Appendix 1. Conceptual model of Envision's components.

Fig. A1.1. Overview of Envisions components, from Spies et al. (2017). Agents on the landscape have goals based on forest policies, markets and personal objectives for the land they manage. To achieve their goals, agents act on the landscape – e.g. cut trees, manage fuels, firewise their homes – and those actions are modeled the forest management allocator submodel. Simultaneously, the landscape is affected by wildfire, vegetation succession and housing expansion, autonomous change processes that are independent of actor behavior, alter landscape conditions and affect where and how agent's goals are achieved. At the end of each time step landscape evaluators quantify the production of different landscape services (e.g., wood production, biodiversity, carbon) and the combined effect of all processes – agent – dependent and autonomous – will determine landscape condition which feedbacks into the simulation for the following time step.



LITERATURE CITED

Spies, T. A., E. White, A. Ager, J. D. Kline, J. P. Bolte, E. K. Platt, K. A. Olsen, R. J. Pabst, A. M.G. Barros, J. D. Bailey, S. Charnley, J. Koch, M. M. Steen-Adams, P. H. Singleton, J. Sulzman, C. Schwartz, and B. Csuti. 2017. Using an agent-based model to examine forest management outcomes in a fire-prone landscape in Oregon, USA. *Ecology and Society* 22(1):25. http://dx.doi.org/10.5751/ES-08841-210125