Addressing the sustainable management of urban trees and forests

White House Council on Environmental Quality

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Climate & Health Action Guide

Maximize the benefits of trees to address climate change and improve human health.

https://www.vibrantcitieslab.com/guides/climate-health-action-guide/
I. DEFINE project goals, and objectives

II. ASSESS climate change impacts and vulnerabilities.

III. EVALUATE goals and objectives.

IV. IDENTIFY and implement adaptation actions.

V. MONITOR and evaluate effectiveness.
Define project/program goals and objectives
Assess community and forest vulnerabilities

**RHODE ISLAND CLIMATE AND HEALTH SPECIES LIST**

A tree species vulnerability assessment was created for urban forests in Rhode Island to consider how climate change would affect tree species used in urban forestry projects, as well as outline the benefits of various tree species on human health and carbon mitigation.

**Climate Vulnerability**

Trees can be vulnerable to a variety of climate-related stressors such as intense heat, drought, flooding, and changing pest and disease patterns. Some species are more susceptible to climate impacts, while others have a greater capacity to adapt.

**Carbon**

Trees can reduce greenhouse gases in the atmosphere by directly storing carbon in their leaves, wood, and roots. Further, tree cover can moderate temperatures and help reduce the energy needed to heat or cool buildings.

**Human Health**

Trees can help reduce human health risks that may be faced under a changing climate, such as heat stress and reduced air quality, by providing shade, cooling through transpiration, and absorption of pollutants. However, some trees can negatively impact human health, such as by producing allergenic pollen.
Evaluate challenges and opportunities

**Challenges**
- More pests and invasive species reduce canopy
- Increased maintenance and tree care needed

**Opportunities**
- Increased interest from health professionals
- Planting efforts to increase equity
- New policy changes to protect and fund trees
Identify adaptation strategies and approaches for climate and health

**Concept**

**Strategy:** A strategy is a broad adaptation response that is applicable across a variety of resources and sites

**Approach:** An approach is an adaptation response that is more specific to a resource issue or geography

**Tactic:** The most specific adaptation response, providing prescriptive direction about actions that can be applied on the ground
Monitor the success of actions taken
Examples!

https://forestadaptation.org/adapt/demonstration-projects
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