# 2017 – 2021 Urban Forestry Strategic Plan

*Village of Bellevue* July 2016



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Urban Forestry Strategic Plan 2016 Village of Bellevue Parks, Recreation, and Forestry

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#### **Introduction: Purpose and Scope**

The community urban forest provides a wide range of net benefits that are essential to the current and future health of the Village and its residents. The benefits are both direct and indirect. The community forest cannot be sustained by nature and requires the intervention and management by people due to the presence of urban stressors and native pests. Thus, the benefits can only occur when adequate and reasonable care and management occur.

**Purpose**: The purpose of the Village of Bellevue Urban Forestry Strategic Plan is to guide the development and implementation of a comprehensive and united urban forestry program.

**Scope**: This plan provides guidance on achieving urban forestry administrative, policy, educational, and management goals. It gives citizens of Bellevue, community decision makers, and staff a clear set of prioritized recommendations to accomplish these goals. The plan proposes a timetable of implementation, and provides costs estimates. The plan encompasses all of the Village's street and public trees with an emphasis on public education, awareness, and support.

Planning for the urban forest occurs on several levels. Generally, a community will adopt an Urban Forestry Strategic Plan as well as an Urban Forest Management Plan. Strategic Plans create a foundation for administration and management of the community tree program. Whereas Management Plans are based upon a tree inventory and they identify and prioritize site-specific tree planting, maintenance and removal activities within a multi-year time-frame. In 2008, the Village adopted its first Urban Forestry Strategic Plan and in 2010, the first Urban Forestry Management plan. The Village Park Commission acts as the Village's designated Tree Board, helping to aid and guide in urban forestry related decisions.

The components of an urban forest include street trees, green spaces, forested conservancies, park trees, vegetation on residential, commercial, and industrial sites within the entire Village boundaries. Trees need to be managed in order to provide a continued level of economic, social, and environmental benefits at the present and into the future. The primary objective of the Urban Forestry Strategic Plan is to maximize public benefits from community trees while minimizing public expense in achieving these benefits.

A healthy urban forest should be viewed as a "green infrastructure," reducing the costs and need to manage air quality and waste. This green infrastructure provides assistance in heating and cooling homes and mitigates storm water runoff while protecting blacktop and streets. It is important to note that trees increase in value over time as they grow more mature. As a result, the cost of removing and replanting a tree exceeds that of maintaining it properly.

### **Background and History**

The Village of Bellevue is located in central Brown County. The City of Green Bay borders the Village on the north, to the east by the Town of Eaton, the Town of Ledgeview to the south, and the Village of Allouez to the west. Major transportation routes within the Village include I-43, US-141, WI-29, and WI-172.

The topography of the Village of Bellevue is comprised of a diversity of features. The western portion of the Earth River Valley is general flat due to submergence by glacial and post-glacial lakes. To the east, the land surface rises over a dissected portion of the Niagara escarpment. Further east, the terrain is gently rolling. Fairly deep-cite intermittent streams constitute the East River Watershed. These wooded ravines run generally east to west. The landscape gently cascades from the eastern boundary to the East River, descending 230 feet over a distance of six miles.

Bellevue's population has experienced dramatic increases in past decades. Statistically, the Village has been one of the fastest growing municipalities in Brown County. The population has continued to increase rapidly with the last official count of 11,828 in 2000. The 2015 State estimate shows the population to have grown to 15,047.

To service residents with the benefits of urban forests, the Village of Bellevue maintains 242 acres of parkland, 86 acres of conservancy, and over 4,000 public trees.

This plan is the timely update of the Village of Bellevue Urban Forestry Strategic Plan in order to incorporate advancements and developments in urban forestry management in the Village. Some goals incorporated into the 2008 plan have carried over in order to emphasize their importance and priority in urban forestry management.



The Village is home to many well-stocked and planted neighborhoods.

#### **Current Program and Management**

The Village Park Commission functions as the Village of Bellevue Tree Board. A majority of tree related issues are handled directly by staff with input from the Village Park Commission.

Village residents and commercial development have maintained satisfactory levels of tree planting and landscaping on private property and developments. These are components that contribute to the success of the urban forest without a direct expense to the Village. The Arboricultural Specifications Manual adopted in 2009 has helped to direct the efforts of both public and private parties. Additionally, the Village of Bellevue Street Tree Program has incorporated the planting of street trees in new developments, in order to keep the pacing of the urban forest in time with the rapid growth of the Village.

In 2009, a Village wide inventory of public and right-of-way trees was contracted through a third party. Trees were identified by species and variety, and locations were identified using a GPS. In 2015, the public tree inventory was updated to reflect changes in the local urban forest through the use of a Wisconsin Department of Natural Resources Urban Forestry grant. This update allowed for the exploration of in-house tree inventory maintenance and options. The public tree inventory has been used in urban forestry management including, but not limited to, preparation against the Emerald Ash Borer. A map of public trees and basic supporting information including species is available to the public online through the Village website.



Parks, Recreation, and Forestry staff conducting tree inspections.

Public tree responsibility is currently shared between the Parks, Recreation, and Forestry and Public Works Departments. Parks, Recreation, and Forestry oversees the administrative tasks of managing the street tree program and in addition, handles the hiring of contract labor for emergency spot tree removals, large planting orders, and training. The Public Works Department supplies staff to perform tasks such as brush cleanup, tree clearance, annual tree pruning, and tree removal as able. Village laborers have been trained in proper tree care techniques and are capable of handling day to day maintenance operations.

The Parks, Recreation, and Forestry Department also handle calls from residents regarding issues with either public or privately owned trees. The Village Forester responds to these requests as time allows. In response to questions about privately owned trees, it is common that residents are referred to either the UW-Extension office or the consultation of a private certified arborist.

#### **Urban Forestry Needs**

This plan establishes program recommendations based upon identified needs. Urban forestry needs are broken into three categories: community awareness, administrative/management, and horticultural needs.

#### **Community Awareness Needs**

- Increased public awareness on the value and benefits of trees and the Village of Bellevue Urban Forestry program.
- Increased public awareness/knowledge on proper tree care and planting within the community.
- Increased support of the Urban Forestry program among residents, elected officials, community groups, business, and Village staff.
- Increased public awareness and concern, and recommended management tactics for damaging and potentially damaging invasive species and pests on public and private lands.
- Increased public involvement in public tree management and protection.
- Continual maintenance and updates to the Village Website for ease of access and use of Village social media tools to improve education and awareness.

#### **Administration and Management Needs**

- Update and maintain an effective public tree inventory system.
- Identify tree maintenance, removal, and planting needs through the public tree inventory system.
- Establish Village commitment to the Urban Forestry program for administrators and staff to manage the program and achieve goals.
- Continually involve Village Tree Board with timely requests and annual updates.
- Maintain current management strategies to continue the successful maintenance of public trees as scheduled.
- Explore alternate and creative sources of funding for the Urban Forestry Program.
- Involve trees in community development and Village construction projects, directed by arboricultural specification guidelines and Village ordinances.

#### **Horticultural Needs**

- Greater species and age diversity.
- Inspect, remove and prevent hazard trees and hazard situations on public lands caused by trees.
- Identify vacant planting sites Village-wide and concentrate on street tree planting in existing developed areas, park lands, and commercial/industrial sites.
- Protection of young trees in order to protect urban forest, investments, and reduce mortality rates.
- Reduce urban forest susceptibility to pests.
- Productive utilization of urban wood waste.
- Maintain the successful annual tree pruning schedule with tree zone rotation.

#### **Goals and Strategies**

Considering Urban Forestry needs, four goals have been developed in order to encompass the three areas of need: community awareness, administrative and management, and horticultural. For each goal, a series of actions have been developed in order to create a strategy for obtaining said goals.

**Goal 1:** Community trees are maintained at optimum levels with attention paid to health, age, and species diversity. Trees planted are appropriate for the site. Trees are maintained for longevity, increased public safety, and reduced liability.

**Strategy #1**: Update and maintain an effective public inventory system. Updates must be made routinely in order to effectively utilize this asset.

- Action 1.1: Secure labor to maintain inventory (staff or Urban Forestry intern use).
- **Action 1.2**: Update GIS tree inventory database to reflect trees planted, removed, and replaced annually utilizing urban forestry staff or Urban Forestry intern.
- **Action 1.3**: Utilize tree inventory to guide future plantings in order to enhance tree diversity and eliminate monocultures.
- **Action 1.4**: Have accessible tree inventory information (tree location and species) on Village Website for resident reference.
- **Action 1.5**: Work with IT department to migrate data into complimentary programs such as i-Tree as needed.

**Strategy #2**: Handle tree care in the most effective, productive manner possible.

- **Action 1.6**: Provide extra protection to immature trees against wildlife and natural stressors in order to protect the urban forest, investments, and reduce mortality rates. Natural stressors include drought conditions and pest and disease damage.
- **Action 1.7**: Utilize tree inventory to identify mature trees, DBH, and height in order to monitor and mitigate tree hazards.
- **Action 1.8**: Integrate sealants for tree wounds into tree care as applicable (the emergency pruning of oak).
- **Action 1.9**: Complete annual staking and application of tree guards for young, vulnerable trees. Training pruning completed as applicable.
- **Action 1.10**: Follow the established tree zone based pruning routine utilizing staff not involved in snow event removal.
- **Action 1.11**: Encourage citizen group action and reporting to monitor tree health.

**Strategy #3**: Manage strategic removals and the handling of wood waste.

- **Action 1.12**: Conduct hazard tree inspections following the outlined ISA Tree Risk Assessment in order to identify potentially hazardous trees as needed.
- **Action 1.13:** Remove hazard trees before they pose significant risk to the public.
- **Action 1.14**: Identify local non-profit groups to donate wood waste to in order to benefit the urban forest, the community, and environment and reduce yard waste debris.

**Goal 2**: Continually work to maintain and grow community and political support for the Urban Forestry program.

**Strategy #1**: Keep Village Officials and Administrator/Department Heads informed on urban forestry related issues and successes.

**Action 2.1**: Parks, Recreation, and Forestry will maintain responsibility for the management of the community forest per Village Ordinance.

**Action 2.2**: Urban forestry program progress reports and success should be provided to Village officials, Village Park Commission, and Village Administrator. Reports should include information on public safety and the environmental and economic benefits to Village residents from a managed urban forestry program.

**Action 2.3**: Village officials support urban forestry efforts through annual Arbor Day proclamations.

**Strategy #2**: Keep Village residents informed on the Urban Forestry Program.

**Action 2.4**: Recruit and solicit volunteers to assist in the urban forestry program and tree planting events.

**Action 2.5:** Maintain urban forestry webpage on Village website with updates and links to additional information as applicable.

**Action 2.6**: Submit blog posts for publication through Village Blog on Urban Forestry activities.

**Action 2.7**: Submit information and updates on Urban Forestry Program for seasonal program guide including existing programs.

Action 2.8: Maintain an Urban Forestry Kiosk at for resident use and information.

**Action 2.9:** Promote and maintain Village Adopt-A-Tree and Buddy Tree programs to facilitate involvement in the remediation of the invasive Emerald Ash Borer.

**Action 2.10**: As applicable, Urban Forestry initiatives and information will be present at Village sponsored community events.

**Action 2.11**: Increase awareness of the Neighborhood Tree Program in order to develop unplanted residential lots.





Resident volunteers may assist in Urban Forestry activities as seen above.

**Goal 3**: Village residents are knowledgeable about proper tree planting and care.

**Strategy #1:** Develop community education and awareness programs.

**Action 3.1:** Invite Village Board to urban forestry events in order to increase community involvement.

**Action 3.2**: Involve schools, educators, and civic groups in Arbor Day and Earth Day events.

**Action 3.3**: Publicize and garner interest in the Memorial Tree Program.

**Action 3.4**: Submit articles and inform media and Village officials on all Arbor Day and Earth

Day activities and achievements utilizing social media.

**Action 3.5**: Maintain Tree City USA status and publicize. Work to achieve a Tree City USA Growth Award annually.

**Action 3.6**: Offer and publicize tree care/planting workshops in conjunction with the Brown County UW-Extension or other private contractors.

**Strategy #2**: Devise tree care information display at Village Hall, Village Offices, and via Village website.

**Action 3.7**: Purchase updated ISA Tree Care Customer Brochures to display for the public at no charge.

**Action 3.8**: Publicize the display information via the Village Website. Where appropriate, place information on website.

**Action 3.9**: Maintain kiosk at Village hall to include Urban Forestry activities, photo of plantings, invasive species, volunteer programs, etc.

**Goal 4**: Ensure that trees are integral in all community planning and development decisions.

**Strategy #1:** Trees are included in the review of all community planning, development, and street reconstructions.

**Action 4.1**: Tree policy be reviewed and updated in congruence with the Bellevue Zoning Ordinance, Physical Development Standards, Chapter 500-1706 Landscaping and Greenspace Standards and/or Chapter 500-1604 Site Design Standards.

**Action 4.2**: Create a Village policy for all departments (where applicable) to address/acknowledge trees during their planning process.

**Action 4.3**: Integrate tree preservation, planting, maintenance, or removal into community funded projects.

**Strategy #2**: Trees are addressed during planning stages in all Village construction projects.

**Action 4.4**: Village construction projects are evaluated for their impact on existing trees prior to beginning.

**Action 4.5**: Documentation of tree preservation/removal decision and justifications should occur on all construction projects.

**Action 4.6**: Maintain formal site plan review including tree review process for all community development.

**Action 4.7:** Update Administrative Policy 26 for tree preservation and justification in construction.

## **Implementation Schedule**

Plans are unlikely to be implemented without clear guidelines on how they will be implemented and by whom. The implementation schedule identifies who is responsible for each action, when each will be completed, and what each will cost where applicable. Please note some actions are dependent on the growing season and require active monitoring to ensure they are implemented at the earliest opportunity.

**Goal 1**: Community trees are maintained at optimum levels with attention paid to health, age, and species diversity. Trees planted are appropriate for the site. Trees are maintained for longevity, increased public safety, and reduced liability.

and reduced liability.						
Strategy #1: Update and maintain an e	ffective public invent	ory system.				
Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date			
Update GIS tree inventory to reflect trees planted, removed, and replaced	Parks, Recreation, and Forestry Staff 80 hours annually	Parks, Recreation, and Forestry with assistance from IT	Annually following completed summer tree work to reflect spring and summer changes			
Maintain accessible tree inventory information (tree location and species) on Village Website	IT Staff	IT Staff	Updated annually following updated GIS tree inventory			
Utilize complimentary programs such as i-Tree to assess tree benefits	Parks, Recreation, and Forestry Staff	Parks, Recreation, and Forestry with assistance from IT	Updated annually following updated GIS tree inventory			
Strategy #2: Handle tree care in the most effective, productive manner possible.						
Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date			
Implement responsive action to natural tree stressors (drought, pest and disease)	Urban Forestry Maintenance Budget 80 hours annually	Parks, Recreation, and Forestry Staff	Decide on action to be taken upon the discovery of undesirable conditions			
Complete staking and application of tree guards for young and vulnerable trees	Urban Forestry Maintenance Budget 52 hours annually	Parks, Recreation, and Forestry Staff	Completion by end of September annually			
Continue following four-year pruning routine based on Tree Zones November through May	Urban Forestry Maintenance Budget	Parks, Recreation, and Forestry with assistance from Public Works staff	Complete pruning by end of May annually			
Strategy #3: Manage strategic removals and the handling of wood waste.						
Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date			
Conduct tree hazard inspections as outlined by the ISA Tree Risk Assessment as applicable	Urban Forestry Maintenance Budget	Village Forester	Complete following winter pruning for pruned trees annually			
Identify local non-profit groups to donate urban wood waste	Parks, Recreation, and Forestry Staff	Parks, Recreation, and Forestry Staff	Summer 2017			

**Goal 2**: Continually work to maintain and grow community and political support for the Urban Forestry program.

**Strategy #1**: Keep Village Officials and Administrator/Department Heads informed on urban forestry related issues and successes.

Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date
Urban forestry progress reports and success provided to Village officials, Park Commission, and Administrator	Parks, Recreation, and Forestry Staff	Parks, Recreation, and Forestry Staff	Annually for presentation with department annual report (reflect on previous year)

<b>Strategy #2</b> : Keep Village residents informed on the Urban Forestry program.
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Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date
Maintain urban forestry webpage on	Parks, Recreation,	Parks, Recreation,	On an as needed basis to
Village website with updates and	and Forestry Staff	and Forestry Staff	reflect program deadlines
links to additional information as applicable	20 hours annually		and urban forestry notices
Submit Urban Forestry blog posts for	Parks, Recreation,	Parks, Recreation,	One post per month as
publication on Village Blog to keep	and Forestry Staff	and Forestry Staff	applicable (winter months
residents informed on Urban Forestry	20 hours annually		may see lull in urban
activities	•		forestry activities)
Maintain Urban Forestry kiosk at	Parks, Recreation,	Parks, Recreation,	Update on monthly basis to
Village Office	and Forestry Staff	and Forestry Staff	reflect program deadlines
	20 hours annually		and urban forestry notices
Promote Neighborhood Tree Planting	Parks, Recreation,	Parks, Recreation,	March 2017 for inclusion in
Program	and Forestry Staff	and Forestry Staff	spring planting
Submit urban forestry information	Parks, Recreation,	Forestry Staff and	Annually by seasonal
for seasonal program guide	and Forestry Staff	Recreation	deadlines
		Supervisor	

Goal 3: Village residents are knowled	Goal 3: Village residents are knowledgeable about proper tree planting and care.				
Strategy #1: Develop community edu	ucation and awareness	programs.			
Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date		
Arbor Day Proclamation*	Urban Forestry Budget	Village Officials	December for recognition in next year		
Involve schools, educators, and civic groups in Arbor Day and Earth Day events	Urban Forestry Budget Varied cost based on partners and donations	Parks, Recreation, and Forestry Staff	March annually (partnership)/April annually (implementation)		
Publicize the Memorial Tree Program  Maintain Tree City USA status and apply for TCUSA Growth Award	Parks, Recreation, and Forestry Staff Parks, Recreation, and Forestry Staff	Parks, Recreation, and Forestry Staff Parks, Recreation, and Forestry Staff	March 2017 for inclusion in spring planting  Complete by end of December annually for next year		
Offer and publicize tree care/planting workshops in conjunction with the Brown County UW-Extension or other private contractors	Urban Forestry Budget Possible inclusion in grants and partnerships	Parks, Recreation, and Forestry Staff	March 2017 for summer workshop offerings		
Strategy #2: Devise tree care informations	<u>'</u>	Hall, Village Offices.	and via Village website.		
Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date		
Purchase updated ISA Tree Care Customer Brochures to display at no charge	Urban Forestry Budget \$189.95 for current ISA Package	Parks, Recreation, and Forestry Staff	December 2017		
Publicize display information online at Village website	Parks, Recreation, and Forestry Staff 20 hours annually	Parks, Recreation, and Forestry with assistance from	On an as needed basis to reflect availability		
Maintain kiosk at Village Office to include Urban Forestry activities, photos, invasive species, volunteer opportunities, etc.	Parks, Recreation, and Forestry Staff 20 hours annually	Parks, Recreation, and Forestry Staff	Update on monthly basis to reflect program deadlines and urban forestry notices		

opportunities, etc.
\*required for Tree City USA eligibility

**Goal 4**: Ensure that trees are integral in all community planning and development decisions.

**Strategy #1**: Trees are included on the agenda during all community planning, development, and street reconstructions.

Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date
Tree policy in development should	Parks, Recreation,	Parks, Recreation,	In congruence with timely
be reviewed and updated in	and Forestry Staff	and Forestry Staff	updates
congruence with the Bellevue			
Zoning Ordinance, Physical			
Development Standards, Chapter			
500-1706 and/or Chapter 500-1604			

**Strategy #2**: Trees are addressed during planning stages in all Village construction projects.

Recommended Action Steps	Cost/Funding Source	Performed By	Status/Completion Date
Revisions to Administrative Policy 26 to adhere to Municipal Code 427	Parks, Recreation, and Forestry Staff	Parks, Recreation, and Forestry Staff	Complete by December 2018
Site Plan Review for Village Funded Projects	Department of Public Works	Village Forester and DPW Staff	Annually during early planning stages as applicable

#### **Evaluating and Updating Plan**

The Village of Bellevue Urban Forestry Strategic Plan is intended to be a five-year plan outlining the urban forestry needs of the Village. Progress of goals should be evaluated annually by Parks, Recreation, and Forestry Staff in order to successfully follow the objectives. Goals that have been rendered infeasible should be addressed early and reasons for failure should be properly identified to avoid conflict with other goals. The Urban Forestry Strategic Plan should be considered in conjunction with this plan in order to ensure cohesive goals and minimal conflict.

During the 5<sup>th</sup> year of implementation, time should be taken to review the existing plan and make revisions. A new Urban Forestry Strategic Plan should be created from these revisions, and should extend the Urban Forestry another five years upon the conclusion of the current plan once adopted. This will help to alleviate "gap years" and keep a consistent plan of action for the Village with direction.