



Western Forestry Leadership Coalition Issue Brief Ecosystem Services

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Summary:

Ecosystem services are the goods provided by ecosystems that, until recently, have been considered largely free for the general public. Pricing these services, such as water filtration and biodiversity protection, would allow landowners to trade them in the private marketplace. The promise of ecosystem service markets means, for example, that standing trees would be valued not just for their board-feet but also for their ability to sequester carbon. Public and private land managers would assist in evaluating the relative worth of different forest management strategies, helping to create markets for environmental services, and, according to proponents of the scheme, improve both efficiency of resource use and incentives for long-term conservation. The ultimate hope is that these new funding streams will allow working forest landscapes to compete against development pressures. Before ecosystem services benefits can be fully realized, however, ecosystem services markets must be established, institutionalized, regulated through policy, and explained to the public.

Background:

The concept of Ecosystem Services suggests the use of private market valuation strategies to capture the value of environmental services that are currently delivered for “free” to the public. One example is the European Union’s “cap and trade” system, currently in place to manage its carbon emissions. Participating countries have set limits on their industries’ total emissions, based on Kyoto Protocol requirements. Industries are then free to buy and sell their emissions credits on the open market. This system ensures an aggregate output that doesn’t exceed the cap, and yet allows industries to choose the best mix of technological advances, improved energy efficiency, and/or trading with other industries to meet its emissions requirements. In contrast to the usual “command and control” regulatory system in the U.S., the European carbon market is likely to be the precursor to similar markets around the world.

In forestry circles, many consider the valuation of Ecosystem Services to enable better management of forestry resources through expansion of the market system, thereby allocating resources more efficiently and promoting conservation. Already, localized examples of carbon trading are earning widespread public attention. States and tribes are working with private entities like the Climate Trust in the Pacific Northwest to generate revenue for forestry projects that increase carbon sequestration.

Considering the infancy of the ecosystem services marketplace in the U.S., The Katoomba Group, Forest Trends, and Ecotrust hosted a meeting in early June in Portland, Oregon entitled *Making the Priceless Valuable: Jumpstarting Environmental Markets*. Bringing together experts from the environmental, academic, research, land management, and financial fields highlighted the complexity of adding private market forces to environmental issues long managed solely through public policy and regulation. The Portland meeting focused on emerging ecosystem markets in three areas: carbon, water quality, and biodiversity.

Issues:

- Ecosystem Valuation has long been a challenge for foresters, researchers, and scientists. While some ecosystem services, such as the amount of carbon emitted or water quality, are more or less measurable, other public goods are far more difficult to capture. How can habitat quality be quantified? Aesthetic value? Accounting methodology is being developed for many such components of ecosystem value.
- Development of Markets & Institutions:
 - Carbon markets are only about one year old in the U.S., but globally have already accounted for approximately \$11 billion in transactions. Forests have thus far played a relatively small role in these transactions, but most agree that this is already changing.
 - Voluntary, private markets have been more fruitful for forest landowners, with an estimated 70% of voluntary transactions being forestry-focused. Most ecosystem services are still not effectively priced as no markets yet exist.
 - Public payment mechanisms are systems that connect public agencies with landowners through standardized rates and prices. Some cities in the U.S. have begun to use this system; the best example is the linking of public water utilities with private forestland owners, where the utilities invest in forest conservation to improve their water quality. New York City and Seattle are two examples of cities experimenting with this approach.
- Public Education, Outreach and Incentives will all be critical to advancing the ecosystem marketplace. Lessons from the international community, especially Europe and Australia, can help guide the formation of institutions in the U.S. Several organizations are now exploring the use of tax incentives to spur market growth. Others have discussed the possibility of re-targeting subsidies to landowners to better capture the value of ecosystem services being provided. Many of the institutional and incentive-based changes will require new policies to establish a workable framework.
- Equity concerns remain paramount in discussions surrounding Ecosystem Services. Historically, market forces have not tended to benefit lower income populations; many point out that there is a unique opportunity with this new developing marketplace to address these and other pervasive social and environmental justice issues more directly.

Next Steps:

Many have predicted that the 2007 Farm Bill will be a platform for and contain provisions relevant to ecosystem services. Mark Rey has publicly stated that the Farm Bill is an opportunity for the development of private markets, noting that such voluntary trading schemes are consistent with the administration's "cooperative conservation" approach to management (<http://cooperativeconservation.gov/>). Likewise, there are implications for international certification standards - such as SFI and FSC - on U.S. federal and non-federal forestlands as private market standards are integrated into forest management.

At the Katoomba conference, it was evident that many of the big financial players are beginning to take ecosystem services seriously. A representative from Goldman Sachs predicted that the U.S. carbon market could one day be the largest in the world. Until then, expect financial experts at all levels to begin to generate investment and establish the institutions necessary for ecosystem markets. The Chicago Climate Exchange is the most visibly successful example of such emerging carbon markets in the U.S. to date. The California carbon registry could be the next big development.

Recommended Actions:

WFLC members, Committees and staff should become aware and cognizant of the developing marketplace for ecosystem services as it relates to forestry. There are implications and opportunities here for any reinvention of the S&PF programs, both administratively and through 2007 Farm Bill. We should be positioned to engage in that dialogue. To this end, consideration of a WFLC / CWSF policy statement on the subject should be discussed.

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