SFI Urban and Community Forest Sustainability Standard

November 1, 2021

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Over 80% of people in North America and 60% around the world live in cities and towns and those numbers continue to climb. Trees close to home—where we live, work, learn, and play—have many benefits. They help us to combat climate change by capturing greenhouse gases and they mitigate the heating of cities—"the heat island effect"—while improving public health, providing recreation space, and so much more. These trees, collectively, and their associated environment make up our urban and community forests.

Urban and community forestry, including the utilization of urban wood, is essential to maximizing the benefits and minimizing the risks that forests and trees play in our cities and towns. For ease of communication, we will refer to both urban and community forests and their care as urban forests and urban forestry, respectively, throughout this standard.

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 from people to thrive in communities.

- **Urban forests and trees** and their associated benefits should be accessible and available to all.

- **Urban forests and trees** are nature-based solutions to pressing issues and essential green infrastructure.

The SFI Urban and Community Forest Sustainability Standard strives to address the environmental, social, and governance issues that will help ensure the sustainability of our urban forests. We can meet these principles by building our capacity, growing our network of support, and continually striving to improve our forests and programs through the following objectives:

- **Objective 1 Community and People**
- **Objective 2 Human Health and Well-being**
- **Objective 3 Conservation and Protection of Biodiversity**
- **Objective 4 Protection and Conservation of Water and Air**
- **Objective 5 Forest and Tree Health and Vitality**
- **Objective 6 Natural Areas and Special Sites**
- **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 cultural perspectives, recognize Indigenous rights, and ensure equitable access for all to the many benefits of urban and community forests.

- **Performance Measure 1.1 –** Organization will ensure equitable access to urban forests, trees, and their associated benefits.

  - o **Indicator 1.1.1:** Organization uses a metric to quantify tree canopy within diverse communities. Demonstrates that the program is prioritizing tree equity for all communities. Tree equity is achieved when a community has enough canopy cover for residents to reap the health, economic, and other benefits that trees provide.

  - o **Indicator 1.1.2:** Organization uses a metric to quantify access to greenspaces that meets diverse usage (e.g., the Americans with Disabilities Act (ADA) or the Accessible Canada Act (ACA) compliance)

- **Performance Measure 1.2 –** Organization recognizes Indigenous rights and perspectives.

  - o **Indicator 1.2.1:** Organization acknowledges land rights, treaties in communications, plans, policies, and provides access to education and training for employees and volunteers.

  - o **Indicator 1.2.2:** Organization upholds Indigenous rights through meaningful engagement, access to decision making and a culturally safe place to share.

  - o **Indicator 1.2.3:** Organization uses a mechanism to embrace and welcome and prioritize local Indigenous ways of knowledge into urban and community forest planning and management. Organization facilitates multiple knowledge systems related to biodiversity, conservation, and stewardship.

  - o **Indicator 1.2.4:** Organization has active projects that increase access to land and water for healing, celebration, learning, and growth.

- **Performance Measure 1.3 –** Organization respects cultural perspectives

  - o **Indicator 1.3.1:** Organization involves communities with diverse cultural and socioeconomic backgrounds including a survey or dialogue with representative community members each year.

  - o **Indicator 1.3.2:** Organization includes diverse communities partners' "voices" in planning, management, and educational opportunities.

- **Performance Measure 1.4 –** Organization will enhance local economies

  - o **Indicator 1.4.1:** Organization supports local and Black, Indigenous, and other people of color (BIPOC) vendors in procurement processes.

  - o **Indicator 1.4.2:** Organization facilitates utilization of urban wood locally.

- **Performance Measure 1.5 –** Organization will broaden public engagement

- o **Indicator 1.5.1:** Organization identifies opportunities for community members to support and celebrate trees (e.g., Arbor Day).

- o **Indicator 1.5.2:** Organization has a body of stakeholders and partners (e.g., a Tree Board) that has active participation in management, care, and removal of community trees.

- o **Indicator 1.5.3:** Organization recognizes community champions of the urban forest and the urban wood resources that come from it.

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, safe, and equitable 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 written plans.

  - o **Indicator 2.1.2:** Organization shows how human health and well-being is utilized in forest and tree-related management decisions.

- ● **Performance Measure 2.2:** Organization promotes human health benefits of forests and trees through multiple communication efforts.

  - o **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.

  - o **Indicator 2.2.2:** Organization gathers information and feedback from internal and external audiences to establish feedback loops and evaluate their program as related to human health and well-being.

- ● **Performance Measure 2.3:** Organization provides nature-based recreational, commuting, and travel opportunities as appropriate.

  - o **Indicator 2.3.1:** Organization has accessible parks or greenspaces for employees and the public, as appropriate.

  - o **Indicator 2.3.2:** The parks and greenspaces are utilized by the employees and public.

  - o **Indicator 2.3.3:** Organization has and implements plans to increase universal access and utilization of parks and greenspaces.

  - o **Indicator 2.3.4:** Organization includes forests and trees in travel and commuting plans and considerations.

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 conserves natural resources.

  o **Indicator 3.1.1:** Organization incorporates the conservation of native biological diversity, including species, wildlife habitats, and ecological community types at urban forest, urban park, and street tree levels.

  o **Indicator 3.1.2:** Organization develops criteria and implements practices, as guided by regionally based best scientific information, to retain urban-level wildlife habitat elements such as snags, stumps, mast trees, down woody debris, den trees, and nest trees.

  o **Indicator 3.1.3:** 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 including 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.

  o **Indicator 3.1.4:** Organization will participate in or incorporate the results of state, provincial, or regional conservation planning and priority-setting efforts to conserve biological diversity and consider these efforts in urban forest management planning.

  o **Indicator 3.1.5:** Organization will address conservation of known sites with viable occurrences of significant species of concern.

  o **Indicator 3.1.6:** Identification and protection of non-forested wetlands, including bogs, fens and marshes, and vernal pools of ecological significance.

  o **Indicator 3.1.7:** Organization participates in programs and demonstrates activities as appropriate to limit the introduction, spread and impact of invasive exotic plants and animals that directly threaten or are likely to threaten native plant and animal communities.

  o **Indicator 3.1.8:** Consider the role of natural disturbances, including the use of prescribed or natural fire where appropriate, and forest health threats in relation to biological diversity when developing urban forest management plans.

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

  o **Indicator 3.2.1:** Program to protect threatened and endangered species.

  o **Indicator 3.2.2:** Program to locate and protect known sites of flora and fauna associated with viable occurrences of critically imperiled and imperiled species and communities. 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:** Support of and participation in plans or programs for the conservation of old-growth urban forests or trees in the urban and community forest.

- **Performance Measure 3.3:** Organization will manage ecologically important sites in a manner that takes into account their unique qualities.

    - o **Indicator 3.3.1:** Use of information such as existing natural heritage data or expert advice in identifying or selecting ecologically important sites for protection.

    - o **Indicator 3.3.2:** Appropriate mapping, cataloging, and management of identified ecologically important sites.

- **Performance Measure 3.4:** Organization will apply knowledge gained through research, science, technology, and field experience to manage wildlife habitat and contribute to the conservation of biological diversity.

    - o **Indicator 3.4.1:** Collection of information on Forests with Exceptional Conservation Value and other biodiversity-related data through forest inventory processes, mapping, or participation in external programs, such as NatureServe, 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.

    - o **Indicator 3.4.2:** A methodology to incorporate research results and field applications of biodiversity and ecosystem research into urban forest management decisions.

Objective 4: Protection and Conservation of Water and Air

- **Performance Measure 4.1:** Organization will meet or exceed all applicable federal, provincial, state, and local water and air quality laws, and meet or exceed best management practices developed under Canadian or U.S. government–approved water and air quality programs

    - o **Indicator 4.1.1:** Program to implement federal, state, or provincial water and air quality best management practices during all phases of management activities.

    - o **Indicator 4.1.2:** Contract provisions that specify conformance to best management practices.

    - o **Indicator 4.1.3:** Monitoring of overall best management practices implementation.

- **Performance Measure 4.2:** SFI-certified organizations shall implement water, wetland, and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state or provincial best management practices, provincial guidelines, and other applicable factors.

    - o **Indicator 4.2.1:** Program addressing 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.

- o **Indicator 4.2.2:** Mapping of rivers, streams, lakes, wetlands, and other water bodies as specified in state or provincial best management practices and, where appropriate, identification on the ground.

- o **Indicator 4.2.3:** Documentation and implementation of plans to manage and protect rivers, streams, lakes, wetlands, other water bodies, and riparian areas.

- o **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).

Objective 5: Forest and Tree Health and Vitality

To ensure long-term viability of natural resources, such as urban forest resources, by providing for integrated plant management, adequate spacing, coexistence with built environments, soil conservation, and protection from damaging agents.

- ● **Performance Measure 5.1:** Organization uses integrated plant management during operations.

  - o **Indicator 5.1.1:** Personnel and/or volunteers are trained in recognizing symptoms and signs of infections, infestations, and other biotic and abiotic problems.

  - o **Indicator 5.1.2:** Appropriate pest controls are implemented, when necessary, using integrated pest management methods.

  - o **Indicator 5.1.3:** Utilizes the most efficient and effective irrigation for establishment and care of trees.

  - o **Indicator 5.1.4:** Considers alternate management options such as prescribed fire, rotational grazing, and natural regeneration in the urban forest to increase forest health and vitality.

- ● **Performance Measure 5.2:** Organization will use planning, planting, and establishment to enhance urban forest health and vitality.

  - o **Indicator 5.2.1:** Planning, policy, and procedure include the right tree, in the right place, for the right reason.

  - o **Indicator 5.2.2:** Tree species and specimens are well-suited to local growing conditions, are climate-adapted, and are not invasive or otherwise destructive.

  - o **Indicator 5.2.3:** Tree planting sites are selected for optimal growing space.

  - o **Indicator 5.2.4:** Regular, proactive tree health monitoring program in place to assess tree stress.

- ● **Performance Measure 5.3:** Organization will facilitate the coexistence of trees and the built environment.

- o **Indicator 5.3.1:** Consideration of built environment is included in planning and maintenance operations.

- o **Indicator 5.3.2:** Built environment is modified or removed, when possible, to improve forest and tree health.

- o **Indicator 5.3.3:** Trees are pruned or removed as necessary to minimize conflict with infrastructure and critical lines of sight.

- ● **Performance Measure 5.4:** Organization will manage soil health to support urban forest health.

  - o **Indicator 5.4.1:** Specifies appropriate soil volume for site and species.

  - o **Indicator 5.4.2:** Continual soil improvement program that utilizes natural or augmented organic matter cycling, tests soils prior to fertilization and modification.

  - o **Indicator 5.4.3:** Soil compaction is minimized through use of protective measures during construction and utilizing engineered solutions and structural soils.

- ● **Performance Measure 5.5:** Organization will protect urban forests and trees from damaging agents.

  - o **Indicator 5.5.1:** Organization has an invasive species program.

  - o **Indicator 5.5.2:** Implements a program to monitor for damaging agents, prevent damage, and properly mitigate such damage.

  - o **Indicator 5.5.3:** Establishes policies or procedures to prevent and mitigate human damage.

Objective 6: Natural Areas and Special Sites

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

- ● **Performance Measure 6.1:** Organization will identify, evaluate, and map natural areas, natural area features and special sites within the urban forest.

  - o **Indicator 6.1.1:** System is in place, that is used to identify, plan for, and manage natural areas and special sites.

  - o **Indicator 6.1.2:** Appropriate professionals, resource managers, Indigenous groups, and other stakeholders have been consulted to identify special sites, natural areas, and natural area features.

  - o **Indicator 6.1**.3: Special sites and natural area features have been identified and mapped; these must include, but are not limited to: rare or threatened ecosystems; watercourses and associated riparian zones that support native species of fish that have been identified and mapped; known sites critical to life functions of native/endemic fauna; known archaeological and cultural sites important to Indigenous communities; natural features that have been identified as historically significant, or identified for protection by way of regional or local ordinance/bylaw; 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 will employ measures to protect and preserve natural areas, natural area features, and special sites.

    o **Indicator 6.2.1:** 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.

    o **Indicator 6.2.2:** Strategies for increasing public awareness and knowledge about the values and issues associated with natural areas and special sites are in place.

    o **Indicator 6.2.3:** Written policies, ordinances, bylaws and/or codes are in place that establish standards for the protection and conservation of special sites and natural areas.

    o **Indicator 6.2.4:** Access (persons, vehicles, and dogs) to natural areas and special sites is regulated, as needed, to assist in protection and preservation.

    o **Indicator 6.2.5:** Processes are in place to monitor performance against the standards for protection and conservation.

- **Performance Measure 6.3:** Organization will ensure that natural areas and special sites are effectively managed to maintain, restore, or enhance their function.

    o **Indicator 6.3.1**: Management plans or written operational guidelines, which are appropriate to the scope and scale of the managed site(s), are in place, which shall include, but would not be limited to invasive species; ecological connectivity; archaeological, historical, and culturally important sites; recreational access; at risk species of flora and fauna; and native flora and fauna that is endemic to managed natural areas.

Objective 7: Climate Smart Management

To ensure climate change resiliency and mitigation through adaptive management strategies including carbon sequestration and management; appropriate tree selection; strategic tree placement; stormwater mitigation; energy savings; urban heat island mitigation; green infrastructure and nature-based solutions.

- **Performance Measure 7.1:** Organization will actively track their operational carbon footprints and their community-wide urban forest carbon-cycle balance and work with community partners to minimize greenhouse gas emissions (GHG) emissions while maximizing carbon sequestration and avoided GHG emissions.

    o **Indicator 7.1.1:** Basic CO2/GHG accounting and carbon cycle assessment undertaken for urban forestry operations and for the entire community every three-to-five years.

- o **Indicator 7.1.2:** A climate action plan (or comparable set of documents) with goals and objectives established for minimizing operational and community carbon footprints and for maximizing carbon sequestration (updated every five-to-seven years).

- o **Indicator 7.1.3:** Formal policies in place to maximize urban wood and woody biomass utilization (to close waste loops, minimize the release of GHGs into the atmosphere, and to create circular economies).

- o **Indicator 7.1.4:** Formal policies in place to encourage use of trees and green infrastructure for carbon sequestration and energy conservation in buildings.

- ● **Performance Measure 7.2:** Organization will actively monitor and work to address the social, economic, and environmental vulnerabilities within their jurisdictions related to climate change and extreme weather (e.g., high temperatures, drought, rising sea levels, flooding, storms, pests and pathogens).

  - o **Indicator 7.2.1:** Community vulnerability assessments and action plans developed for urban heat islands, storms and extreme weather, pests and pathogens, wildfire, ecological disruption, and social/economic disruption

  - o **Indicator 7.2.2:** Natural disaster/emergency response and recovery plans in place for catastrophic events.

  - o **Indicator 7.2.3:** Trees and green infrastructure sites are planned and actively managed to maximize long-term ecological and human health.

  - o **Indicator 7.2.4:** Urban forestry policies promote tree preservation and planting to maximize the provision of various ecosystem services, especially for historically disadvantaged and vulnerable populations in critical areas.

- ● **Performance Measure 7.3:** Organization will actively work with cross-sector partners to create educational programs, policies, incentives, and regulatory measures aimed at building social and ecological resilience via trees, green infrastructure, and nature-based solutions.

  - o **Indicator 7.3.1:** Urban forestry goals are tied to social and environmental justice efforts, economic development, and cultural enhancement initiatives.

  - o **Indicator 7.3.2:** Green workforce training/development programs in place.

  - o **Indicator 7.3.3:** Urban Forestry policies promote food production and cottage industries in appropriate sites (e.g., community orchards, private gardens, and natural areas).

  - o **Indicator 7.3.4:** Urban forestry policies are coordinated with and support community efforts to improve commerce, active transportation, educational and recreational opportunities, and energy independence.

Objective 8: Urban Forest Planning

To ensure long-term sustainable support for and growth of the resource and urban and community forest program through comprehensive planning that includes appropriate resource assessment, a

clearly defined community vision, stakeholder involvement, strategic planning, provisions for implementation, risk management, monitoring, and evaluation.

- **Performance Measure 8.1**: Organization will engage in comprehensive and regular urban forestry system assessments and monitoring sufficient to allow them to generate informed management plans based on current conditions of their respective forest(s).

    o **Indicator 8.1.1**: Organization has a forest resource assessment underway or has a current (performed or updated within the past five years) forest resource assessment. Assessment types may include urban tree canopy and tree equity assessments, tree inventories, community surveys, and broad community stakeholder interviews.

    o **Indicator 8.1.2**: Organization has documented administrative and operational performance monitoring related to tree canopy extent, condition, and distribution; ecosystem services; operational costs and return on investment; and urban forest system vulnerabilities.

    o **Indicator 8.1.3**: Organization has at least one current assessment of the forest resource that includes a geographic component.

- **Performance Measure 8.2**: Organization will support and promote planning efforts by consulting relevant and interested community stakeholders including, as applicable: urban and community shade tree committees, environmental committees, and/or similar organizations; foresters; municipal, state, provincial and/or federal agencies; municipal or local groups; professional societies; conservation organizations; Indigenous Peoples and governments; community groups; universities; extension agencies; and/or other pertinent stakeholder groups to apply principles of sustainable forest management.

    o **Indicator 8.2.1**: Organization has one or more advisory groups or similar organizations that are formalized or chartered to advise on the establishment, conservation, protection, and maintenance of urban and community trees and forests, to ensure inclusivity and collaboration.

    o **Indicator 8.2.2**: Organization has one or more non-governmental advocacy groups or similar non-governmental organizations active in the community that advocate or act for the establishment, conservation, protection, and maintenance of urban and community trees and forests.

- **Performance Measure 8.3**: Organization will have comprehensive strategic plans that are interdisciplinary (and linked to other planning efforts), that are integrated with other departments and internal administrative groups, and that articulate what a given jurisdiction has, what it wants, how it is going to get what it wants, and how it will measure progress and adapt as needed.

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

- o **Indicator 8.3.2**: Organization has a current (less than five-year old) adopted urban forest management plan and urban forest maintenance plan (or comparable set of documents) to address system goals and operational targets. The plan must:
  - ▪ 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
- o **Indicator 8.3.3**: The organization's plans will include items such as tree planting or stocking level goals, tree canopy goals, information and goals on budgets and staffing, directions for regular operations, and proactive approaches for monitoring and evaluation of the program and the tree population.
- o **Indicator 8.3.4**: If relevant, organization has 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 community departments that impact community trees. The master plan provides consistency between policies and plans of different community departments and partner groups.
- o **Indicator 8.3.5**: If relevant, organization has a current natural areas plan (a written plan for natural areas management).
- ● **Performance Measure 8.4**: Provisions for implementation.
  - o **Indicator 8.4.1**: Organization dedicates funding for urban forest planning, assessment, and management, tree establishment, and tree maintenance activities.

Objective 9: Management and Care of Urban Forests and Trees

To ensure the establishment, care, and maintenance of forests and trees through proper planning, effective regulations and policies, effective monitoring, better management practices, and risk management.

- ● **Performance Measure 9.1:** Organization has management authority and staff qualifications
  - o **Indicator 9.1.1:** Organization employs a professional with the education (degree in forestry, urban forestry, or closely related field) and expertise (e.g., International Society of Arboriculture credentials, state certification, or registered professional certification bodies) required to effectively lead and manage the community forestry program
  - o **Indicator 9.1.2:** Organization has formally adopted responsibility and authority for the protection, care and management of urban trees and forests through ordinance, charter, or other guiding policy or contractual arrangement.

- o **Indicator 9.1.3:** Department managers and staff regularly convene stakeholders to coordinate urban forestry policy or project activities such as planting, removing, or protecting trees on public or private property.

- o **Indicator 9.1.4:** Organization has established policies that supports and incentivizes professional certification programs and continuing education opportunities for tree workers, professional staff, and tree board members.

- ● **Performance Measure 9.2:** Organization adopts and implements urban forest policies and standards.

  - o **Indicator 9.2.1:** Organization has adopted policy, plans, ordinance and/or professional best management practices that govern the planting, establishment, maintenance, and removal of trees.

  - o **Indicator 9.2.2:** Organization has a written tree risk management policy for inspecting and mitigating reported tree problems, including a timetable for mitigating potential risks.

  - o **Indicator 9.2.3:** Organization has development policies, procedures (i.e., site plan review), regulations and standards that detail requirements for tree preservation and protection, permitting, inspection, mitigation, and noncompliance penalties for trees on public and private property during land disturbance and development activities. Includes standards for tree protection, trenching/boring/excavation in critical root zones, preconstruction mulching, root or limb pruning, watering, and post-construction restoration.

  - o **Indicator 9.2.4:** Organization regularly assesses and utilize current and scalable urban tree health, canopy distribution, and social and ecological vulnerability data to inform and formulate urban forest policies, management strategies, maintenance standards and program SMART goals.

- ● **Performance Measure 9.3:** Organization coordinates Tree Planting and Establishment

  - o **Indicator 9.3.1:** Organization has an established program for planting and establishing urban tolerant trees on managed public or private property in accordance with nationally or regionally adopted best management practices.

  - o **Indicator 9.3.2:** Organization annually inspects and monitors all trees planted within the past three years for survival, health, and maintenance needs.

  - o **Indicator 9.3.3:** Organization has policy, public relations, educational outreach, public assistance programs, etc. that encourage private landowners to replace trees removed

  - o **Indicator 9.3.4:** In the absence of a catastrophic storm event, the five-year rolling average of trees planted within the urban forest is equal to or greater than the number of trees removed, for all reasons.

- **Performance Measure 9.4:** Organization conducts Tree Maintenance

  o **Indicator 9.4.1:** Organization demonstrates an established program of care for newly planted (under five years old) trees that is aligned with nationally or regionally adopted best management practices.

  o **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 conducts systematic, visual assessments of 15% or more of the managed tree population annually for forest health, structural defect, and risk determination, and prescribe and perform proactive pruning and restorative maintenance as needed to sustain a healthy urban forest that is safe for use and enjoyment.

  o **Indicator 9.4.4:** Organization demonstrates an orderly and systematic process for assessing, prioritizing, scheduling, and mitigating high-risk tree defects identified through annual visual surveys or reported by the public. Risk mitigation assessments consider the likelihood of failure, likelihood of impact, and consequences of failure, and follow nationally or regionally adopted tree risk assessment protocols.

- **Performance Measure 9.5:** Organization preserves and protects trees and forests.

  o **Indicator 9.5.1:** Organization demonstrates authority and capacity to implement and enforce tree protection codes, policies and construction specifications through on-site inspection and monitoring and administrative actions such as stop work orders, citations, permit revocation, withholding of occupancy permit, redemption of performance bond(s), mitigation orders, etc. and/or judicial process.

  o **Indicator 9.5.2:** Organization demonstrates inclusive community engagement, equitable protocols, and targeted programing to ensure that trees and forests are preserved and protected in all neighborhoods regardless of socioeconomic status.

- **Performance Measure 9.6:** Organization maintains and updates tree inventories and assessments.

  o **Indicator 9.6.1:** Organization implements and maintains comprehensive spatial tree inventory/asset management systems that inform natural resource attributes (tree species, size, condition, location, maintenance needs, etc.) to support work plan prioritization, document work completion and asset allocations.

  o **Indicator 9.6.2:** Organization utilizes current remote sensed geospatial information to inform tree canopy attributes (percent tree cover, tree canopy change, tree size class, species distribution or forest health conditions within a defined forest management area), and management strategies, operational goals, and fiscal priorities.

Objective 10: Disaster Readiness, Response, and Recovery

To limit undesirable effects and aid in the recovery of communities and forest resources from storms, extreme weather, flooding, drought, wildfire, invasive pests, and other disasters through strategic planning, thorough preparation, effective response, and continuous improvement.

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

  o **Indicator 10.1.1:** Organization assesses risks and develops an equitable disaster response plan for regionally appropriate events including debris management plans.

  o **Indicator 10.1.2:** Organization implements readiness plan, across departments, to include appropriate funding sources, operational capacity, mutual aid agreements, standing contracts or agreements in place with private contractors for surge capacity.

  o **Indicator 10.1.3:** Organization implements appropriate prevention and mitigation programs to reduce risks prior to an event.

- **Performance Measure 10.2:** Organization implements disaster plans in response to an event.

  o **Indicator 10.2.1:** Organization activates appropriate response teams, integrates with other emergency management operations, tracks work orders and accomplishments, coordinates dispatch, reduces risks, and follows federal, state, or provincial emergency management guidelines or programs where appropriate.

  o **Indicator 10.2.2:** Organization maximizes opportunities to utilize downed woody debris for higher use and utilization.

- **Performance Measure 3:** Organization implements recovery plan after an event.

  o **Indicator 10.3.1:** Organization has and implements a risk mitigation program to reduce residual risk following the event.

  o **Indicator 10.3.2:** Organization has and implements a reforestation or replanting plan following the event.

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

- **Performance Measure 10.4:** Organization has an established urban forest risk management program.

  o **Indicator 10.4.1:** Organization has adopted a risk assessment protocol or standard and implemented it.

  o **Indicator 10.4.2:** Organization enacts risk prevention and mitigation programs.

  o **Indicator 10.4.3:** Organization assesses the effectiveness of their risk management program and adjusts as needed.

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

    o **Indicator 11.1.2:** Organization assesses current and future budgeting needs based on plans and desired future state/goals.

- **Performance Measure 11.2**: Organization actively engages stakeholders.

    o **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 number of hours worked, if applicable.

- **Performance Measure 11.3**: Organization utilizes performance review to improve program.

    o **Indicator 11.3.1:** Organization completes regular review process of implementation of relevant plans with action steps identified to achieve desired future state/goals.

    o **Indicator 11.3.2:** Organization identifies staff and/or organizations for various functions such as: outreach, volunteer management, planting, tree care management, inter-department communication, etc.

- **Performance Measure 11.4**: Organization supports professional development and improvement.

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

    o **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 community forests.

- **Performance Measure 12.1**: Organization will have a management plan, ordinance, and/or policy that states the living tree is 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 and to reduce environmental impacts associated with transportation

- o **Indicator 12.1.1:** The plan will include urban wood utilization targets including criteria used to determine the best use plan for various wood products based upon local resources, size, quality, and circumstances and can include, but is not limited to the following: urban wood is milled into lumber urban wood is left for wildlife habitat with strategic placement to promote biodiversity and forest health; urban wood is left in public spaces for natural aesthetics, recreation, conservation education, and/or landscaping; urban wood that isn't suitable for one of the above may be converted 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 that support environmental, economic, and social values. Understanding that the highest and best use will vary due to region and circumstance.

  - o **Indicator 12.2.1:** Support local utilization of wood through investment, purchase, and/or supplying material.

  - o **Indicator 12.2.1:** Ongoing training exists that ensures trees are removed in a manner that supports highest use and value.

  - o **Indicator 12.2.3:** Organization will have an urban tree replacement plan in accordance with best practices and may include collaboration with local experts on the correct tree selection based on the site conditions, purpose, and post-removal utilization.

- **Performance Measure 12.3:** To build sufficient long-term capacity, organization shall engage property stakeholders and urban wood professionals in support of a self-sustaining network

  - o **Indicator 12.3.1:** Promote community engagement and support of local workforce development initiatives and vocational training opportunities such as school woodshop programs, wood products related recidivism reduction programs, veterans' woodworking projects, etc.

  - o **Indicator 12.3.2:** Participate in urban wood use organizations, memberships, arrangements, or contracts with urban wood professionals such as arborists, processors, or manufacturers who follow a set of best industry standards and practices.

  - o **Indicator 12.3.3:** Support industry approved standards and chain of custody procedures or policy by adopting or working with entities who have adopted and utilize industry standards and chain of custody procedure or policy.

- **Performance Measure 12.4**: Organization shall develop an evaluation process to assess past performance and establish future goals for urban wood utilization.

  - o **Indicator 12.4.1:** Use locally appropriate metrics to determine what and how material was recovered that would have been wasted otherwise.

  - o **Indicator 12.4.2:** Develop targets for the next year that strive to meet or exceed previous year's results.

- o **Indicator 12.4.3:** Document estimated economics of reduced costs or increased revenues to support local programs.

- o **Indicator 12.4.4:** 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.

Objective 13: Communications

To invest in and utilize excellent 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 plan which includes outreach, engagement, and education about urban forests and trees, the associated benefits, and the need for management and care.

  - o **Indicator 13.1.1:** Organization's plans prioritize bi-directional and diverse communication.

  - o **Indicator 13.1.2:** Organization has shareable and accessible information about the urban forest communicating about policies, who's responsible, and contact information through multiple methods.

  - 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 can show what resources (financial, human capital, in-kind, partnerships with local organizations) are utilized to communicate about the urban forest and trees inside and outside of the organization.

  - o **Indicator 13.2.2:** Organization implements communication plans and shares their 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 plan to stay informed about new research.

  - o **Indicator 14.1.1:** Support available for professional development for urban forestry practitioners (continuing education, conference attendance, professional certification for urban forest managers, certification for urban wood professionals).

  - o **Indicator 14.1.2:** Support available for urban forestry and urban wood practitioners to sustain membership in professional organizations.

- o **Indicator 14.1.3:** Organization has representation in local/regional climate task forces, Tree City USA, or similarly aligned groups to indicate that there is interest in applying knowledge of risks.

- o **Indicator 14.1.4:** Organization has connection to researchers, extension agents, and other science-based individuals and organizations and displays evidence of awareness and promotion of peer-reviewed research/reports that promote sustainable resource management.

- **Performance Measure 14.2:** There is demonstrated or active participation or investment in research that advances urban forestry practices locally or at larger scale.

  - o **Indicator 14.2.1:** Organization collaborates with stakeholders and partners to participate in social science or applied research (e.g., identifying issues, facilitating data collection, surveying stakeholders, providing access to study sites, applying for research funding).

- **Performance Measure 14.3:** There is clear commitment to and evidence of the following: building awareness of current or recently produced research, informing research, and dissemination of research findings.

  - o **Indicator 14.3.1:** Organization is involved in the dissemination of research such sharing via popular press, social media, peer networks/communities of practice, lead or co-authorship of manuscripts.

  - o **Indicator 14.3.2**: Organization has publicly accessible listing of relevant research applied in its current urban forestry program.

  - o **Indicator 14.3.3:** Organization participates in contributing to and/or disseminating (via written or verbal communication) case study findings that advance knowledge of urban forestry at least once annually.

- **Performance Measure 14.4:** There is evidence of utilizing the best science to advance sustainable urban forest management, urban wood utilization, and related initiatives.

  - o **Indicator 14.4.1:** Organization applies current research in management strategies.

  - o **Indicator 14.4.2:** Organization's sustainable resource management strategies are based on scientific research.

- **Performance Measure 14.5:** There is evidence of investment in and utilization of technology that supports sustainable resource management.

  - o **Indicator 14.5.1:** Organization utilizes technology, applications, software, and related training.

  - o **Indicator 14.5.2:** Organization shows transparency of data collected via technology.

  - o **Indicator 14.5.3:** Organization makes technology and related data equitably accessible within jurisdiction or organization.

- **Performance Measure 14.6:** There is evidence of community engagement in research and technology.

    o **Indicator 14.6.1:** Organization has plan or 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.

    o **Indicator 14.6.2:** Organization has plan or mechanism to identify, and practice documented, applicable findings of social science or applied research in community engagement.

Objective 15: Legal and Regulatory Compliance

To comply with applicable federal, provincial, state, and local laws and regulations.

- **Performance Measure 15.1:** Organization will comply with applicable federal, provincial, state, and local forestry and related social and environmental laws and regulations.

    o **Indicator 15.1.1:** Access to relevant laws and regulations in appropriate locations.

    o **Indicator 15.1.2:** System to achieve compliance with applicable federal, provincial, state, or local laws and regulations.

    o **Indicator 15.1.3:** Demonstration of commitment to legal compliance through available regulatory action information.

- **Performance Measure 15.2:** Organization will comply with all applicable social laws at the federal, provincial, state, and local levels in the country in which the organization operates.

    o **Indicator 15.2.1:** 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 Peoples' rights, workers' and communities' right to know, prevailing wages, workers' right to organize, and occupational health and safety.

    o **Indicator 15.2.2:** Organization will respect the rights of workers and labor representatives in a manner that encompasses the intent of the International Labor Organization core conventions.

Objective 16: Reporting

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

- **Performance Measure 16.1:** Organization will report annually to SFI Inc. on their conformance with the SFI Urban and Community Forest Sustainability Standard

    o **Indicator 16.1.1:** Prompt response to the SFI annual progress report survey.

    o **Indicator 16.1.2:** Record keeping for all the categories of information needed for SFI annual progress report surveys.

- o **Indicator 16.1.3:** Maintenance of copies of past survey reports to document progress and improvements to demonstrate conformance to the SFI Urban and Community Forest Sustainability Standard.

- ● **Performance Measure 16.2:** Organization will provide a summary audit report, prepared by the certification body, to SFI Inc. 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:

    - ▪ a description of the audit process, objectives, and scope

    - ▪ a description of substitute indicators, if any, used in the audit and a rationale for each

    - ▪ 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)

    - ▪ the dates the audit was conducted and completed

    - ▪ 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.