Post-graduate fellow opportunity: Drivers of carbon dynamics in Pacific Coast forests

The agency's monitoring of sequestration and emissions of carbon from forest lands has led to a need for managers and policy-makers to evaluate alternative approaches to managing and regulating forests on the West Coast. The selected participant(s) will collaborate with staff to interpret patterns and trends in carbon stores in forests of diverse composition and disturbance history to understand the drivers affecting forest carbon stocks, and inform the parameterization and validation of simulation models used to project alternative future management scenarios. The learning objectives for the project include: identifying approaches for constructing growth and yield relationships from empirical chronosequences; understanding how simulation models address tree growth, mortality, and wood decay; estimating the role of disturbance and other drivers in the regional carbon trends found to date; and gain experience in sharing this information internally among agency programs and externally among decision-makers, stakeholders and the public.

Under the guidance of a mentor, the participant will be given the opportunity to (1) continue their professional development through immersion in regional land management challenges, (2) inform and contribute to decisions regarding forest, watershed, soil, and fire evaluation and management, (3) gain an understanding of complex natural resource management and policy challenges in the West, and (4) pursue research related to the intersection of natural resource management, and carbon storage in forests and forest products.

Preferred qualifications for the ideal applicant include: understanding of forest ecology and ecosystem dynamics, strong quantitative analysis skills, ability to write code to retrieve and process large datasets, willingness to work in a collaborative environment, experience with scientific writing.

Interested people should contact Andrew Gray (Andrew.gray@usda.gov) for more information.