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Interdisciplinary research and teaching at universities can promote innovation and facilitate collaborative efforts in the sustainability sciences. A truly sustainable society will require us to go beyond interdisciplinary cooperation and employ fully integrated and systems-based thinking. The Department of Civil and Environmental Engineering (CEE) and the School of Environmental and Forest Sciences (SEFS) have a long tradition of collaboration. The challenges of the future demand that we build on this tradition, with closer integration across multiple disciplines.

The UW School of Forestry was established in 1907 as one of the earliest forestry schools in the nation with the objective of moving away from the "cut and run logging" of the late 19th century by educating a forest management workforce via fundamentals in science and engineering. Recognition that our virgin forests were finite, that forest plantations could not sustain the diverse fauna of the Pacific Northwest, and that "human element" had to be part of the equation led the then College of Forest Resources to continually broaden its scope through the latter part of the 20th Century to address these new and complex challenges. Intentional or not, this represented the beginnings of addressing sustainable resource management. Looking forward we are beset with the burdens of an ever growing population, increasing resource limitations, and the impacts of a changing climate. Thus, a close relationship between CEE and SEFS, along with many other units, is needed now more than ever to develop creative sustainable approaches to the management of natural and built environments.

In this talk, examples of on-going research in SEFS that play a direct role in a sustainable future will be presented and examples of the potential for co-creation with CEE will be highlighted. Linking ecologically-based forestry with bio-regionally produced engineered wood products that are used in green building design and smart regional development is just one example of a shared, systems-based approach that will facilitate a more sustainable future. Such shared objectives to meet human needs for fiber, clean water, and shelter while maintaining and restoring biological diversity and ecosystem well-being create research and learning opportunities, but more importantly will serve as a catalyst for sustainability in the Pacific Northwest.