

Guidance for

SFI Urban and Community Forest Sustainability Standard

May 2023

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Guidance for SFI Urban and Community Forest Sustainability Standard

Introduction

This guidance document is intended to assist *Organizations* in interpreting and implementing new and existing provisions in the SFI Urban and Community Forest Sustainability Standard. This document provides additional information that may help *Organizations* make management decisions to meet the SFI Urban and Community Forest Sustainability Standard. SFI routinely researches ways to improve the functionality of its work, thus this document may be updated over time. This guidance document is informative in nature and the guidance information contained below should not be taken as normative.

The SFI Urban and Community Forest Sustainability Standard promotes sustainable urban and community forests based on 16 objectives. This standard is appropriate for organizations that own, manage, or are responsible for urban and/or community forests. These organizations can come from all facets of the urban and community forest sector including but not limited to: governmental organizations (i.e. municipalities, counties, states, provinces), Indigenous Peoples, non-governmental organizations, , community groups, healthcare organizations, educational organizations, and corporate organizations. This standard is based on 5 guiding **PRINCIPLES**:

- Urban and community forests and trees are vital for community well-being, health, resiliency, and sustainability.
- Urban and community forests and trees and their associated benefits should be accessible and available to everyone.
- Urban and community forests and trees depend upon understanding, awareness, appreciation, stewardship, and engagement by communities and people in order to thrive.
- Urban and community forests and trees require proper planning, care, and management to optimize benefits and *minimize* risks.
- Urban and community forests and trees are nature-based solutions to pressing issues and essential green infrastructure.

Objective 1: Community, People, and Indigenous Participation

To strengthen the community, enhance local economies, broaden public engagement, respect diverse perspectives, facilitate *Indigenous* participation, and ensure equitable access for all to the many benefits of *urban and community forests*.

• Performance Measure 1.1: Organization actively seeks and promotes public engagement.

Guidance:

Organization should recognize people in the community who are champions of the *urban forest* and its resources and benefits.

Local Enhancement & Appreciation of Forests (LEAF): Urban Forest Champion

Tree Canada: Royal Galipeau Award of Distinction, Urban Forestry Student Bursary, Urban Forestry Youth Volunteer Award, Public Education Award, Eterne Award, Ultimate Award

Society of Municipal Arborists Annual Awards

International Society of Arboriculture Award Programs: <u>ISA Member-Recognition</u>

Organization should work with cross-sector partners to create educational programs, policies, incentives, and regulatory measures aimed at building social and ecological resilience via trees and nature-based solutions.

Project Learning Tree Resources

Organization should demonstrate that its urban forestry goals recognize social and environmental justice efforts, economic development, educational and cultural enhancement initiatives, and active transportation efforts.

Vibrant Cities Lab: Social, Economic, and Environmental Benefits of Urban Forests.

Organization could promote food production and green entrepreneurship strategies to build social resilience.

Food and Agriculture Organization of the United Nations: <u>Building Resilience to Enhance Food</u> <u>Security</u> <u>and Nutrition in the Near East</u> <u>and North Africa (FSN)</u>

• **Indicator 1.1.1:** *Organization* identifies opportunities and events for community members to support and celebrate trees.

Guidance:

Organization could participate in Arbor Day Foundation's Tree City USA, Tree Cities of the World, or affiliate programs.

Organization could celebrate Arbor Day or include urban forests and trees in Earth Day celebrations.

Tree Canada: <u>National Tree Day</u> Arbor Day Foundation Celebrate Trees: <u>Arbor Day</u>

• **Indicator 1.1.2:** *Organization* has a body of *interested parties* that actively participates in *managing* community trees.

Guidance:

Organization could maintain a Tree Board. Arbor Day Foundation Tree City USA Bulletin

City of Trees Challenge: Boise Tree Captains

• **Performance Measure 1.2:** *Organization* respects diverse perspectives.

o **Indicator 1.2.1:** *Organization* seeks and engages communities with diverse cultural and socioeconomic backgrounds.

<u>Guidance:</u>

Vibrant Cities Lab Toolkit: Build a Stakeholder Coalition

Policy Link: Community Engagement Guide for Sustainable Communities

o **Indicator 1.2.2:** Organization includes diverse community values, experiences, and perspectives in planning, management, and educational opportunities.

Guidance:

Organization could hold conversations, assemble focus groups, or survey diverse populations regarding urban forests and trees.

The University of Texas at Austin: Diversity Planning Tools for Diversity and Inclusion Committees

o **Indicator 1.2.3:** Organization demonstrates cultural competency with regard to diverse communities.

<u>Guidance:</u>

Organization should facilitate access to cultural education and training for employees and volunteers.

• **Performance Measure 1.3:** Organization integrates_Indigenous Peoples' knowledges and perspectives.

Guidance:

Organization could have active projects that increase access to land and water for healing, celebration, learning, and growth.

Indigenous Corporate Training Inc.: First Nation Relationship to the Land

We All Go Back to the Land: The Who, Why, and How of Land Acknowledgements, by Suzanna Keeptwo.

o **Indicator 1.3.1**: *Organization* provides meaningful opportunities for Indigenous Peoples to participate in decision making, through processes that respect their representative institutions and utilize appropriate protocols.

Guidance:

Government of Canada Treaties and agreements

USAID Indigenous Peoples resources.

Project Learning Tree Sault College: <u>Building Respectful Forest-Focused Relationships with Indigenous</u> <u>Peoples</u>

- o **Indicator 1.3.2**: *Organization* communicates with *Indigenous Peoples* in a manner that enables them to:
 - understand and respect traditional forest-related knowledge;
 - identify and protect spiritually, historically, or culturally important sites;
 - address the use of non-timber forest products of value; and,
 - respond to inquiries and concerns received.

Government of British Columbia: Indigenous Engagement

Government of Canada: Indigenous engagement and representatives

• **Performance Measure 1.4:** *Organization* ensures equitable access to *urban and community forests*, trees, and their associated benefits.

<u>Guidance:</u> Tree Philly <u>Environmental Justice Report</u>

UBC Sustainability, the Restorative Natural Area Index: "<u>Not All Green Space is Created Equal – or</u> <u>Equally Accessible to All</u>"

• **Indicator 1.4.1:** Demonstrates that the *program* prioritizes *tree equity* for all *interested parties*.

Guidance:

Organization should use a metric to quantify tree canopy within diverse communities. A tool such as <u>treeequityscore.org</u> from American Forest could be used to analyze and inform their urban forest equity management.

Tree Canada: Equitable Access to Trees

Nature Canada Tree Equity: Canada's Urban Forests Bringing the Canopy to All

• **Indicator 1.4.2:** *Organization* uses a metric to quantify equitable access to *urban and community forests*, green spaces, and their associated benefits.

Guidance:

Trust for Public Land: 2022 ParkScore® Index

Trees for Seattle: <u>Tree Walks</u>

Objective 2: Human Health and Well-being

To promote human and community health and well-being through equitable management and distribution of tree and forest related benefits, fair and safe access to and within green spaces, and nature-based recreational opportunities.

Guidance:

The connection between *urban forests*, trees, and human health continues to grow. An *organization* should use resources such as Vibrant Cities Lab's <u>Urban Forestry Toolkit</u> or the Southern Group of State Foresters' <u>Healthy Trees, Healthy Lives</u> to inform their programs.

- **Performance Measure 2.1:** *Organization* includes human health and well-being in assessment, planning, and management efforts.
 - **Indicator 2.1.1:** *Organization* identifies how human health and well-being are addressed in *urban or community forest*-related resource assessments and *strategies*.

Guidance:

Organization could include heat-zone maps and public health data in their assessment and management studies. (i.e. <u>Urban Heat Island Management Study</u>)

USDA Forest Service: <u>Climate adaptation actions for urban forests and human health</u>

IUFRO: Expert Panel on Forests and Human Health 2023: <u>Global Forest Expert Panels (GFEP)</u> <u>Programme</u>

First Steps in Urban Heat for Built Environment Practitioners <u>ePapers</u>

• **Indicator 2.1.2:** *Organization* demonstrates how human health and well-being aspects are integrated in forest- and tree-related management decisions.

Guidance:

One Tree Planted: <u>18 Health Benefits of Trees and Forests</u>

The Nature Conservancy: <u>6 Ways Trees Benefit People</u>

The Southern Group of State Foresters: <u>Healthy Trees, Healthy Lives</u>

- **Performance Measure 2.2:** *Organization* promotes human health benefits of forests, trees, and greenspaces.
 - Indicator 2.2.1: Organization uses multiple approaches to communicate the connection between human health and well-being and forests and trees to public and internal audiences.

World Health Organization: Urban Green Spaces: a brief for action

European Environment Agency: <u>Who benefits from nature in cities? Social inequalities in access to urban</u> green and blue spaces across Europe

American Forests: <u>Tree Equity Score</u>

- **Performance Measure 2.3:** *Organization* has a system or systems to include the urban or community forest in recreational, commuting, and travel opportunities.
 - o Indicator 2.3.1: Organization has accessible and welcoming parks and/or greenspaces.

Guidance:

- KITE Research Institute: <u>Accessible Parks Canada: Making National Parks in Canada Accessible</u>
- Forest Research: Access and Accessibility
- Digital Commons @ Loyola Marymount University: <u>Urban Green Space Availability</u>, <u>Accessibility</u> and <u>Attractiveness</u>, and the <u>Delivery of Ecosystem Services</u>
 - **Indicator 2.3.2:** *Organization* has and implements *strategies* to ensure equitable access and utilization of parks and greenspaces.

Guidance:

Improving access to greenspace: A new review for 2020

• **Indicator 2.3.3:** *Organization* includes *urban or community forests* and trees in travel, commuting, and mobility plans and *strategies*.

Guidance:

Organization could use a resource such as <u>Vibrant Cities Lab: Transportation</u> to improve their urban forest connection to transportation.

City of Grand Rapids' Green Grand Rapids Plan

Objective 3: Protection and Conservation of Biodiversity

To *protect*, conserve, and improve *biodiversity* through *urban and community forestry*, including *threatened* and endangered species, *wildlife habitat*, trees, forests, and associated ecological systems.

Guidance:

TreeNet: <u>SA Urban Forest Biodiversity Program: Conservation Opportunities And Dilemmas In Urban</u> <u>And Peri-urban Areas</u>

• **Performance Measure 3.1:** Organization incorporates the conservation of biological diversity at *urban or community forest, urban park, and/or street-tree levels.*

• **Indicator 3.1.1:** Organization develops criteria and implements *practices*, as guided by regionally based *best scientific information*, to retain urban or community forest level *wildlife habitat* elements.

Guidance:

Wildlife habitat elements can include snags, stumps, mast trees, down woody debris, den trees, and nest trees.

Semantic Scholar: Promoting and preserving biodiversity in the urban forest

UC Davis: Forest & Rangeland Indicators

• **Indicator 3.1.2:** *Organization* works individually or collaboratively to support a diversity of *native* tree and/or forest types including a diversity of ages and/or sizes that enhance *biological diversity* at the urban and/or community scale.

Guidance:

Organization could document diversity of forest cover types and age or size classes at the individual ownership or urban or community forest tenure level, and where credible data are available at the urban and community level.

Climate Change Response Framework: Urban Forests

• **Indicator 3.1.3:** Organization participates in or incorporates the results of state, provincial, territorial, or regional *conservation* planning and priority-setting efforts to conserve *biological diversity* through *urban or community forest* management.

<u>Guidance:</u> Islands Trust: Conservation Planning

Government of Ontario: Provincial parks and conservation reserves planning

National Association of State Foresters: Forest Action Plans

 Indicator 3.1.4: Organization participates in programs and demonstrates activities to limit the introduction, spread, and impact of *invasive* exotic insects, animals, and plants that directly threaten or are likely to threaten *native* plant and animal communities.

Guidance:

US Department of the Interior: Invasive Species Control

Ontario Ministry of Natural Resources and Forestry: Ontario's Invading Species Awareness Programs

We Conserve PA: Invasive Species Management Program : Conservation Tools

- **Performance Measure 3.2:** Organization protects threatened and endangered species, Forests with Exceptional Conservation Values, and old-growth forests or trees.
 - Indicator 3.2.1: Organization protects threatened and endangered species.

International Institute for Sustainable Development: Protecting Endangered Species

Endangered Species Coalition: <u>15 Ways to Help Protect Endangered Species</u>

 Indicator 3.2.2: Organization locates and protects known sites of flora, fungi, and fauna associated with viable occurrences of critically imperiled and imperiled species and communities.

Guidance:

Organization could create plans for protection independently or collaboratively and may include management by *organization*, cooperation with other *interested parties*, or use of easements, *conservation* land sales, exchanges, or other *conservation* strategies.

Society for Ecological Restoration Certified Ecological Restoration Practitioner (CERP) Program

• **Indicator 3.2.3:** *Organization* supports or participates in plans or *programs* for the *conservation* of old-growth *forests* or trees, if applicable.

<u>Guidance:</u> <u>Old Growth Urban Forests</u>, by Robert E. Loeb

Nature Trust British Columbia: The Importance of Old Growth Forests

US Department of Agriculture Forest Service: Old Growth Forests

The Old-Growth Forest Network

• **Performance Measure 3.3:** *Organization* manages *wildlife habitat* and contributes to the *conservation* of *biological diversity*.

Guidance:

Organization could utilize relevant programs such as the Wildlife Habitat Council's <u>Conservation</u> <u>Certification Standard</u> to illustrate their conservation efforts.

> • **Indicator 3.3.1:** Organization collects information on *Forests with Exceptional Conservation Value* and/or other *biodiversity*-related data through *inventory*, mapping, and/or participation in external *programs*.

Guidance:

Organization could utilize programs such as <u>NatureServe</u>, state or provincial heritage programs, or other credible systems. Such participation may include providing non-proprietary scientific information, time, and assistance by staff, or in-kind or direct financial support.

 Indicator 3.3.2: Organization implements strategies to incorporate research results and field applications of *biodiversity* and ecosystem research into *urban or community forest* management decisions.

<u>Guidance:</u> Nature Communications: <u>Strategically growing the urban forest will improve our world</u>

Objective 4: Stewardship of Natural Resources including Air, Water, and Soil

To consider the impact of the *urban and community forest* and *organization*'s *program* on natural resources including air, water, and soil.

• **Performance Measure 4.1:** *Organization* meets or exceeds all applicable water and air quality laws, regulations, and meets or exceeds *best management practices* developed under government–approved water and air quality *programs*.

<u>Guidance:</u> Sustainable Infrastructure Society: <u>Best Management Practices</u>

• **Indicator 4.1.1:** *Organization* implements water- and air-quality *best management practices* during all phases of management activities.

Guidance:

United States Environmental Protection Agency: Water Management Plans and Best Practices at EPA

Government of Ontario: Best Management Practices: Water Management

United States Environmental Protection Agency: <u>Managing Air Quality - Control Strategies to Achieve Air</u> <u>Pollution Reduction</u>

• **Indicator 4.1.2:** *Organization* monitors implementation of overall *best management practices* to *protect* air, water, and soil.

Guidance:

- University of Wyoming: <u>BMP Monitoring Guide for Stream Systems</u>
- USDA Forest Service: <u>Soil and Water: Best Management Practices Monitoring</u>
- **Performance Measure 4.2:** Organization implements water, wetland, and riparian protection measures during *urban or community forest* management.

Organizations should consider soil type, terrain, vegetation, ecological function, harvesting system, governmental best management practices and guidelines, and other applicable factors. Plans that address wet-weather events to maintain water quality (e.g., urban forest inventory systems, wet-weather tracts, definitions of acceptable operating conditions).

Government of British Columbia: Riparian Areas Protection Regulation (RAPR)

Organization could utilize maps of rivers, streams, lakes, wetlands, and other water bodies as specified in governmental best management practices and, where appropriate, identifies them on the ground.

Government of Canada: <u>Water sources: Wetlands</u>

• **Indicator 4.2.1:** *Organization* employs strategies to effectively manage rivers, streams, lakes, wetlands, watersheds, other water bodies, and *riparian areas* to protect, preserve, conserve, maintain, restore, and/or enhance their natural functions.

Guidance:

Government of Ontario: Environmental guidelines for access roads and water crossings

 Indicator 4.2.2: Organization documents and implements strategies to manage and protect rivers, streams, lakes, wetlands, other water bodies, and riparian areas, and to manage stormwater.

Guidance:

Land Trust Alliance, Conservation in a Changing Climate: <u>Manage Rivers, Lakes, and Other Freshwater</u> <u>Ecosystems for Climate Change</u>

Colorado Riparian Association: Riparian Areas: Functions and Strategies for Management

• **Performance Measure 4.3.** *Organization* implements a *strategy* to *protect* soil quantity, quality, and health during *urban or community forest* management.

Guidance:

Government of Ontario, Forest Indicators Protecting Forest Soils: Natural Resources

• **Indicator 4.3.1:** *Organization* specifies appropriate soil volumes and quality for *sites* and species during *planting* and development.

<u>Guidance:</u>

<u>Up By Roots</u>, by James Urban, FASLA

Government of Canada: Soils of Canada

US Geological Survey: Soil properties dataset in the United States

• **Indicator 4.3.2:** *Organization* implements *best management practices* to *protect* soils from degradation and/or rehabilitate damaged soils.

Guidance:

Organization could adopt and utilize the latest edition of <u>Best Management Practices - Soil Management</u> <u>for Urban Trees</u>, by Bryant C. Scharenbroch and E. Thomas Smiley in their program.

Bartlett Tree Experts' Soil Management Programs: Enhancing Your Landscape

Organization should implement a continual soil improvement *program* that utilizes natural or augmented organic matter cycling, and tests soils prior to fertilization and modification.

Organization should *minimize* negative effects of soil compaction through the use of protective measures during construction, utilizing engineered solutions, or using structural soils.

Bartlett Tree Experts: Soil for Urban Tree Planting

Objective 5: Urban and Community Forest and Tree Health and Vitality

To ensure the long-term viability of *urban and community forests* by maximizing their health, longevity/age, *diversity*, *resilience*, and size to optimize benefits and resource availability and use.

• **Performance Measure 5.1:** *Organization* uses *integrated plant management* or *plant health care* procedures during operations.

Guidance:

Organization could implement a plant-focused management *strategy* to address health and vitality. Resource: Washington State University: <u>Using IPM in the Landscape</u>.

• **Indicator 5.1.1:** *Organization* implements holistic *strategies* that consider tree and plant needs, including spacing, water requirements, pest associations, and proper fertility.

Guidance:

The Davey Tree Company: What Do Trees Need to Be Healthy?

Bartlett Tree Experts: Long Live Your Landscape Trees

Bartlett Tree Experts: MoniTor-Rx Integrated Pest Management

• **Indicator 5.1.2:** *Organization* utilizes integrated management options where appropriate, such as prescribed fire, rotational grazing, and *natural regeneration* to increase *forest health* and vitality.

- **Performance Measure 5.2:** *Organization* has developed strategies to guide *planting* and establishment to enhance *urban or community forest* health and vitality.
 - Indicator 5.2.1: Organization ensures that tree species and specimens are well-suited to local growing conditions, are climate-adapted, represent diverse species, and are not invasive or otherwise destructive.

Arbor Day Foundation Tree City USA Bulletin: Let's Diversify Community Forests

ISA's Trees are Good: <u>Choosing the Right Tree</u>

• **Indicator 5.2.2:** *Organization* selects tree *planting sites* that support tree growth and performance.

Guidance:

Arbor Day Foundation Tree City USA Bulletin: <u>Make Room for Trees</u>

United States Department of Agriculture Forest Service: <u>Urban and Community Forest Program Site</u> Selection for Tree Planting within a State Improvement Plan

HydroQuebec: Choose the Right Tree or Shrub tool

• **Indicator 5.2.3:** *Organization* utilizes a regular, proactive tree health monitoring *program* to assess tree stress and survival.

Guidance:

Ecological Research Institute: Monitoring and Managing Ash (MaMA)

• **Performance Measure 5.3:** *Organization* facilitates the coexistence of trees and the *built environment*.

Guidance:

Organization could adopt and implement latest edition of "<u>Best Management Practices – Integrated</u> <u>Vegetation Management</u>," by Randall H. Miller.

Trees and Design Action Group: <u>Trees in Hard Landscapes</u>

• **Indicator 5.3.1:** *Organization* ensures that the built environment and trees needs are considered in *urban or community forest* planning and maintenance operations.

Guidance:

Organization should have a process to prune or remove trees, as necessary, to *minimize* conflict with infrastructure and critical lines of sight.

• **Indicator 5.3.2**: *Organization* modifies or removes the built environment, when feasible, to reduce conflicts and improve forest and tree health.

Guidance:

Florida Urban Forestry Council: <u>Quarterly Newsletter 2013 Issue- Reducing Conflicts Between Urban</u> Infrastructure and Trees

Vibrant Cities Lab: Engineered System

- **Performance Measure 5.4:** *Organization protects urban and community forests* and trees from damaging agents.
 - **Indicator 5.4.1:** *Organization* implements a *strategy* to monitor for *damaging agents* and *invasive species*, prevent damage, and properly mitigate such damage.

<u>Guidance:</u> Emerald Ash Borer Network: <u>Emerald Ash Borer Preparedness Plans</u>

• **Indicator 5.4.2**: *Organization* establishes policies or procedures to mitigate damage from human activities.

Guidance:

Tree Canada: Tree Protection during Construction/Trees and Building Foundations

ISA TreesAreGood: Why Topping Hurts Trees

Arbor Day Foundation Tree City USA Bulletin: <u>A Systematic Approach to Building With Trees</u>

Arbor Day Foundation Tree City USA Bulletin: Let's Stop Salt Damage

Objective 6: Special Sites, including Natural Areas

To manage lands that are geologically, culturally, economically, or *ecologically important* in a manner that considers their unique qualities.

- **Performance Measure 6.1:** *Organization* establishes appropriate guidelines for the protection and conservation of special sites and natural areas.
 - Indicator 6.1.1: Organization establishes and maintains conservation and management objectives based on land and/or site evaluation.

<u>Guidance:</u> New York City's Forest Management Goals

- **Performance Measure 6.2:** *Organization* identifies, evaluates, and maps special sites, natural areas, and/or natural area features within the urban or community forest.
 - **Indicator 6.2.1:** *Organization* uses a data-management system to identify, map, plan for, and manage natural areas and special sites.

Organization should consult appropriate professionals, resource managers, First Nations, and other *interested parties* to identify *special sites*, natural areas, and natural area features. *Special sites* and natural area features should be identified and mapped; these should include:

- Rare or threatened ecosystems.
- Watercourses and associated *riparian zones* that support *native* species of *aquatic species* have been identified and mapped.
- Known *sites* critical to life functions of *native/endemic* fauna including but not limited to important nesting areas (e.g. Heron Rookeries), dens (e.g. bears) or other special *habitat* areas.
- Known archaeological & cultural *sites* important to First Nations/Indigenous communities.
- Natural features that have been identified as historically significant, or identified for *protection* by way of regional or local ordinance/by-law, including but not limited to individual trees, stands of trees, artesian springs.
- Land areas that have the potential to serve as corridors/connections for movement of fauna between natural areas.
- Rare or unusual landforms created by geomorphological processes.
- **Performance Measure 6.3:** *Organization* employs strategies to effectively manage natural areas and special sites to protect, preserve, conserve, maintain, restore and/or enhance their natural function.

Guidance:

Organization should monitor performance against the guidelines for protection, preservation, and conservation.

Organization should consider issues such as:

- Invasive species
- Ecological connectivity
- Archaeological, historical, and *culturally important* sites
- Recreational access
- At risk species of flora and fauna
- *Native* and flora and fauna that is *endemic* to managed natural areas.

Organization should manage access (persons, vehicles, and dogs) to natural areas and *special sites* to assist in *protection* and preservation. Efforts may include:

- Physical barriers
- Signage
- Enforcement by on-site staff
- Posting of regulatory information via website, social media, print, or other electronic means.

Organization could consider example resources such as:

- Surrey Natural Areas Management Plan; Overview and Seven Key Strategies.
- <u>City of Toronto's Environmentally Significant Areas</u>.
- Rouge National Urban Park Management plan 2019.
 - **Indicator 6.3.1:** *Organization* manages special sites and/or natural areas based on existing scientific research and best management practices.

Guidance:

Organization should recognize that various geographic regions have distinct issues that require unique management *strategies* are in place to *protect* and preserve natural areas and *special sites* with respect to issues such as, but not limited to:

- Interface fires
- Geologically unstable areas
- Areas being damaged by *invasive species*

Example:

City of Surrey, BC's Fire Management Strategy

Objective 7: Climate-Smart Management

To promote *climate change resilience* and address pressing environmental, social, and economic concerns using tree-related *adaptation* and *mitigation strategies*.

• **Performance Measure 7.1:** Organization monitors and strives to maximize the *ecosystem services* provided by the *urban or community forest,* such as carbon sequestration, and storage, stormwater reduction, air quality, urban heat island, temperature, and others as appropriate.

Guidance:

American Forests: Urban Forests and Ecosystem Services Research

Treasure Valley Canopy Network <u>City Forest Credits</u>

First Steps in Air Quality for Built Environment Practitioners: <u>ePapers</u>

The Canopy: The Trees and Design Action Group

Vibrant Cities Lab: Climate Health Action Guide

• **Indicator 7.1.1:** *Organization* quantifies and tracks *ecosystem services*, economic, and/or aesthetic benefits.

Guidance:

• My City's Trees: <u>Bringing the Nation's Forest Census to Urban Areas</u>

- i-Tree: <u>Tree Canopy Assessment Tools</u>
 - **Indicator 7.1.2**: *Organization* utilizes tree planning and management efforts to maximize *ecosystem* services.

City Forest Credits: <u>Tree Planting Protocol</u>

Government of Canada: Urban heat islands tools and resources

Treasure Valley Canopy Network: <u>Shade Tree Project</u>

• **Indicator 7.1.3:** *Organization* incentivizes the use of trees and *green infrastructure* to *minimize* greenhouse gas emissions and stormwater runoff and flooding, while maximizing carbon sequestration.

Guidance:		
•	City of San Antonio: GreenShade Energy Saving Tree Rebate Program	
•	Arbor Day Foundation: Energy Saving Trees	
•	European Union: The forms and functions of green infrastructure	
•	Cities Forum: Superblock (Superilla) Barcelona	
•	American Forests: Tree Equity Score	

• **Performance Measure 7.2:** *Organization* monitors and takes steps to *minimize* the carbon footprint of their *urban or community forestry* operations.

Guidance:

Organization could include a regular basic CO₂/Green House Gasses (GHGs) assessment for *urban forestry* operations.

City of Eugene, Oregon: Community Climate and Energy Action Plan

• **Indicator 7.2.1:** *Organization* demonstrates that *strategies* are utilized to minimize carbon footprints and maximize *urban wood* utilization to minimize the release of greenhouse gases into the atmosphere, and to help promote a circular economy.

Guidance:

US Department of Agriculture Forest Service: <u>Carbon dioxide reduction through urban forestry:</u> guidelines for professional and volunteer tree planters

Urban Tree Alliance: Urban Wood Utilization

- **Performance Measure 7.3:** *Organization* regularly assesses and works to address vulnerabilities within their jurisdictions related to *climate change* and extreme weather.
 - **Indicator 7.3.1:** *Organization* implements strategies to mitigate the effects of urban heat islands, ecological disruption, and social/economic disruption due to *climate* change.

<u>Guidance:</u>

US Environmental Protection Agency: Reduce Urban Heat Island Effect

Vibrant Cities Lab: Climate Health Action Guide

USDA Forest Service: Climate adaptation actions for urban forests and human health

• **Indicator 7.3.2:** *Organization* promotes tree preservation and *planting* to maximize the provision of various *ecosystem services*, prioritizing areas with historically disadvantaged and vulnerable populations and low *tree equity*.

Guidance:

UN Environment Programme: Tree planting to promote environmental conservation and improve livelihoods in Burkina Faso

Food and Agriculture Organization of the United Nations: <u>Tree planting and ecosystem restoration: a</u> <u>crash course</u>

Government of Canada: 2 Billion Trees Commitment

American Forests: Tree Equity Score

Objective 8: Urban and Community Forest Planning

To ensure the long-term sustainability of the urban and community forest resource and management *program* through comprehensive planning and strategic goal setting.

- **Performance Measure 8.1**: Organization engages in comprehensive and regular urban or community forestry system assessments and monitoring sufficient to allow it to generate informed management plans and management strategies based on current conditions of the forest.
 - **Indicator 8.1.1**: *Organization* has an urban or community forest resource assessment underway or has a current urban or community forest resource assessment.

Guidance:

Organization should have at least one current forest resource assessment which should have a geographic component. Assessment types could include:

- urban tree canopy,
- tree equity assessments,

- tree inventories,
- community surveys,
- natural area assessments, and
- broad community *interested parties'* interviews.

Examples of an Assessment:

City of Surrey: Biodiversity Conservation Strategy

i-Tree: Tree Canopy Assessment Tools

Tree Canopy Assessment at Google Explorer: Environmental Insights

 Indicator 8.1.2: Organization documents administrative and operational performance monitoring related to tree canopy extent, condition, and distribution; ecosystem services; operational costs and measurable results; and urban or community forest system vulnerabilities.

Guidance:

City of Portland: Portland Parks & Recreation Tree Canopy Monitoring

US Forest Service: Urban tree canopy assessment: a community's path to understanding and managing the urban forest

City of Surrey: Sustainability Dashboard

• **Performance Measure 8.2**: *Organization* supports and elevates planning efforts by consulting relevant and interested community *interested parties*.

Guidance:

Interested parties could include:

- Urban and community shade tree committees,
- Environmental committees, or similar organizations,
- Foresters,
- Municipal, state, provincial and/or federal agencies,
- Municipal or local groups,
- Utility service providers,
- Professional societies,
- Conservation organizations,
- Indigenous Peoples and governments,
- Community groups,
- Universities,
- Extension agencies,
- And other pertinent groups.

 Indicator 8.2.1: Organization seeks input from advisory groups, professional consultants, intra-agency departments, and other community interested parties to advise on the establishment, conservation, protection, and maintenance of urban and community trees and forests, to ensure inclusivity and collaboration.

<u>Guidance:</u> Vibrant Cities Lab: <u>Build a Framework for Change</u>

• **Performance Measure 8.3**: *Organization* has comprehensive interdisciplinary planning *strategies* that are integrated with other departments and internal administrative groups and align with *interested parties'* interests and goals.

Guidance:

National Library of Medicine: <u>The "Inter" Within Interdisciplinary Research: Strategies for Building</u> Integration Across Fields

• **Indicator 8.3.1**: *Organization* has a clearly defined vision that, at the highest level, guides planning and management decisions.

Guidance:

Urban Forest Management Plan Toolkit: Urban Forest Management Planning

• **Indicator 8.3.2**: *Organization* has documented, publicly available *strategies* that support current goals and operational targets.

Guidance:

Organization should have a current *urban forest master plan*, a general assessment, and *policy* summary for the community's entire *urban forest*, with guidance from external partners and from departments that impact trees. The *master plan* provides consistency between policies and plans of different departments and partner groups. Plans should:

- Include an *urban forest maintenance plan* (or comparable set of documents).
- Identify and prioritize action items based on professional, relevant inventories and/or resource assessments.
- Include tree maintenance cycle information,
- Outline the future management of the organization's trees and forests,
- Be current and actively used within the past five years,
- Guide management decisions and/or resource allocation,
- Be updated as needed to incorporate new information,
- Include tree *planting*, canopy, or stocking level goals,
- Include *tree equity* goals,
- Include information and goals on budgets and staffing,
- Include directions for regular operations,
- Include proactive approaches for monitoring and evaluation of the *program* and the tree population,

- Consider and, where applicable, incorporate externally owned and managed trees in the community into management and planning efforts,
- Include *urban wood* utilization, *forest health, special sites*, natural areas, climate, and human health, as appropriate.

Objective 9: Management and Care of Urban and Community Forests and Trees

To ensure that best *practices* are followed in the establishment, maintenance, and management of forests and trees.

• **Performance Measure 9.1:** Organization has management authority and one or more qualified resource professionals directing urban or community forest management and maintenance activities.

Guidance:

A municipal *organization* could participate in the Society of Municipal Arborists' <u>Accreditation Program</u> to show commitment to municipal *forestry* management.

Ontario Professional Foresters Association: Urban Forestry

 Indicator 9.1.1: Organization employs or has an agreement with a professional that has the education and expertise required to effectively lead and manage the *urban or community forestry program.*

Guidance:

Education can be documented through relevant *degrees* in *urban forestry, forestry*, arboriculture, or closely related fields. Expertise can be documented through professional credentialling *programs* such as International Society of Arboriculture's certifications (i.e. ISA Certified Arborist, ISA Municipal Specialist) and qualifications (i.e. ISA Tree Risk Assessment Qualification), state certification or licensure, or other registered professional certification bodies.

Indicator 9.1.2: Organization has formally adopted responsibility and authority for the planning, management, protection, preservation, and care of urban or community trees, forests, and the landscapes they populate through ordinances, charter, or other guiding policies or agreements.

Guidance:

City of Portland Oregon Urban Forest Management Plan

Chicago Region Trees Initiative: Tree Ordinances

City of Columbus: Urban Forest Master Plan

Halifax Regional Municipality: Urban Forest Master Plan

• **Performance Measure 9.2:** *Organization* adopts and implements *urban or community forest* policies, procedures, and standards.

Guidance:

Organization could adopt development policies or other controlling provisions and written standards of practice or operating procedures that effectively protect trees during land disturbance and infrastructure maintenance activities. i.e., ordinances, formal site plan review process, permitting, mitigation, incentives, etc.

- City Green: <u>The Urban Forest- Planning and Policy</u>
- City of Vancouver: <u>Vancouver's Urban Forest Strategy</u>
- UN Sustainable Urban and Peri-urban Forestry: <u>An Integrative and Inclusive Nature-Based</u> <u>Solution for Green Recovery and Sustainable, Healthy and Resilient Cities</u>
- Ville De Quebec: <u>Plan Directeur</u>
- Tree Care Standards: ANSI A300

Organization could adopt current ISA "<u>Best Management Practices - Managing Trees During</u> <u>Construction.</u>" Tree Protection examples could include:

- Standards for tree protection.
- Protective fencing.
- Trenching, boring, or excavation in critical root zones.
- Preconstruction pruning of roots and branches.
- Mulching.
- Soil moisture, nutrient, and air exchange management.
- Watering.
- Post-construction restoration.
- Indicator 9.2.1: Organization has adopted policies, planning strategies, ordinances, and/or best management practices that govern the planting, establishment, maintenance, protection, risk management, and removal of trees.

Guidance:

The State University of New Jersey Agricultural Experiment Station: <u>Best Management Practices for Tree</u> <u>Care</u> Course

City of Charlottesville: <u>Best Management Practices for Tree Preservation, Transplanting, Removal and</u> <u>Replacement</u>

> Indicator 9.2.2: Organization regularly assesses and utilizes current and scalable urban or community tree health, canopy distribution, social and ecological vulnerability, and ecosystem services data to inform, formulate, and adopt urban or community forest policies, planning goals, management strategies, maintenance standards, and program goals.

- Performance Measure 9.3: Organization coordinates tree planting and establishment.
 - Indicator 9.3.1: Organization has an established program for planting and establishing site-appropriate trees on managed public and/or private property, including green stormwater infrastructure, in accordance with nationally or regionally adopted best management practices.

Government of Canada 2 Billion Trees Commitment

US Environmental Protection Agency: Stormwater Trees: Technical Memorandum

City of Ottawa: Tree planting

Trees and Design Action Group: Guides to Inform Decision-making on Urban Trees

 Indicator 9.3.2: Organization demonstrates appropriate post-planting follow-up care for all trees based on species, size, and type of stock, *site* characteristics, local climate, and maintenance needs.

Guidance:

Canopy: Caring for Trees

University of Nebraska- Lincoln Institute of Agriculture and Natural Resources: <u>Follow-Up Care for Newly</u> <u>Planted Trees</u>

> Indicator 9.3.3: Organization actively supports initiatives, policies, outreach, or public assistance strategies that encourage private landowners to replace trees that have died or been removed.

Guidance:

National Park Service: Tree Replacement: Planning, Planting, and Establishment

ArborCare: Tips for tree removal & replanting

DC Department of Energy and Environment: Front Door Tree Rebate Program

DC Government Data Policy: Tree Permitting

• **Indicator 9.3.4**: *Organization* demonstrates that the five-year rolling average of trees planted within managed areas is equal to or greater than the number of trees removed, for all reasons, in the absence of a catastrophic disaster.

Organization should strive to, at least, replace every tree that dies or is removed to reduce tree canopy loss.

- **Performance Measure 9.4:** *Organization* maintains managed forests and trees under its jurisdiction.
 - **Indicator 9.4.1:** *Organization* has an established *program* of care for young trees that is aligned with nationally or regionally adopted *best management practices*.

<u>Guidance:</u> Arbor Day Foundation: Tree Life Stages

Bartlett Tree Experts: Care for Young Trees

Canopy: Caring for Young Trees

 Indicator 9.4.2: Organization implements proactive resource management, monitoring, and maintenance strategies for established trees that optimize tree health and longevity, public safety, and resource allocations.

<u>Guidance:</u> Vibrant Cities Lab: <u>Monitoring & Maintaining Your Urban Forest</u>

> Indicator 9.4.3: Organization annually conducts systematic visual assessments of 15% or more of the managed tree population for *forest health*, structural defects, and risk management, and prescribes and performs proactive pruning and restorative maintenance as needed to sustain a safe and healthy *urban or community forest* that coexists with the built environment.

Guidance:

Organization should inspect each tree on a 6 to 7 year cycle and perform necessary maintenance.

Tree Canada: Tree Inspection Cycle

Tree Canada: Pruning Practices

- **Performance Measure 9.5:** *Organization* preserves and *protects* forests and trees.
 - Indicator 9.5.1: Organization exercises the authority and has the capacity to implement and enforce tree *protection* codes, policies, standards, and/or construction specifications.

Guidance:

Organization should exercise the authority and capacity to implement and enforce tree protection

codes, policies, standards, and construction specifications through site plan reviews, on-site inspections, and monitoring and administrative actions. Administrative actions could include:

- Stop work orders.
 - Citations.
 - Permit revocation.
 - Withholding of occupancy permit.
 - Redemption of performance bonds.
 - Mitigation orders.
 - Judicial process.
 - Indicator 9.5.2: Organization demonstrates inclusive community engagement, equitable protocols, and targeted programming to ensure that forests and trees are preserved and protected in all neighborhoods regardless of social, ethnic, or economic demographics.

Guidance:

Community Involvement with Urban Forestry: Trees for Energy Conservation

Objective 10: Disaster Readiness, Response, and Recovery

To limit undesirable effects and aid in the recovery of communities and forest resources from disasters through strategic planning, preparation, effective response, restoration, and improved *resilience*.

• **Performance Measure 10.1:** *Organization* proactively plans and prepares for catastrophic natural events and disasters that can reasonably be anticipated.

Guidance:

Organization should implement appropriate prevention and *mitigation programs* and *strategies* to reduce risks prior to an event, including appropriate funding sources, operational capacity, mutual aid agreements, and standing contracts or agreements in place with private contractors for surge capacity.

Organization should adopt standards and procedures prior to an event to ensure ability to enforce standards during response and recovery activities. *Organization* should consider the likelihood of an event or disaster during the planning process. Events and disasters could include:

- Extreme weather such as storms, ice, snow, wind, hurricanes, tornadoes, heat, drought, and flooding.
- Wildfire.
- Invasive pests.
- War or other conflict
- Indicator 10.1.1: Organization assesses risks and develops and documents equitable disaster response strategies, including debris management, appropriate for events in its region.

Guidance:

Texas A&M Forest Service: Growing Texas Community Planning Guide: Storms

US Environmental Protection Agency: Disaster Debris Planning

National Library of Medicine: Disaster debris management best practice case studies

• **Indicator 10.1.2:** *Organization* implements appropriate prevention and *mitigation programs* and *strategies* to reduce risks prior to an event.

<u>Guidance:</u> Government of Canada: <u>Disaster prevention and mitigation</u>

ISA Texas: Texas Wildfire Risk Reduction Qualification

- **Performance Measure 10.2:** *Organization* implements adopted disaster-response *strategies* in response to events.
 - Indicator 10.2.1: Organization activates appropriate response teams, integrates with other emergency management operations, and follows governmental emergencymanagement guidelines or programs where appropriate.

<u>Guidance:</u>

Organization could work with groups such as <u>state urban forestry programs</u> or the <u>Urban Forest Strike</u> <u>Teams</u>.

Vibrant Cities Lab: Emergency Operations Planning Guide for Storm Response

Tree Canada: Emergency Preparedness

• **Indicator 10.2.2:** *Organization* maximizes opportunities to preserve damaged trees and divert woody debris for highest and best uses.

Guidance:

Government of British Columbia: Wildlife Tree & Course Woody Debris Guidance & Policies

Global Earth Repair Foundation: <u>Some Uses of Woody Biomass in Gardening and Regenerative</u> <u>Agriculture</u>

• Performance Measure 10.3: Organization implements recovery strategies after an event.

Guidance:

Organization could work with other *organizations* and *programs* such as: Arbor Day Foundation's <u>Community Tree Recovery</u>.

Keep America Beautiful's <u>Retreet program</u>.

• **Indicator 10.3.1:** *Organization* has and implements a risk *mitigation program* to reduce residual risk following events.

Guidance:

Colorado State Forest Service: Forest Restoration & Wildfire Risk Mitigation

 Indicator 10.3.2: Organization implements effective restoration, maintenance, and replanting *strategies* following events.

<u>Guidance:</u>

US Department of Agriculture Forest Service: <u>Reforestation</u>

One Tree Planted: Reforestation

• **Indicator 10.3.3**: *Organization* assesses the impact of events and evaluates the effectiveness of their readiness, response, and recovery efforts.

Guidance:

Organization could utilize urban tree canopy data to track changes following events to evaluate recovery efforts.

Objective 11: Capacity-Building

To promote continued improvement in the *practice* of sustainable management through education, outreach, sufficient resourcing and funding, professional development, engagement, stewardship, and performance review.

- **Performance Measure 11.1**: Organization ensures budgets are in place for *urban or community forestry* operations.
 - Indicator 11.1.1: Organization has a dedicated budget for *urban or community forestry* related activities.

<u>Guidance:</u> Vibrant Cities Lab: <u>Funding</u>

Arbor Day Foundation's Tree City USA: Qualified Expenses

• **Indicator 11.1.2**: *Organization* assesses current and future budgeting needs based on *strategies*, plans, and desired future conditions and/or goals.

Guidance:

Pennsylvania State University: <u>Sustaining and Funding an Urban Forestry Program</u>

• Performance Measure 11.2: Organization actively engages interested parties.

Guidance:

US National Urban and Community Forestry Advisory Committee's Ten-Year Urban Forestry Action Plan: <u>Stakeholders and Audience</u>

Organization should work with <u>ISA Chapters</u> and <u>SFI Implementation Committees</u> where available and appropriate to achieve on-the-ground progress.

 Indicator 11.2.1: Organization produces an annual report of engagement with decision makers, leaders, citizens, and other interdepartmental staff based on outreach and engagement plans.

Guidance:

Sustainable Urban Forest Coalition: Scan of Urban Forestry Outreach Campaigns

City of Austin, Texas, Urban Forestry Program

1T.org: Innovators

• **Indicator 11.2.2:** *Organization* works with volunteers and tracks the number of hours worked, if applicable.

<u>Guidance:</u>		
Up With Trees: Volunteers		

- **Performance Measure 11.3**: *Organization* utilizes performance reviews to improve its *program*.
 - Indicator 11.3.1: Organization employs a regular review process to assess the implementation of relevant *strategies*, with action steps identified to achieve desired future conditions and/or goals.

Guidance:

Organization should implement adaptive management to improve operations.

Urban Forest Management Plan Toolkit: Adaptive Management

- Indicator 11.3.2: Organization identifies staff and/or organizations for various ancillary functions such as: outreach, volunteer management, *planting*, tree care management, inter-department communication, etc.
- **Performance Measure 11.4**: *Organization* supports professional development and improvement.

 Indicator 11.4.1: Organization has trained and credentialed managers, crews, or contractors.

Guidance:

International Society of Arboriculture: Credentials

Association of BC Forest Professionals: Urban Forestry FAQs

• **Indicator 11.4.2:** *Organization* provides opportunities for continuing educational development.

Guidance:

International Society of Arboriculture: Continuing Education Units

Canadian Institute of Forestry: Continuing Forestry Education Credits

Tree Fund: Webinars

Objective 12: Urban Wood and Community Forest Utilization

To ensure the highest and best use of *urban and community forest wood* resources and *minimize* waste from our urban and *community forests*.

• **Performance Measure 12.1**: Organization has a strategy stating that living trees are the highest and best use until the risk exceeds tolerance or the tree has reached the end of its useful living, standing life, and then defines what to do when trees or parts of trees are removed and supports their best utilization in compliance with controlling regulations.

Guidance:

Organization could utilize an evaluation process to assess past performance and establish future goals for *urban wood* utilization.

Organization should:

- Use locally appropriate metrics to determine what and how material was recovered that would have been wasted otherwise.
- Develop targets for the next year that strive to meet or exceed previous year's results.
- Document estimated economics of reduced costs or increased revenues to support local programs.
- Document local *urban wood* being purchased and or utilized by the *organization* in new construction, building, or furnishings, showing an increasing percentage used each year.

Organization could adopt and utilize the <u>USRW Certified Wood Standards</u> to assist with their *urban wood* utilization program.

City of Baltimore, Maryland: <u>The Baltimore Wood Project</u>

Example of a controlling regulation:

- Government of Canada: Emerald Ash Borer Regulated Articles
 - Indicator 12.1.1: Organization includes urban wood or community forest utilization targets including criteria used to determine the best use for various wood products based upon size, quality, circumstances, and available local resources.

Best uses could include:

- Leave for wildlife habitat with strategic placement to promote biodiversity and forest health.
- Mill into lumber or other wood products.
- Leave in *public spaces* for natural aesthetics, recreation, *conservation* education, or landscaping.
- Convert to various biomass products such as biochar, biofuel, or mulch.
- **Performance Measure 12.2**: *Organization* values and manages trees as full-cycle resources that are utilized even after removal to support environmental, economic, and social values, while understanding that the highest and best use will vary due to region and circumstance.

Guidance:

Organization should consider *urban wood* utilization during tree replacement and *planting* operations to include the eventual best, full-cycle use of the tree once it must be removed.

• **Indicator 12.2.1:** *Organization* supports local utilization of wood through investments, purchases, or supplying materials.

Guidance:

Cambium Carbon: Carbon Smart Wood

Government of Ontario: Provincial Wood Supply Strategy

• **Indicator 12.2.2:** *Organization* facilitates ongoing training and employs practices that ensure trees are removed in a manner that supports the highest use and value.

Guidance:

Cambium Carbon: Carbon-Smart City Services

Video from Sustainable Resources Institute: Harvesting Urban Trees with Modern Logging Equipment

• **Performance Measure 12.3:** Organization engages interested parties and urban wood or community forest professionals in support of a self-sustaining network to build long-term capacity.

Organization facilitates community engagement with urban wood utilization.

Urban Wood Network: The Urban Wood Toolkit

Urban Tree Alliance: Urban Wood Utilization

Vibrant Cities Lab: Urban Wood Reuse

 Indicator 12.3.1: Organization participates in urban wood or community forest utilization arrangements and/or membership or participation in urban wood-use or community forest organizations.

Guidance:

Urban wood professionals include arborists, tree care companies, wood processors, and manufacturers who follow best industry standards and *practices*.

Organization could support local workforce development and vocational training opportunities in wood utilization.

• **Indicator 12.3.2:** *Organization* supports industry approved standards and/or chain-of-custody procedures or *policies*.

Guidance:

Organization could follow the USRW Urban Wood Standards: <u>Urban Salvaged and Reclaimed Woods</u> <u>Inc.</u>

Organization could follow the SFI 2022 Chain of Custody Standard

Objective 13: Communications

To invest in and utilize effective communications both internally and externally to support and promote all aspects of the *urban and community forest* and urban and community forestry *program*.

• **Performance Measure 13.1:** *Organization* has a communication *strategy* that includes outreach, engagement, and education about *urban or community forests* and trees, the associated values and benefits, and the need for management and care.

Guidance:

<u>Tree Canada Canadian Urban Forest Strategy</u>: Communications and Public Education section Organization could collaborate with <u>SFI Implementation Committees</u> or <u>International Society of</u> <u>Arboriculture chapters, professional affiliates, or associate organizations</u> for outreach, engagement, and education.

City of Seattle <u>Urban Forestry Communication Toolkit</u>

Green Infrastructure Ontario Coalition: <u>Communication the Benefits of the Urban Forest in a Municipal</u> <u>Context</u>

o Indicator 13.1.1: Organization prioritizes two-way and diverse communication.

<u>Guidance:</u>

Tree Canada: Considering Diversity, Social Inclusion, and Equity through Urban Forest Collaborations

 Indicator 13.1.2: Organization utilizes multiple methods of shareable and accessible information about the *urban or community forest,* communicating about policies and who is responsible for them, with contact information.

<u>Guidance:</u> Cities 4 Forests: <u>Urban Forests for Healthier Cities Learning Guide</u>

• **Indicator 13.1.3**: *Organization* annually evaluates the effectiveness of communication efforts and adjusts as needed.

Guidance:

Organization could follow a procedure like the City of Austin, Texas <u>Urban Forestry public engagement</u> process report.

• **Performance Measure 13.2:** *Organization* invests in *urban or community forest* and tree-related communication efforts.

Guidance:

Organization could document the resources utilized to communicate about the *urban forest* and trees inside and outside of the *organization*.

• **Indicator 13.2.1:** *Organization* implements a communication *strategy* and shares its accomplishments internally and externally.

<u>Guidance:</u> The State of Missouri's <u>Trees Work campaign</u>

Objective 14: Research, Science, and Technology

To invest in, utilize, and promote research, science, and technology that supports sustainable resource management.

• **Performance Measure 14.1:** *Organization* has a *strategy* for staying informed about new research.

 Indicator 14.1.1: Organization makes support available for urban and community forestry and urban and community wood practitioners to sustain membership in or receive training from professional organizations.

Guidance:

Society of Municipal Arborists Membership Info

Ontario Professional Foresters Association: Urban Forestry

• **Indicator 14.1.2:** *Organization* participates in groups or *organizations* that increase access to research.

Guidance:

Organization should participate in local or regional climate task forces, Tree City USA and affiliated *programs*, Sustainable Urban Forest Coalition, university-based Extension, state or local *urban forestry programs*, or similarly aligned groups.

- USDA Forest Service National Urban and Community Forestry Advisory Council
- Tree Research and Education Endowment (TREE)Fund Cultivating Innovation
- Canadian Tree Fund: <u>Research and Grants</u>

Organization could work with <u>SFI Implementation Committees</u> where available and appropriate to achieve on-the-ground progress.

- **Performance Measure 14.2**: *Organization* participates and/or invests in research that advances *urban and community forestry practices* locally and/or at a larger scale.
 - Indicator 14.2.1: Organization commits resources to collaborate with interested parties and partners to advance social science or applied *urban and community forestry* research when opportunities arise.

Guidance:

Activities could include:

- Identifying relevant issues.
- Facilitating data collection.
- Sharing existing data.
- Surveying stakeholders.
- Providing access to study sites.
- Applying for or providing research funding.
- **Indicator 14.2.2**: *Organization* demonstrates willingness to participate in research that advances knowledge of *urban and community forestry* when opportunities arise, including contributing to projects and/or sharing findings within peer networks.

Organization could have a mechanism in place to identify and inform *urban forestry* and urban wood utilization needs that can be addressed via social science or applied research efforts.

Organization could have a mechanism to identify and apply documented, applicable findings of social science or applied research in community engagement.

• **Performance Measure 14.3:** *Organization* demonstrates commitment to applying findings from relevant research to the professional, sustainable management of the *urban or community forest.*

Guidance:

Organization is involved in activities that promote the dissemination of research. Activities could include:

- sharing via popular press,
- social media,
- peer networks,
- communities of *practice*,
- and lead or co-authorship of manuscripts.
 - **Indicator 14.3.1:** *Organization* applies relevant current research in management strategies.

Guidance:

Organization could list research references in management plans or strategies similar to the city of <u>Kirkland</u>, <u>Washington</u>.

- USDA Forest Service, National Urban and Community Forestry: <u>Ten-Year Urban Forest Action</u>
 <u>Plan</u>
- Vibrant Cities Lab: <u>How Trees Improve</u>
- **Performance Measure 14.4:** *Organization* acquires and utilizes technology that supports sustainable resource management.

Guidance:

The Davey Tree Expert Company: <u>Technology in Urban Forestry</u>

Canadian Geospatial and Open Data Research Partnership: <u>Open Data and Urban Forests – What's</u> <u>Next?</u>

PlanitGeo: Tree Plotter

• **Indicator 14.4.1:** *Organization* invests in staff training for applications of technology used in sustainable resource management.

Guidance:

Organization could support in-person or asynchronous training in tools such as iTree Tools.

• Indicator 14.4.2: *Organization* is transparent regarding data collected via technology.

Guidance:

Organization could host an online dashboard for their tree inventory. Example: <u>Westerville, Ohio's</u> <u>Transparency Hub</u>

• **Indicator 14.4.3:** *Organization* utilizes technology and related data to promote equitable access to *urban and community forests* within jurisdiction of *organization*.

Guidance:

Organization could use American Forest's Tree Equity Score tool to facilitate equitable access to tree, forests, and their associated benefits. Example: the <u>City of Detroit Michigan</u>.

Objective 15: Legal and Regulatory Compliance including Recognizing Indigenous Peoples' Rights

To comply with applicable laws and regulations and recognize Indigenous Peoples' Rights.

• **Performance Measure 15.1:** *Organization* complies with applicable *urban or community forestry* and related social and environmental laws and regulations.

<u>Guidance:</u> Government of Canada: <u>Canada's Forest Laws</u>

US Department of Agriculture Forest Service: Urban Forests

- **Indicator 15.1.1:** *Organization* has access to relevant laws and regulations in appropriate locations.
- **Indicator 15.1.2**: *Organization* has a system for achieving compliance with applicable laws and regulations.
- **Indicator 15.1.3:** *Organization* demonstrates a commitment to legal compliance through *available regulatory action information*.
- **Performance Measure 15.2:** *Organization* complies with all applicable social laws in the country in which the *organization* operates.

Guidance: The Canadian Encyclopedia: Social Laws & Programs

• **Indicator 15.2.1:** Organization has written *policy* demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, gender equality, *diversity*, inclusion, anti-discrimination and anti-harassment measures,

workers' compensation, *indigenous rights*, workers' and communities' right to know, prevailing wages, workers' right to organize, and occupational health and safety.

 Indicator 15.2.2: Organization respects the rights of workers and labor representatives in a manner that encompasses the intent of the International Labor Organization fundamental conventions.

<u>Guidance:</u> International Labour Organization

• **Performance Measure 15.3:** Organization shall recognize and respect Indigenous Peoples' rights.

Guidance:

Objective 8: Recognize and Respect Indigenous Peoples' Rights in <u>Guidance in SFI 2022 Standards and</u> <u>Rules</u>

- Indicator 15.3.1: Organizations shall develop and implement a written policy acknowledging a commitment to recognize and respect the rights of Indigenous Peoples. This policy shall provide reference to a program that includes:
 - use of available resources and information to identify the *Indigenous Peoples* whose rights may be affected by the *Organization's* urban or community forest management activities.
 - recognition of the established framework of legal, customary, and traditional rights such as outlined in: the UN Declaration on the Rights of Indigenous Peoples; ii. federal, provincial, and state laws and regulations; iii. treaties, agreements or other constructive arrangements among governments and Indigenous Peoples.
 - appropriate training of personnel and contractors so that the Organization is competent to fulfill their responsibilities under Objective 15 of the SFI Urban and Community Forest Sustainability Standard.
- Indicator 15.3.2: The written policy shall be publicly available.

Objective 16: Reporting

To annually report progress on conformance with the *SFI* Urban and Community Forest Sustainability Standard to increase transparency.

- **Performance Measure 16.1:** *Organization* reports annually to *SFI* on its conformance with the *SFI* Urban and Community Forest Sustainability Standard.
 - **Indicator 16.1.1:** *Organization* provides prompt responses to the *SFI* annual progress report survey.

• **Indicator 16.1.2**: *Organization* keeps records for all the categories of information needed for *SFI* annual progress report surveys.

<u>Guidance:</u> Organization should retain records according to appropriate local, regional, and national rules and regulations.

- Indicator 16.1.3: Organization maintains copies of past survey reports to document progress and improvements that demonstrate conformance to the SFI Urban and Community Forest Sustainability Standard.
- **Performance Measure 16.2:** *Organization* provides a summary audit report, prepared by the *certification body*, to *SFI* after the successful completion of a certification, recertification, or surveillance audit to the *SFI* Urban and Community Forest Sustainability Standard.
 - **Indicator 16.2.1:** The summary audit report submitted by the *organization* (one copy must be in English), shall include, at a minimum:
 - The name of the *Organization* that was audited, including its *SFI* representative.
 - A general description of the *Organization*'s *urban forest* included in the audit.
 - The name of the *certification body* and *lead auditor* (names of the *audit team* members, including *technical experts*, may be included at the discretion of the *audit team* and *organization*).
 - A description of the audit process, *objectives*, and scope.
 - The dates the audit was conducted and completed.
 - A description of substitute *indicators*, if any, used in the audit and a rationale for each.
 - A summary of the findings, including general descriptions of evidence of conformity and any nonconformities and corrective action plans to address them, opportunities for improvement, and exceptional *practices*.
 - The certification decision.

The summary audit report will be posted on the SFI website (forests.org) for public review.

Guidance:
Sustainable Forestry Initiative Audits and Reports

Glossary

adaptation:	Climate change adaptation refers to actions that reduce the negative impact of climate
	change, while taking advantage of potential new opportunities. It involves adjusting
	policies and actions because of observed or expected changes in climate.

aquatic habitat:	An area where water is the principal medium that provides the resources and environmental conditions to support occupancy, survival, and reproduction by individuals of a given species
aquatic species:	Animals that live on or within water during some stage of their development.
audit team:	One or more auditors conducting an audit, supported if needed by technical experts (ISO 19011:2018).
auditor:	A person with the competence needed to conduct an audit (ISO 19011:2018).
available regulatory action information	Statistics or regulatory compliance data collected by a federal, state, provincial, or local government agency. Note: Although conformance with laws is the intent, certification bodies are directed to look for a spirit and general record of compliance rather than isolated or unusual instances of deviation.
best management practices (BMPs):	A practice or combination of practices for protection of water quality that is determined by a federal, provincial, state, or local government or other responsible entity, after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective and practicable means (including technological, economic, and institutional considerations) of conducting a forest management operation while addressing any environmental considerations.
best scientific information:	Available factual information that is generally accepted by the broad scientific community. It includes but is not limited to peer-reviewed scientific information obtainable from any source, including government and non-governmental sources, that have been verified by field testing to the maximum extent feasible.
biodiversity:	The variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local to regional to global.
biological diversity:	The variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local to regional to global.
built environment	Human-made structures, features, and facilities viewed <u>collectively</u> as an environment in which people live and work.
certification body:	 An independent third party that is accredited by: ANSI-ASQ National Accreditation Board (ANAB) as being competent to conduct certifications to the 2022 Forest Management Standard, SFI Fiber Sourcing Standard, SFI Chain-of-Custody Standard or SFI Certified Sourcing Standard, SFI Small Lands Group Certification Module, or SFI Small Scale Forest Management Module for Indigenous Peoples and Families. Standards Council of Canada (SCC) as being competent to conduct certifications to the SFI 2022 Forest Management Standard, SFI Fiber Sourcing Standard, SFI Custody Standard or SFI Certified Sourcing Standard, SFI Chain-of-Custody Standard or SFI Certified Sourcing Standard, SFI Small Lands Group Certification Module, or SFI Small Scale Forest Management Module for Indigenous Peoples and Families
climate change:	A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use. Note: Taken from the Intergovernmental Panel on Climate Change (IPPC).

community forest:	Term used in the USA for smaller communities that don't consider themselves 'Urban'; see urban forest. Note that "community forest" is often used in connection with community-based forestry, which is described as a participatory approach to forest management in which people in cities and towns manage areas of forest for a range of ecological, social, and economic values. For more information, see the Trust for Public Lands' report, " <u>Community Forests: A Path to prosperity and connection</u> ," and the US Forest Service's <u>Community Forest and Open Space Conservation Program</u> . From the Canadian perspective, a community forest is "a tree-dominated ecosystem managed for multiple community values and benefits by the community. While this includes urban situations, most conceptions of community forests in Canada involve smaller rural communities and their forest hinterlands" (Duinker et. al. 1995)
conservation:	1. Protection of plant and animal habitat. 2. The management of a renewable natural resource with the objective of sustaining its productivity in perpetuity while providing for human use compatible with sustainability of the resource.
critically imperiled:	A plant or animal or community, often referred to as G1, that is globally extremely rare or, because of some factor(s), especially vulnerable to extinction. Typically, five or fewer occurrences or populations remain, or very few individuals (<1,000), acres (<2,000 acres or 809 hectares), or linear miles (<10 miles or 16 kilometers) exist. (Further information can be found under Forests with Exceptional Conservation Value in Section 7 — Guidance to SFI 2022 Standards and Rules.)
culturally	Having significance for or being representative of human activities or beliefs (e.g.,
important: damaging agent	documented areas such as cemeteries, sacred sites). Any factor that negatively affects tree vitality and environmental and economic tree value is known as a damaging agent (Wulff, 2011)
degree:	A professional academic degree (e.g., bachelor's) or equivalent.
diversity:	1. Diversity refers to individual and group/social differences. These include, but are not limited to, psychological, physical, and social differences that occur among any and all individuals, such as race, ethnicity, nationality, religion, economic class, age, gender, sexual orientation, and mental and physical ability. 2. The variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local to regional to global.
diverse	A diverse group, community, or organization is one in which a variety of social and
communities: ecologically important:	cultural characteristics exist. Ecologically important can be defined as applying to natural communities, biological, ecological, or physical features which, either by themselves or in a network, contribute significantly to an ecosystem's productivity, biodiversity, and resilience. Ecologically important areas may be so identified by the inclusion viable occurrences of species or natural communities that are integral to the identity or function of an ecosystem, but which may be relatively uncommon, including species or ecological communities with a high "S-Rank" or "G-Rank" from NatureServe, subject to the discretion of the Certified Organization.
ecosystem services:	Components of nature, directly enjoyed, consumed, or used to yield human well-being.
endemic:	Native or indigenous to a region.
exotic tree species:	A tree species introduced from outside its natural range. This does not include species that have become naturalized in an area and have a naturally reproducing population. Note: Hybrids of native species or native plants that have been derived from genetic tree improvement and biotechnology programs are not considered exotic species.
forest health:	The perceived condition of a forest derived from concerns about such factors as its age,

	structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance.
forest inventory:	1. A set of objective sampling methods that quantify the spatial distribution,
	composition, and rates of change of forest parameters within specified levels of
	precision for management purposes. 2. The listing of data from such a survey.
forestry:	The profession encompassing the science, art, and practice of creating, managing, using,
iorestry.	and conserving forests and associated resources for human benefit and in a sustainable
	manner to meet desired goals, needs, and values.
Foundation with	-
Forests with	Critically imperiled (G1) and imperiled (G2) species and ecological communities.
Exceptional	
Conservation	
Value:	
geographic	An organized collection of computer systems, personnel, knowledge, and procedures
information	designed to capture, store, update, manipulate, analyze, report, and display forms of
system (GIS):	geographically referenced information and descriptive information.
green	Living plants and natural materials within developed areas. Can be incorporated with
infrastructure:	gray infrastructure (utilities, paved surfaces, and buildings) to perform stormwater
	management, erosion control, temperature buffering, and other important ecological
	functions.
habitat:	1. A unit area of environment. 2. The place, natural or otherwise (including climate,
	food, cover and water), where an individual or population of animals or plants naturally
	or normally lives and develops.
human damage:	Injuries to trees and forests caused by human activity such as soil compaction, lawn
	mower or string trimmer impact to trunks, or improper pruning.
imperiled:	A plant or animal or community, often referred to as G2, that is globally rare or, because
	of some factor(s), is very vulnerable to extinction or elimination. Typically, six to 20
	occurrences, or few remaining individuals (1,000 to 3,000), or acres (2,000 to 10,000
	acres or 809 to 4,047 hectares), or linear miles (10 to 50 miles or 16 to 80.5 kilometers)
	exist. Additional information can be found under Forests with Exceptional Conservation
	Value in Section 7 of the SFI 2022 Standards and Rules.
indicator:	A specific metric that provides information about an organization's forestry and
	environmental performance, and that is integral to assessing conformance to the SFI
	2022 Standards' objectives and performance measures.
Indigenous or	Inclusive of all Indigenous Peoples residing in Canada and the United States. More
Indigenous	specifically, Indigenous Peoples are defined in the United States as members of federally
Peoples:	recognized tribes and in Canada as those peoples that are recognized by section 35(2) of
	the Constitution Act, 1982. In the United States, the US Department of Interior's Bureau
	of Indian Affairs publishes a list of each of the 573 federally recognized tribes. In Canada,
	Indigenous and Northern Affairs Canada provides a list of the 619 recognized First
	Nations by province. Rights-holding Métis communities in Canada, as per S. 35(2) of the
	Constitution Act, 1982, include but are not limited to governing members of the Métis
Indigonous	National Council as well as the Métis Settlements General Council.
Indigenous	Indigenous rights (sometimes referred to as Aboriginal rights) refer to practices,
Peoples' rights:	traditions, and customs that distinguish the unique culture of each First Nation and were
	practiced prior to European contact. These are rights that some Indigenous peoples of
	The rights of certain peoples to hunt, trap, and fish on ancestral lands are examples of
	Indigenous rights. Indigenous rights vary from group to group, depending on the
	customs, practices, and traditions that have formed part of their distinctive cultures.
	Indigenous rights are protected under s.35 of the Constitution Act, 1982.
	Indigenous rights. Indigenous rights vary from group to group, depending on the

integrated pest	The careful consideration of all available pest control techniques and subsequent
management:	integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment (source: FAO 2018).
integrated plant management:	A comprehensive program to manage the health, structure, and appearance of plants in the landscape, similar to integrated pest management. See also plant health care.
Interested parties	A person, group, community, or organization with a vested interest in the subject of the standard. alternative term for stakeholders.
invasive:	Species introduced from another country or geographic region outside its natural range that may have fewer natural population controls in the new environment, becoming a pest or nuisance species.
invasive species:	Species introduced from another country or geographic region outside its natural range that may have fewer natural population controls in the new environment, becoming a pest or nuisance species.
land classification:	The process of designating areas of land into classes or strata that are sufficiently homogeneous in their physical, vegetative, and development attributes.
landscape:	1. A spatial mosaic of multiple ecosystems, landforms, and plant communities across a defined area, irrespective of ownership or other artificial boundaries and repeated in similar form throughout. 2. An area of land characterized by: a) similar biogeoclimatic conditions that influence site potential; b) similar historical disturbance regimes that influence vegetation structure and species composition; and c) sufficient size to provide the range of habitat conditions for naturally occurring communities (except for a few megafauna with large spatial needs, e.g., wolves).
lead auditor:	An auditor appointed to lead an audit team. Also referred to as an audit team leader (ISO 19011:2018, 3.14, note 1).
least-toxic and narrowest- spectrum pesticide:	A chemical preparation used to control site-specific pests that minimizes impact to non- target organisms while meeting management objectives. The management objectives should consider the target pest, the degree of control needed, and other issues, such as season and timing of application, rates and methods; and terrain, forest conditions, and the presence or absence of water bodies that may be impacted.
maintenance plan:	Short term (generally one to two years) implementation, work, or action plan for the maintenance of an organization's urban forest and trees.
master plan:	An Urban Forest Master Plan (UFMP) is a road map providing detailed information, recommendations, and resources needed to effectively and proactively manage and grow a community's tree canopy. More important, it provides a shared vision for the future of the urban forest to inspire and engage interested parties in the care and protection of trees.
minimize:	To do only that which is necessary and appropriate to accomplish the task or objective described or to reduce an action's impacts.
mitigation:	1. Climate change mitigation consists of actions to limit the magnitude or rate of global warming and its related effects. This generally involves reductions in human emissions of greenhouse gases. 2. Reduce effect or impact (i.e. from tree removal).
native:	Species or ecological communities occurring naturally in an ecological region, as neither a direct nor indirect consequence of recent human activity. (Ecological Regions of North America: Levels I-II)

natural community:	Natural communities are combinations of native plants and animals that are regularly found together in particular settings. Human-caused disturbances have been minimal or are consistent with historical disturbance regimes (e.g., prescribed fire); the natural community has recovered from that disturbance; or the human-caused disturbance falls within the range of natural variation. (Adapted from NatureServe).
natural regeneration:	Establishment of a plant or a plant age class from natural seeding, sprouting, suckering, or layering.
nature-based solutions:	Sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience.
objective:	In the SFI Urban and Community Forest Sustainability Standard, a fundamental goal of sustainable forest management.
old-growth forests:	A forested ecosystem distinguished by old trees and related structural attributes, such as tree size, down woody debris, canopy levels, and species composition. Organizations should utilize a definition specific to their region and particular forest types.
organization:	Person or group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives.
performance measure:	A means of judging whether an objective has been fulfilled.
plant health care:	Comprehensive program to manage the health, structure, and appearance of plants in the landscape.
planting:	The establishment of a group or stand of young trees created by direct seeding or by planting seedlings or plantlets.
policy:	A written statement of commitment to meet an objective or to implement a defined program or plan to achieve an objective or outcome.
practice(s):	The actual application or use of an idea, belief, or method, as opposed to theories relating to it.
principle:	The vision and direction for sustainable urban forest management as embodied in the principles of the SFI Standards.
program:	An organized system, process, or set of activities to achieve an objective or performance measure.
protection (or protect):	Maintenance of the status or integrity, over the long term, of identified attributes or values including management where appropriate and considering historical disturbance patterns, fire risk, and forest health when determining appropriate conservation strategies.
public land:	Land that is owned or administratively managed by a government entity (federal, state, provincial, county, or local), excluding easements or other encumbrances held by a government entity on private land.
qualified resource professional:	A person who by training and experience can make urban forest management recommendations. Examples include arborists, foresters, soil scientists, hydrologists, forest engineers, forest ecologists, and fishery and wildlife biologists, or technically trained specialists in such fields.
reforestation:	The reestablishment of forest cover either naturally or by seeding or planting of seedlings.
resilience or resiliency:	The overall capacity to recover from anthropogenic and natural disturbances.
riparian area:	Transition zone characterized by vegetation or geomorphology adjacent to rivers, streams, lakes, wetlands, and other water bodies.

SFI 2022 Audit Procedures and Auditor Qualifications and Accreditation:	The principles and guidelines that detail specific requirements to Certified Organizations and certification bodies for conducting audits to the SFI 2022 Forest Management, Fiber Sourcing, Chain-of-Custody, and Certified Sourcing Standards and the SFI Small Lands Group Certification Module and the SFI Small-Scale Forest Management Module for Indigenous Peoples and Families.
SFI certification:	A systematic and documented verification process to obtain and evaluate evidence objectively to determine whether a Certified Organization conforms to the requirements of SFI Standards and Rules.
SFI Implementation Committee:	A state, provincial, or regional committee organized by Certified Organizations to facilitate or manage the programs and alliances that support the growth of SFI certification, including sustainable forest management.
site:	1. A permanent location where an organization carries out work or a service. 2. An area in which a plant or forest stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation in the area can carry (<i>Dictionary of Forestry</i> , Society of American Foresters).
soil health:	The continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. (USDA)
special sites:	Sites that include geologically unique or culturally important features.
strategy:	Organized system, process, plans, or set of activities to achieve a goal or objective.
Sustainable Forestry Initiative (SFI):	SFI is a 501c(3) non-profit charitable organization, and is solely responsible for maintaining, overseeing, and improving the Sustainable Forestry Initiative. SFI directs all elements of the Sustainable Forestry Initiative and the SFI Standard(s), including forest management, fiber sourcing, and chain-of-custody certifications, and labeling and marketing. SFI is overseen by a three-chamber board of directors representing social, environmental, and economic sectors.
sustainable forestry:	To meet the needs of the present without compromising the ability of future generations to meet their own needs, by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing, and harvesting of trees for useful products and ecosystem services such as the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation, and aesthetics.
technical expert:	A person who provides specific knowledge or expertise to the audit team (ISO 19011 2018, 3.16).
third-party verification and certification:	An assessment of conformance to the SFI 2022 Standards and Rules conducted according to the requirements of SFI Section 10 SFI 2022 Audit Procedures and Auditor Qualifications and Accreditation, and ISO 19011, by a qualified certification body.
threatened and endangered:	Listed under The U.S. Endangered Species Act or the Canadian Species at Risk Act and/or listed under applicable state or provincial laws requiring protection.
traditional forest-related knowledge:	Forest-related knowledge owned and maintained by Indigenous Peoples as a result of their traditional use of or tenure on forestland.
tree equity:	Tree equity is achieved when a community has enough canopy cover for residents to reap the health, economic, and other benefits that trees provide.
urban forest management plan:	A document that describes how urban forestry goals are to be accomplished within a defined time frame; includes tasks, priorities, best management practices, standards, specifications, budgets, and staffing analyses.
pian:	specifications, budgets, and starting analyses.

urban forest:	Trees, forests, greenspace, and related abiotic, biotic, and cultural components in areas extending from an urban core to the urban-rural fringe. Urban forests may include parks, street trees, landscaped boulevards, gardens, river and coastal promenades, greenways, river corridors, wetlands, nature preserves, shelter belts of trees, and working trees at former industrial sites. Urban forests, through planned connections of green spaces, form the green infrastructure on which communities depend (U.S. Forest Service).
urban forester:	An individual trained in or practicing urban forestry.
urban forestry:	Management of naturally occurring and planted trees and associated plants in urban areas or communities.
urban wood:	Woody biomass reclaimed from urban areas for other purposes, often at their highest and best use. Urban wood is a plentiful, local, and renewable resource with unique design characteristics.
verifiable monitoring system:	A system capable of being audited by a third party that includes: 1. A means to characterize the Certified Organization's wood and fiber supply area, which may include sources certified to a standard that requires conformance with best management practices, including those sources from certified logging professionals; 2. A process to identify and use sources of available data (e.g., state or provincial monitoring programs, certification status of suppliers) in the use of best management practices; and 3. A method to assess supplier performance, if needed, to supplement available data.
vernal pool:	A seasonal wetland with sufficient water present during amphibian breeding season, an absence of fish, and the presence of wetland obligate fauna.
wetland:	1. Seasonally or permanently water-logged areas characterized by vegetation adapted for life in saturated /flooded conditions; 2. Wetlands can be forested, shrubby, grassy, or open and may include bogs, fens, swamps, marshes, and shallow open water areas; 3. wetlands may be stagnant systems (e.g., bogs, vernal pools), slow flowing (e.g., fens, swamps), or have fluctuating water levels (e.g., marshes, shallow open water).
wildlife:	Aquatic (marine and freshwater) and terrestrial fauna