

# MANAGEMENT PLAN DEVELOPMENT



PLANT  
LIVE  
GROW

## An Overview

This document is intended to help Vermont communities develop an urban forest management plan by outlining actions to be taken, resources needed, and key plan components. It is meant to compliment more detailed planning resources that are available on our program website and introduced at the end of this overview.

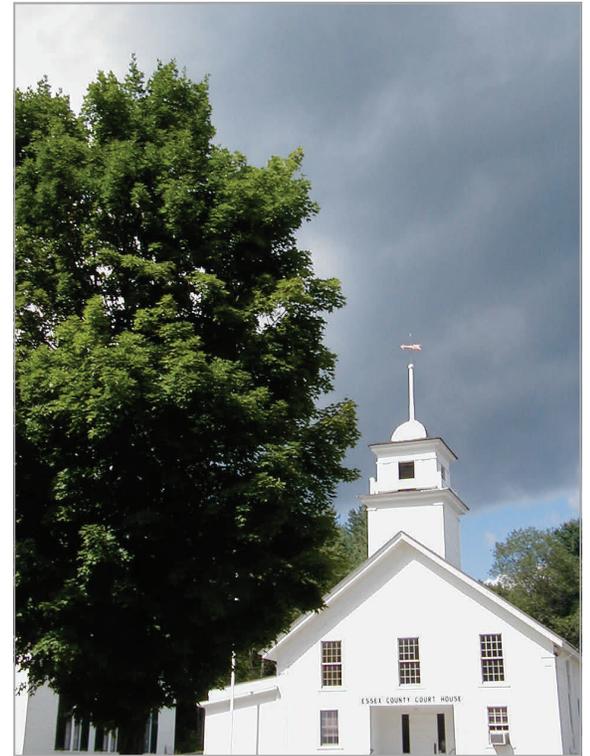
Developing an urban forest management plan establishes focus, direction, and a framework for implementation of goals. **Effective planning can mean the difference between cost-effective, pro-active management and costly, reactive, crisis management.**

An urban forest management plan should be specific to the field operations of a community's tree program. Typically integrated with a detailed tree inventory, a plan identifies and prioritizes site specific tree planting, maintenance, and removal activities within an established timeline. Additionally, a management plan should establish roles and responsibilities, preparedness steps for tree pests and storm damage, provisions for community engagement and outreach, and should include a detailed budget.

Planning is a continuous process that follows a logical sequence of steps that is driven by four principal questions:

1. **What do you have?**
2. **What do you want?**
3. **How do you get what you want?**
4. **Are you getting what you want?**

The remainder of this guide will introduce these four questions and outline action steps that can support your efforts to develop your community's urban forest management plan. It is important to note that planning processes vary depending on many factors, such as size of community, local leadership, and technical resources. There is no prescribed order, length, or format for a management plan. However, a management plan should include clear, action-oriented goals; a plan must be useful or it won't be used!



**Note that invasive tree pests**, such as the emerald ash borer (EAB), pose a serious threat to Vermont's community trees. We recommend that all communities incorporate pest preparedness for EAB into their urban forest management plan. Some will want to plan for hemlock woolly adelgid (HWA) and other pests as well. This planning document outlines basic considerations to respond to invasive forest pests; for more detailed information pest preparedness, visit <http://vtinvasives.org/tree-pests/community-preparedness>.

*The Vermont Urban & Community Forestry Program is a collaborative effort between the Department of Forests, Parks & Recreation and the University of Vermont (UVM) Extension. We provide technical and financial assistance as well as educational programs and products for the management of trees and forests in and around Vermont communities.*

*To learn more, visit our website at [www.vtcommunityforestry.org](http://www.vtcommunityforestry.org).*

# Pre-Planning

Before the planning process begins, basic parameters for plan development should be set. Expressed interest, expertise, time, and financial resources of your group should be considered when determining how to develop the plan. Additionally, key stakeholders and a timeline for plan development should be established. Finally, the purpose and scope of the urban forest management plan should be decided and should guide the planning process.

Pre-Planning Action	Questions to Consider
<b>Identify</b> Key Stakeholders	<ul style="list-style-type: none"> <li>Who are the key individuals in the community that should <u>be involved</u> with the development of your plan?</li> <li>Who in your community will <u>have information</u> to contribute to plan?</li> <li>Who in your community should <u>know</u> about the plan?</li> </ul>
<b>Form</b> the Management Planning Team	<ul style="list-style-type: none"> <li>Who will be the team leader to coordinate plan development?</li> <li>How will the Management Planning Team communicate?</li> </ul>
<b>Gather</b> Relevant Information and Documents	<ul style="list-style-type: none"> <li>What information exists that will help in the development of your plan? Examples include:                             <ul style="list-style-type: none"> <li>A tree inventory of public trees;</li> <li>Any municipal ordinance or policy pertaining to public and/or private trees;</li> <li>A budget breakdown of how funds are currently allocated for urban forest management;</li> <li>A list of the public right-of-way (ROW) boundaries ; and</li> <li>A list of available municipal equipment for tree management.</li> </ul> </li> </ul>
<b>Identify</b> Potential Threats From Tree Pest and Storm Damage	<ul style="list-style-type: none"> <li>What tree pests pose a threat to your urban forest?</li> <li>What kind of storms are your trees and community vulnerable to and how often may they occur?</li> </ul>
<b>Establish</b> a Management Plan Development Timeline	<ul style="list-style-type: none"> <li>How often will the Management Plan Team meet?</li> <li>Are there any important deadlines or milestones to consider?</li> </ul>
<b>Define</b> your Management Plan Purpose and Scope	<ul style="list-style-type: none"> <li>Why are you developing this urban forest management plan?</li> <li>What is this management plan intended to accomplish?</li> <li>How will this management plan be used?</li> <li>Who will most benefit from the development of this management plan?</li> </ul>

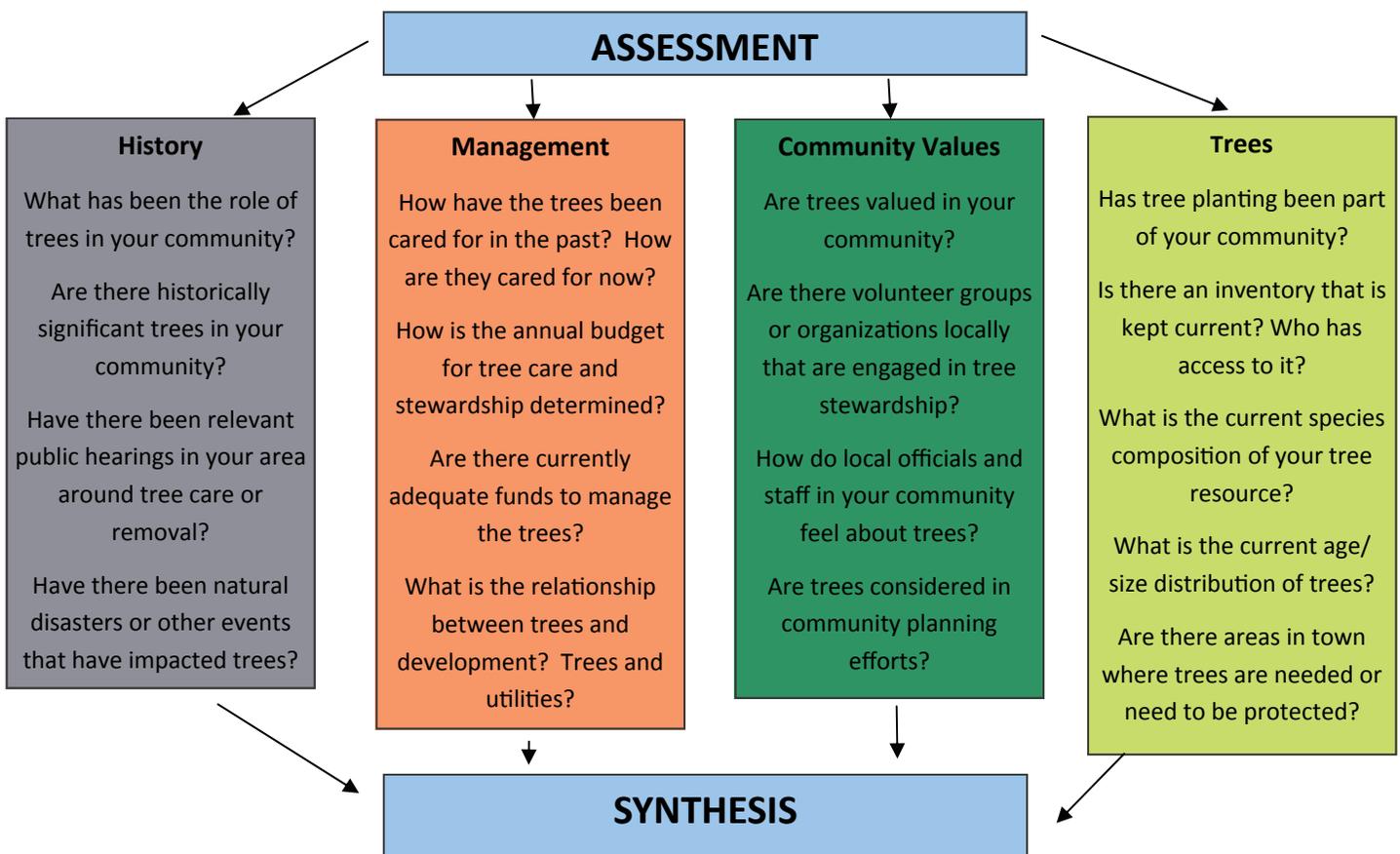
## Sample Purpose and Scope

**Purpose:** *The purpose of the Pleasantville urban forest management plan is to recommend specific tree planting, maintenance, and removal activities to cost-effectively improve the public tree resource.*

**Scope:** *This plan will make site-specific, prioritized, inventory-based recommendations for managing Pleasantville’s public tree resources for a five-year time period. It will identify staffing and project annual budget needs for the five-year planning period.*

## Step 1: What Do You Have?

As you begin your planning process, it is important to understand the current state of your urban forest and its management. By examining your community’s existing resources and how the present condition came to be, you will gain insights in how to plan for the future and establish solid goals for your urban forest management plan. This assessment may require some investigation and time. You might conduct a survey or hold a public meeting to determine residents’ attitudes, preferences, and level of knowledge about trees, tree care, and tree management. One approach to consider in addressing this task is to separately consider the factors that effect your community’s trees and then synthesize how they are connected to identify issues and needs to address in your plan’s goals. This approach is depicted in the figure below.



### Importance of maintaining a tree inventory

A public tree inventory defines the current state of the tree resource and is used as a benchmark in the planning process: you can’t manage what you don’t know. Inventory format varies depending on local capacity; from simple spreadsheet to subscription inventory management systems, we can help your community find the appropriate inventory system. If your town does not have an inventory that was conducted in the last ten years with — at a minimum — data on tree species, diameter, and condition of trees within the public right-of-way, this should be one of your top priorities.

## Step 2: What Do You Want?

Once you know what you have, it's time to think about what you want. This phase of the planning process is all about establishing goals and objectives for your urban forest management plan. What specific outcomes do you want this plan to help you achieve? Synthesizing your assessment of historic and current conditions and revisiting the purpose and scope developed in your pre-planning phase will help you identify issues, trends, and needs that will lead to specific goals and objectives for your plan.



**Goals** should be tangible and quantifiable so that progress can be measured. Goals should be broad but should steer away from vague statements, such as “improve the quality of life”. The goal-setting process may involve soliciting input from municipal staff, consultants, elected officials, and engaged residents. Grouping goals into categories or by planning horizon (which may become different sections of your management plan) may be a helpful exercise in this step of the planning process. For example:

### Grouping by Category

- Management of the Tree Resource
- Administration of the Tree Program
- Public Awareness and Community Engagement

### Grouping by Planning Horizon

- Short-term Goals
- Midrange Goals
- Long-term Goals

**Objectives** specifically address how each goal will be achieved. While a goal states a desired future condition, it doesn't indicate what exactly needs to be done: that is accomplished by establishing measurable, reasonable, and attainable objectives. Objectives should also be set to be achieved in a specified timeframe. In terms of the planning process, it may be most effective to set your goals first and then develop objectives to align with those goals.

## Examples of Goals and Objectives

**Goal:** Develop a proactive management regime for public trees.

**Objectives:** 1. Update the 2006 comprehensive street tree inventory by 2015.

2. Reassess the Town budget for tree maintenance in terms of achieving a five-year systematic pruning cycle.
3. Require all City staff who routinely perform tree maintenance to acquire ISA Certified Arborist status.

**Goal:** Increase citizen involvement in local tree stewardship

**Objectives:** 1. Recruit five citizen members for the tree advisory board by 2016.

2. Work with two local schools to celebrate Arbor Day in 2015.
3. Develop a page on the City's website with tree information for residents by mid-2015.

Be sure to address the following questions when considering how your community will respond to **invasive tree pests**:

- Is your community supportive of using pesticides to treat trees? If so, what municipal trees should be preserved?
- Will trees killed by tree pests be removed proactively or reactively? Will they be replaced?
- How can the urban forest become more diverse, and resilient to future threats from invasive tree pests?

## Step 3: How Do You Get What You Want?

Once the goals and objectives have been set, you should have a clear picture of what you want for your tree program. The next step is to figure out how to achieve the goals and objectives by establishing strategies and tasks, developing an implementation schedule and budget, and submitting your plan for approval. Plans are unlikely to be implemented without a clear and realistic indication of **who** will do what, **when**, and at what **cost**, so this step of the planning process is vital and could potentially be the most time-consuming. The table below introduces a sample implementation schedule.

**Goal: Trees are maintained at optimum levels of stocking, health, age, and species diversity, and are appropriate for the site.**

**Objective 1: Complete a community street tree inventory.**

Recommended Actions	Cost & Funding Source	Performed By	Completion Date	Status
Determine how inventory will be conducted	N/A	Tree Board	January 2015	Done
Apply for Caring for Canopy Grant through Vermont Urban & Community Forestry Program	N/A	Tree Board	April 2015	In process
Hire Intern or Consultant	\$1200—\$4500 Caring for Canopy Grant	Tree Board and Staff	July 2015	
Perform Inventory	N/A	Intern or Consultant	July —October 2015	
Purchase equipment and materials, as necessary	\$0—\$500 Caring for Canopy Grant	Tree Board	July 2015	
Analyze tree inventory findings	N/A	Intern or Consultant, with Tree Board	October—December 2015	

Under the Vermont Tree Warden Statutes, towns will have to respond to trees that become public safety hazards due to **invasive tree pests, such as EAB**. Removal and possible replacement of these trees will be a significant expense for most Vermont towns. The EAB Cost calculator (<http://extension.entm.purdue.edu/treecomputer/>) is a free online tool to help towns compare management options and costs in order to build an informed and detailed budget for pest response.

Recovering from the impacts of **invasive tree pests** starts now with careful planning with a focus on diversifying tree species distribution in a community's public tree population. Begin to plant a diverse range of species before invasive pests arrive to give your community a head start on tree replacement and diversifying age/size classes of your public trees. Plan your tree plantings so that there is no more than 5% of any species, 10% of any genus, and 20% of any family in your urban forest.

At this point, you have developed all of the major elements plan and can now compile these components into a full draft plan. While there is no prescribed length or format of a management plan, it should include three basic sections:

- **Introduction:** Overall plan background, purpose, and scope. Community context may be included.
- **Status of the Urban Forest:** Information on the various assessments done in Step 1.
- **Strategic Plan:** The goals, objectives, actions, and implementation plan developed through Steps 2 & 3.

Sample plan outlines are included on the next page. Your compiled draft plan should be circulated to key stakeholders for review and comment to ensure that it is accurate, realistic, and consistent with municipal policies. The plan may be presented to the public for review and comment before considered for final approval and adoption by your municipal governing body.

# Sample Management Plan Outlines

## Sample 1

- I. Title Page
- II. Executive Summary
- III. Introduction
  - A. Statement of Purpose and Scope
  - B. Historical Background
  - C. Current Situation
    - i. Tree Planting and Care
    - ii. Key Players and Roles
    - iii. Contracted vs. In-house work
    - iv. Equipment Inventory
    - v. Funding
  - D. Tree Inventory Summary and Analysis
  - E. Invasive Tree Pest Threat and Management
- IV. Goals for Urban Forest Management and Program
- V. Strategies
- VI. Actions
  1. Tree and Stump Removal
  2. Maintenance
  3. Planting
  4. Administrative Support
  5. Community Outreach and Engagement
- VII. Implementation Schedule and Budget
- VIII. Budget Justification
- IX. Evaluation Mechanism
- X. Appendices
  - A. Community Map
  - B. Zoning Map
  - C. Map of Utilities
  - D. Invasive Forest Pest Preparedness Plan
  - E. Storm Management Plan
  - F. Technical and Safety Standards
  - G. Species Lists
  - H. Equipment and Vehicle Rates
  - I. Inventory Documentation
  - J. List of Vendors and Contractors

## Sample 2

- I. Title Page
  - A. Contributors
  - B. Funding
  - C. Administration
  - D. Contact Information
- II. Executive Summary
- III. Inventory, Tree Maintenance, and Planting Plan
  - A. Goals
  - B. Current Inventory Summary
  - C. Maintenance Plan
  - D. Planting Plan
  - E. Invasive Forest Pest Preparedness Plan
- IV. Funding, Partners, and Operations
  - A. Goals
  - B. Roles and Responsibilities
  - C. Funding Opportunities
  - D. Budget
  - E. Budget Justification
- V. Community Education and Outreach
  - A. Goals
  - B. Outreach Activities
  - C. Arbor Day
  - D. Tree Board Bylaws
- VI. Appendices
  - A. Tree Policy
  - B. Species List for Tree Plantings
  - C. Technical and Safety Standards
  - D. Community Maps

## Step 4: Are You Getting What You Want?

Approval and adoption of your management plan is really your starting point: you will now need to implement the plan in order to achieve your goals and objectives. This final step involves continuous monitoring and evaluation, and — if needed — revisions, of your plan as you implement. What are the specific ways that you will assess whether the strategies are moving you toward your goals and ultimately the purpose of your plan?

Monitoring and evaluation will allow you to adjust your strategies and can help to identify roadblocks in real time. In some cases, it may also become evident that some objectives are simply unattainable, which may require adjusting goals or the implementation plan. Regular evaluation, reporting, and revision of your plan can also help to keep stakeholders aware of your urban forestry efforts and can be valuable in demonstrating the value of the program; this can help build and maintain support for your community trees .

An impact of an invasive tree pest infestation is the generation of infested timber that needs to be dealt with on a local level. By planning utilization options for this wood, communities can find opportunities for economic development and wood product industries while making good use of a valuable resource. More information and advice about effective utilization of wood can be found at <http://vtinvasives.org/tree-pests/community-preparedness/toolbox>

## Planning Tips

A plan is not an end unto itself, rather it is the chosen route to a destination. Many impressive looking plans end up on a shelf gathering dust because there is no vehicle for reaching the destination, or because the vehicle becomes stalled along the way. A plan will be more useful and more likely to be implemented if:

- It is ambitious but realistic considering the abilities, capacity, and constraints of a municipality or organization;
- It contains clear and specific goals, objectives, and strategies to reach an explicit purpose. A good plan provides enough information to give a clear picture of each action step and the resources (time, dollars, people) need to achieve that step;
- It is used to develop annual work plans;
- It has a broad support base. Avoid the temptation to include only tree enthusiasts or insiders in the planning process; identify and included all affected parties and stakeholders and make sure they are aware of all steps of the planning process;
- It is a team effort. Regardless of who actually prepares the plan, all individuals who will be involved with implementation should regularly review the plan (and should have their own hard copy!);
- Adequate time has been taken to develop and review the plan prior to submission for approval. Urban forest planning can be a complex process, so anticipate numerous revisions, setting interim deadlines as needed; and
- One individual is given explicit responsibility for overall plan development, one individual is given explicit responsibility for evaluation, and implementation roles and responsibilities are clear. To help ensure long-term thoroughness and continuity, responsibilities should be given to individuals with the time and interest to give the plan the attention it needs and deserves.

