

18. Extending PINEMAP Benefits into a Post-PINEMAP Future

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Because PINEMAP is a five-year project with outcome-focused goals for increased carbon sequestration and forest resilience projecting 30 years into the future, we need a plan that enables our stakeholders to continue to benefit from our work after the project is completed.

The PINEMAP project's mission is to enable southeastern U.S. landowners to increase carbon sequestration and resilience in planted pine forests over the next 30 years. In order for the five-year project to achieve these long-term goals, PINEMAP's data, tools, and networks established during the funded phase of PINEMAP must remain available to our stakeholders after the project expiration in February 2016. A key resource for extending PINEMAP's outreach will be the U.S. Department of Agriculture, Southeast Regional Climate Hub (SERCH), directed by PINEMAP co-principal investigator and modeling team co-leader Steven McNulty.

SERCH was established in 2014 to deliver science-based knowledge and practical information on climate variability and change to farmers, ranchers, and forest land managers. SERCH's mission is to connect public, academic, and private sector organizations, researchers, and outreach specialists to deliver technical support and provide tools and strategies to help producers cope with challenges associated with drought, heat stress, excessive moisture, changing growing seasons, and changes in pest pressures. SERCH's outreach mission meshes with the goals of the PINEMAP project, and nicely leverages USDA's investments in both SERCH and PINEMAP for the long-term benefit of forestland owners and managers in the southeastern United States.

The details of the PINEMAP-SERCH partnership are still under development, but we plan to include the following elements:

Data, Analyses, and Tools

The PINEMAP project is producing a large quantity of data, analyses, and tools, including ecosystem measurements on hundreds of experimental forest plots; gridded soils and historical and projected climate data for the entire region; model simulations; and a host of tools and resources on the PINEMAP Decision Support System (DSS) for assessing risk and capitalizing on opportunities associated with climate change. Data resources will be hosted on the Terra-C terrestrial carbon data management system. SERCH could play an important role both in bringing these resources to stakeholders' attention and in facilitating the use of Terra-C and the PINEMAP DSS. SERCH's focus on the direct application of information and tools for adaptive land management will allow these databases to be maintained for future researchers and provide an interface to extend the utility of these data.



Measuring clonal demonstration at age four. Photo by Steve McKeand.

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Outreach Products

PINEMAP's outreach products, which are targeted to both corporate and noncorporate pine forest landowners, include fact sheets, videos, archived webinars, and the tools and resources on the PINEMAP DSS. SERCH will capitalize on these resources by hosting this material on the federal and cooperator SERCH websites, providing resources through presentations and distributing resources at meetings, workshops, and seminars. SERCH may also assist Project Learning Tree with updates to the PINEMAP module for secondary science teachers.

Enhanced Coordination Among Regional and National Networks

One of the most important PINEMAP outcomes is enhanced coordination among regional and national networks of researchers, educators, and outreach professionals. For example, PINEMAP helped to coordinate collaboration

on forestry and climate research among many of the major forestry research cooperatives in the region, including three tree-improvement cooperatives, two silviculture-biology cooperatives, two modeling cooperatives, and an economics and policy cooperative. Continuing these coordinated efforts will be essential for maximizing PINEMAP's benefits for corporate forestland in the region. Additionally, the linkage of these organizations cooperatives to SERCH as a high priority federal program could significantly increase the potential for successfully competing for future competitive grant funding. SERCH will provide an important framework for organizing this collaboration.

The long-term outlook and regional scope of SERCH will allow PINEMAP's data, decision support tools, outreach and educational resources, and network coordination benefits to remain accessible to the region's forest land owners and managers, helping to ensure positive outcomes for this critical resource in a changing world.