

## ..Title

### Environmental Commission Recommends the Inclusion of Natural Features Sustainability in Ann Arbor City Planning and Development

## ..Body

Whereas it is the responsibility of the Environmental Commission, as recorded in the Ann Arbor City Code Title I, Chapter 8,1:237, “to develop comprehensive, integrated environmental policies for implementation by the City to protect and enhance our air, water, land, and public health. It shall help to set goals and policies for the City and community to continuously improve the natural and built environment.”;

Whereas protecting and restoring biodiversity is one of the most important things we can do for the well-being of the planet and we who depend on it for our survival;<sup>1</sup>

Whereas the existing Ann Arbor Natural Features Master Plan affirms that “it is City's policy to promote sound stewardship of the City's Natural Features” and that “a healthy natural environment is necessary to sustain a high quality of life.”;

Whereas the 2013 Sustainability Framework, part of Ann Arbor’s current Comprehensive Land Use Plan, recognizes our “need for integrated and sustainable systems that preserve and enhance the integrity of our natural environment:” and the importance of “reinforcing our community’s connection with both our built and natural environment.”;

Whereas presentations and discussion for the Ann Arbor Planning Commission's Comprehensive Plan Subcommittee, the Comprehensive Plan Steering Committee, and a Comprehensive Plan online Open House have consistently shown public support for natural features, as shown in the following comments:<sup>2</sup>

- a. 5/15/2024 listed “Increased green infrastructure and protection of natural features” and “Importance of protecting trees and natural areas while developing the City.”;
- b. 7/17/2024 listed a defining theme of “Environmental Protection & Climate Action” and a Vision of “Protect Trees & Natural Areas”;
- c. 9/24/2024 stated that “We are committed to promoting balance between ALL our natural and human systems, today and into the future”;

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1 West, Paul Senior Scientist. PhD (2025, April 9) Drawdown Nexus: How we can create a triple win for climate, nature, and people, Project Drawdown. <https://drawdown.org/>

2 <https://a2compplan-a2-mi.hub.arcgis.com/pages/blog>

- d. 9/24/2024 stated “Increasing density must be balanced with Natural Features protection and reducing carbon emissions”;
- e. 10/2024 public feedback session stated “Goal 4: Balance development with protection and integration of critical natural features to foster a healthy, biodiverse ecosystem”;
- f. 11/20/24 listed “Preservation of Natural Features” as #4 of the nine priorities;
- g. 11/20/24 meeting minutes of the Ann Arbor Comprehensive Land Use Plan reported public support for preservation of Natural Features, stating that high-quality natural areas deserve more attention, mitigation efforts may not be sufficient, and biodiversity and ecosystems need protection even when land values are high;

Whereas numerous Michigan cities, including Dearborn<sup>3</sup>, Grand Rapids<sup>4</sup>, Lansing<sup>5</sup>, Livonia<sup>6</sup>, Novi<sup>7</sup>, Royal Oak<sup>8</sup> and Sterling Heights<sup>9</sup>, incorporate protection of natural features and ecosystems, and environmentally sensitive requirements, or natural sustainable practices in their Master or Comprehensive Land Use Plans;

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3 <https://www.a2gov.org/planning/historic-preservation/design-guidelines-codes/>

4 Aspen Global Change Institute, Understanding global change challenges: Biodiversity loss, May 29 2024, <https://www.agci.org/blog/understanding-global-change-challenges-biodiversity-loss#:~:text=Biodiversity%20loss%20%E2%80%94%20driven%20by%20habitat,the%20effects%20of%20climate%20change.>

5 International Union for the Conservation of Nature, Nature may have solutions your city is looking for, Aug 7, 2019, <https://iucn.org/news/forests/201908/nature-may-have-solutions-your-city-looking#:~:text=The%20provision%20of%20ecosystem%20services,projects%20emerging%20around%20the%20world.>

6 Nature Based Solutions, Urban stormwater retention capacity of nature-based solutions at different climatic conditions, December 2022, <https://www.sciencedirect.com/science/article/pii/S2772411522000301#:~:text=The%20SUDS%2C%20that%20are%20key,to%2096%25%20%5B87%5D.>

7 Earth Org, Explainer: What Are Nature-Based Solutions And How Can They Help Tackle the Climate Crisis?, Jan 11 2023, <https://earth.org/nature-based-solutions-can-help-tackle-the-climate-crisis/>

8 European Commission, Green Infrastructure, [https://environment.ec.europa.eu/topics/nature-and-biodiversity/green-infrastructure\\_en](https://environment.ec.europa.eu/topics/nature-and-biodiversity/green-infrastructure_en)

9 Dearborn 2030 Master Plan, <https://cityofdearborn.org/documents/city-departments/city-plan/2223-master-plan-2030/file>

Whereas Ann Arbor's Historic District design guidelines protect site features on historic residential properties, including mature trees, hedges and other historic plantings;<sup>10</sup>

Whereas the current Natural Features Master Plan describes Ann Arbor's natural features, both publicly and privately owned, and sets forth policies to protect, restore, and maintain them, the new Comprehensive Land Use Plan must promote and improve the same policies to sustain these natural features and their ecosystem services;

Whereas Ann Arbor, as with many other communities, is experiencing both a critical housing shortage and the critical loss of significant natural features, biodiversity, and the services provided by natural ecosystems; it is imperative that the Comprehensive Land Use Plan address the need for nature-based solutions that will balance growth and economic development with a healthy natural environment into the future for the benefit of all;

Whereas it is critically important to recognize the value of our remaining important Natural Features such as Native Forest Fragments, Woodlands, Landmark and Heritage Trees, Wetlands, Watercourses, Floodplains, Floodways, Steep Slopes and soils;

Whereas Natural Features and the ecosystem services they provide form a natural cyclic infrastructure that contributes the basics required to support all life, such as oxygen, food, clean water, and temperature regulation. These ecological processes sustain the quality of air, water, and soils; sequester carbon; cycle nutrients; provide habitat, pollination and pest control; and contribute to non-material mental and physical aspects of quality of life, well-being, and joy;<sup>11</sup>

Whereas natural ecosystems and the diversity of species they support are in steep decline locally and around the world due to climate change; pollution; destruction and fragmentation of habitats; invasive species of plants, animals, and pathogens;<sup>12</sup>

Whereas saving natural ecosystems is critical to the survival of all species and requires that the City work to protect, conserve, restore, and manage them as essential components of local infrastructure;<sup>13</sup>

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10 Grand Rapids Community Master Plan, copy available upon request

11 Designing Lansing Comprehensive Plan, <https://www.lansingmi.gov/244/Design-Lansing>

12 Livonia Starts Now Vision 21, <https://www.ci.livonia.mi.us/DocumentCenter/View/349/Livonia-Starts-Now-Vision-21-PDF>

13 City of Novi Master Plan for Land Use - Draft, <https://cityofnovi.org/media/ys3dxsgp/250204draftmasterplanfebruary2025.pdf>

Whereas actions to protect and enhance natural features and biodiversity can reduce costs through the natural ecosystem services they provide and should be used in conjunction with direct interventions to reduce greenhouse gases<sup>14</sup> and improve stormwater management;<sup>15</sup>

Whereas Ann Arbor has planned efforts to cut greenhouse gases to net zero by 2030, and while natural features protection is a multi-departmental multidisciplinary effort, the City has yet to adopt a broad-based plan to protect and enhance biodiversity and nature-based design across the City including the Ann Arbor A<sup>2</sup>ZERO Living Carbon Neutrality Plan which incorporates minimal elements to protect natural systems.;

Whereas healthy, functioning natural systems integrated with the built environment are essential to support healthy, sustainable communities;

Whereas we should protect existing biodiversity and natural systems and actively seek to increase and enhance these assets with each project.<sup>16</sup>

Therefore, be it resolved that the Environmental Commission recommends that City Council direct the Planning Commission to consider the inclusion of the following policies in the Comprehensive Plan, in collaboration with the Environmental/Sustainability Commission:

- a. Incorporate measures to conserve, restore, enhance, and continuously improve the protection and stewardship of Natural Features on all properties in the city;
- b. Include biodiversity and the protection and stewardship of Natural Features in the city, with ongoing development;
- c. Strive to be a healthy sustainable community where healthy functioning natural features are integrated with the built environment;
- d. Utilize, continue to enforce, and continuously improve the Natural Features regulations (UDC, Chapter 55, Article IV, Section 5.23<sup>17</sup>) in effect as of 3/20/25;

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<sup>14</sup> Royal Oak Master Plan 2050 - Draft, <https://planroyaloak.com/wp-content/uploads/sites/13/2025/01/2218-MasterPlan-Proposed.pdf>

<sup>15</sup> Sterling Heights 2924 Master Plan, Draft, <https://engage.giffelswebster.com/sterling-heights-master-plan>

<sup>16</sup> City of Ann Arbor Unified Development Code, <https://www.a2gov.org/media/xmhf4pg1/udc-edition-10a-effective-2-6-25.pdf>

<sup>17</sup> TreeNet, Integrating biodiversity sensitive urban design (BSUD) into urban planning, <https://treenet.org/resource/integrating-biodiversity-sensitive-urban-design-bsud-into-urban->

including adding actions to strengthen mitigation requirements, enhance regulations to protect soils from compaction, and improve protections for Natural Features, such as Landmark and Heritage Trees, and Native Forest Fragments.

Comprehensive Plan goal 10 should have an opening paragraph that explains the natural features transition:

- The current Natural Features Master Plan document that was approved in 2004 is being replaced by Comprehensive Plan goal 10.
- Even though Comprehensive Plan goal 10 is drastically shorter than the Natural Features Master Plan, there is no intention to degrade the current natural features protections.

Include the following statements as an overview of goal 10 natural features protections:

- Purpose<sup>18</sup>: The City of Ann Arbor is committed to securing a high quality of life for its current and future residents. It is City policy to promote sound stewardship of the city's natural features. A healthy natural environment is necessary to sustain a high quality of life. This Plan describes our natural features, both publicly and privately owned, and sets forth policies to protect, restore and sustain them.
- Loss of natural features has health, economic, aesthetic, educational and recreational consequences. Only through policies and actions that integrate high environmental quality and public health with other goals of the City can we ensure the city's aesthetic character, ecological stability, economic vitality, and quality of life.
- This Plan provides a framework to guide the City and its citizens in their policy making and stewardship activities. Standards for protection are based upon the sensitivity of each natural feature and its importance and uniqueness as part of a local ecosystem. The principles of this document should be incorporated into all elements of the City Plan and in the day-to-day decision making processes of City departments.
- General Description and Protection Measures: Ann Arbor lies entirely within the central portion of the watershed of the Huron River, which begins many miles northeast in Oakland County. Hills, bluffs, ravines, and wetlands surround the river and its tributary streams with pockets of native soils, vegetation and wildlife.

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[planning/#:~:text=By%20applying%20the%20principles%20of,fundamental%20component%20of%20urban%20design.](#)

18 City of Ann Arbor Natural Features Master Plan, [https://www.a2gov.org/media/u1qjqduh/nfmasterplan\\_6-04.pdf](https://www.a2gov.org/media/u1qjqduh/nfmasterplan_6-04.pdf)

Generally, natural areas of the greatest size, diversity and number of features, and those with the least fragmentation or with multiple natural features are the most valuable.

- Sustaining the ecological health of the city and the region requires cooperation between citizens and many partners: governmental bodies, educational and other community institutions, businesses, media, volunteers, and environmental and other civic organizations.
- The Plan identifies nine types of natural features. Goals and implementation strategies for each natural feature are found in Section VI of the Plan. A summary of the protection goals and implementation methods is outlined below:

Natural Features and Protection Goal Summaries	Methods for Implementation
<p>1. The Watershed of the Huron River and Its Tributaries in Ann Arbor: The Huron River is the central natural feature of the City and its major source of water.</p> <p>Goal Summary: Update watershed plans; ensure that the City's Capital Improvements Plan is consistent with Natural Features Master Plan; add greenways along the Huron River; add flood storage capacity and reduce adverse impacts of heavy rain events, including flooding.</p>	<p>Implementation Summary: Implement watershed plans, the City Plan and the Capital Improvements Plan; work with various partners to implement watershed planning; encourage native plantings and acquisition of lands along the river; improve education outreach techniques; improve city services; and improve GIS capabilities relating to data management.</p>
<p>2. Wetlands, Ponds and Lakes: The City's original wetlands were open meadows, forested swamps, marshes and ponds. A few of the original wetlands remain, and there are numerous retention ponds and small wetlands.</p> <p>Goal Summary: Identify, assess, protect and sustain wetlands.</p>	<p>Implementation Summary: Review and modify City codes relating to inspections, mitigation and other standards for wetlands; encourage stewardship and management techniques to reduce impacts to wetlands resulting from storm water run-off.</p>

<p>3. Floodways and Floodplains: The floodplain is land adjacent to lakes, streams, and rivers which is prone to flooding water levels rise and overflow the normal water channels during a 100-year frequency flood. The floodway is the sub-area of the floodplain needed to convey flood flows.</p> <p>Goal Summary: Identify, restore and sustain floodplains, especially those of highest-concern; reduce storm water volume and flood occurrences; support watershed groups and implement watershed plans.</p>	<p>Implementation Summary: Review and modify City codes and policies to ensure that best management practices are implemented; restore city-owned wetlands; promote stewardship by educating the public on the identification and value of native plants and activities that can benefit floodplains.</p>
<p>4. Groundwater and Groundwater Recharge Areas: A groundwater recharge area is land which readily permits water to move from the surface into a groundwater system. Groundwater recharge areas provide water for wells and a steady supply of clean filtered water to rivers and streams.</p> <p>Goal Summary: Protect drinking water and identify suitable groundwater recharge areas throughout the City and protect these areas from impervious surfaces and pollutants.</p>	<p>Implementation Summary: Implement policy changes that help to minimize adverse impacts to groundwater and groundwater recharge areas, such as protecting wellhead areas, minimizing impervious surfaces, installing and preserving essential vegetation, and eliminating contamination problems.</p>
<p>5. Landforms and Steep Slopes: Steep slopes are prone to erosion when the vegetation on them is disturbed and storm water is allowed to move across the surfaces at high speed, or when surface runoff is directed toward them. Disturbed</p>	<p>Implementation Summary: Maintain geographic information database for steep slopes; review standards, codes and policies for possible modifications that would help identify and protect</p>

<p>slopes often result in silting watercourses or disturbances to lands below.</p> <p>Goal Summary: Protect steep slopes; identify and protect scenic vistas and sustain the natural features that comprise them.</p>	<p>natural land contours and scenic vistas.</p>
<p>6. Woodlands, Savannas and Prairies: Woodlands, savannas and prairies are important elements of the natural beauty of the City. They serve as buffers from pollution, moderate local climate and storm hazards, and provide areas of plant and animal diversity and habitats.</p> <p>Goal: Identify, steward, and conserve woodlands, savannas and prairies to protect water, air, and soil quality, to buffer air and noise pollution, to moderate local climate and storm hazards, to preserve wildlife habitats and natural corridors, and to maintain important elements of the natural beauty of the City.</p>	<p>Implementation Summary: Amend code to include definitions for savannas and prairies; review code to identify areas to improve protection measures, including enforcement; identify sites for possible acquisition; revise PROS Plan to include savannas and prairies in criteria for acquisition; develop native planting policy for city-owned property; develop additional tools and resources for public education and stewardship.</p>
<p>7. Landmark Trees: A landmark tree is generally any tree larger than 24 inches in diameter at breast height and any tree of a size listed on the Landmark Tree List (in the Land Development Regulations).</p> <p>Goal: Protect and preserve landmark trees that are in good or excellent condition, particularly trees that are rare, unusual, old or historically significant (over 100 years old),</p>	<p>Implementation Summary: Establish a program that identifies and rewards landowners for stewardship of landmark trees; develop tools and resources to educate the public on possible impacts to and recommended care for landmark trees; develop a process to determine long-term impacts of protection measures, including re-inspections after</p>



provide a diversity of species or contribute to a native forest fragment.	development; foster a longterm monitoring program.
<p>8. Native Plant and Animal Ecosystems: Native plants are those that have evolved in the area over thousands of years, adapting to the local climate and providing habitats for native wildlife of the area. The use of native plant species offers great benefits to the City. Many of the native grasses and flowers are insect-rather than wind pollinated so produce less air pollen. Native plantings require no mowing and once established require less water, hold water on the landscape much better with their deeper roots, and do not need pesticides or fertilizers.</p> <p>Goal: Identify, steward and protect habitats that are rich in native flora or fauna and that are threatened, endangered or contain special concern species, while reducing invasive species and increasing the diversity and distribution of native plants that are adapted to the extremes of climate of the region.</p>	<p>Implementation Summary: Inventory and rate plant species and consider acquiring those with high ratings; develop an assessment system for wildlife; identify best protection techniques; designate areas for on-going management; continue controls burns; develop policy for native plantings in City parks; continue public education regarding stewardship; develop a stewardship program for endangered species habitats.</p>
<p>9. Greenway Linkages between Natural Features: Greenways are linear open spaces connecting natural areas and parks. While greenways primarily link natural features, they may also facilitate connections in the built environment, such as links between neighborhoods, retail areas,</p>	<p>Implementation Summary: Implement greenway programs and initiatives and coordinate such activities with other organizations and governmental entities; identify new links, including possible acquisition; identify improvements to existing links; incorporate greenway systems and design principles into master plans</p>

<p>schools, downtown or employment centers.</p> <p>Goal: Establish a network of greenways throughout the City that provides non motorized connections between various land uses, such as neighborhoods, commercial and employment centers, downtown and the University of Michigan, and helps to retain the shape and continuity of natural features, especially along stream corridors, between parks and through new neighborhoods. The network also should extend to greenways located on adjacent township and County properties.</p>	<p>and zoning; facilitate stewardship of privately owned linkages.</p>
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Include the following statements in the Comprehensive Plan goal 10.1:

- The City should consider adding protections for soil compaction and heritage trees.
- The City should incentivize development in areas with low natural features but high in other desirable values such as walkable / bikeable / public transportation with employment opportunities.
- The City's nature areas have had restoration over the past few decades and are seeing an improvement in biodiversity. To expand that improvement, the City should look for opportunities to create wildlife corridors (air or land) throughout the city. The corridors can include existing private property which could receive a wildlife corridor designation.
- The City should consider developing goals and strategies to reduce mortality of birds across the city from collisions with windows in conjunction with its Bird City status.

Include the following statements in the Comprehensive Plan goal 10.2:

- The City should consider a program to encourage the removal of turf grass and other invasive plants from city and residential property which will allow more water absorption by the soil while encouraging the use of native plants.

Include the following statements in the Comprehensive Plan goal 10.3:

- For projects that do not require a site plan, and where tree removals are proposed, the City could explore requiring funds added to the canopy loss fund. The costs should be a sliding scale from a high price for native trees, a lower price for non native trees and a credit for invasive trees. The net result for all projects in Ann Arbor should be a negligible increase in total cost.
- The City should finalize the 2023 Urban Forest Management Plan and strive to achieve the canopy coverage goals listed (increase residential from 37% to 60%, increase recreation and open spaces from 48% to 50%, etc.).

Include the following statements in the Comprehensive Plan goal 10 note:

- The list of examples of green infrastructure should include the following items: conversion of mowed grass to native plants and removal of invasive species.

Include the following statement in the Comprehensive Plan goal 4.1

- In economically disadvantaged areas with low access to parks and natural features, the existing parks and natural features should be protected regardless of their usage.

Include the following statement in the Comprehensive Plan goal 4.2

- The City should identify non-motorized routes from high-density housing to the nearest park and nature area.

Ensure that Goal 10 of the Comprehensive Plan directs the appropriate departments to use their internal processes to update and create appropriate new metrics to make Natural Features a sustainability priority with associated strategies, actions and goals including short and long-term goals, proposed parties responsible, indicators of success and time-frames; along with the existing strategies and methods of implementation for all nine types of Natural Features listed similar to the A<sup>2</sup>ZERO Plan that will:

- a. Integrate built and natural infrastructure and allow the City to grow while ensuring that development respects, protects, and improves Ann Arbor's natural landscape and ecosystems for future generations;
- b. Develop metrics to assess and track gains and losses in biodiversity and set interim and long term targets that continuously improve its overall diversity;
- c. Utilize best practices (national or international) as part of developing Natural Features protections;
- d. Sequester greenhouse gas emissions and increasing biodiversity in the city;

