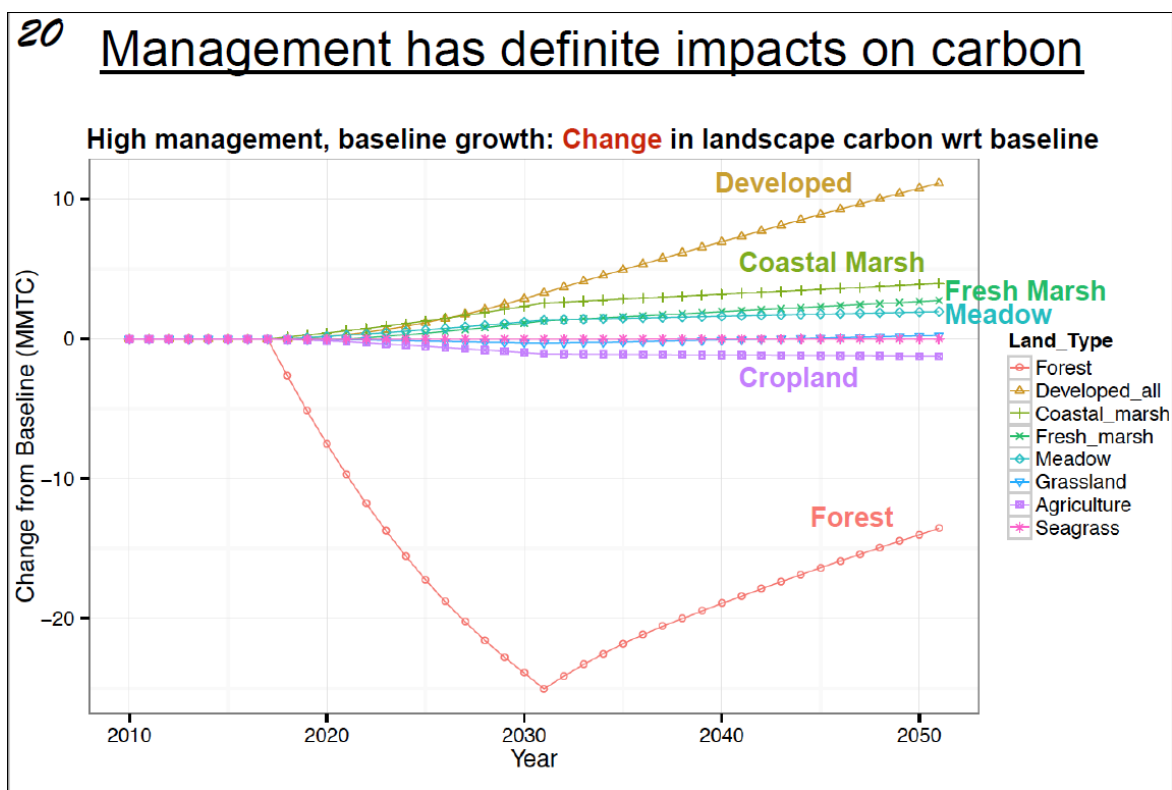
Sierra Pacific Industries (SPI) is a family owned vertically integrated timber products company. SPI owns 1.9 million acres of timberland, approximately 1.6 million acres in California and 300,000 acres in Washington State. In California, SPI operates 10 sawmills and five cogeneration power plants, along with other manufacturing facilities. The company is the second largest lumber producer in the United States, producing everything from timbers and framing lumber to fencing and specialty products. SPI employs about 3,500 people in California.

SPI Scoping Plan Comments

SPI is supportive of the Scoping Plan, but have concerns with the forest carbon accounting model in Appendix G. The graphed outputs from Appendix G have trend lines that contradict our understanding of the carbon flux associated with forests and their response to management. SPI requests that the carbon accounting (CALAND) utilize the expertise of the University of California's Division of Agriculture and Natural Resources and CAL FIRE when completing the forest carbon model as those organizations have developed the expertise to correctly conduct such an analysis.

The IPCC is the leading international body for the scientific assessment of climate change established in 1988 under the auspices of the United Nations. The IPCC judged the merits of sustainable forestry and bio-energy in its comprehensive study *Forestry, In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. This report concludes that: "In the long term, sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual yield of timber, fibre, or energy from the forest, will generate the largest sustained mitigation benefit." (pg. 549)

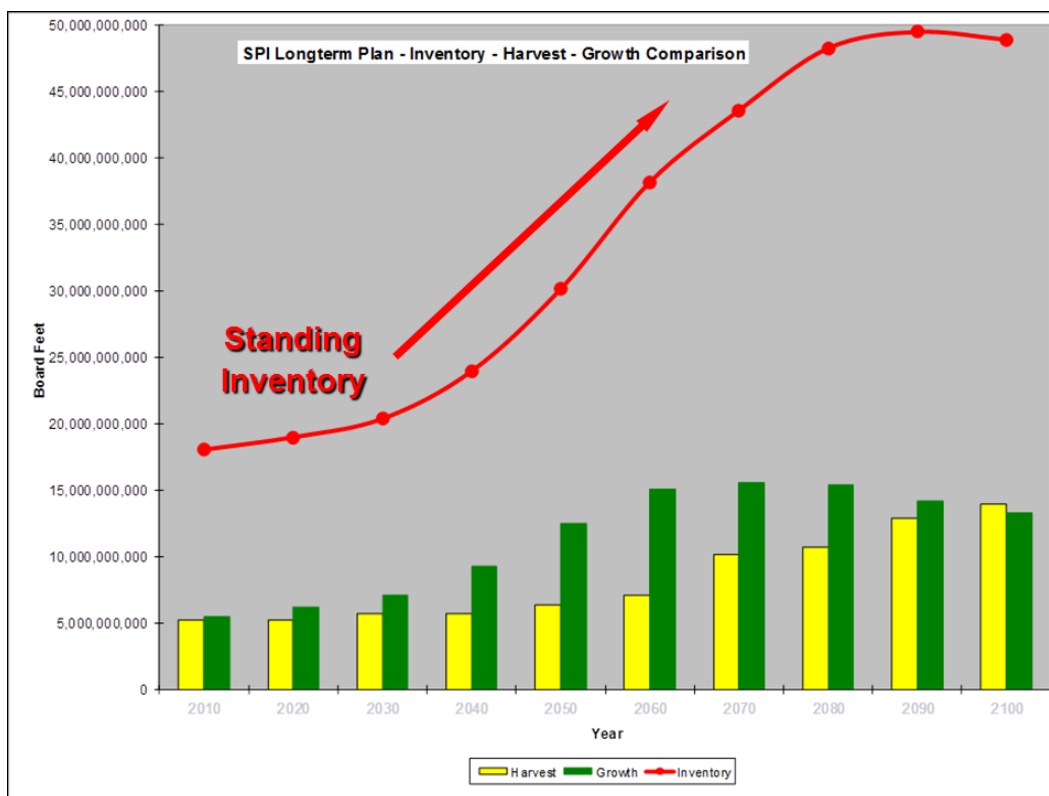
We believe if the forest model in Appendix G was using accurate data or equations that accurately reflect sustainable forest management strategies, it would have similar conclusions as the IPCC scientists. One indication that Appendix G likely has errors is found on the graph for the High Management scenario on Page 20 (below). The shape of the curve for "Forest" shows a precipitous decline in landscape carbon.



The "high management" carbon curve does not accurately reflect the sequestration that can occur from intensive forest management activities or reflect the forest sustainability laws embedded in the California Forest Practice Rules. The error in the Working Lands Carbon Model (CALAND) is that under the "high management" scenario it's calculations ignore the fact that sustainable forestry in California only occurs on a very small percentage of the overall land

base annually (<2%), leaving all of the remaining acres of forest sequestering carbon. CALAND however appears to model "high management" as if there are impacts to a majority of forest acres. This then inflates the loss of carbon as it causes all the remaining forest stocks to disappear. This is an unrealistic scenario that is not reflective of the reality of sustainable forest management.

On an annual basis, SPI has carefully calculated the rates of sequestration for our timberlands, as well as for the emissions from individual harvest plans. After accounting for logging, hauling, milling, and product emissions from all our annual timber harvest projects, our forests still sequester 20 times those emissions every year. There is no precipitous decline in carbon stocks on our timberlands as suggested by Di Vittorio's carbon model. Our "high management" (we refer to it as sustainable forestry practices) results in SPI timberlands sequestering three times the amount of carbon over the next 100 years as compared to a custodial (Low) management approach. This substantial increase in sequestration however requires significant monetary investments in establishing and managing tree densities. Our sustainable forestry practices will result in the modal diameter of volume by diameter class to increase from 18 inches to 32 inches. These larger trees will be widely spaced and, due to their size, stand structure and landscape distribution, will have increased fire resilience.



The graph above is from SPI's Option A demonstration of Maximum Sustained Production of High Quality Timber Products. In 1999, it was approved by the

California Department of Forestry and Fire Protection and was reviewed in 2014 by CAL FIRE to determine first decade compliance. The trajectory for standing inventory, growth and harvest are based on real measurements of real trees at over 400,000 individual forest inventory plots across the SPI ownership. Conifer trees are approximately half carbon by weight. Therefore, the increase in standing inventory of trees directly correlates to increases in carbon on the landscape. SPI forests are projected to sequester significant carbon during the next 40 years before flattening off at a sustainable future growth rate that is twice the level of sequestration that is presently occurring. As one can see, these results and predictions are inconsistent with that of the CALAND modeling in Appendix G. Therefore, the modeling must adjust its model to ensure more accurate projected outcomes of "high management" forestry. The current model is inaccurate and will mislead decision makers regarding the potential carbon sequestration contributions that can occur through sustainable forestry.

Fire resilient landscapes are a goal that is desired by a broad suite of stakeholders. Therefore, it is our opinion that the Working Lands Carbon Model (CALAND) needs to be corrected so that policy makers can correctly evaluate and potentially incentivize "high management" investments, at least on commercial timberlands, so that society can achieve those climate benefits. The high rate of sequestration from our timberlands does not consider the carbon storage that is maintained in lumber and other wood products, the fossil fuel savings from renewable biomass energy, nor the emissions savings that can be realized by substituting wood products such as mass timber building construction techniques in place of more highly energy embodied materials such as cement and steel.

Conclusion

SPI requests the experts at CAL FIRE and the University of California Division of Agriculture and Natural Resources be utilized to review and update the modeling. This would provide timberland owners with additional confidence that the modeling has been done accurately.

Sincerely,



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