

Developing and Implementing a Forest Management/Watershed Services Incentive-Based Project –-Replicating the NY City Watershed Services Model

Market-Based Conservation Incentives Workshop: Strategies for Family Forest Owners Participation in Biodiversity and Water Markets September 10-11, 2008

Clean reliable water supplies and healthy aquatic ecosystems are expected to become increasingly scarce in many parts of the country as develop pressure and climate change intensifies. Forests play a critical role in these hydrological systems. The search for innovative incentive-based solutions for the protection of freshwater supplies is expanding rapidly and water conservation and forest management can play an important role.

In 1997, New York City launched a revolutionary project to protect its drinking water by protecting the ecosystem services of its watershed. When the federal government adopted the Safe Drinking Water Act mandating that all major surface-water systems filter their water or prove they could protect the watershed producing it, New Yorkers decided to invest in the upstate watershed from where it came. The key assumption upon which the program is based is that improvements in farm and forestry practices will maintain and improve water quality making additional filtration and treatment unnecessary.

A filtration plant large enough to clean the City's water supply would cost approximately \$9 billion. Preserving the watershed, conversely, was estimated at \$1.5 billion, just over a dime invested on ecological preservation for every dollar that would have been spent on a filtration plant. Savings on future watershed protection costs would be even greater.

The major forestry related components of the NYC program include:

- purchasing conservation easements, that retire certain ecologically significant land from production.
- providing \$40 million to dairy farmers and foresters for additional incentives associated with the adoption of best management as well as technical assistance
- instituting education and outreach programs, and working to promote USDA Farm Bill and other water quality enhancement programs
- local council's exploration of a market for "certified" wood products.
- differential land use taxation forest landowners owning 50 acres (efforts to waive minimum acreage) or more and willing to commit to a ten-year forest management plan are eligible for an 80% reduction in local property tax
- outright purchase of hydrologically sensitive lands at market price such as lands near reservoirs, wetlands, and watercourses

Offering something for nearly everyone, the water flowing from reservoirs west of the Hudson River is safer today than when the agreement was signed and farmers and family forest owners are still able to make a profit from working the land. Nearly every stakeholder involved deems the agreement a success, and environmentalists are pointing to the City's watershed agreement as the prime example of how ecological solutions can also reap financial benefits. There were a number of unique circumstances, including a variety of innovative financing mechanism, that led to successful implementation and many wonder whether this watershed program can be replicated in other locations.

A working group, led by AFF, has been formed with the goal of emulating the NYC example. It may be necessary to work on a smaller watershed scale since the complexity of designing and maintaining financial mechanisms increases with scale. This breakout session will focus on the important elements to consider for choosing a site, designing the project, and determining the appropriate incentives for family forest owners and farmers to ensure their participation. Staff time and resources (though more are needed) have been dedicated to this effort. *Sources:* Kenny, 2006, Perrot-Maître and Davis, 2001