

Dan Miller
Earth Systems Institute
3040 NW 57 Street
Seattle, WA 98107
206-633-1792

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Ashley E. Seim
Oregon Watershed Enhancement Board
775 Summer Street NE, Suite 360
Salem, Oregon 97301-1290

Progress Report, for work completed through October 31, 2009
Grant No. 208-8009-6216: Integrated Dynamic Landscape and Coho Salmon Model

We have implemented a spatially distributed wood recruitment model to estimate wood recruitment rates to stream reaches over time. The model includes processes for both stream adjacent recruitment and for delivery of wood to streams by mass wasting (debris flows). The model uses a DEM (Digital Elevation Model) to characterize the channel network, stream attributes, and basin topography. We are currently using the 100-yr simulations of forest dynamics from the Coastal Landscape Analysis and Modeling Study (CLAMS: <http://www.fsl.orst.edu/clams/>), created using the Landscape Management Policy Simulator (LAMPS: Bettinger et al. 2005), to estimate future forest stand conditions. These linked models provide probability estimates of wood abundance over time, using current ownership patterns and management strategies, for all stream reaches for the entire CLAMS study area. Calculated wood abundances are linked with channel attributes to provide estimates of habitat condition.

Bettinger, P., M. Lennette, K. N. Johnson, and T. A. Spies. 2005. A hierarchical spatial framework for forest landscape planning. *Ecological Modeling* **182**:25-48.