

The Link Between Forests and Drinking Water

The Forest Service estimates that nearly 1 million acres of forest were converted to developed uses each year in the 1990s, and by 2050, an additional 23 million acres of forests may be lost due to development (Stein et al 2005). Areas experiencing the most forest loss are often the suburban communities outside of metropolitan regions where municipal staff struggle to keep up with the growth and may not have adequate tools to manage it. Few of these communities conduct detailed planning for water supply or forest conservation prior to approving new developments.

Forests capture rainfall and replenish and cleanse our water supply. These processes are widely accepted in the scientific community, yet they have not really been translated into the language that most often drives planning and land use decisions at the local level: dollars. The management of forests often requires the balancing conflicting goals of economic development and environmental conservation among its many users and owners.

Research is needed to identify the specific economic connections between forests and drinking water (supply, quality, and cost), based on the available science. This research can be used to: a) put advance planning for water supply and forest conservation at the forefront of community issues, b) make the case for forest conservation to protect drinking water, c) encourage the use of incentives for forest conservation and tree planting that are more reflective of their true value, and d) factor in the costs of drinking water supply and treatment when evaluating development alternatives.

Some resources on forest and drinking water are provided below.

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- Ernst, C. 2004. *Protecting the Source. Land Conservation and the Future of America's Drinking Water*. The Trust for Public Land and the American Water Works Association. San Francisco, CA. http://www.tpl.org/content_documents/protecting_the_source_04.pdf
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- Stein, S.M., McRoberts, R. E., Alig, R. J., Nelson, M. D., Theobald, D. M., Eley, M., Dechter, M., and M. Carr. 2005. *Forests on the Edge. Housing Development on America's Private Forests*. USDA Forest Service. Technical Report PNW-GTR-636. <http://www.fs.fed.us/openspace/fote/fote-6-9-05.pdf>
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