

Waterloo's Tree Inventory Project

A tree inventory is defined as a record of the location, characteristics, and assessment of individual trees within a well-defined group. Public works departments, leisure services departments, city forestry departments, & parks departments are all responsible to efficiently maintain a safe, healthy, and aesthetically pleasing environment for the citizens of their respective Iowa communities. In order to properly do this, an inventory of all publicly owned trees should be obtained.

The City of Waterloo has recently awarded a contract to Stratapoint, Inc. of Rosemount, MN, to create a comprehensive inventory of all Waterloo's trees located along the street rights-of way, in the three municipal golf courses, and in the city's 52 parks.

The Waterloo Tree Inventory Project requires the collection of the following data:

<u>Location</u>	<u>Risk Assessment (Structural integrity of the tree)</u>
GPS Coordinates	
Zone (1-10)	
Street Name	<u>Maintenance Recommendations</u>
Address	Maintenance activities (Tree removal, Trim, Stump removal, Inspect, Monitor, Pick up downed limbs, Root prune, Girdled Root Repair, Mulch, Water)
Block #	
Tree ID#	
Site Descriptors (tree well, blvd, etc...)	
<u>Tree ID</u>	Maintenance activity extensions – clean, raise, clearance, reduce, thin, systematic routine, young tree training, restoration, hanging limbs
Botanical name	
Variety or Cultivar	
Common name	
<u>Size Classification</u>	Prioritize recommendations
Diameter (DBH to nearest inch)	
<u>Condition Rating</u> (Relating to health)	<u>Suitable Planting site availability</u>
Excellent/Healthy & Vigorous	<u>Utilities</u>
Good/Generally Healthy	
Fair	<u>Status</u>
Poor/Declining	Memorial trees
Dead/Nearly Dead	<u>Comments</u>

A tree inventory is a 'must have' for all urban land managers for many reasons.

- An inventory generates a tree management plan. Based on the condition of trees recorded, required tree work is prioritized and completed as funding is available.
- An inventory justifies tree care budgets. Knowing what needs to be done to the trees allows managers to accurately project how much funding is needed.

- The location of the trees and the tree attributes can be used as another layer within the municipality's GIS system.
- An inventory is one tool in preparing a community for a natural disaster. For example, when the emerald ash borer arrives in Iowa and starts killing all the ash trees, a community with an inventory will know where the insect will attack and what size the ash trees are that will be attacked. This will allow accurate budgets to be projected for such a disaster as well as accurate contract documents and work orders.
- Liability exposure is reduced with the ability to prove that your municipality has maintained accurate records and performed due diligence with respect to a proactive tree maintenance program.
- An inventory provides an opportunity for better customer service by allowing staff to respond in a more informed and timely manner to public inquiries on tree issues.
- Efficient tree care operations are the result. An inventory gives the opportunity to schedule all work in a given area to be done at the same time, which increases efficiencies with less travel time.

A tree inventory is a snapshot in time of the trees and their attributes in a community. However, when the tree data collected is downloaded into a tree manager software program, it is possible to keep the tree inventory updated.

The Waterloo Leisure Services will be downloading the inventory data into a tree manager software program called Point DataMap-Online, created by Stratapoint, Inc. Point DataMap-Online allows the Waterloo Leisure Services staff to create and print work orders for the forestry crews with aerial photos of the job site, it offers a work history to be maintained for every tree, it shows what trees require immediate attention, and it allows the leisure staff to create reports dealing with the tree data collected. Waterloo's forestry staff will be updating all files in this software to keep the inventory up to date. All tree related calls will be entered in the call history of the appropriate trees, tree work orders will be recorded into the work history for the appropriate trees, tree conditions and sizes will be updated during systematic trimming cycle visits, and all new plantings will be recorded. Since Point DataMap-Online is available online, any computer with online capability will offer the ability to manipulate the data in the tree inventory. A laptop computer and a Tablet PC will be used in the field to access and update the inventory information.

Waterloo Leisure Services staff is looking forward to using the new tree inventory and tree management software to better manage Waterloo's tree resources, and to provide a safer and more aesthetically pleasing environment for its citizens and visitors.

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