

SFI Urban and Community Forest Sustainability Guidance

Summer 2022

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Introduction

This guidance document is intended to assist organizations and certification bodies in interpreting and implementing provisions in the SFI Urban and Community Forest Sustainability Standard. It provides additional information that may help organizations make management decisions to meet the 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 information contained below should not be taken as normative.

There are geographic differences across the globe when describing and defining urban forests and community forests. In the United States, many people think urban refers to very large municipalities such as New York, Los Angeles, and Houston. The USDA Forest Service and many state programs refer to their programs as urban and community forestry as more inclusive of smaller communities. In Canada and in much of the rest of the world, community forestry refers to more traditional forests that are located in or near communities and may be managed by a community for more traditional forest products. To be as inclusive as possible, SFI has facilitated the creation of this urban and community forest sustainability standard. We simplify the standard by referring to urban forestry and urban forests throughout the standard.

From the US 10-Year Urban Forestry Action Plan (https://urbanforestplan.org/wp-content/uploads/2015/11/FinalActionPlan Complete 11 17 15.pdf): "Urban forests are trees for people, where they live, work and play. Each person has a different way of thinking about the urban forest. In this Action Plan, and for many professionals, the urban forest includes all trees in the city, on public and private property, and within the many land uses one finds in cities and towns—homeowners' yards, school campuses, tree-lined streets, government properties, parks, and green spaces. Urban forests and vegetation are an urban ecosystem that is aesthetically pleasing, contributes to quality of life, supports community development and green infrastructure, and provides a wealth of benefits and values to cities and towns."

From Tree Canada's Urban Forest Strategy (https://treecanada.ca/wp-content/uploads/2019/04/TC-CUFS-2019-2024-Eng.pdf): "Urban forests are trees, forests, greenspace and related abiotic, biotic and cultural components in areas extending from the urban core to the urban-rural fringe. Urban forestry is the sustained planning, planting, protection, maintenance, management and care of trees, forests, greenspace along with related resources in and around cities as well as communities for economic, environmental, social, and public health benefits for people."

Urban forestry has been practiced in one form of another for more than 100 years, with increased emphasis in the last 40 years. Throughout this period there have been several approaches to evaluating or auditing urban forestry programs, but there has never been a standard and certification.

Intent

SFI has been active in forest management standards and certification for more than 25 years. Urban forestry standard and certification was raised during our last standards revision, in 2020-2021. SFI

formed a task group to evaluate the topic and surveyed the urban and community forestry sector in 2020 about bringing a standard and certification to the sector. The response was very positive, with more than 90 percent of the over 600 self-selected stakeholders indicating that they were supportive of SFI facilitating an urban forestry standard and certification. SFI entered the urban forestry sector in 2021 in partnership with American Forests, Arbor Day Foundation, International Society of Arboriculture, Society of Municipal Arborists, and Tree Canada. This standard and certification complements the existing efforts of all the dedicated individuals and organizations in urban and community forestry.

This standard is guided by five principles developed by representatives of the urban and community forestry sector.

PRINCIPLES:

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

Scope

This standard is appropriate for any organization that owns, manages, or is responsible for urban forests. These organizations can come from all facets of the urban forest sector including but not limited to: governmental organizations (i.e. municipalities, counties, states, provinces), non-governmental organizations, Indigenous Peoples, community groups, healthcare organizations, educational organizations, and corporate organizations.

There are no defined limits to the size and stocking of an urban forest. Property owners and managers can make the decision to manage to the Standard and seek certification of their urban forest. The organization will describe the extent of their urban forest. This could include all community owned and managed trees or could be limited to a single park.

Organizations will meet the standard through the following 16 objectives:

- Objective 1: Community and People
- Objective 2: Human Health and Well-being
- Objective 3: Conservation and Protection of Biodiversity
- Objective 4: Stewardship of Natural Resources including Air, Water, and Soil
- Objective 5: Forest and Tree Health and Vitality
- Objective 6: Special Sites including Natural Areas

- Objective 7: Climate-Smart Management
- Objective 8: Urban Forest Planning
- Objective 9: Management and Care of Urban Forests and Trees
- Objective 10: Disaster Readiness, Response, and Recovery
- Objective 11: Capacity Building
- Objective 12: Urban Wood Utilization
- Objective 13: Communications
- Objective 14: Science, Research, and Technology
- Objective 15: Legal and Regulatory Compliance
- Objective 16: Reporting

Objective 1: Community and People

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

- Performance Measure 1.1 Organization actively seeks and promotes public engagement
 - o **Indicator 1.1.1:** *Organization* identifies opportunities and events for community members to support and celebrate trees.

Guidance for *Indicator* 1.1.1: *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.

o **Indicator 1.1.2:** *Organization* has a body of *stakeholders* and partners that actively

Guidance for *Indicator* 1.1.2: *Organization* could maintain a Tree Board (see this Arbor Day Foundation document.)

participates in *planting* and maintaining community trees.

- Indicator 1.1.3: Organization recognizes people in the community who are champions
 of the urban forest and its wood resources.
- **Performance Measure 1.2** *Organization* respects diverse perspectives.
 - o **Indicator 1.2.1:** *Organization* involves communities with diverse cultural and socioeconomic backgrounds.

Guidance for *Indicator* 1.2.1: *Organization* could hold conversations, assemble focus groups, or survey diverse populations regarding *urban forests* and trees.

- o **Indicator 1.2.2:** *Organization* includes perspectives from *diverse communities* partners in planning, management, and educational opportunities.
- **Performance Measure 1.3** *Organization* upholds *Indigenous rights* and perspectives.

- Indicator 1.3.1: Organization acknowledges land rights and treaties in communications, plans, and policies, and provides access to education and training for employees and volunteers.
- Indicator 1.3.2: Organization upholds Indigenous rights through meaningful engagement, access to decision making, and a culturally safe place to share information and perspectives.
- o **Indicator 1.3.3:** *Organization* uses a mechanism to embrace, welcome, and prioritize local Indigenous ways of knowledge in urban *forest* planning and management.
- Indicator 1.3.4: Organization has active projects that increase access to land and water for healing, celebration, learning, and growth.
- **Performance Measure 1.4** *Organization* ensures equitable access to *urban forests*, trees, and their associated benefits.
 - o **Indicator 1.4.1:** Demonstrates that the *program* prioritizes *tree equity* for all

Guidance for *Indicator* 1.4.1: *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.

stakeholders.

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

Objective 2: Human Health and Well-being

Guidance for *Indicator* 1.1.2: adherence to the Americans with Disabilities Act (ADA) or the Accessible Canada Act (ACA) compliance could be used as a metric for physical access.

Guidance for *Objective* 2: The connection between *urban forests*, trees, and human health continues to grow. An *organization* can use resources such as <u>vibrantcitieslab.com/toolkit</u> or https://healthytreeshealthylives.org/ to inform their *programs*.

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.

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

Guidance for *Indicator* 2.1.1: *Organization* could include heat-zone maps and public health data in their assessment and management studies. (i.e. <u>texastrees.org/resource/urban-heat-island-management-study</u>)

- o **Indicator 2.1.2:** *Organization* demonstrates how human health and well-being aspects are integrated in forest- and tree-related management decisions.
- **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.
 - Indicator 2.2.2: Organization gathers information from internal and external audiences to establish feedback mechanisms and evaluate its program as related to human health and well-being.
- Performance Measure 2.3: Organization establishes metrics for assessing recreational, commuting, and travel opportunities.
 - o **Indicator 2.3.1:** Organization has accessible parks or greenspaces that are utilized.
 - Indicator 2.3.2: Organization has and implements strategies to increase universal access and utilization of parks and greenspaces.
 - Indicator 2.3.3: Organization includes urban forests and trees in travel, commuting,

Guidance for *Indicator* 2.3.3 *Organization* could use a resource such as vibrantcitieslab.com/transportation to improve their *urban forest* connection to transportation.

and mobility plans and strategies.

Objective 3: Protection and Conservation of Biodiversity

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

- **Performance Measure 3.1:** *Organization* incorporates the *conservation* of *native biological diversity* at *urban forest*, urban park, and street tree levels.
 - o **Indicator 3.1.1:** Organization develops criteria and implements practices, as guided by regionally based best scientific information, to retain urban-level wildlife habitat

Guidance for *Indicator* 3.1.1: *Wildlife habitat* elements can include snags, stumps, mast trees, down woody debris, den trees, and nest trees.

elements.

 Indicator 3.1.2: Organization works individually or collaboratively to support diversity of native forest cover types and age or size classes that enhance biological diversity at the urban and community scale.

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Guidance for *Indicator* 3.1.2: *Organization* could include documenting *diversity* of forest cover types and age or size classes at the individual ownership or *urban forest* tenure level, and where credible data are available at the urban and community level.

- Indicator 3.1.3: Organization participates in or incorporates the results of state, provincial, or regional conservation planning and priority-setting efforts to conserve biological diversity in urban forest management.
- 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.
- **Performance Measure 3.2:** Organization protects threatened and endangered species, Forests with Exceptional Conservation Values, and old-growth forests or trees.
 - o **Indicator 3.2.1:** *Organization protects threatened and endangered* species.
 - Indicator 3.2.2: Organization locates and protects known sites of flora and fauna associated with viable occurrences of critically imperiled and imperiled species and communities.

Guidance for *Indicator* 3.2.2: Plans for *protection* may be developed independently or collaboratively and may include management by *organization*, cooperation with other *stakeholders*, or use of easements, *conservation* land sales, exchanges, or other *conservation strategies*.

- o **Indicator 3.2.3:** *Organization* supports or participates in plans or *programs* for the *conservation* of old-growth *urban forests* or trees.
- **Performance Measure 3.3:** Organization manages wildlife habitat and contributes to the conservation of biological diversity.

Guidance for *Performance* Measure 3.3: *Organization* could utilize relevant *programs* such as the Wildlife Habitat Council's Conservation Certification Standard to illustrate their *conservation* efforts.

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

Guidance for *Indicator* 3.3.1: *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 utilizes a strategy to incorporate research results and field applications of biodiversity and ecosystem research into urban forest management decisions.

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

To consider the impact of the *urban 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
 - o **Indicator 4.1.1:** *Organization* implements water and air quality *best management practices* during all phases of management activities.
 - o **Indicator 4.1.2:** *Organization* monitors implementation of overall *best management practices* to *protect* air, water, and soil.
- **Performance Measure 4.2:** Organization implements water, wetland, and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, governmental best management practices and guidelines, and other applicable factors.
 - Indicator 4.2.1: Organization addresses management and protection of rivers, streams, lakes, wetlands, other water bodies, and riparian areas during all phases of management, including the layout and construction of roads and urban infrastructures, to maintain water reach, flow, and quality.
 - Indicator 4.2.2: Organization maps rivers, streams, lakes, wetlands, and other water bodies as specified in governmental best management practices and, where appropriate, identifies them on the ground.
 - o **Indicator 4.2.3:** *Organization* documents and implements *strategies* to manage and *protect* rivers, streams, lakes, *wetlands*, other water bodies, and *riparian areas*.
 - Indicator 4.2.4: Plans that address wet-weather events to maintain water quality (e.g., urban forest inventory systems, wet-weather tracts, definitions of acceptable operating conditions).
- **Performance Measure 4.3.** Organization implements a strategy to protect soil quantity, quality, and health during *urban forest* management.
 - Indicator 4.3.1: Organization considers soil attributes during tree planting and reforestation activities.
 - o **Indicator 4.3.2:** *Organization* implements *best management practices* to *protect* soils from degradation and/or rehabilitate damaged soils.

Guidance for *Indicator* 4.3.2: *Organization* could adopt and utilize the latest edition of *Best Management Practices - Soil Management for Urban Trees*, by Bryant C. Scharenbroch and E. Thomas Smiley in their *program*.

Objective 5: Forest and Tree Health and Vitality

To ensure the long-term viability of *urban 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 for *Performance Measure* 5.1: *Organization* could implement a plant focused management *strategy* to address health and vitality. Resource *Using IPM in the Landscape* from Washington State University.

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

- Indicator 5.1.2: Organization utilizes alternate management options where appropriate such as prescribed fire, rotational grazing, and natural regeneration to increase forest health and vitality.
- **Performance Measure 5.2:** *Organization* uses planning to guide *planting* and establishment to enhance *urban 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, and are not *invasive* or otherwise destructive.
 - Indicator 5.2.2: Organization selects tree planting sites for optimal tree growth and performance.
 - Indicator 5.2.3: Organization utilizes a regular, proactive tree health monitoring program to assess tree stress and survival.
- **Performance Measure 5.3:** *Organization* facilitates the coexistence of trees and the built environment.

Guidance for *Performance Measure* 5.3: *Organization* could adopt and implement latest edition of "Best Management Practices – Integrated Vegetation Management," by Randall H. Miller.

- o **Indicator 5.3.1:** *Organization* ensures that the built environment is considered in *urban forest* planning and maintenance operations.
- o **Indicator 5.3.2:** *Organization* modifies or removes the built environment, when feasible, to improve forest and tree health.
- o **Indicator 5.3.3:** *Organization* has a process to prune or remove trees, as necessary, to *minimize* conflict with infrastructure and critical lines of sight.
- Performance Measure 5.4: Organization manages soil health to support urban forest health.
 - o **Indicator 5.4.1:** *Organization* **s**pecifies appropriate soil volumes for *sites* and species during *planting*.

- o **Indicator 5.4.2:** *Organization* implements a continual soil improvement *program* that utilizes natural or augmented organic matter cycling, and tests soils prior to fertilization and modification.
- Indicator 5.4.3: Organization minimizes negative effects of soil compaction through the
 use of protective measures during construction, utilizing engineered solutions, or using
 structural soils.
- **Performance Measure 5.5:** Organization protects urban forests and trees from damaging agents.
 - o **Indicator 5.5.1:** *Organization* implements a *strategy* to monitor for damaging agents and *invasive species*, prevent damage, and properly mitigate such damage.
 - Indicator 5.5.2: Organization establishes policies or procedures to mitigate damage from human activities.

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 identifies, evaluates, and maps natural areas, natural area features, and special sites within urban forests.
 - Indicator 6.1.1: Organization uses a system to identify, map, plan for, and manage natural areas and special sites, based on conservation objectives that have been prioritized by the organization.

Guidance for *Indicator* 6.1.1: *Organization* should consult appropriate professionals, resource managers, First Nations, and other *stakeholders* 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 6.2:** Organization employs measures to manage natural areas and special sites to protect, preserve, conserve, maintain, restore, and/or enhance their functions based on management plan requirements.
 - Indicator 6.2.1: Organization utilizes written policies, ordinances, by-laws, and/or codes that establish standards for the protection and conservation of special sites and natural areas.

Guidance for *Indicator* 6.2.1: *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*
- Indicator 6.2.2: Organization monitors performance against the standards for protection, preservation, and conservation.
- **Performance Measure 6.3:** *Organization* ensures that natural areas and *special sites* are managed to maintain, restore, or enhance their functions.
 - o **Indicator 6.3.1:** *Organization* has implemented *strategies* or written operational guidelines appropriate to the scope and scale of the managed *site(s)*.

Guidance for *Indicator* 6.3.1 - *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.
- City of Toronto's Environmentally Significant Areas.
- Rouge National Urban Park Management plan 2019.

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*.

Guidance for *Objective 7 - Organization* could utilize resources such as:

- USDA Climate Hubs. For example, "<u>Vulnerability Assessment of Austin's Urban Forest and</u> Natural Areas."
- City Forest Credits.

- **Performance Measure 7.1:** Organization monitors and strives to maximize the *ecosystem* services provided by their *urban forest*.
 - o **Indicator 7.1.1:** *Organization* quantifies annual carbon sequestration and total carbon storage benefits, stormwater benefits, air quality and temperature benefits, and aesthetic/economic benefits; and tracks trends over time.
 - Indicator 7.1.2: Organization utilizes tree planning and management efforts to maximize
 ecosystem services related to carbon sequestration, energy conservation, urban heat
 island mitigation, stormwater mitigation, air-quality improvement, and economic
 vitality.
 - Indicator 7.1.3: Organization incentivizes the use of trees and green infrastructure to minimize greenhouse gas emissions while maximizing carbon sequestration and avoided emissions.
- Performance Measure 7.2: Organization monitors and takes steps to minimize the carbon footprint of their urban forestry operations.
 - o **Indicator 7.2.1:** Organization minimizes operational carbon footprints; includes a regular basic CO₂/Green House Gasses (GHGs) assessment for *urban forestry* operations.
 - o **Indicator 7.2.2:** Organization demonstrates that strategies are in place to maximize urban wood and woody biomass utilization to close waste loops, minimize the release of GHGs into the atmosphere, and help create a circular economy.
- Performance Measure 7.3: Organization regularly assesses and works to address the various vulnerabilities within their jurisdictions related to climate change and extreme weather.
 - o **Indicator 7.3.1:** *Organization* implements a *strategy* to address the effects of urban heat islands, ecological disruption, and social/economic disruption due to *climate* change.
 - o **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*.
- Performance Measure 7.4: Organization works 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.
 - Indicator 7.4.1: Organization demonstrates that its urban forestry goals are tied to social and environmental justice efforts, economic development, educational and cultural enhancement initiatives, and active transportation efforts.
 - Indicator 7.4.2: Organization promotes food production and green entrepreneurship strategies to build social resilience.

Objective 8: Urban Forest Planning

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

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

Guidance for *Indicator* 8.1.1: At least one current forest resource assessment 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 stakeholder interviews.
 - 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 forest system vulnerabilities.
- Performance Measure 8.2: Organization supports and promotes planning efforts by consulting relevant and interested community stakeholders.

Guidance for Performance Measure 8.2: Stakeholders 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 stakeholders to advise on
 the establishment, conservation, protection, and maintenance of urban and community
 trees and forests, to ensure inclusivity and collaboration.
- **Performance Measure 8.3**: *Organization* has comprehensive interdisciplinary planning *strategies* that are integrated with other departments and internal administrative groups and align with *stakeholder* interests and goals.
 - Indicator 8.3.1: Organization has a clearly defined vision that, at the highest level, guides planning and management decisions.
 - Indicator 8.3.2: Organization has documented strategies that support current goals and operational targets.

Guidance for *Indicator* 8.3.2: *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 Forests and Trees

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

Guidance for *Objective* 9: A municipal *organization* could participate in the Society of Municipal Arborists' Accreditation Program to show commitment to municipal *forestry* management.

- **Performance Measure 9.1:** Organization has management authority and a *qualified resource* professional directing urban forest management and maintenance activities.
 - 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 community
 forestry program.

Guidance for *Indicator* 9.1.1: 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) 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 protection, care, and management of urban trees and forests through ordinances, charter, or other guiding policies or agreements.
- o **Indicator 9.1.3:** *Organization* regularly convenes *stakeholders* to coordinate *urban forestry policy, practices,* and/or project activities.
- **Performance Measure 9.2:** *Organization* adopts and implements *urban forest* policies, procedures, and standards.
 - 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.
 - Indicator 9.2.2: Organization has development policies, standard operating procedures, regulations, and standards that detail requirements for tree protection, permitting, inspection, mitigation, and noncompliance penalties for trees on public and private property during land disturbance, development, and infrastructure maintenance activities.

Guidance for *Indicator* 9.2.2: *Organization* could adopt current the ISA "Best Management Practices - *Managing Trees During Construction*." Tree *Protection* examples 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 9.2.3: Organization regularly assesses and utilizes current and scalable urban tree health, canopy distribution, and social and ecological vulnerability, and ecosystem

services data to inform, formulate, and adopt *urban 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 urban tolerant trees on managed public and/or private property, including green stormwater infrastructure, in accordance with nationally or regionally adopted best management practices.
 - Indicator 9.3.2: Organization demonstrates appropriate follow-up care and establishment for all trees planted based on species, size and type of stock, site characteristics, local climate, and maintenance needs.
 - Indicator 9.3.3: Organization has policy, public relations, educational outreach, and/or public assistance programs that encourage private landowners to replace trees that have died, blown down, or been removed.
 - o **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.
- **Performance Measure 9.4:** *Organization* maintains managed forests and trees under their jurisdiction.
 - o **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*.
 - 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.
 - o **Indicator 9.4.3:** *Organization* annually conducts systematic, visual assessments of 15% or more of the managed tree population for *forest health*, structural defect, and risk management, and prescribes and performs proactive pruning and restorative maintenance as needed to sustain a safe and healthy *urban forest* that coexists with the built environment.
- Performance Measure 9.5: Organization preserves and protects trees and forests.
 - Indicator 9.5.1: Organization has 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.

Guidance for *Indicator* 9.5.1: Administrative actions could include:

- Stop work orders.
- Citations.
- Permit revocation.
- Withholding of occupancy permit.
- Redemption of performance bonds.
- Mitigation orders.
- Judicial process.

o **Indicator 9.5.2:** *Organization* demonstrates inclusive community engagement, equitable protocols, and targeted programming to ensure that trees and forests are preserved and protected in all neighborhoods regardless of social, ethnic, or economic demographics.

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

Guidance for *Performance Measure* 10.1: *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.

natural events and disasters that can reasonably be anticipated.

- Indicator 10.1.1: Organization assesses risks and develops written and equitable disaster response strategies, including debris management, appropriate for events in its region.
- o **Indicator 10.1.2:** *Organization* implements 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.
- **Performance Measure 10.2:** *Organization* implements adopted disaster-response *strategies* in response to events.
 - o **Indicator 10.2.1:** *Organization* activates appropriate response teams, integrates with other emergency management operations, and follows governmental emergency

Guidance for *Indicator* 10.2.1: *Organization* could work with groups such as state *urban forestry programs* or the Urban Forest Strike Teams.

management guidelines or programs where appropriate.

- o **Indicator 10.2.2:** *Organization* maximizes opportunities to preserve damaged trees and divert woody debris for highest and best uses.
- Performance Measure 10.3: Organization implements recovery strategies after an event.

Guidance for *Performance Measure* 10.3: *Organization* could work with other *organizations* and *program* such as:

- Arbor Day Foundation's <u>Community Tree Recovery</u>.
- Keep America Beautiful's Retreet program.
- American Forests' <u>Trees for Community Recovery</u>.
- Tree Canada's Operation Releaf https://treecanada.ca/operationreleaf/
 - Indicator 10.3.1: Organization has and implements a risk mitigation program to reduce residual risk following events.
 - o **Indicator 10.3.2:** *Organization* implements effective *reforestation*, restoration, or replanting *strategies* following events.
 - o **Indicator 10.3.3:** *Organization* assesses the impact of events and evaluates the effectiveness of their readiness, response, and 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 and stewardship, and performance review.

- **Performance Measure 11.1**: *Organization* ensures budgets are in place for *urban forestry* operations.
 - o **Indicator 11.1.1:** *Organization* has a dedicated budget for *urban forestry* related activities.
 - Indicator 11.1.2: Organization assesses current and future budgeting needs based on strategies, plans, and desired future conditions and/or goals.
- **Performance Measure 11.2**: *Organization* actively engages *stakeholders*.
 - Indicator 11.2.1: Organization produces an annual report of engagement with decision makers, leaders, citizens, and interdivisional actors based on outreach and engagement plans.
 - o **Indicator 11.2.2:** *Organization* works with volunteers and tracks the number of hours worked, if applicable.

- **Performance Measure 11.3**: Organization utilizes performance reviews to improve its program.
 - Indicator 11.3.1: Organization employs a regular review process of the implementation of relevant strategies with action steps identified to achieve desired future conditions and/or goals.
 - 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.
 - Indicator 11.4.2: Organization provides opportunities for continuing educational development.

Objective 12: Urban Wood Utilization

To ensure the highest and best use of urban wood resources and minimize waste from our urban and

Guidance for *Objective* 12: *Organization* could adopt and utilize the <u>USRW Certified Wood Standards</u> to assist with their *urban wood* utilization.

community forests.

- **Performance Measure 12.1**: *Organization* has a verifiable *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.
 - o **Indicator 12.1.1:** *Organization* includes *urban wood* utilization targets including criteria used to determine the best use for various wood products based upon size, quality,

Guidance for Indicator 12.1.1: Best use 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.

circumstances, and available local resources.

- o **Indicator 12.1.2:** *Organization* utilizes an evaluation process to assess past performance and establish future goals for *urban wood* utilization.
- **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

Guidance for *Performance Measure* 12.2: *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.

Guidance for *Indicator* 12.1.2 *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.

understanding that the highest and best use will vary due to region and circumstance.

- Indicator 12.2.1: Organization supports local utilization of wood through investments, purchases, or supplying materials.
- o **Indicator 12.2.2:** *Organization* facilitates ongoing training that ensures trees are removed in a manner that supports the highest use and value.
- **Performance Measure 12.3:** *Organization* engages property *stakeholders* and *urban wood* professionals in support of a self-sustaining network to build sufficient long-term capacity.
 - o **Indicator 12.3.1:** *Organization* facilitates community engagement with *urban wood* utilization.
 - Indicator 12.3.2: Organization participates in urban wood use organizations,

Guidance for *Indicator* 12.3.2: *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.

memberships, arrangements, or contracts with *urban wood* professionals.

 Indicator 12.3.3: Organization supports industry approved standards and chain-ofcustody procedures or policies.

Objective 13: Communications

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

- **Performance Measure 13.1:** Organization has a communication strategy that includes outreach, engagement, and education about *urban forests* and trees, the associated values and benefits, and the need for management and care.
 - o **Indicator 13.1.1:** *Organization* prioritizes bi-directional and diverse communication.
 - Indicator 13.1.2: Organization utilizes multiple methods of shareable and accessible information about the *urban forest*, communicating about policies and who's responsible for them, with contact information.
 - o **Indicator 13.1.3:** *Organization* evaluates the effectiveness of communication efforts annually and adjusts as needed.
- **Performance Measure 13.2:** *Organization* invests in *urban forest* and tree-related communication efforts.
 - o **Indicator 13.2.1:** *Organization* documents the resources utilized to communicate about the *urban forest* and trees inside and outside of the *organization*.
 - o **Indicator 13.2.2:** *Organization* implements a communication *strategy* and shares its accomplishments internally and externally.

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 forestry and urban wood practitioners to sustain membership in or receive training from professional organizations.
 - o **Indicator 14.1.2:** *Organization* participates in groups or *organizations* that increase access to research.

Guidance for *Indicator* 14.1.2: *Organization* should participate in 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.

• **Performance Measure 14.2:** *Organization* participates and/or invests in research that advances *urban forestry practices* locally and/or at larger scale.

 Indicator 14.2.1: Organization commits resources to collaborate with stakeholders and partners to advance social science or applied urban forestry research when opportunities arise.

Guidance for *Indicator* 14.2.1: 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 forestry when opportunities arise, including contributing to projects or sharing findings within peer networks.

Guidance for *Indicator* 14.2.2: *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 their *urban forest*.
 - Indicator 14.3.1: Organization is involved in activities that promote the dissemination of research.

Guidance for *Indicator* 14.3.1: Activities could include sharing via popular press, social media, peer networks, communities of *practice*, and lead or co-authorship of manuscripts.

- o **Indicator 14.3.2:** *Organization* applies relevant, current research in management *strategies*.
- **Performance Measure 14.4:** *Organization* acquires and utilizes technology that supports sustainable resource management.
 - o **Indicator 14.4.1:** *Organization* invests in staff training for applications of technology used in sustainable resource management.
 - o **Indicator 14.4.2:** *Organization* is transparent regarding data collected via technology.
 - Indicator 14.4.3: Organization utilizes technology and related data to promote equitable access to urban forests within jurisdiction or organization.

Objective 15: Legal and Regulatory Compliance

To comply with applicable laws and regulations.

- **Performance Measure 15.1:** *Organization* complies with applicable *urban forestry* and related social and environmental laws and regulations.
 - Indicator 15.1.1: Organization has access to relevant laws and regulations in appropriate locations.
 - o **Indicator 15.1.2:** *Organization* has a system for achieving compliance with applicable laws and regulations.
 - o **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.
 - 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.

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 their conformance with the *SFI* Urban and Community Forest Sustainability Standard.
 - o **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.
 - 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.
 - o **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.

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).
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,

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	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	The variety and abundance of life forms, processes, functions, and structures of plants,
diversity:	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.
certification	An independent third party that is accredited by: • ANSI-ASQ National Accreditation
body:	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 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	Term used in the USA for smaller communities that don't consider themselves 'Urban';
forest:	see urban forest. Note that "community forests" 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, "Community Forests: A Path to Prosperity and Connection," and the US
	Forest Service's <u>Community Forest and Open Space Conservation Program</u> .
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	A plant or animal or community, often referred to as G1, that is globally extremely rare
imperiled:	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.)
culturally	Having significance for or being representative of human activities or beliefs (e.g.,
important:	documented areas such as cemeteries, sacred sites).
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 cultural
communities:	characteristics exist.

ecologically important:	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 embracing the science, art, and practice of creating, managing, using, and conserving forests and associated resources for human benefit and in a sustainable manner to meet desired goals, needs, and values.
Forests with Exceptional Conservation Value:	Critically imperiled (G1) and imperiled (G2) species and ecological communities.
geographic information system (GIS):	An organized collection of computer systems, personnel, knowledge, and procedures designed to capture, store, update, manipulate, analyze, report, and display forms of geographically referenced information and descriptive information.
green infrastructure:	Living plants and natural materials within developed areas. Can be incorporated with gray infrastructure (utilities, paved surfaces, and buildings) to perform important ecological functions such as stormwater management, erosion control, temperature buffering, and more.
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. (Further 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 Peoples:	Inclusive of all Indigenous Peoples residing in Canada and the United States. More specifically, Indigenous Peoples are defined in the United States as members of federally recognized tribes and in Canada as those peoples that are recognized by section 35(2) of

Indigenous rights:	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 National Council as well as the Métis Settlements General Council. Aboriginal rights refer to practices, traditions, and customs that distinguish the unique culture of each First Nation and were practiced prior to European contact. These are rights that some Aboriginal peoples of Canada hold as a result of their ancestors' longstanding use and occupancy of the land. The rights of certain peoples to hunt, trap, and fish on ancestral lands are examples of Aboriginal rights. Aboriginal rights vary from group to group, depending on the customs, practices, and traditions that have formed part of their distinctive cultures. Aboriginal rights are protected under s.35 of the Constitution Act, 1982.
integrated pest management:	The careful consideration of all available pest control techniques and subsequent 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.
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: • similar biogeoclimatic conditions that influence site potential; • similar historical disturbance regimes that influence vegetation structure and species composition; and • 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, 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 organizations 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 city's tree canopy. More important, it provides a shared vision for the future of the urban forest to inspire and engage stakeholders 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.

verification and certification:	to the requirements of SFI Section 10 SFI 2022 Audit Procedures and Auditor Qualifications and Accreditation, and ISO 19011, by a qualified certification body.
technical expert:	A person who provides specific knowledge or expertise to the audit team (ISO 19011 2018, 3.16). An assessment of conformance to the SFI 2022 Standards and Rules conducted according
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.
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.
strategy:	standard. Organized system, process, plans, or set of activities to achieve a goal or objective.
special sites: stakeholder:	Sites that include geologically unique or culturally important features. A person, group, community, or organization with an interest in the subject of the
soil health:	The continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. (USDA)
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).
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.
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.
Procedures and Auditor Qualifications and Accreditation:	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.
riparian area: SFI 2022 Audit	Transition zone characterized by vegetation or geomorphology adjacent to rivers, streams, lakes, wetlands, and other water bodies. The principles and guidelines that detail specific requirements to Certified Organizations
resilience or resiliency:	The overall capacity to recover from anthropogenic and natural disturbances.
professional: reforestation:	engineers, forest ecologists, and fishery and wildlife biologists, or technically trained specialists in such fields. The reestablishment of forest cover either naturally or by seeding or planting of seedlings.
qualified resource	A person who by training and experience can make urban forest management recommendations. Examples include foresters, soil scientists, hydrologists, forest

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.
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.
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.
visual quality:	The visual aspects of both the landscape and the activities that occur on it.
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