

# Concept for Hemlock Restoration

## A Partnership Initiative of Save Georgia's Hemlocks & Trout Unlimited

### Background

The hemlocks in north Georgia have been under attack by the invasive insect Hemlock Woolly Adelgid (HWA) since 2002/2003. Millions of trees have already died; thousands more hemlocks in 19 counties are infested; and all are in danger of eventually being killed by the pest. This problem affects all ages, sizes, and species of hemlock across the continuous landscape of public and private property. Forecast to be a crisis similar in scale to the loss of American chestnut in the 20<sup>th</sup> century, widespread loss of the hemlock will have devastating long-term, and in some cases irreversible, effects on the aesthetics, environmental and ecological health, and economic vitality of communities throughout the region as well as personal and spiritual aspects for individuals and families who live, work, or visit here.

For more than a decade, the efforts of the U. S. Forest Service (USFS), Georgia Department of Natural Resources (DNR), Georgia Forestry Commission (GFC), and some local municipalities have focused on preserving a population of the larger and more significant hemlocks in designated conservation areas through chemical and/or biological controls. During the past four years and continuing into a fifth year, Save Georgia's Hemlocks (SGH) and volunteers from other conservation-minded nonprofits such as Trout Unlimited (TU) and the Benton MacKaye Trail Association (BMTA) have provided labor support for some of this work. Where these preservation efforts have been implemented, the chemical treatments have worked well, and the biological controls are beginning to gain traction, but both approaches continue to face the limitations of money and manpower, and to our knowledge there has been no approved program to address reforestation on public lands.

### Goal

As loss of the hemlock is of particular concern along our trout streams, Save Georgia's Hemlocks in partnership with Trout Unlimited has developed an initiative to restore a healthy hemlock population along these waterways in support of:

- \* watershed protection and water quality;
- \* the numbers, health, and diversity of the aquatic inhabitants (especially trout);
- \* the public's ability to access and enjoy these areas; and
- \* the economic impact of the related tourism and recreation.

### Scope and Approach

To ensure an orderly roll-out that offers the opportunity to establish appropriate protocols, anticipate resource requirements, obtain necessary approvals, and document project results, implementation will take place in this order:

- \* Hemlock sapling planting on a few key trout streams on private property for learning purposes
- \* Provision of information to the U. S. Forest Service for incorporation into the Environmental Assessment document for the Chattahoochee-Oconee National Forest (being updated in 2016)
- \* With USFS permission, a limited pilot for hemlock sapling planting on trout streams on the national forest
- \* Full implementation offering hemlock sapling planting projects on other public/private trout streams in Georgia

In the future, it is possible that other states may desire to implement a similar program, and we will be happy to provide our documentation and experience for them to adapt to suit their own local circumstances and resources.

### Tasks and Responsibilities

The major tasks and responsibilities for this initiative are as follows:

- \* Identification of candidate trout streams:
  - on private property – TU and property owner
  - on non-federal public land – TU and land manager
  - on national forest – TU and USFS
- \* Execution of agreement with property owner, land manager, or agency representative – SGH & TU
- \* Provision of healthy hemlock saplings, planting and treatment materials – SGH
- \* Volunteer labor for site preparation, planting, and follow-up/maintenance – SGH, TU, & other interested parties
- \* Training of volunteers and supervision of site preparation, planting, and follow-up/maintenance – SGH



## Considerations

The detailed plan for this initiative will address the following:

- \* Priorities and parameters for site selection and site preparation
- \* Guidelines for number, size, and spacing of saplings to be planted
- \* Estimating time and manpower for acquisition of saplings, site preparation, planting and initial treatment, periodic monitoring, and periodic retreatment
- \* Estimating funds needed for sapling supplies, planting, and treatment materials and guidelines for determining, on a project by project basis, the party or parties responsible for the expenses
- \* Requirements for record keeping and reporting

## Time Line

The following is a suggested time line for implementation of this initiative:

<u>Task</u>	<u>Target date</u>	<u>Status</u>
* Review and approval of concept document by Board of Save Georgia's Hemlocks and Georgia Council of Trout Unlimited .....	summer 2015 .....	complete
* Identification of site for first project .....	spring 2016 .....	complete
* Creation and legal review of a MOU template to be used with property owners, land managers, and government agencies .....	summer 2016 .....	complete
* Preparation of budget prototype.....	summer 2016 .....	complete
* Preparation of detailed plan for first project .....	summer 2016 .....	in process
* First project for trout stream on private property .....	early fall 2016	
* Provision of input to USFS Env. Assmt. Document.....	early fall 2016	
* Projects in Murray and/or Whitfield Counties .....	late fall 2016	
* First pilot project for trout stream on national forest .....	spring 2017	
* Full implementation.....	summer 2017	

Note: A related concept is being explored by the SGH and the USFS concerning the rescue of healthy saplings that are on USFS hemlock conservation areas but not selected for treatment. These saplings would be treated for HWA, housed temporarily in a nursery managed by SGH to ensure their viability, and reserved for use in hemlock restoration projects on the national forest.