



**AGENDA**  
CHARTER TOWNSHIP OF MERIDIAN  
ENVIRONMENTAL COMMISSION  
REGULAR MEETING  
July 1 2020 7 pm

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ZOOM MEETING: ID: **874 3474 0486** Password: **5151**

1. CALL MEETING TO ORDER
2. APPROVAL OF THE AGENDA
3. APPROVAL OF THE MINUTES
4. PUBLIC REMARKS
5. NEW BUSINESS
  - A. Commissioner Application: Luca Winsinski
  - B. Mowing Amendment Discussion
  - C. Environmental Justice Resolution
  - D. Regional Environmental Zoom Meeting: Sarver
  - E. Other
6. OLD BUSINESS
  - A. Environmental Review of Code of Ordinances and Green Infrastructure Audit
  - B. Other
7. CHAIR'S REPORT
8. STAFF REPORT
9. COMMISSION/LIASON/WORKGROUP REPORTS & DISCUSSIONS
  - A. Brownfield Redevelopment Authority
  - B. Energy
  - C. Environmental Justice Study Group
  - D. Green Team/Green Network
  - E. Land Preservation
  - F. Planning
  - G. Sustainable Development Study Group
  - H. Transportation
  - I. Tree Team
10. PUBLIC REMARKS
11. ADJOURNMENT



ENVIRONMENTAL COMMISSION REGULAR MEETING  
WEDNESDAY, June 3, 2020 7:00 PM

PRESENT: Bill McConnell, John Sarver (Chair), Jim Kielbaso, Ned Jackson, Courtney Wisinski (Trustee Liaison), Courtney Boersema, Rose Vadnais (Vice Chair), Susan Masten  
STAFF: LeRoy Harvey, Stephen Gebes, Samantha Diehl  
GUESTS: Bob Chapman

**Approval of Agenda:** Approved

**Green Theme:** Solar Power Purchase Agreements were described in a presentation with Bob Chapman, formerly executive director of Michigan Interfaith Power and Light and Ecoworks of Detroit. Chapman is also the Board chair of Corner Shower & Laundry, serving homeless in Detroit.

Power Purchase Agreements are a way to achieve immediate cost reductions, energy savings, renewable energy goals, and greenhouse gas reduction. There are benefits to both building owners and investors. View the presentation at <http://meridianmi.swagit.com/play/06032020-828>. Slide show only at <https://www.meridian.mi.us/Home/ShowDocument?id=21082>

**Approval of Minutes:** Approved

**New Business:**

**Environmental Commissioner Application:** The Commission recommended the appointment of Tom Frazier (see application in tonight's packet). LeRoy will prepare a short memo from the EC/Chair Sarver to Supervisor Ron Styka.

**Sustainability and Racial Equality:** Vadnais suggested that it might be timely to address this issue. McConnell echoed this interest. Sarver suggests we put it on a future agenda. Wisinski knows the Governor's Environmental Justice Advocate and might be able to meet with us. Masten, Sarver, McConnell, and Vadnais would like to be part of that discussion. Masten also mentions connections between racial, economic, multi-family dwellings, and Covid-19. She will share data from [Ingham County Health Dept.](#)

**Old Business**

**Presentation to the Board of Trustees:** Wisinski expects that the E.C. may have the opportunity to present June 16<sup>th</sup> (Tuesday). We've discussed a presentation about PAH/Coal Tar Ban, a Climate Emergency Resolution, an update on our Climate Sustainability Plan, and other topics if they're "ready for prime time" such as the Tree Initiative, the Sustainable Building, and a commissioner appointment.

**Staff Report:** Harvey reported on his involvement with several groups including Green Network

Conversations (Wednesday mornings at 9am on [Zoom](#)), the Sustainable Building Study Group, the Green Team (recycling event coordination), the Energy Team, and the Tree Team. He's also working with (and looking for) neighborhood volunteers to help weed the Hidden River Rain Garden at Burcham. The fall recycling event will likely occur in the fall. The latest "[Green Gazette](#)" describes some additional updates. Subscribe [here](#).

### **Commission/Liaison/Workgroup Reports:**

**Brownfield Development Authority:** Jackson reports progress on the Haslett Marathon Service Station/redevelopment (SE corner of Haslett and Marsh).

**Energy:** Sarver reported on the MI Solar Series which continues on Thursdays at 7pm. More at <https://www.facebook.com/groups/MiSolarUsers/> Samantha Diehl has assisted in uploading to the HOMTV Youtube channel. Four of 5 stories feature Meridian residents and will hopefully be featured in a Virtual Solar Home Tour in the Fall.

**Green Team:** Krishnamurthy is involved with college entrance exams. (As a result, we may have another student opening on the Commission) Harvey reported the table at the Market staffed by Green Team members (Roger Eberhardt also helped with a handout). The Fall Recycling Event will be discussed and hopefully planned over the summer.

**Land Preservation Board:** Kielbaso reports meetings have been on hold. A meeting may occur next week. Park Naturalist, Emma Campbell will be working with the LPB on developing a Meridian Conservation Corp. There are openings on the LPB. The LPB Apply at <https://www.meridian.mi.us/government/boards-and-commissions>

**Planning:** McConnell reports continuing discussion of form-based code (as applied to Grand River Corridor). There is interest in environmental considerations (including electric vehicle charging stations, green infrastructure, etc.) but it is not obvious how this can be integrated with FBC, except by providing waivers or incentives for certain environmental amenities. McConnell suggests the Sustainable Building Study Group may inform this discussion.

**Sustainable Building Study Group:** McConnell reports progress looking at state and national standards, tools, and models. [See report in June 3 E.C. Packet](#). Vadnais has also provided info on E. Lansing's Draft Sustainable Building Policy. (which currently mentions LEED-like standards for various types of development).

Cliff Walls (Tri-Co Regional Planning Commission/TCRPC) and Theresa Lark (Mid-Michigan Environmental Action Council/MMEAC) have offered to assist with a [Green Infrastructure Audit](#) of Codes & Ordinances. Harvey will ask about staff time required. Harvey will draft a memo (from the EC), updating others and inviting the Board, the Planning Commission, and staff to comment on and assist with green building and green infrastructure code/ordinance review. McConnell suggests specificity and deadlines in the memo.

**Transportation:** McConnell expressed concern that the Transportation Commission is not meeting frequently enough. This is concerning in that MDOT is well underway in planning for M-43. This could significantly impact the connection between Phase I and Phase II of the InterUrban Pathway. He continues to voice this concern to the Board. Sarver suggests that anyone who has contact with the Transportation Commission to provide encouragement.

McConnell also reports a lot of information on [www.meridian.mi.us](http://www.meridian.mi.us) about road projects.

**Tree Team:** Kielbaso reports the recent tree distribution at the Farmers Market. Harvey reports that the school planting plan at Haslett and Okemos is still in the works and remains a possibility at Chippewa, Haslett H.S., and Hiawatha.

**Other:** Masten asks about yard waste accumulation at Cornell and wonders what can be done.

**Public Remarks:** Stephen Gebes forwarded a couple calls. Connie Rahbany (HOMTV Intern asks what inspired the tree planting project. Kielbaso reports the Board's decision to devote \$10,000 to the effort. Sarver mentioned the multiple health, economic, environmental benefits of tree planting. Harvey reports the "feel-good" nature of tree planting – a positive thing that engages citizens in a positive way. Wisinski agreed.

Timothy Hammond, 1801 N. Hagadorn, 48823 also called in asking about volunteering with the E.C. or other Boards. Stephen will forward contact info to the E.C.

**Next Meeting:** July 1<sup>st</sup> at 7pm on Zoom

Potential Agenda Items (in addition to regular agenda items)

- Environmental Justice Discussion
- Wetland Use Permit (Menards)
- Other

**Adjournment at 8:30pm**

**Next Meetings for 2020**

- \*August 5 Community Room, Zoom or Main Fire Station
- September 2 Town Hall Room, Zoom or Municipal Building
- October 7 Town Hall Room, Zoom or Municipal Building
- \*November 4 Community Room, Zoom or Main Fire Station
- December 2 Town Hall Room, Zoom or Municipal Building

\*Note: Change of location

# Meridian Township Environmental Commission – EGLE Environmental Justice Advocate Meeting

Monday, June 22, 2010

1:00 PM via Zoom

## Attendees:

Regina Strong, EGLE Environmental Justice Advocate

John Sarver, Rose Vandais, Susan Masten, Meridian Townships Environmental Commission Members

Courtney Wisinski, Environmental Commission Board Liaison

## I. Notes

- a. Multifamily housing and hot spots for COVID 19. Higher population, lower income, rental housing. African American population has certainly been affected greater.
- b. Environmental challenges exist
- c. EJ, ensure that everybody is equitably protected. Ethnicity and race concerns are in more urban, industrial areas, resulting in population.
- d. Climate sustainability plan. Did not give much thought to environmental justice.
  - i. Center the plan in equity
    1. Disparities with COVID in more populated areas (i.e. apartments). May have different needs than other living areas, based on demographics.
    2. Where are places in the township that may need to be looked at specifically to determine the need of the community?
      - a. Engaging students if possible in the fall
        - i. Bring energy to the effort, younger
        - ii. Need diversity on the EC and other Boards in general. How do we generate interest?
          1. Intentional outreach to residents that may not hear about opportunities
          2. Application process may be a barrier
          3. Who's engaged and who is not and find them? Use existing trusted channels; i.e. faith-based, social

media group, on-line newsletter, ESL community places, Islamic Temple

4. Use the schools to get the information to the families, maybe 6-8 grade. Schools may have a more diverse population than the general population due to younger population. Susan's ??? Program is already established.

3. Whether you live in apartments, subdivision or rural have the same opportunities

ii. Ann Arbor example:

1. Varying populations
2. They have an EJ event this week to engage people in the process

iii. Regina's overall tips

1. Reaching out intentionally
  - a. Help to understand what info to share and how to share it.
2. Is there another township that we could model?
  - a. Regina will think about it as a follow-up
3. The Environmental Commission will reach out to Regina with further questions as we progress.

## Chapter 82. Vegetation

### Article II. Prohibited Vegetation

#### § 82-26. Duty of owner, agent or occupant; exceptions.

[Code 1974, § 98-1; amended by Ord. No. 2015-03, 5-19-2015]

It shall be the duty of the owner, agent or occupant of any property located within 75 feet of a structure **or \_\_\_\_\_ feet of a sidewalk, ~~excepting public utility installations~~** to prevent weeds, grasses, brush or other vegetation from growing to a height of greater than eight inches, nor shall such owner, agent, or occupant permit an accumulation of dead weeds, grasses, brush or other vegetation of a height greater than eight inches on any such properties. Nothing in this section shall apply to trees, flower gardens, vegetation planted for ornamental purposes, vegetation in vegetable gardens, or vegetation in fields devoted to an agricultural crop, **park/land preservation trails, off-road pathways, trails or public utility installations. As used in this article, the term “sidewalk” means the portion of the street outside the edge of the roadway, designed and improved for non-motorized use.**

#### § 82-27. Removal; notice; cost.

[Code 1974, § 98-2; amended by Ord. No. 2015-03, 5-19-2015]

The Fire Chief, Fire Inspector or Township manager, or the authorized agent of the manager, shall notify personally, or by posting on the premises, the owner, agent or occupant of any of the lands described in § **82-26** on which prohibited grasses, weeds, vegetation or brush is found. Such notice shall contain a description of the prohibited condition and a summary of the provisions of this article. If the owner, agent or occupant of such land has failed within three business days after such notice is delivered or posted to cut, destroy or remove the prohibited condition, the Township manager or his/her agent may enter upon such land and destroy by cutting with or without mechanical equipment and/or otherwise remove the prohibited weeds, grasses, brush or other vegetation. Express power to so enter such lands and perform such duties is hereby conferred upon the Township manager and his/her agent. All expenses incurred in such destruction and/or removal shall be billed to and paid by the owner, agent or occupant of such lands. If such owner, agent or occupant shall not pay such statement when due, the amount of expenses incurred by the Township in destroying and/or removing such condition shall be paid from the Township general fund and the amount thereof assessed against the lands on which such expenditures were made on the next general assessment roll of the Township and shall be collected in the same manner as other taxes are collected. The Township shall have a lien upon such lands for such expense, such lien to be enforced in the manner prescribed by the general laws of the state providing for the enforcement of tax liens.

# ZONING PRACTICE

APRIL 2020



AMERICAN PLANNING ASSOCIATION

➔ ISSUE NUMBER 4

## PRACTICE NATIVE LANDSCAPES

A photograph of a green roof with various native plants and white flowers. In the background, there are modern buildings and a fence. A large white number '4' is overlaid on the bottom left of the image.

# 4

# Native Landscapes in the Neighborhood and Beyond

By Suzanne S. Rhees, AICP

More urban and suburban residents than ever are converting their lawns and landscaping to native landscapes, rain gardens, and bee lawns, hoping to create habitat for threatened pollinators, reduce stormwater runoff, reduce water use, and improve soil health. While such practices are increasingly accepted in many cities, it is still possible to run afoul of “weed ordinances” and other municipal nuisance regulations for lawn maintenance and property management. However, many resources are available to assist planners—or property owners—in modifying these regulations.

The first part of this article explores the elements of a native landscaping ordinance for existing residential neighborhoods, a sample permitting process, and methods for addressing common concerns and enforcement issues. The second part discusses the elements of a city- or county-wide ordinance that requires the use of native plants in various types of *new* development and redevelopment.

## ESTABLISHING NATIVE LANDSCAPES IN RESIDENTIAL NEIGHBORHOODS

Native plants have many advantages compared with their nonnative relatives: they require less watering, less fertilizer, and little if any pesticide use. They are ideally suited to attracting birds, butterflies, and beneficial insects. Deep-rooted meadow and prairie plants build healthy soil, store carbon, and hold water on the land, thereby reducing stormwater runoff.

However, creating a native landscape is not free of risk, especially during the first few years as the native vegetation is established. Invasive species and common weeds can move in and multiply, bare soil can erode, and maintenance efforts can fail to keep pace. Even after establishment, native yards and gardens can appear untended and unkempt, out of place among more manicured residential properties. Neighbors may be motivated to complain to the landowner or to the local government, and citations or fines or even removal of the native plants can result.

Weed ordinances fit into a broad category of “nuisance” ordinances. Nuisance ordinances have a long history in common law, extending to many activities deemed illegal or undesirable, even extending as far as number of calls to law enforcement. Property maintenance is a common area of nuisance law, with tall grass and weeds a typical focus. In fact, a real public health interest is served by preventing overgrown vegetation that can attract rats or mosquitoes or foster invasive plants. Noxious weeds that can compete with crops or harm livestock are listed and prohibited by many state and local governments. However, well-maintained native vegetation poses no such hazards, although it certainly can bring to light aesthetic differences among neighbors.

Many states have granted farming operations in rural and urbanizing areas protection from nuisance law under “Right to Farm” statutes. Likewise, the concept of natural landscaping, while not typically protected under state law, has been gaining ground for several decades. A groundbreaking law review article by Bret Rappaport in 1993 described the movement in epic terms as a struggle between advocates for the natural land ethic espoused by Aldo Leopold and proponents of the sterile, artificial monoculture of the suburban lawn.

At that time, the concept of natural or native landscape was in its infancy, espoused by pioneering gardeners and advocacy groups such as Wild Ones. Many cities have modified their ordinances since then, often following pressure from property owners, to recognize and allow many forms of native landscaping. Regional planning organizations and native plant societies have developed guidebooks and model ordinances to support these efforts. This article draws upon several such examples.

In recent years, advocates of urban agriculture have also identified weed control ordinances as barriers to expanding local food production, a goal that often goes



Minnesota Board of Water & Soil Resources

➔ A front yard rain garden.

hand in hand with the promotion of native landscapes: front yard planting beds for vegetables are often seen in conjunction with borders of native grasses or shrubs.

Regulations for landscaping on residential property are commonly located under the “public health” or “nuisances” sections of city codes rather than the zoning code. Conventional regulations under this section will likely include the prohibition of vegetation taller than six, eight, or 10 inches along streets, sidewalks, and alleys; accumulation of weed and brush piles; and growth of noxious weeds—with penalties for violations.

Native landscape regulations may include definitions, height limits, setbacks, and permit requirements. Examples of these provisions follow.

### Definitions

“Native vegetation” or “natural habitat”? Defining “native” is, not surprisingly, complicated. Most of the definitions in Table 1 and in common use refer to species that existed in a region prior to European contact. However, many plants native to one part of North America have been introduced and found to be compatible with existing natives in others, while many new cultivars of natives have been developed to enhance or maximize certain features, such as color or growing habit. Rochester, Minnesota’s ordinance uses a more inclusive definition of *native and naturalistic vegetation* as

“grasses and flowering broad-leaf plants that are native to, or adapted to, the state, and that are commonly found in meadow and prairie plant communities, except weeds” (§8-5-2).

If native or natural vegetation is desired, weeds are not. “Weeds” are frequently defined by reference to a state definition of *noxious weeds*, encompassing invasive plant species that can crowd out natives or pose a threat to crop production. Most states maintain such a list. Ironically, many nonnative species originally introduced as ornamental plants, such as purple loosestrife, bitterweet, and glossy buckthorn, are now considered invasive.

Highland Park, Illinois, defines both “noxious weeds” as determined by state law and “nuisance weed,” a specific list of about 50 species that includes many common naturalized plants such as chicory and dandelion (§95.020).

Rochester’s definition captures the old “flower out of place” description, in addition to noxious weeds: “. . . any undesirable or troublesome plant that is horticulturally out of place exceeding the height limitations in this chapter . . .,” although dandelions are exempt (§8-5-2). Another Minnesota ordinance, from St. Louis Park, goes further, defining *rank vegetation* as “uncultivated vegetation growing at a rapid rate due to unplanned, unintentional, or accidental circumstances” (§34-115(f)).

However, rather than trying to distinguish wanted and unwanted vegetation, most lawn and landscape regulations rely on restricting height: six to eight inches are a common range of maximum heights for grass and other vegetation. Vegetation exceeding the limit is frequently subject to mowing by city crews, with fines or charges to the property owner.

Cities may allow exceptions to the height limit for native or natural vegetation. Austin, Minnesota, a city that includes substantial rural acreage, allows exceptions to this requirement for wetland parcels, wooded lots, agricultural land and pasture, and managed native landscapes meeting permit requirements, as discussed below (§10.13.A).

### Setbacks

In a suburban setting dominated by lawns, it is common to require a setback between native plantings and property boundaries to ensure that plants do not overhang sidewalks and block visibility, and perhaps to provide a sense of orderliness and continuity with nearby lawns. Austin, Minnesota, requires native plantings, including rain gardens, to be set back at least 20 feet from the front lot line and five feet from side and rear lot lines, unless a five-foot fence is in place or another native planting is located on the neighboring property (§10.13.A.5). Eden Prairie, Minnesota, requires that the required

**TABLE 1. EXAMPLES OF USE DEFINITIONS FOR NATIVE PLANTS**

City	State	Use Definition
Florida Native Plant Society Model Ordinance	Florida	<i>Native plant</i> : species of plants occurring within the city boundaries prior to European contact, according to best scientific and historical documentation. More specifically, it includes those species understood as indigenous, occurring in natural associations in habitats that existed prior to significant human impacts and alterations of the landscape.
Highland Park	Illinois	<i>Native plant</i> : any plant, including nuisance weeds and lawn turf grasses, that is: (i) Designated in <i>Plants of the Chicago Region</i> as native, original, or indigenous to the greater Chicagoland area; and (ii) Grown and maintained to enhance the beneficial and natural functions that are lost through the cultivation of lawn turf grasses, trees, shrubs, ferns, bushes, flowers, or gardens (§95.020).
Rochester	Minnesota	<i>Native and naturalistic vegetation</i> : grasses and flowering broadleaf plants that are native to, or adapted to, the state and that are commonly found in meadow and prairie plant communities, except weeds (§8-5-2).
Scottsdale	Arizona	<i>Protected native plant</i> : cacti which are three (3) feet or greater in height and trees which are four (4) inches or greater in caliper of the following species [Protected Plant List] (§46-105).
St. Louis Park	Minnesota	<i>Native Vegetation</i> : indigenous trees, shrubs, wildflowers, grasses, and other plants that have naturally adapted themselves to the climate and soils of the area but require cultivation and maintenance to remain viable (§34-115(b)).

setback area (also 20 feet from front lot line and five feet from side and rear) consist of regularly mowed turf grass, garden beds, trees, shrubs, mulch, wood chips, rock, or gravel (§9.71.3.B & §9.71.4). Highland Park, Illinois, requires a three-foot setback from all lot lines for native plants, which may not overhang or encroach on sidewalks, streets, alleys, or other properties (§95.038.B).

Cincinnati's "Managed Natural Landscaping" provisions require a three-foot setback from property lines and streets unless a fence is in place (§731-4). The natural landscaping option is available only to privately owned residential properties. Plantings within the right-of-way strip between sidewalk and street are restricted to a height of 10 inches.

Not all cities require setbacks: Minneapolis allows plantings of flowers and grasses, both native and nonnative in any location, including the right-of-way strip, known regionally as the "boulevard," as long as sight lines are not blocked and the plantings are "planned, intentional, and maintained" (§427.10(c) and 227.90(b)).

#### Percentage of Lot Area

Some communities restrict the area that native plantings may occupy. For example, Bloomington, Minnesota's weeds and brush ordinance restricts native prairie and long

grasses to no more than 50 percent of the pervious surface area of the parcel, exclusive of wooded areas, wetlands, rain gardens, and other natural areas (§10.38(a)(2)(A)).

The requirement for a permit may be triggered by planting more than a certain percentage of lot area. St. Louis Park, Minnesota, requires a permit when plantings occupy 800 square feet or more than 25 percent of lot area, whichever is smaller (§34-114).

#### Plants to Encourage, Plants to Prohibit

It would be challenging to identify all possible native plants suitable for residential landscapes in a city or region and to keep it up to date. Rather, many ordinances will refer to lists of suitable plants provided by a research institution or allied organization. However, ordinances that establish citywide native plant requirements for new development may include a list of protected plants, often including mature trees.

For example, the Scottsdale, Arizona, ordinance lists over 20 such *protected native plants*, which receive specific protection in development projects when exceeding a certain size (§46-105). Lee's Summit, Missouri, lists specific native plant species available for use in *planned natural landscapes* but allows use of similar but unlisted plants following consultation with the state's

conservation department and university extension service (§30-38).

#### Permit Requirements

Ordinance requirements for setbacks, height limits, and maintenance often go hand in hand with a permit requirement. A permit, while increasing administrative time and costs, gives local government a mechanism for ensuring that native landscapes comply with the code. Many of the cities mentioned above require permits, generally administered by the parks department. Some permits are renewable annually with a fee while others simply require the applicant to agree to comply.

While a permit requirement may seem onerous, it can also help to guide the applicant toward greater understanding of the responsibilities that go with native plant establishment. The Florida Native Plant Society's model ordinance calls for residential landowners to simply submit a list of proposed plants. Some permits also require information on methods for site preparation and for maintenance methods after establishment (mowing, burning, hand weeding). By engaging with parks staff, who generally have expertise with landscape management, applicants can gain access to advice and resources.

#### Incentives

In some communities, watershed or conservation districts provide incentives for residents to use native plants to achieve water quality improvements. For example, Eden Prairie, Minnesota, offers residents a landscaping rebate for installation of shoreline buffers, rain gardens, or pollinator gardens designed and constructed to treat stormwater runoff. The rebate amount is \$2 per square foot, up to \$1,500, issued when the project is completed. Plans must be approved by the city prior to construction, the applicant must commit to maintaining the project for a minimum of five years, and at least 75 percent of the vegetation must be native species as identified by the University of Minnesota's Bee Lab or by Blue Thumb, a public-private partnership promoting native plantings for clean water.

The Utah Water Savers program, a state-wide water conservation initiative, offers rebates in Salt Lake County through a Flip Your Strip program: converting a park strip



Minnesota Board of Water & Soil Resources

Native landscaping in the strip of right-of-way between the sidewalk and the curb.

(the regional term for the unpaved portion of the right-of-way between the lot line and the curb) from living lawn to perennial plants in a base of gravel or mulch, minimizing irrigation requirements. The program offers \$1 per square foot, or \$1.25 if the applicant attends a park strip training class. Another program, Localscapes Rewards, offers rebates for applicants who landscape their yards with locally adapted plants with low water and maintenance needs.

Austin, Texas, another city seeking to conserve its water resources, offers a WaterWise Rainscape Rebate program to help residents and schools install landscape features such as berms, terraces, swales, and rain gardens to keep rainwater on their properties. Rainscapes must be registered with the city's Watershed Protection Department, and applicants must allow the water district to track their water use. The rebate provides \$0.30 per square foot converted (at least 100 square feet), up to a lifetime limit of \$500 per property.

Minnesota is in the early stages of a new state pilot program, known as Lawns to Legumes ("L2L" in shorthand) established via a legislative appropriation in 2019. The program is designed to provide pollinator habitat, particularly for the rusty patched bumble bee, an endangered species (and now the official state bee). L2L will offer a combination of workshops, coaching, planting guides, and cost-share funding for installing pollinator-friendly native plantings in residential lawns. Minnesota residents can apply to be reimbursed for up to \$350 in costs associated with establishing pollinator habitat in their yards.

Local governments, tribal governments, and nonprofits can apply for grants to establish community projects intended to enhance pollinator habitat in key corridors, raise awareness for residential pollinator protection, and showcase best practices. The selected organizations overseeing a demonstration neighborhood will work with residents to install four types of beneficial planting practices: native pocket plantings, pollinator beneficial trees and shrubs, pollinator lawns, and pollinator meadows.

Program designers (including this article's author) recognize that conflicts may arise with existing municipal ordinances that limit native landscaping and have developed a sample permit and compiled examples of

ordinance language as guidance for local governments (Minnesota BWSR 2019b).

#### REQUIREMENTS FOR NATIVE LANDSCAPING IN NEW DEVELOPMENT

Almost every community with a zoning code or other development regulations requires some form of landscaping when a site is developed. Requirements often are focused on the number of trees and shrubs to be planted in yards, parking lots, buffers, and the like. Many communities have lists of recommended and prohibited tree species, both native and non-native. However, requirements for native or naturalized landscaping are becoming more common, often for reasons related to water: protecting scenic resources or scarce water supplies, managing stormwater runoff on-site, or improving the functioning of facilities such as solar installations.

#### Policy Support

Any local government with an interest in protecting and establishing native vegetation should consider incorporating a policy statement in its comprehensive plan to encourage or require the use of native vegetation in new development and redevelopment, and to encourage residents to follow suit. Ordinances, if challenged, are likely to be upheld when supported by the policies of a comprehensive plan. These policies can then be reflected in the ordinance's statement of purpose.

For example, *Minneapolis 2040*, the city's newly adopted comprehensive plan, includes the following policy statements, among others, that focus on landscaping for ecological function and resilience to climate change:

- Encourage plant and tree types that complement the surrounding area, including a variety of species throughout the site, and seasonal interest. Species should be climate resilient, indigenous, or proven adaptable to the local climate and should not be invasive on native species.
- Promote landscaped areas that include plant and tree types that address ecological function, including the interception and filtration of stormwater, reduction of the urban heat island effect, and preservation and restoration of natural amenities.
- Encourage native and pollinator-friendly species in landscaping.

In the absence of such comprehensive plan policies, a detailed statement of purpose and intent can provide the legal foundation for an ordinance. The model ordinance developed by the Florida Native Plant Society lists purpose statements that include protection of microhabitats in urban areas for wildlife habitat; conserving scarce water resources; creating larger, more connected plant populations that are better able to migrate in a changing climate; providing for wildfire protection; and reducing the use of chemical fertilizers and pesticides.

Tucson, Arizona's landscaping and screening ordinance includes statements of intent typical of many desert cities with a strong interest in limiting water use, including achieving water conservation goals through use of drought-tolerant plantings and xeriscape principles, reducing heat and glare radiated by the built environment, reducing soil erosion, and assisting in groundwater recharge (§7.6.1.A).

The city also has provisions specific to "Native Plant Preservation," with a purpose statement that includes the goals of preserving a sense of place, improving air quality, and reducing energy costs through use of native vegetation for shade (§7.7.2).

#### Scenic Resource Protection

Tucson also employs native vegetation to preserve its scenic resources. According to the city's Scenic Corridor Zone regulations, the city's location, surrounded by mountain ranges, is rich in scenic resources that are valued for both aesthetic and economic reasons (§5.3). The city has established scenic corridors to preserve views of the mountains and foothills, as well as natural vegetation and geologic formations.

Along defined Scenic Routes, only native vegetation may be used. A Scenic Corridor Zone extends 400 feet from the right-of-way line of existing and planned scenic routes. The first 30 feet adjacent to the right-of-way is designated as a buffer that must be retained in or restored to a natural state. Other features of the Scenic Corridor Zone include limits on siting and height of structures to preserve existing natural topography and view corridors.

Austin, Texas, uses a similar designation, Hill Country Routes, for several major roadways that extend from the city into the rural Texas Hill Country (Environmental

Criteria Manual Appendix A). Within those corridors, 40 percent of a development site must remain undisturbed or restored as a natural area, using native trees, shrubs, and grasses. A 100-foot buffer of largely undisturbed vegetation is also required along these roadways. Revegetation, when required, is calibrated to the amount of vegetation canopy coverage that already existed on a site, based on air photos taken in the early 1980s.

These strategies address a key goal of *Imagine Austin*, the city's comprehensive plan: integrating nature into the city through "strategically planned and managed networks of natural lands, parks, working landscapes, other open spaces, and green stormwater controls that conserve and enhance ecosystems and provide associated benefits to human populations."

#### Water Conservation and Wildfire Resistance

Many cities in the Southwest, including Scottsdale and Tucson, Arizona, use native vegetation as part of a comprehensive strategy of limiting water use, along with restrictions on the use of turf in landscaped areas, and promotion of recycled water and graywater for landscape irrigation.

Tucson's landscaping and screening ordinance applies to all development other than individual single-family lots. Plants must be selected from a list of drought-tolerant plants, although non-drought-tolerant landscaping is allowed in an *oasis*, a small percentage of a site established as a separately programmed area for more intensive irrigation (§7.6.4). Scottsdale limits "water intensive landscape/turf areas" on commercial, industrial, and common residential areas to around 10 percent of each site. Somewhat higher limits apply to schools, churches, and resorts (§49-245-246).

San Diego County, California, has developed a detailed landscape ordinance and *Water Efficient Landscape Design Manual* in response to prolonged drought in California, requiring any new construction for which the county issues a building permit with an aggregate landscape area of 500 square feet or more to obtain authorization for outdoor water use. Landscape plants must be grouped into hydrozones with similar water demands, with an emphasis on low water use, deep-rooted plants, and native species. Turf may not exceed 25 percent of residential

landscape areas. The manual provides examples of drought-tolerant plants that are also resistant to ignition during wildfires.

#### Rain Gardens for Stormwater Management

A rain garden is a planted low area that captures stormwater runoff from impervious surfaces, such as streets, roofs, or driveways, while it infiltrates into the soil below. Rain gardens filter pollutants from the runoff, reduce erosion by keeping soil in place, and provide habitat for birds and pollinators. However, excavations for rain gardens may run afoul of buried utilities and, if designed inappropriately, could damage existing trees or cause stormwater to overflow onto sidewalks or neighboring properties.

Native species are the most appropriate choice for rain gardens and may be required in some jurisdictions. They typically have deep root systems that help enhance infiltration, tolerate drought, and anchor the soil to prevent erosion. In locations likely to be saturated regularly, wetland or wet meadow plants such as sedges and rushes are ideal. Within berms, slopes, or upland buffers surrounding the sunken area, meadow and prairie plants may be appropriate. Over time, rain gardens can become choked with weeds and tall plants. Guidance provided by the city of Austin, Texas, suggests that shorter plants at the inlet and within the basin help ensure water inflow and sediment removal.

St. Paul, Minnesota, encourages rain gardens and has developed a guide for their installation on residential private properties or the associated public boulevard. No permit is required for small rain gardens on private property. A garden requiring more than 50 cubic yards of fill, grading of more than 10,000 square feet, or retaining walls four feet or taller, or that is located within 10 feet of a structure, does require a permit, as do boulevard rain gardens that include a curb cut. Registration for a permit is free, and no formal agreement for maintenance is required, although city staff respond to complaints. Several watershed districts in the city and neighboring communities offer cost-share grants for rain garden installations.

#### Solar Installations

Solar installations are becoming ever more common, but without landscaping requirements, ground-mounted panels can simply be placed on gravel or turf—a lost opportunity to

achieve multiple ecosystem benefits. There is increasing interest in pairing native plants for pollinator habitat with solar installations. The National Renewable Energy Lab, a research arm of the Department of Energy, and Fresh Energy, a Minnesota-based advocacy group, have been promoting the economic and environmental benefits of "pollinator-friendly solar"—maintenance costs are lower; a cooler microclimate under the panels increases energy output; and honey bees, native bees, and other pollinator species (and the crops they fertilize) can benefit.

In Minnesota, a number of counties now require planting of native grasses and wildflowers on solar farms and solar gardens. Some county ordinances incorporate the "beneficial habitat standards" established in state statute by reference, while others include similar requirements. Stearns County, one of the first to adopt the state standard, requires the applicant to maintain the habitat for the duration of operations (Ordinance 439 §6.52.2.H(2)). The applicant must submit a financial guarantee equal to 125 percent of the cost of the landscape installation, which remains in place until the vegetation is established. Site inspections will be performed by the county's Soil and Water Conservation District.

#### Adapting to Climate Change

Questions frequently arise about whether native plants currently adapted to a particular region and climate zone will be able to adapt to a changing climate. Climate change is already bringing longer periods of drought to some regions and more intense storms and spring flooding to others. In the Upper Midwest, for example, extended and wetter spring and fall seasons are leading to increases in cool season invasive species such as reed canary grass and woody invasive species such as buckthorn.

While it is challenging to predict the effects of climate change on native plant communities, most natives have high genetic diversity, often giving them the ability to adapt to changing conditions—if conditions are not too extreme and if populations are of a sustainable size. Much of the discussion about appropriate seed and plant sources for native plants focuses on "how close is close enough." Concerns include whether plants will produce viable seed, whether populations adapted to local site conditions will be

affected by the introduction of new genetic material, and whether plants from a different region will out-compete existing natives. Use of seed and plants from sources located just to the south of a project site may be advisable, and plant species at the southern edge of their range may need special consideration.

The Nature Conservancy has prepared a set of spatial tools and related guidance for creating “Resilient and Connected Landscapes,” focusing initially on Eastern North America. The analysis looks at site resilience—the ability to maintain biological diversity and ecological function as the

climate changes—and patterns of landscape connectivity—corridors of connected natural areas that allow for dispersal and movement between sites. The spatial tools can be integrated with other GIS data to assist in site-specific analyses.

### CONCLUSIONS

Given the multiple benefits that native plants can provide, it seems likely that their use will continue to increase in many settings, from residential lawns and gardens to scenic corridors, solar farms, and commercial sites. The benefits native plant species can provide

in capturing runoff, protecting groundwater, reducing erosion, and providing habitat benefits are becoming increasingly well-known. Concerns over compatibility, long-term maintenance, and resilience can be addressed with the right combination of rules, guidelines, incentives, and education.

### ABOUT THE AUTHOR

Suzanne S. Rhees, AICP, is a project manager for the Minnesota Board of Water & Soil Resources (BWSR), focusing on the intersection of climate change, agriculture, and water policy. She has worked as a land-use planning and zoning consultant to local governments and has contributed articles to *Zoning Practice* on solar regulations and cross-boundary cooperative planning. The opinions reflected in this article are her own and not those of BWSR.

Cover: Minnesota Board of Water & Soil Resources

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### VOL. 37, NO. 4

The American Planning Association provides leadership in the development of vital communities for all by advocating excellence in planning, promoting education and resident empowerment, and providing our members with the tools and support necessary to ethically meet the challenges of growth and change.

*Zoning Practice* (ISSN 1548-0135) is a monthly publication of the American Planning Association. Joel Albizo, FASAE, CAE, Chief Executive Officer; Petra Hurtado, PhD, Research Director; Joseph DeAngelis, AICP, and David Morley, AICP, Editors.

Subscriptions are available for \$95 (U.S.) and \$120 (foreign). Missing and damaged print issues: Contact APA Customer Service (312-431-9100 or [subscriptions@planning.org](mailto:subscriptions@planning.org)) within 90 days of the publication date.

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ARE YOUR COMMUNITY'S  
REGULATIONS HELPING  
OR HINDERING NATIVE  
LANDSCAPES?

**4**

Form Name:  
Date & Time:  
Response #:  
Submitter ID:  
IP address:  
Time to complete:

Public Service Application Form  
06/25/2020 8:43 PM  
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A new entry to a form/survey has been submitted.

**Form Name:** Public Service Application Form  
**Date & Time:** 06/25/2020 8:43 PM  
**Response #:** 57  
**Submitter ID:** 11674  
**IP address:** 136.181.198.1  
**Time to complete:** 39 min. , 42 sec.

**Survey Details**

Page 1



# Public Service Application Form

**I am interested in service on one or more of the following public bodies as checked below:**

**\*Special conditions restrict eligibility for appointment**

1.

Environmental Commission

2. **Occupation:**

Student

3. **Indicate areas not included above which may warrant special attention or study that are of interest to you:**

I am very interested in serving as a student representative on the Meridian Township Environmental Commission.

4. **Describe education, experience or training which will assist you if appointed:**

I am a Sophomore at the Okemos High School and have a passion for science. I became involved in the Earth Club because I really enjoy environmental science and want to make a community impact. Please see my attached resume and cover letter for additional experiences.

**5. Contact Information:**

**Name:** Luca Wisinski  
**Place of Employment:** Okemos HS  
**Phone (days):** 517-435-5985  
**Date:** 06/25/2020

**Occupation:** Student  
**Home Address:** 4419 Elmwood Dr., Okemos, MI  
**Phone (evenings):** Not answered  
**Email:** lwisinski23@gmail.com

**6. Attach Resume**

**Resume is attached** Luca Wisinski Resume 2020.docx

**7. Attach Cover Letter**

**Cover Letter is attached** Luca Wisinski Cover.docx

Thank you,  
Meridian Township, MI

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# LUCA WISINSKI

4419 Elmwood Dr., Okemos, MI 48864 · 517-435-5985

[Lwisinski23@gmail.com](mailto:Lwisinski23@gmail.com)

Hon. Supervisor Styka  
Meridian Charter Township  
5151 Central Park Rd.  
Okemos, MI 48864

## **DEAR SUPERVISOR STYKA AND MERIDIAN TOWNSHIP ENVIRONMENTAL COMMISSION,**

I would very much like to serve as a student representative with the Meridian Township Environmental Commission. You will see from my resume that I exhibit both passion and experience for and with environmental sustainability.

I truly enjoy my time serving as an Okemos High School Earth Club Member. I would like to apply my experience and expand my work in environmental studies at a community level. I would be honored to be a part of the work the Environmental Commission is committed to. If given this opportunity, I would like to use the leadership skills I learn to include on my application to the U.S. Naval Academy.

Thank you for the time to review my resume. I look forward to talking with you.

Sincerely,  
Luca Wisinski

# LUCA WISINSKI

4419 Elmwood Dr., Okemos, MI 44864 · 517-435-5985

[Lwisinski23@gmail.com](mailto:Lwisinski23@gmail.com)

I would like to obtain experience in working with local government to advocate for environmental issues.

## EXPERIENCE

**AUGUST 2019-PRESENT**

### **MEMBER, OKEMOS HIGH SCHOOL EARTH CLUB**

Developed and maintained recycling activities at Okemos High School  
Assisted in the initiative to establish paper recycling within Okemos High School  
Member of the research team that proposed a rain garden plan, including finding sponsors, developing an installation plan and future garden maintenance

**JUNE -- AUGUST 2019**

### **UMPIRE, MERIDIAN TOWNSHIP PARKS AND RECREATION**

Umpired U9-12 baseball and softball leagues  
Served as a umpire for various baseball tournaments

## EDUCATION

### **SOPHMORE, OKEMOS HIGH SCHOOL**

Maintain a 3.5 GPA, (4.0 GPA for the second semester of Freshman year)  
Completed one year of German language class  
Completed one semester of electrical engineering class

## SKILLS

- Passion for environmental sustainability
- Manage multiple tasks
- Leadership qualities
- Team oriented
- Applied problem solving skills
- Social media content creator

## ACTIVITIES

Okemos High School Baseball Player  
Reading and research  
Debate  
Skateboarding  
Nature exploration