

INFORMATION PAPER



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Planning, Building, and Development
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SUBJ: NATIVE TREE AND PLANT ZONING AMENDMENTS

Summary: Lake County is Illinois' most biodiverse county with unique plant communities at the convergence of two eco-regions and unique ecosystems including oak savannahs, ravines, bogs, and upland forests. These habitats and biodiversity are threatened by the loss of native habitat and an increasing number of invasive species. For example, Lake County forests contain up to fifty percent buckthorn by stem count, which can prevent oak regeneration and negatively impact native wildlife including birds and understory plants. The County can limit or remediate this problem through amendments to Chapter 151 Unified Development Ordinance (UDO), including: updating the Plant Materials List, requiring native trees and plants, expanding natural resource protection standards, and encouraging invasive species removal. These actions may decrease the number of invasive species while increasing oak and other native species regeneration.

Background:

- Lake County currently has 30% canopy cover, while the Morton Arboretum and the Chicago Region Tree Initiative have suggested this could be increased by more than 50%, up to a total of 83%.¹
- An estimated 42% of biomass in Lake County is made up of buckthorn.
- Invasive species crowd out native plants, produce less resources for local fauna, and disrupt the regeneration of oak and hardwood ecosystems.
- Native plants offer improved wildlife habitat, water conservation, carbon storage, reduced maintenance for property owners, and require little to no pesticides and herbicides when established.
- Larger trees have more benefits for local plants, animals, and air quality.

Analysis:

- The County has established goals to expand and improve wildlife habitat, increase water conservation and retention, and improve local air quality. Increasing the number of native trees and plants, increasing canopy cover, and removing invasive species may contribute to these goals. For example, removing buckthorn improves oak regeneration and other native species, improving long-term outcomes for native wildlife.
- Residential districts are the largest land use category in Lake County and have the greatest potential for increased tree canopy cover according to the Chicago Region Tree Initiative.
- The Lake County, Illinois Code of Ordinances' Natural Resource Protection Standards apply to some residential subdivisions and non-residential development. These standards protect woodlands and significant trees and require reforestation if these natural resources are removed or damaged during subject development. Trees required for reforestation may come from the Plant Materials List or be a native tree.
- The UDO can encourage or require the planting and preservation of native trees, plants, and habitats, which would support local ecological restoration.

¹ All statistics presented are from the Morton Arboretum and the Chicago Region Tree Initiative (CRTI). Source: Morton Arboretum (2021) 2020 Chicago Region Tree Census Report. Available online: https://mortonarb.org/app/uploads/2021/05/2020-Chicago-Region-Tree-Census-Report_FIN.pdf.

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Policy Options:

- Option 1: Update Plant Materials List
 - Summary: Projects undergoing Site Capacity Site Plan Review must adhere to Natural Resource Protection Standards. Plant Materials List is used for replanting requirements after removal of woodlands and significant trees. Native trees are allowed but not listed or suggested on the list.
 - Actions: 1) Remove invasive, disease-affected, and trees deemed incompatible with County goals, 2) Add a list of native trees available locally, 3) Prioritize native trees and plants.
- Option 2: Increase Species Diversity Requirements
 - Summary: Natural Resource Protection Standards limit a single species to no more than 40% of reforested trees. A mix of tree species and families can limit the spread of pests and lessen the overall impact of pests on local forests.
 - Actions: 1) Determine appropriate maximum percent for any given species, 2) Determine appropriate maximum percent for any given genus.
- Option 3: Prioritize Native Trees and Plants
 - Summary: Native trees are permitted for Natural Resource Protection Standards requiring reforestation. Native trees could be incentivized through reduced reforestation requirements when planting natives.
 - Actions: 1) Determine land uses and projects that may be eligible for prioritization, 2) determine appropriate reduction ratio for projects and level of native planting.
- Option 4: Require Native Trees and Plants
 - Summary: Native trees are permitted for Natural Resource Protection Standards requiring reforestation. A certain percentage of all plants could be required to be native in projects subject to standards. This percentage could be staggered so that larger projects require more native trees. Requiring 100% native plants is not feasible due to local supply chains.
 - Actions: 1) Determine situations where required native trees and plants would be beneficial, 2) Determine appropriate percentage for native trees and plants.
- Option 5: Expand Natural Resource Protection Standards
 - Summary: Natural Resource Protection Standards apply to certain non-residential and subdivision development projects. Nearly all residential projects are unaffected by these standards. Natural Resource Protection Standards could be expanded to include a wider array of residential projects, such as projects containing native “heritage” trees.
 - Action: 1) Determine what protections could be reasonably extended in residential areas, 2) Determine what constitutes an ecologically, economically, and aesthetically valuable tree to be protected under a potential “heritage” tree designation, 3) Estimate the number of native “heritage” trees in residential areas, 4) work to close loopholes regarding NRPS and agricultural uses.