

# Watershed Forest Management: Sources of Assistance

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**F**or the next two quarterly articles, my focus is going to be forested lands and their relation to water resources.

This particular article will briefly describe the water quality benefits forests provide, and more importantly, the available resources private forest landowners can utilize to manage their

woodlots. My hope is that you, as water treatment professionals, could disseminate this information to land owners within your source water protection areas.

Healthy forests provide a number of benefits that work to improve the quality of the nation's waterways. Forested lands provide for the stabilization of soils, nutrient uptake (especially phosphorous and nitrogen), flood control, temperature regulation, and increase biodiversity of water fauna. Attention must be paid to the effects of development sprawl resulting in the loss of forested lands, especially the ever-important forested buffers that encompass small feeding tributaries to our surface water supplies. A 2002 study of 27 water suppliers conducted by the Trust for Public Land and the American Water Works Association showed that for every 10 percent increase in forest cover in the protection area, treatment and chemical costs decreased approximately 20 percent (see figure 1) up to about 60 percent forest cover. The study showed that after an increase of 60 percent forest cover, the return on treatment and chemical costs marginally diminishes. The specific percentage increase in forest and decrease in treatment and chemical costs may not be consistent across the country, but what is important, is the apparent relationship between the two. In New York the highest profile watershed management program (New York City's West-of-the-Hudson Reservoir System) has utilized land acquisition (keeping existing forest lands from being developed) and conversion of developed lands into forests as one of their main water quality preservation tools. Rural water suppliers can, and do, see the same positive water quality impacts with forested lands within their protection areas.

WATERSHED FORESTED	TREATMENT AND CHEMICAL COSTS PER MG	CHANGE IN COSTS	AVERAGE TREATMENT COSTS	
			PER DAY	PER YEAR
10%	\$115	19%	\$2,530	\$923,450
20%	\$93	20%	\$2,046	\$746,790
30%	\$73	21%	\$1,606	\$586,190
40%	\$58	21%	\$1,276	\$465,740
50%	\$46	21%	\$1,012	\$369,380
60%	\$37	19%	\$814	\$297,110

Figure 1. Diagram courtesy of Trust for Public Land and AWWA publication "Protecting the Source"

As all of you know, New York has an abundance of forested lands. What you may not have known is that 85 percent of New York's forested lands are privately owned (15 percent of that is tied up in public ownership such as land trusts and private industrial use). Systems with source water(s) located within the rural stretches of the state undoubtedly have privately owned forested lands within their respective source water protection areas. What you may not know is that there are a number of resources available to New York's private forest landowners that provide guidance related to forest lot management in the forms of technical assistance, education, and in some instances, cost-sharing for the installation of management practices.

In the recent past (years 2003, 04, 05) the main focus of New York's forestry technical assistance program serving the needs of private forest owners was the Forest Land Enhancement Program (FLEP). FLEP originated from the 2002 Farm Bill (hopefully to be reintroduced with the 2007 Farm Bill) replacing the federal Forest Incentive Program (FIP) and the Stewardship Incentive Program (SIP). FLEP's components are technical assistance, cost-share assistance, and coordination with existing educational programs. Under FLEP, the private forest landowner is required to contact the NYSDEC Bureau of Private Land Services as the primary provider of technical assistance. Following the initial contact with a NYSDEC forester, the landowner receives general forest management advice (education) and what the landowner requirements are to enroll in cost-share assistance (NYSDEC approved Landowner Forest Stewardship Plan). The demand for the limited NYSDEC foresters is high so landowners are able to work with private foresters as long as their plan is approved by NYSDEC. Cost-share assistance requires that the forest landowner implement the specified practices (treating up to 50 acres) within 6 months of the plans approval and limits annual payments for the implemented/ installed practices at \$6,000 (for a total of \$25,000 through 2007- end of 2002 Farm Bill). During the years of 2003, 2004 and 2005 there was a total allocation of \$250,000 per year for New York's private forest landowners. As of the date of this article, resources for FLEP are unknown for 2006. Information regarding FLEP's status can be obtained from your regional NYSDEC-Division of Lands and Forests office or online at [www.dec.state.ny.us/website/dlf/privland/index](http://www.dec.state.ny.us/website/dlf/privland/index). Though their primary goals are not forest stand improvement, there are a number of other federal cost-share assistance programs appropriated through the 2002 Farm Bill such as Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), and Wildlife Habitat Incentive Program (WHIP) that can be used to improve facets of New York's forests.

There a number of other resources available to New York's private forest landowners which provide technical assistance and possibly cost-share assistance depending where you are located in the state. The main source of assistance statewide is your regional NYSDEC forester ([www.dec.state.ny.us/website/dlf/lfoffice.html](http://www.dec.state.ny.us/website/dlf/lfoffice.html)). Assistance through NYSDEC will stem from either the regional forester(s) or a private forester through the Cooperating Forester Program. Private foresters enrolled in the Cooperating Forester Program have agreed to uphold standards with planning in accordance to the NYSDEC. The Cornell Master Forest Owners (MFO) Program is a source available to all of New York's private forest landowners. Under MFO, landowners can contact volunteers that have enlisted in MFO training to come and give general advice regarding forest management. Under the MFO program, volunteers are limited to giving general management advice further in-depth recommendations require the assistance of a private forester or a NYSDEC regional forester. Information regarding the MFO program and their volunteers (broken down by county) can be sought at [www.dnr.cornell.edu/ext/mfo](http://www.dnr.cornell.edu/ext/mfo). Depending on what county you are located within, you may be able to get free or low cost technical assistance from your respective county soil and

water conservation district or Cornell Cooperative Extension Office. Those websites are listed in order as [www.agmkt.state.ny.us/soilwater/contacts.htm](http://www.agmkt.state.ny.us/soilwater/contacts.htm) and [www.cce.cornell.edu](http://www.cce.cornell.edu). Of course if you are fortunate to live within the New York City's Watershed, there is the Catskill Watershed Agricultural Council (WAC). WAC provides information regarding technical assistance, as well as, education and outreach. In the past, WAC has provided cost-share assistance with best management practices and has had equipment available for loan. Contact information regarding WAC is available at [www.nycwatershed.org](http://www.nycwatershed.org).

Hopefully this article has given you (water system operators) an idea of the available resources for New York's private forest landowners. If your source water protection areas have an abundance of privately owned woodlands, it would be to your benefit to get this information out to forest landowners (it's what we in the business refer to as source water protection outreach). My next article will focus more heavily on what happens when forest practices go bad. Scary huh, well it can be in certain situations and we all know that "an ounce of prevention is worth a pound of cure". Any questions regarding this article feel free to contact me at [Bossard@nyruralwater.org](mailto:Bossard@nyruralwater.org) or at (518) 828-3155 Ext 23. ♠

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