

Urban and Community Forestry Technical Implementation Toolkit

The Case for Urban and Community Forestry

Versatile and applicable to nearly every landscape, forestry work has become a focal point of many companies' environmental strategies. In recent years, the private sector has viewed forestry projects through the carbon offset lens, investing in large tracts of often-remote forestland to achieve internal climate commitments. There is, however, a growing awareness that forestry investments on a company's own lands or in the communities in which they operate can help them realize a diverse set of benefits, both internal and external:

Social Benefits

- Stronger community ties through opportunities for collaboration and the creation of communal spaces
- Beautified communities with increased tree canopy
- Decreased noise pollution
- Physical and mental wellness benefits associated with diverse canopies and outdoor recreation

Environmental Benefits

- Carbon sequestration
- Temperature moderation, particularly in areas prone to urban heat island impacts
- Reduced air pollution
- Flood mitigation
- Improved water quality, through trees' nitrogen uptake and stormwater control capabilities
- Shelter and food for wildlife

Business Benefits

- Increased satisfaction among employees as companies invest in their communities
- Improved social license to operate
- Biodiversity, climate response and community engagement metrics that can be used in reporting
- A nature-based mechanism for managing stormwater runoff and particulate matter
- Lower energy costs through nature-based temperature moderation

To realize these benefits fully, companies must base their tree planting efforts in a scientifically sound and community-appropriate strategy and plan for long-term forest monitoring and maintenance efforts long after trees have been placed in the ground.

Urban and community forestry (UCF) involves choosing the right tree(s), right place and right partner to ensure that forestry work meets local community and environmental needs while strengthening ties between all parties involved. While industry is not yet integrated into the most prevalent municipal, state and federal canopy and UCF plans, companies can play a critical role in improving quality of life in urban, rural and industrial communities by researching and planting tree species likely to flourish within their spaces and ensuring the trees' continued success through upkeep and robust monitoring.

About this Toolkit

To explore the potential for industry to engage in UCF work, and to develop a best-in-class approach that connects corporate ambitions, community needs, and local, state and national canopy and forestry goals, in 2020, Wildlife Habitat Council (WHC) and a team of corporations, knowledge partners and community stakeholders implemented an <u>Urban and Community Forestry Challenge Cost Share Grant Program</u>, aligned with the national <u>Ten Year Urban Forestry Action Plan (2016-2026)</u> and focused on creating and enhancing resilient urban and community forests.

The program, which formed the basis for the *Across Fence Lines* initiative, focuses on forging connections between corporate America's industrial and mining facilities and adjacent communities through public-private forestry programs that diversify, leverage and increase UCF funding and resources, while also maximizing local resiliency, workforce development and biodiversity uplift outcomes. As the lack of canopy within an urban region often serves as a proxy for a suite of other social and environmental inequities, *Across Fence Lines* has focused on developing public-private partnerships and crossing fence-lines in **urban and rural communities with low canopy cover, high industrial density and high scores on the Environmental Protection Agency's Environmental Justice Index**. As part of this work, WHC and its partners conducted research in four regions of the U.S. to explore how historical, environmental and socio-economic contexts inform UCF approaches within distinct geographies.

To facilitate private sector engagement in urban and community forestry, Wildlife Habitat Council (WHC) developed this toolkit, which provides guidance on integrating community needs and partner insights into UCF projects. It is one of three WHC-produced UCF toolkits — the other two focus on how the right **Outreach and Community Engagement** tactics and **Education** efforts can strengthen UCF work.

Getting Started – General Guidance

While some aspects of tree selection, installation, maintenance and monitoring are dependent on local conditions, there are general guidelines that teams across the U.S.¹ can follow when conducting forestry work. This section of the toolkit offers basic guidance within the four regions studied through *Across Fence Lines*; a <u>state extension office</u> can help identify locally focused forestry resources within these regions and across the country.

Tree Selection, Siting and Planting

At the core of any forestry effort is the proper selection of tree species that are likely to thrive within a given site. Choosing the right trees and properly planting them will help ensure that all forestry efforts meet a team's goals and will minimize the need for ongoing tree maintenance. When selecting and planting trees, consider the following:

• Identify useful technology – When siting projects, it is important to identify locations which, when planted, will provide the greatest value to nearby communities. Tools like <u>i-Tree</u> and <u>Tree Equity</u> <u>Scores</u> can guide the project siting process, using data on air quality, stormwater management needs, urban heat island effect and canopy coverage to identify areas with the greatest need for tree plantings. This data can, in turn, be used to justify the need for a forestry project when speaking with key stakeholders.

¹ While the guidance in this toolkit is informed by research and project implementation completed in the U.S., comparable planting and maintenance tactics can be employed in many countries. WHC recommends that UCF teams outside the U.S. supplement this toolkit's guidance with additional research about their countries' environmental histories, forestry priorities and socioeconomic contexts.

- **Prioritize native species:** Forests planted with native trees will provide the most habitat value for local wildlife. Additionally, native species are well-adapted to local weather patterns and soil conditions, meaning that they will require less upkeep. A local native plant nursery or extension office can make region-specific recommendations.
- **Select multiple species:** Planting a variety of tree species helps ensure forest resiliency in the event of pests or pathogens, as many of these threats target a single species or family (e.g., Dutch elm disease, emerald ash borer, chestnut blight).ⁱ Selecting many species can also help a project realize a wider range of environmental benefits:
 - Including trees that produce a wide range of nuts, berries and flowers will attract a greater variety of native wildlife to an area, increasing biodiversity.
 - \circ $\;$ Evergreen trees, on average, intercept more rainfall via their leaves, and can do so year-round. ii
 - Planting trees with greater leaf surface area, or pairing trees with less leaf area with understory vegetation, likewise increases a forest's capacity to intercept stormwater. For every m² increase in leaf area in a habitat, about 0.2mm of additional rainwater can be intercepted by the tree canopy.ⁱⁱⁱ
 - Poplars can provide maximum phytoremediation benefits, as they can take up high volumes of contaminated water through their complex root systems. Hybrid poplar varieties are particularly adept at phytoremediation, as they have a high tolerance for contamination.^{iv}
 - Large trees species are ideal for carbon sequestration; over the course 1 year, a large, healthy tree can store about 65x more carbon than a small tree growing in the same conditions.^v
 - Trees with sticky (e.g., birch) or hairy (e.g., pine, yew) leaves are most adept at capturing air particulate matter.^{vi}
- **Consider planting fruit trees** In communities that face food insecurity, the planting of fruit trees can provide healthy food choices at little to no cost for residents. Community members may also be more receptive to plantings of fruit-bearing trees as their benefits are more readily apparent. While native fruit trees will provide the greatest environmental co-benefits, incorporating some introduced, but non-invasive, species can help ensure that residents have a varied, nutritious diet.
- **Choose trees primed for success** Trees, like all plants, are prone to transplant shock (failure to establish in a new location due to root damage or environmental stress). When purchasing trees, consider selecting those with the following attributes (regardless of species):
 - Compared to smaller trees, those with a 1-3 inch caliper tend to have higher survival rates when planted in a new location and watered weekly.
 - Compared to field-grown trees, container-grown ones that are sold with their roots packaged in burlap are less likely to experience transplant shock.
- Assess on-site soil conditions Many tree species have specific soil needs (e.g., moisture/drainage, pH, soil nutrients). In industrial zones and those where the soil lacks organic matter or contains slag (a metallurgy byproduct used in fertilizers and cement), hardier species should be selected. A local extension office can provide insights into the characteristics of local soil and the best trees to plant in it.
- **Dig proper holes** Trees' roots are more likely to grow outwards than downwards, so trees fare the best when placed in wide, shallow holes. A hole should have sloped sides and be just as deep as a tree's root ball is tall, but two to five times as wide as the root ball (and may need to be wider in severely compacted soil).^{vii}
- **Ensure correct spacing** Depending on the species selected, individual trees will need to be planted anywhere from 15 to 40 feet away from each other to ensure that they each have 500 cubic feet of non-compacted soil in which to grow.^{viii}

- Avoid utility lines Utilities companies spend an estimated \$1.5 billion each year to keep tree limbs away from active utility lines.^{ix} Before planting, UCF teams should assess if power lines are present in the project site. If so, follow these guidelines:
 - Only plant shrub species (e.g., redbud, dogwood, sumac, witch hazel) directly under aboveground utility lines.
 - Within 50 feet of aboveground utility lines, only plant species under 40 feet tall (e.g., Washington hawthorn).
 - Avoid planting trees within 10 feet of underground utility lines,^x and when underground utilities are present, select species with smaller root systems. ^{xi}
- **Mulch properly** Proper mulching helps to protect trees from damage from mowing and promotes water retention. Follow these practices when mulching:
 - If possible, use shredded hardwood mulch that is <u>certified weed-free</u>.
 - Apply mulch in a ring shape, keeping the mulch at least 4 inches away from the trunk.
 - Spread the mulch out so that the ring is 2-4 inches deep; a thicker layer of mulch can suffocate tree roots.
 - Spread any excess mulch outwards, rather than upwards.

Maintenance

Once trees are planted, they will require water and upkeep, particularly in the first three years, while their roots are still establishing into the ground. When developing a maintenance strategy, consider the following:

- **Develop a plan** Identify project participants (e.g., employees, community volunteers) that can help with maintenance. Develop a set of maintenance steps and a timeline that they can follow.
- Water regularly New trees will need to be watered often, particularly throughout the dry season.
 - As a general guideline for non-arid regions, apply 10 gallons of water per inch of trunk diameter, or for every inch of diameter, apply water for five minutes directly to the base of each tree. For example, a 2-inch diameter tree should receive 20 gallons of water or 10 minutes of watering time every 7-10 days, and more often if rainfall is below 1 inch per week.
 - Teams in arid regions should familiarize themselves with any local water conservation ordinances or initiatives, and contact a local nursery or extension office to discuss best watering practices.
 - Direct all water toward trees' root systems, rather than their foliage, particularly when planting in regions where water is scarce.^{xii}
 - Alternatively, use tree watering bags or soil amendment crystals that are designed to slowly release water directly to the tree's root structure without wasting water through run-off or evaporation.
 - If possible, water trees early in the morning. Watering trees in the afternoon can result in excessive evaporation, but water applied at night may not evaporate enough, leaving trees susceptible to fungal diseases.^{xiii}
- **Adopt best practices** While maintenance practices may vary between trees and regions, the following guidelines can be used to ensure tree health in all locations:
 - Prune broken, dead or rubbing branches during the dormant season (after the coldest part of the winter).
 - If needed, place tree shelters around newly planted trees to protect them from browsing.
 Once the tree no longer needs protection or outgrows the shelter, the remains of the tree shelter can be removed.
 - Avoid using fertilizers, as doing so will encourage roots to confine themselves within the amended soil, rather than spreading out.

- The ring of mulch surrounding each tree should be replenished yearly.
- Quickly address hazards such as wet, fallen leaves and uprooted sidewalks.
- **Optimize trees' environmental impact** Driving to a planting site, using motorized tools for maintenance or disposing of dead trees can undermine the carbon sequestration goals of a forestry project, or even cause a project to become a net emitter of carbon.^{xiv} The following practices can help prevent maladaptive maintenance:
 - If possible, travel to the project site on foot.
 - Use motorized tools (such as chainsaws or leaf blowers) sparingly, and only if maintenance work cannot be efficiently conducted with hand tools.
 - Dead trees left on-site can provide habitat for cavity-nesting birds and other wildlife. If your team prefers to remove dead trees, however, consider ways to recycle the wood. The wood can be repurposed as mulch or can be used to construct park benches or play structures within the planting site.
- **Log maintenance activities** Keep records of all maintenance activities, including dates and participants' names.

Monitoring

Once trees are planted, it is important to regularly monitor them (at least once per year) and compare monitoring data over time. Doing so enables a team to perform adaptive management as issues are noted and generates data that can be contributed to citizen science platforms, integrated into CSR reports or used in WHC Conservation Certification® applications. Consider the following when monitoring a forestry project:

- **Define monitoring parameters** So that data can be compared over time, the same information should be captured during each monitoring session. Options for monitoring include:
 - Documenting per-species survival either as a total number (compared to a baseline count) or the percent of plantings that survived from the previous monitoring session
 - Assessing growth rate by measuring tree height, trunk diameter at breast height or crown width each year and comparing data over time
 - Recording observations of herbivory, insect damage and disease
 - Noting the spread of disease or invasive species within the project area
- **Decide how to record data** Monitoring data can be recorded in many formats, including:
 - Hard-copy monitoring logs that participants fill out by hand. Completed logs can be filed into a folder or scanned onto a computer
 - o Spreadsheets that are updated each time monitoring activities occur
 - Apps such as i-Tree, through which participants can input data and receive quantitative insights on the ecosystem services (e.g., pollution removal, carbon sequestration, runoff mitigation) that the forest provides

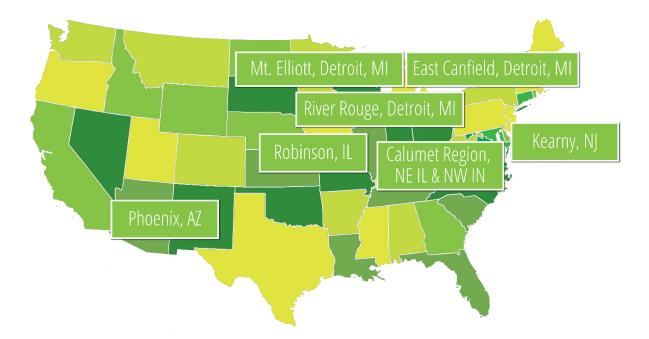
External Monitoring and Maintenance Assistance

While many corporate-led UCF efforts have found success in organizing employee volunteers, others have faced difficulty in finding employees with the interest in, and availability to, perform routine monitoring and maintenance. In these cases, consider engaging external partners who may be able to assist.

- School groups or youth troops may be interested in assisting if activities align with state learning standards or merit badge requirements. For more information on integrating educational content into forestry projects, see the **Education** toolkit.
- Organizations such as the <u>Student Conservation Association</u> and <u>Greening of Detroit</u> conduct all monitoring and maintenance activities for plantings conducted in conjunction with their teams. For additional information on partnerships, see the **Outreach and Partnerships** toolkit.

Getting Started – Region-Specific Guidance

As part of *Across Fence Lines*, local case studies were developed to showcase UCF success stories within four distinct regions of the United States. The regions, detailed below, were selected with attention to their unique histories, climate considerations and environmental justice concerns.



This section of the toolkit features the case studies corresponding to regions that have recently initiated or expanded their planting efforts, paired with guidance for identify the right tree, right place and right partner within these areas.

Calumet Region

Geographic Context

The Calumet region extends from southeastern Chicago into northwestern Indiana, including the cities of Gary, East Chicago, Hammond and Portage. Proximity to Lake Michigan has made the region conducive to industry, with steel, mineral and chemical operations located throughout, and a major port (Burns Harbor) situated on the shoreline. Due to stringent regulatory monitoring of local environmental challenges such as fugitive dust, many companies in the region have sought out nature-based solutions such as strategic tree plantings.

The region is also home to unique wetland and dune communities, including Indiana Dunes National Park, many of which are located close to industrial facilities. While centuries of urbanization and industrial growth have led to habitat fragmentation and degradation, today, many companies in the Calumet region are committed to engaging with local residents and organizations to conduct restoration work with the potential to foster biodiversity, habitat connectivity and community empowerment.

Right Tree

- When planting in industrial zones, consider plants that thrive in urban settings or in slag-laden soils, for instance:
 - Jack pine (*Prunus serotina*)
 - Red cedar (Juniperus virginiana)
 - Cottonwood (*Populus deltoides*)
 - Black oak (*Quercus velutina*)

Right Place

- Consider collaborating with a school, park or private landholder, as many in the area are open to plantings on their properties.
- Identify communities with a high need for trees before siting a project. Tools like <u>Urban Footprint</u> offer parcel-by-parcel analyses of factors such as community resilience, land use and climate risk so that forestry teams can address local equity gaps through their efforts.
- Heavily industrialized regions such as Calumet have extensive histories of development and redevelopment. What may appear to be an ideal site for a tree may have housed a building, parking lot or other compacted surface in the past. Pre-drilling holes to test soil conditions can prevent wasted time and false starts.

Right Partner

- Pre-existing partner networks such as CommuniTree offer ready access points to an established network of varied stakeholders with experience conducting UCF.
- The <u>Morton Arboretum</u> is also a world leader in arboriculture and tree science. With outreach efforts and research programs on topics such as forest resilience and taxonomy, Morton also leads community forestry initiatives such as the removal and replacement of Chicago-area trees damaged by emerald ash borer infestation.

Case Study

A WHC-led coalition of partners convened around the industrial applications of UCF at the Illinois International Ports District (IIPD), a port facility located where the Calumet River meets Lake Michigan that draws heavy freight traffic, in October 2021. IIPD leadership introduced UCF to port tenants in a showcase planting of 90 trees surrounding the port offices, in an area where pooling and stagnant water often follows heavy rain events. Tenants were invited to field volunteers to help plant trees that would better manage stormwater accumulation.

This partnership also engaged the City of Chicago Bureau of Forestry — in alignment with municipal street tree installation goals, 40 trees were planted along the city-owned right-of-way leading into the port. The port facility is situated across the street from a residential neighborhood, so greening efforts done in partnership with the city focused on the entrance to the facility and along the neighborhood-facing boundary to provide the most beneficial impacts to nearby residents impacted by the air quality concerns caused by idling traffic within the port.

Metro Detroit: River Rouge, East Canfield & the I-94 Corridor

Geographic Context

Located in southeastern Michigan along the Detroit River, the city of Detroit and surrounding areas have been considered the hub of the U.S. automobile industry and other manufacturing and technology operations. Urbanization and river channelization have led to habitat loss and fragmentation in the region, and socioeconomic disparity has resulted in inequitable access to green space. Many companies in the region, including leading automotive manufacturers GM and Stellantis and utility company DTE, have recognized the opportunity to conduct activities like shoreline softening, tree planting and park creation while engaging community members every step of the way.

Because of previous, poorly executed forestry projects in the area (which were conducted with minimal resident input) and because of recent emerald ash borer infestations in Michigan (which resulted millions of dead trees, in need of removal, across the state), some residents have become hesitant about community forestry projects. When working within Detroit's communities, it is critical to listen to, and address, residents' concerns about trees' maintenance needs and the risk of property damage.

Right Tree

- Consider trees that will meet local needs:
 - The American basswood, Ohio buckeye, catalpa and tulip tree can provide habitat and forage for important pollinators, including bumblebees, butterflies and hummingbirds.
 - River birch, sycamore, tamarack, white ash and shagbark hickory thrive in areas with periodic flooding and can therefore help control stormwater runoff.
 - White oak, bur oak and Kentucky coffeetree can survive in areas with poor air quality, and in turn can help mitigate air pollution.

Right Place

- <u>Detroit Land Bank</u> owns properties across the city, embedded within neighborhoods, that may be available for community planting events.
- The <u>Greening of Detroit</u> has worked with companies such as Stellantis to conduct plantings on community-owned lots.

Right Partner

• Given local hesitance to forestry work, projects that engage communities early on are more likely to succeed. Consider partnering with community associations or organizers, who can help address residents' concerns about forestry projects.

Case Study

Partnering with community groups like Friends of the Rouge and the University of Michigan-Dearborn allowed Marathon Petroleum to design and carry out a community-oriented planting directly next to its Detroit Refinery, a site that has been an intermittent source of controversy among local environmental justice advocates. Using resources, equipment and volunteer labor made possible by the project site's proximity to the refinery, Marathon employees planted 150 trees that are projected to capture over 75,000 gallons of rainfall over the next 5 years. The project was designed for alignment with existing projects, such as a nearby park constructed by the Fort Rouge Gateway Partnership and upcoming city initiatives such as the construction of the Iron Belle Trail, which will intersect the site directly. These alignments helped the Stellantis team secure sustained support within the community.

Northeast New Jersey

Geographic Context

With 90% of New Jersey residents living in long-urbanized areas, access to green space can be limited. This has led to a lack of recreational opportunities for many residents, particularly those without personal vehicles. Additionally, per EPA data, the region scores poorly on many environmental justice metrics, including communities' proximity to hazardous waste and superfund sites. Local companies and community partners have begun utilizing tree plantings as a nature-based solution to these environmental challenges while also increasing residents' access to outdoor areas.

Right Tree

- When necessary, plantings can be designed to either stabilize or remove toxic compounds such as heavy metals or crude oil contamination from soil.
 - These phytoremediation efforts will require consultation of local experts.
 - Depending on the type and level of contamination, tree species and cultivar selection, soil amendments, and supplementation with microbes or fungi may all vary.
 - These efforts also require rigorous monitoring and scientific guidance to ensure the resulting soil stabilization condition is properly quantified.
- When planting trees within a park teams should select species that are conducive to community member recreation:
 - Planting tall-growing native hardwoods with expansive canopy, rather than low-growing or rapidly spreading species, helps create forests with a spacious, park-like feel that is more inviting to community members than spaces with thick underbrush. In the northeast U.S., this may entail selecting native oak or maple varieties.

Right Place

• Situating efforts along rivers or existing recreational corridors allows for connectivity to existing green spaces or ecological restoration efforts, which often focus on waterways.

Right Partner

 Many municipalities in the region have goals pertaining to urban canopy coverage, green space accessibility or provision of the ecosystem services that trees provide. Communicating with local city or state government representatives can provide UCF teams with clarity on these goals, streamlining the process of designing projects that align with them.

Case Study

Designed voluntarily as part of an NRDA settlement agreement associated with the Lower Passaic River Superfund Site, BASF Corporation has gained approval to establish a strategically designed park in a highly industrialized part of East Newark. The park was presented to local leaders as an appealing complement to other remediation actions that BASF and other local companies will undertake. Selecting a site along the river, on one of the few remaining undeveloped sites in the borough, will allow the park to connect to existing riverbank recreation sites and make the space accessible to neighboring municipalities.

Urban Arizona

Geographic Context

Desert cities like Phoenix have developed rapidly in recent years, exacerbating geographic divides between high- and low-income communities, particularly when it comes to immigrant populations. As a result, many underserved communities in Phoenix face inequitable access to green space and often live in asphalt-heavy zones that, because of a lack of vegetation, experience intense heat island effects.

Right Tree

- As drought conditions are becoming more common in the region, teams should select native desert species that require minimal water while providing maximum shade and wildlife habitat value.
- Planting water-intensive trees can cancel out the ecological benefits of revegetation. UCF efforts in the region may entail removing these trees and replacing them with ones better adapted for local conditions.

Right Place

- Homeowner Associations (HOAs) are common in the Phoenix area. Before conducting community plantings, it may be necessary to secure HOA approval for chosen planting sites and species.
- Locations can be strategically chosen to align with municipal goals such as the Cool Corridors Initiative, through which trees are strategically planted along streets and routes to facilitate pedestrian access to mass transit options, parks, and other cultural or environmental community assets.

Right Partner

- Cities both large and small may have tree canopy goals, sustainability benchmarks or other structured conservation campaigns.
- Consulting local parks and recreation departments or sustainability offices can provide UCF teams with lists of priority areas for greening, adding value for under-resourced or historically underserved communities.

Case Study

With a strong presence in the desert southwest, extractive and mining companies are heavily involved in community development and outreach. Extractive operations also lend themselves to forestry efforts in many ways. Before extraction activities begin at a new site, vegetation must be removed and is often relocated. Moreover, the state of Arizona places a monetary value on these plants. Mining operations must purchase existing vegetation at this price before extractive activities begin. These practices present a unique opportunity to relocate removed native vegetation to strategically chosen locations for community greening or cool corridor creation.

Extractive companies in this region have found success in collaborative UCF event planning and proactive engagement with a variety of stakeholders. These efforts have also been aided by the availability of existing company resources such as equipment, volunteer capacity and vegetation. A group of Phoenix-based companies engaged with Across Fence Lines plans to utilize these practices and resources to carry out a cost-efficient, donation-based park revitalization project in winter 2022.

WHC Conservation Certification®

Once a forestry project has been on-the-ground for at least one year, it may qualify for WHC Conservation Certification, the organization's voluntary sustainability standard.

Certification recognizes a wide array of conservation project types, including forest projects, which fall under the broad category of habitat projects. One or more projects make up a site's conservation program. In order for a program to earn certification, at least one associated project must earn a designation of qualifying. Qualifying projects must meet five criteria, which for a forest project are defined as follows:

- 1. **Be locally appropriate** The project consists of native species or is targeting a native forest community.
- 2. **Exceed any relevant regulatory requirements** The project is voluntary or exceeds regulatory requirements.
- 3. **Have a conservation or conservation education objective** The project has a stated conservation objective that outlines the intended conservation outcomes.
- 4. **Provide conservation or conservation education value** The project is large enough to be considered a habitat and has been on-the-ground for one or more growing seasons.
- 5. **Have documented measurable outcomes** Informal observations (e.g., survivorship) are implemented at least once annually.

Applying for Certification

All applications must be submitted through the Conservation Certification website. Teams applying for certification for the first time will first need to create an account through the Certification Website following <u>these instructions</u>. The forest project application asks a range of questions about the project's size, age, monitoring and maintenance activities, participants, and any alignments that the project has with corporate commitments to forestry or large-scale initiatives (e.g., community canopy goals).

Once submitted, applications are evaluated by at least two third-party reviewers and a certification outcome is communicated to the program's designated contact.

Information about application fees and deadlines, as well as additional guidance on the application, review process and possible outcomes, can be found within the <u>Certification Support Center</u>.

The Certification Cycle

Once a program achieves Conservation Certification, the program team must apply to renew the certification every 2-3 years to demonstrate that efforts are ongoing. Certification, then, can be envisioned as a cycle in which site teams rotate through six steps illustrated on the right.



WHC knows business & biodiversity

About WHC

WHC promotes and certifies ecological stewardship action on corporate lands through partnerships and education. The organization's corporate members represent some of the leading national and multinational corporations seeking to support sustainable ecosystems and the communities that surround them. These efforts have resulted in more than 1,000 certified programs across 48 states and 25 countries, including 70 programs that feature forestry work in locations throughout the Americas, Europe and Asia.

WHC Consulting Services

To help companies forge meaningful relationships with partner organizations and community members, WHC's website features free resources such as webinars, blogs, white papers and project guidances.

WHC Consulting also offers a variety of fee-based services to help companies leverage successful conservation work to improve their social license to operate.

To help companies plan, implement and maintain community-minded and scientifically sound forestry projects, WHC Consulting can provide:

- Recommendations for location-appropriate forestry projects
- Step-by-step instructions on planning, implementing, maintaining and monitoring forestry work
- Insights on maximizing the positive climate impacts (e.g., carbon sequestration, stormwater management) of forestry projects
- Guidance on aligning forestry efforts with existing corporate or site-level initiatives (e.g., STEM education, employee engagement)
- Training for employees and volunteers on conducting forestry work

To learn more, visit www.wildlifehc.org/consulting

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