DETERMINING FOREST CARBON STOCK LOSSES DUE TO WILDFIRE DISTURBANCE IN THE WESTERN UNITED STATES

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Abstract—Quantifying carbon stock losses after wildfire events is challenging due to the lack of detailed information before and after the disturbance. We propose to use the extensive Western FIA database (including periodic and annual inventories) to recreate pre- and post-fire conditions to better estimate actual carbon losses. Methods include using remeasurement date where available, growth models for forecasting and backcasting, and wildfire data and mapping from the United States Geological Survey. We will discuss the results and provide specific examples to demonstrate the proposed modeling system.

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