

NATIONAL FOREST RESILIENCY INNOVATION CHALLENGE COST SHARE GRANT PROGRAM ONLINE GRANT PORTAL

## DEFINITIONS

**Urban and Community Forestry:** The art, science, and technology of managing trees, forests, and natural systems on nonfederal public lands in and around rural towns, suburbs, and cities, for the health and well-being of all people.

**Disadvantaged Communities:** Communities that do not receive equitable financial and technical assistance as other communities, in maximizing the benefits from the conservation and management of their natural resources. These areas also identify the gaps in our natural resource, social and economic systems that if improved have one of the greater impacts in addressing forest and community resiliency. In this context we consider Disadvantaged Communities as low income, under- represented racial / ethnic minorities; Native Americans; people with disabilities and the elderly living within degraded natural resource areas and vulnerable to the impacts of climate change such as, but not limited to heat islands, flooding, air and water pollution, and environmental stresses on physical and mental health.

**Ecological Impact Areas:** Communities lacking sustainable ecosystem services due to inadequate urban/community forest structure and management that diminishes environmental, socioeconomic, and health benefits.

**Environmental Justice:** Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

**Forest Resiliency:** Forest Resiliency is the capacity of an urban or rural community forest ecosystem to respond to a disturbance by resisting damage and recovering quickly.

**Green Infrastructure**: Green infrastructure is strategically planned and managed networks of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations.

**Genetically Modified Organisms (GMOs)** are created through the process of genetic engineering: a technology that takes DNA from one organism and moves it into another, creating new varieties of plants and animals that wouldn't be found in nature. Genetic engineering is prohibited in organic food and farming because of concerns about their environmental and health repercussions. <u>Learn more about genetic engineering</u>.

**Innovation**: the ability to address issues and opportunities by enhancing existing or creating new solutions, processes, practices and/or policy.

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**Local:** In reference to local seed zone origins, is the smallest unit of area for defining locality for plants. Historically a geographic area in which seed transfer can be done with little risk for mal adaption. We are trying to separate the idea of seed "origin" from 'seed transfer' or where it should be planted if reference to everchanging growing conditions.

**Nontraditional**: Organizations, agencies, businesses not traditionally involved in urban and community forestry.

Seed Zone: A seed zone is a contiguous area that represents the origin of seed.

**Stock Type:** The size, and type of planting culture utilized by nurseries to propagate and sell trees for planting. These may include bareroot vs container, and the age or size specifications of the seedling or the container.

**Sustainable Green Workforce Development** encompasses a range of programs, policies, and initiatives designed to create work environments that actively support the well-being, engagement, and growth of members and their community. It prioritizes cultivating a workforce that is skilled, competent, and continuously improving its expertise to achieve long-term career success.

A hallmark of sustainable workforce development is its focus on empowering individuals not only to thrive in their careers but also to contribute to their communities. This may include starting their own businesses, assisting communities in their green infrastructure management, and mentoring the next generation of workers. Unlike traditional job training, which often emphasizes immediate job readiness, sustainable workforce development is centered on fostering long-term growth and adaptability. This approach not only benefits individuals but also helps businesses remain competitive and resilient in an evolving job market.

## **RESOURCES:**

- Reforestation, Nurseries, and Genetic Resources (RNGR) <u>https://rngr.net/participate</u>
- <u>Climate and Economic Justice Screening Tool</u>
- Social Vulnerability Index: https://www.atsdr.cdc.gov/placeandhealth/svi/index.html
- EJScreen: <u>https://www.epa.gov/ejscreen</u>
- The Current Role of Land Use Planning in Food Policy Councils
- Trust for Public Lands Heat Island Map <u>https://tpl.maps.arcgis.com/apps/webappviewer/index.html?id=1b6cad6dd5854d2aa3d215a39</u> <u>a4d372d</u>

Most arboriculture <u>Standards and Best Management Practices</u> are available from the International Society of Arboriculture, ISA (labeled below as American National **Standards** Institute - ANSI A300 Tree Care Standards and ISA BMPs).

- 1. Seed sourcing
  - Woody Plant Seed Manual (2008): <u>Woody Plant Seed Manual Reforestation</u>, <u>Nurseries and Genetics Resources (rngr.net</u>)

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- 2. Nurseries
  - Forest Service Reforestation, Nurseries, Genetics, Resources, RNGR team resources: <u>Publications — Reforestation, Nurseries and Genetics Resources (rngr.net)</u>
    - <u>A Nursery Guide for the Production of Bareroot Hardwood Seedlings</u> <u>Reforestation, Nurseries and Genetics Resources (rngr.net)</u>
    - <u>The Container Tree Nursery Manual Reforestation, Nurseries and Genetics</u> Resources (rngr.net)
  - ANSI Z60.1 American Nursery Stock Standards
- 3. Tree planting
  - ANSI A300 Tree Care Standards: Clause 10 Planting and Transplanting
  - ISA BMP: <u>Tree Planting</u> (English & Spanish)
  - Recommendations for a Successful Urban Tree Planting Initiative: <u>Beyond the Golden</u> <u>Shovel (usda.gov)</u>
- 4. Arboriculture/tree care

## Overall – Tree Owner's Manual

Pruning

- ANSI A300 Tree Care Standards: <u>Clause 5 Pruning</u>
- ISA BMP: Pruning (English & Spanish)
- ISA BMP: <u>Utility Pruning of Trees</u> (English & Spanish)
- Dr. Ed Gilman (University of Florida) An Illustrated Guide to Pruning
- Purdue Extension Tree Pruning Essentials (video, PDF)
- USDA Forest Service <u>How to Prune Trees</u>

Other Tree Care and Protection

- ANSI A300 Tree Care Standards:
  - o <u>Clause 6 Soil Management</u>
  - o <u>Clause 7 Supplemental Support Systems</u>
  - o <u>Clause 8 Lightning Protection Systems</u>
  - o Clause 9 Management During Site Development & Construction
  - <u>Clause 11 Integrated Vegetation Management (IVM)</u>
  - o <u>Clause 12 Root Management</u>
  - <u>Clause 14 Integrated Pest Management (IPM)</u>
- ISA BMPs:
  - o <u>Tree Support Systems</u>
  - o Lightning Protection Systems
  - o <u>Soil Management for Urban Trees</u>
  - o <u>Tree and Shrub Fertilization</u>
  - o Root Management
  - o Integrated Pest Management
  - o <u>Managing Trees During Site Development & Construction</u>

- Nelda Matheny & James Clark book <u>Trees and Development: A Technical Guide to</u> <u>Preservation of Trees During Land Development</u>
- University of Minnesota Extension publication <u>Protecting Existing Trees During</u> <u>Construction</u>
- 5. Urban forest management
  - ISA BMPs:
    - o <u>Tree Inventories</u>
    - o Integrated Vegetation Management (IVM) (English & Spanish)
  - Vibrant Cities Lab: Urban Forest Management Plan Toolkit
  - Arbor Day Foundation <u>Backyard Woods</u> (management of small woodlands)
  - Purdue Extension Indiana's Urban Woodlots (management of small woodlands)
  - Indiana Department of Natural Resources Indiana Woodlot Owner Series
- 6. Tree risk assessment and management
  - ANSI A300 Tree Care Standards: Clause 13 Tree Risk Assessment
  - ISA BMPs:
    - o <u>Tree Risk Assessment</u>
    - o <u>Utility Tree Risk Assessment</u>
  - USDA Forest Service Guide <u>Urban Tree Risk Management</u>
- 7. Urban wood utilization
  - The Urban Wood Toolkit: <u>https://urbanwoodnetwork.org/wp-content/uploads/The-Urban-Wood-Toolkit.pdf</u>
- 8. Urban agroforestry
  - <u>Urban Agroforestry Tipsheet: Food Forests and</u> Beyond (NCAT/ATTRA)
  - <u>Urban Agroforestry</u> (NCAT/ATTRA)
    <u>Working Trees Information Sheet: How can agroforestry practices and approaches</u> <u>support green infrastructure?</u> (National Agroforestry Center)
- Environmental Justice Executive Order
- <u>Climate Change Executive Order</u>