AGENDA
Sustainability Commission Meeting
7:00 PM - Monday, February 8, 2021
Zoom Meeting

Page

1. CALL TO ORDER
2. ROLL CALL

   Commissioner Heine
   Commissioner Bayha
   Commissioner Foley
   Commissioner Greenwald
   Commissioner Gibbons
   Commissioner Collins
   Commissioner Simmons
   Commissioner Michalowski
   Councilmember Wilcoxen
   Staff Liaison Akers
3. INTRODUCTIONS
4. PUBLIC COMMENT (3 MINUTES)
5. AGENDA APPROVAL (5 MINUTES)
6. PRESENTATIONS
7. CONSENT AGENDA (2 MINUTES)
   - 7.1. Approval of minutes from January 11, 2021 — 3 - 4
     Sustainability 1-11-2021 Reg Minutes
8. WORK SESSIONS
   - 8.1. Sustainability Goals:Water — 5 - 8
     Draft-Master-Plan-Update - Water
9. RESOLUTIONS/MOTIONS/DISCUSSIONS
   - 9.1. Annual Report 2020 — 9 - 17
     SustainabilityCommissionAnnualReport2020_Draft4
   - 9.2. Penn Dam discussion
10. COMMISSIONER REPORTS (20 MINUTES)
11. PUBLIC COMMENT (3 MINUTES)
12. PROPOSED BUSINESS (5 MINUTES)
13. ADJOURNMENT

MINUTES

City of Ypsilanti
SUSTAINABILITY COMMISSION MEETING
Virtual Meeting

Monday, January 11, 2021
7:00 P.M.

I. CALL TO ORDER: 7:03 p.m.

II. ROLL CALL

Keith Michalowski	Present	Katy Greenwald	Present
Nancy Heine	Present	Beth Gibbons	Present
Julia Bayha	Present (*late arrival)	Takunia Collins	Present
Bryan Foley	Present	Desirae Simmons	Present

Also Present: Counsel Liaison Steve Wilcoxen
Staff Liaison Ron Akers, Public Services Director
Commission Recording Secretary, Nancy Hare-Dickerson

Additional Staff Present: Bonnie Wessler, Public Services Project Manager (Zoom Meeting Host)

III. PUBLIC COMMENT – none

IV. AGENDA APPROVAL

Commissioner Michalowski: Request for correction - to move item 7.2.- "Michigan Catalyst Communities Academy" from the Consent Agenda, to 9.1- under Resolutions/Motions/Discussions. "UofM Ypsilanti Resilience Hub Project Follow Up" would move from 9.1 to 9.2- under Resolutions/Motions/Discussions.

Heine (Second: Gibbons) moved to approve the Agenda as amended.

Roll Call Vote – Ayes: Commissioners Michalowski, Heine, Foley, Greenwald, Gibbons, Collins, Simmons
Nays: None
Absent: Commissioner Bayha*

V. INTRODUCTIONS – none

VI. PRESENTATIONS

1. **Ypsilanti Community Schools Resiliency Center (YCSRC)**

Marquan Jackson, Ypsilanti Community Schools Homeless Liaison, shared that through support received from various foundations/agencies, the Resiliency Center, which is housed at the Willow Run campus, opened in December 2020. He discussed the work the Center has done and is doing to assist YCS families, as well as where they look to take the initiative in the near future. *[Commissioner comment followed]*

VII. CONSENT AGENDA

1. **Approval of December 14, 2020 minutes**

Heine (Second: Foley) moved to approve the December 14, 2020 Minutes as submitted.

Roll Call Vote – Ayes: Commissioners Michalowski, Heine, Bayha, Foley, Greenwald, Gibbons, Collins, Simmons
Nays: None
Absent: None
Motion Carried

VIII. WORK SESSIONS - none

IX. RESOLUTIONS/MOTIONS/DISCUSSIONS

1. **Michigan Catalyst Communities Academy**
   Commissioner Michalowski explained that the desire of the Academy is to add two members from the Sustainability Commission and what the commitment would entail. *[Commissioner comment followed].* He asked that any interested commissioners contact him within 24-hours.

2. **UofM Ypsilanti Resilience Hub Project Follow Up**
   Commissioner Michalowski asked that commissioners respond to the group, per the email he shared, to sign up for an interview period in order to show support and to help them move forward on the resilience work they are doing.

X. COMMISSIONER REPORTS

Commissioners provided comment and shared updates of events and activities they are involved with and/or are working on related to sustainability. Some discussion topics included: Annual Report, Earth Day, Community Outreach, Parkridge Community Center, Resiliency Hub, Council budget considerations, Huron River Watershed/Pen Dam, Water Street development/local impact, Seed Kit Creation/Gardening, the Adapt game.

Council/Staff Liaisons also provided updates of meetings, events and activities they are involved with which relate to the Sustainability Commission.

XI. PUBLIC COMMENT – none

XII. PROPOSED BUSINESS

Commissioner Michalowski asked commissioners to email to him any items they would like to see added to the agenda.

XIII. NEXT MEETING DATE

Monday, February 8, 2021

XIV. ADJOURNMENT: 9:12 p.m.

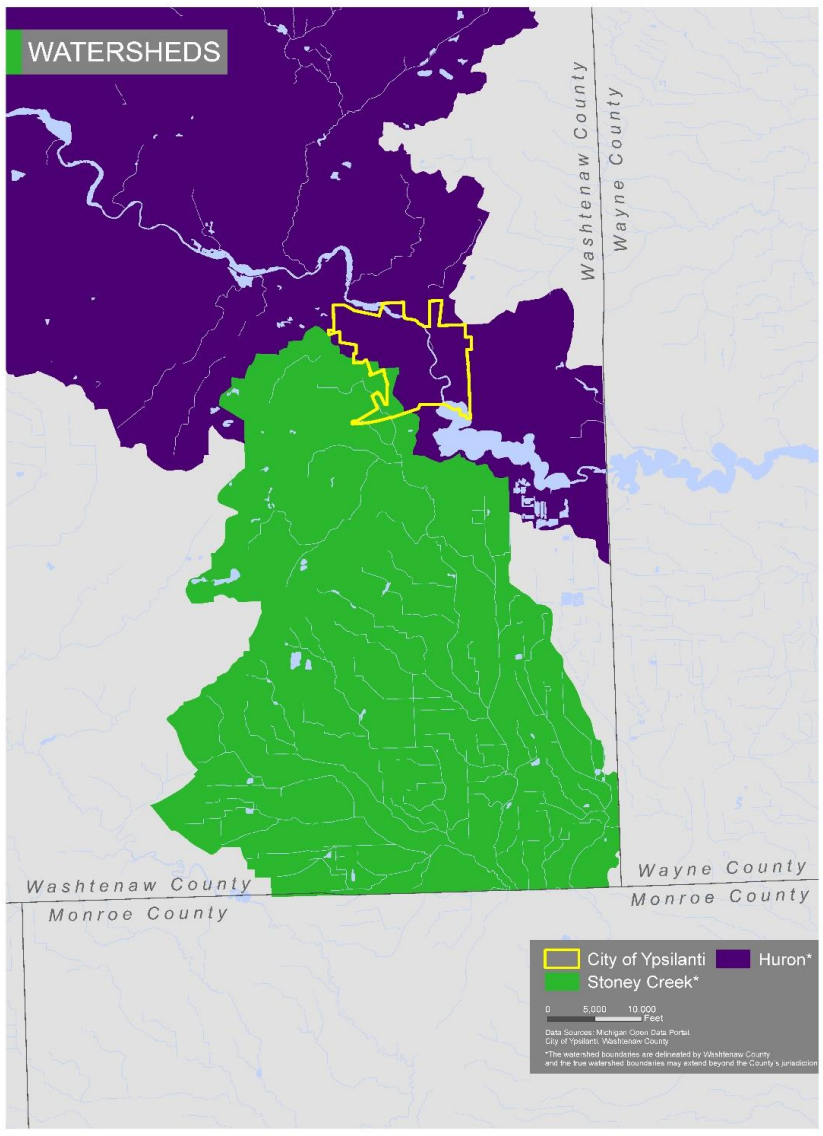
Simmons (Second: Bayha) moved to adjourn the meeting of the Sustainability Commission.

Voice Vote: Unanimous **Motion: Carried**

Water

Surface Water Quality

Ypsilanti is a part of the Lake Erie Basin. Within the City's boundaries are two watersheds - Huron River and Stoney Creek (into which the City's Paint Creek drains). The Huron Watershed, which covers most of the City, is divided into five sections. The section that encompasses Ypsilanti is known as the "Lower Middle Huron," enveloping about 27.7 miles of the river from North Maple Road (Barton Pond) downstream to Belleville Lake. It includes portions of the City and Township of Ann Arbor, Superior Township, Ypsilanti Township, and Van Buren Township.[14] Because a watershed crosses several jurisdictional boundaries, it is incumbent on these municipalities to cooperatively maintain high-quality water while permitting access to the river. The health of the river depends on the quality of all its tributaries, which is often linked to land use policy. One way to coordinate across municipal jurisdictions is through a watershed council: the Huron River Watershed Council (HRWC) was the first in the state and has been working to protect and restore the Huron River since 1965. In addition to writing a management plan for the entire watershed, the HRWC also authors management plans covering specific sections of the watershed. The HRWC is updating the section of the watershed management plan that includes Ypsilanti, the Lower Middle, in 2020-2021.



The HRWC identifies that the section of the Huron River that runs through Ypsilanti and Ann Arbor is heavily impounded: 77% of it is impounded by the seven dams that stretch across this area, making it more similar to a lake ecosystem than a river. Two sources afflicting the health of the watershed are runoff from impervious surfaces, and new development along the riverbank that clears vegetation vital to the absorbing runoff. In particular, phosphorous and *E. coli* are entering the river from Mill, Honey, and Boyden Creeks.

Some measures are in place to protect water quality. According to the City of Ypsilanti's code of ordinances, all development along any river frontage must show where a planned conservation and/or access easement of 50 to 100 feet would be located.[15] A conservation easement allows river access for potential restoration or cleanup efforts. Without an easement, the City would have to receive permission from private property owners to pursue any riverbank projects. The City has also adopted ordinances to limit phosphorus fertilizers and asphalt sealcoats; the success of this regulation is limited by enforcement and cooperation from property owners and has yet to be measured.

To further ensure protections for the Huron River, an overlay district could be implemented. The regulations would limit new development, curtail uses involving toxic chemicals on site, and enforce low impact design standards that allow the site to retain water to mitigate contamination entering the river. Ypsilanti has adopted the stringent standards from Washtenaw County Water Resources Commissioner, a mighty step in safeguarding future development from polluting practices. However, these regulations are not a panacea because they only apply to new or redeveloped sites, which are much fewer in number than established sites.

Table X: Watershed Report Card

Subject[1]	Grade	Explanation
Watershed land use	D	High impervious surfaces along tributaries
Natural areas	D	12% of watershed has intact natural areas
River flow	F	Flashes following storms, erratic dam gate
River habitat	B	Where undammed, favorable features for river life
Aquatic Insect Community	C	Where undammed, good habitat for insects
Fish Community	B	Anglers enjoy good smallmouth bass
Phosphorous	C-	Concentrated of phosphorous exceed target; declining
E.Coli	C	After heavy rain, E.coli exceeds state standards
Total Suspended Solids (TSS)	A	Low levels of TSS
Water Temperature	B	High maximum summer temperatures
Conductivity	B	Mostly measured at normal levels
Dams	F	High presence of dams and poorly controlled

Source: HRWC

A retrofitting program would have wider scale effects, but its implementation is more controversial than policies pertaining only to new development. The adoption of stormwater fees based on the amount of impervious coverage on a property is an example of this type of effort and has been enacted in places like Detroit and Ann Arbor. In those communities, impervious surfaces incur drainage fees, thus incentivizing the implementation of pervious substitutes. Credits are offered for on-site stormwater management investments, such as the installation of a rain barrel, cistern, or rain garden to capture run-off from a rooftop. Rain barrels are a cost-effective method of storing water for residential properties when used correctly. Best practices suggest rain barrels should stand upright, be screened to prevent mosquito breeding and debris accumulation, connect to overflow barrels, have a "do not drink" spigot, and belong to property owners who have been educated about their use and maintenance.

It takes the work of many groups to see positive change in our water systems. The Middle Huron Partners, a group that works with the HRWC, has invested over $10 million over 11 years on projects that reduce and capture stormwater runoff. At a larger scale, the Middle Huron Partners successfully lobbied to restrict phosphorous fertilizers, and the state followed suit in 2012 with new legislation to reduce algae blooms. At the county level, Washtenaw County modified its focus from flood control to quality control. This change in philosophy is backed by a hierarchy of preferred management practices that prioritizes natural vegetation first for infiltration, then minimizing impervious surfaces, and finally detention

[14] HRWC. "The Huron River: Lower Middle Huron." River Profile. https://hrwc.maps.arcgis.com/apps/MapJournal/index.html?appid=67e1fd1bbc9a44cf853cd78dd6d8219f
[15] City of Ypsilanti Code of Ordinances, Article VI: Site Regulations, Section 122-607 (c). https://cityofypsilanti.com/DocumentCenter/View/1396/ZOUpdate--02--ZO_BW20170215_anno?bidId=

and conveyance of excess stormwater. [16] Vegetation is at the top of the hierarchy for its varied benefits: plants provide structural support, stabilize the soil through their root networks to reduce erosion, keep rivers healthier for aquatic life, and purify runoff before it enters the river.

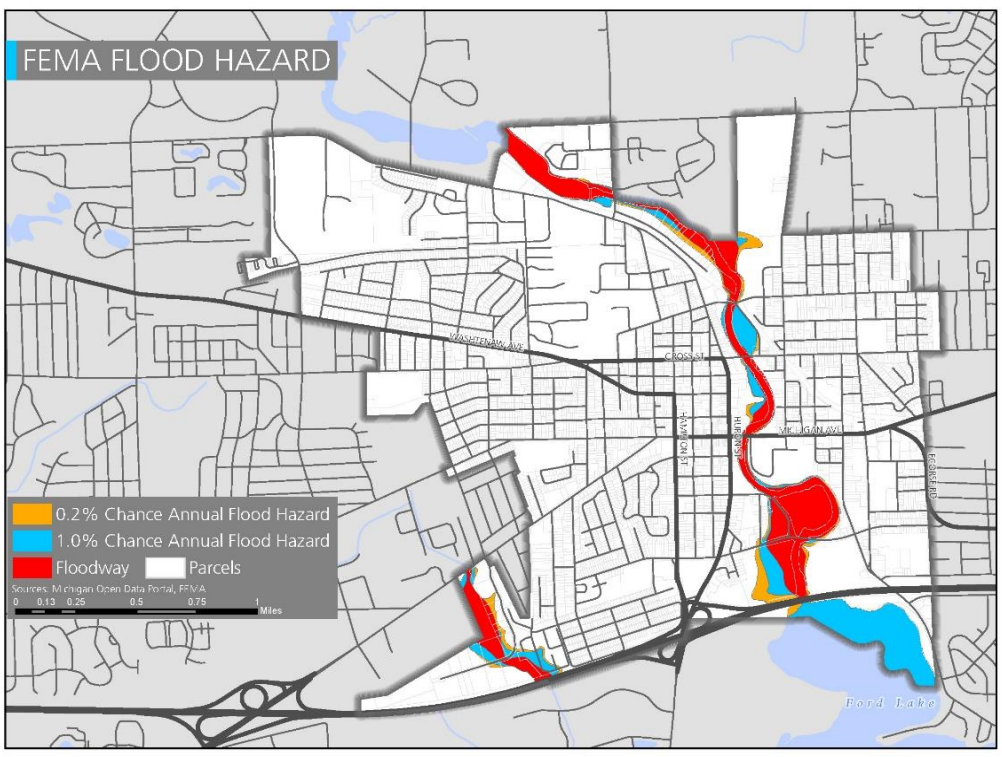
As vegetation becomes the priority for protecting water quality, it is important to recognize the maintenance challenges that have hampered its progress. Landscaping is not a short-term proposition. Specifically, it takes about three years for a rain garden to take root and maximize its capacity as a water absorber and purifier. During that time, it must be regularly nurtured *and* must avoid its other unintended function as a "litter collector." In cases where rain gardens have amassed trash and debris, they have been deemed "blight" and subsequently removed. A rain garden sign that includes its year of inception can insulate them from removal during their nascent stages and give them sufficient time to mature.

Dam Removal

The Peninsular Paper Dam, in its current state, is a cause of many troubling ecological indicators regarding the Huron River's health, namely creating impoundments where algae forms and changing water temperatures that alter dissolved oxygen levels, harming fish habitats.[17] Ypsilanti and the HRWC conducted a feasibility report on removing the dam. The dam was classified as a high potential hazard by the DEQ due to the severity of impending damage it could cause if it failed, and its classification as obsolete because it no longer serves any purpose. Based on sediment quality and quantity, potential infrastructure and utility impacts, and riverfront land ownership, it was determined that removing the dam is feasible.[18] In 2016, estimates for repairing the dam would exceed $800,000 and removing it would cost closer to $2.7 million. Its removal would help restore the Huron River to a flow that is better suited for the ecosystem that depends on it.

In May 2019, City Council voted to approve $500,000 towards deconstructing the dam as opposed to continuing to pay for repairs so long as the City applies to grants to complete the project.[19] [20] Dismantling the dam will protect the environmental health of native species that rely on the Huron River, and protect the City's budget in the long run.

Flooding and Stormwater Management



Flooding has the potential to harm the drinking water supply, human life, property, and infrastructure. The Federal Emergency Management Agency (FEMA) has identified zones based on the anticipated frequency an area will flood in a 100-year interval. These predictions are based on historical data, which means that they do not incorporate climate change considerations. Already, the FEMA-delineated floodplains have been shown in many cases to be outdated, as areas vulnerable to flooding have expanded outside of its boundaries. Part of the increase in instances of flooding is linked to increased precipitation falling in concentrated storm patterns. Fortunately, Ypsilanti has not yet experienced flooding that has overwhelmed its storm sewer infrastructure, and much of the land that lies in the flood zones is designated parkland. The composition of Ypsilanti's soil also helps in that regard, since only 7% of the soils in Ypsilanti are prone to "frequent flooding," and the other soils experience no flooding aside from extreme circumstances.[21] To gain more accurate depictions of how the City may flood in the future, Ypsilanti can invest in an updated study that incorporates recent data and includes forecasts of more intense and frequent storms. The study should also include how the river's altered channel due to the anticipated removal of the dam may impact flooding.

Green Infrastructure, specifically green stormwater infrastructure (GSI), is one way to reduce the impacts of excess stormwater. Green stormwater infrastructure is a broad term that includes several practices of water management that protect or mimic the natural water cycle. As opposed to conventional "gray" stormwater infrastructure, which uses hard surfaces and systems to channel excess water elsewhere, this approach protects and expands the natural environment so that water can be absorbed naturally at several scales: a home, a downtown, an entire city, a watershed. Common examples are rain gardens, green roofs, trees, planter boxes, rainwater harvesting systems, and bioswales, and better protection of wetlands and floodplains.

The utility of GSI should not be underestimated. For example, one acre of imperviously-surfaced roadway can generate between 0.5 and 1 million gallons of stormwater runoff annually. On Michigan Avenue in Lansing, there are 30 planter box bioretention areas that collect runoff from four acres of roadway and reduce the annual stormwater runoff by approximately 75%.[22]

Landscaping that beautifies a site can also capture stormwater. Already embedded in the landscaping requirements in the Zoning Ordinance is a tree protection plan for site plan review. The applicant is awarded credit for preserving or incorporating existing trees and shrubs into the development, and if trees or shrubs intended to meet the minimum landscaping requirements are cut down or damaged, the applicant must replace them according to ordinance specifications. Moreover, trees proposed for credit cannot be invasive (122-632). The frontage of all public and private streets for a new or altered use that requires site plan review must be landscaped with street trees (122-636). Existing regulation stops short of a tree preservation ordinance, which would prevent the removal of trees determined meeting criteria for condition, size, and species. In a tree preservation ordinance, regulations prioritizing transplanting trees prior to removal can also be included. Furthermore, wetlands are

[16] Washtenaw County Water Resources Commissioner. Rules and Guidelines: Procedures and Design Criteria for Stormwater Management Systems. Revised October 2016. https://www.washtenaw.org/DocumentCenter/View/302/Rules-and-Guidelines---Procedures-and-Design-Criteria-for-Stormwater-Management-Systems-PDF?bidId=
[17] Huron River Watershed Council. The Huron River Data Report: Ann Arbor and Ypsilanti Vicinity. https://www.hrwc.org/wp-content/uploads/LowerMiddleHuron-11x8.pdf
[18] Princeton Hydro. Peninsular Paper Dam: Dam Removal Assessment and Feasibility Report. September 2018. https://cityofypsilanti.com/DocumentCenter/View/1789/2018-11-21-Peninsular-Dam-Removal-Study-Report
[19] WXYZ Detroit. Ypsilanti City Council Votes to Tear Down Peninsular Dam. May 2019. https://www.wxyz.com/homepage-showcase/ypsilanti-city-council-votes-to-tear-down-peninsular-dam
[20] Ypsilanti City Council. Resolution 2019-101. May 7 2019.
[21] Web Soil Survey, United States Department of Agriculture, https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
[22] SEMCOG. Green Infrastructure Vision for Southeast Michigan. 2014. Page 45. file:///C:/Users/Michelle%20Bennett/Downloads/GreenInfrastructureVisionForSoutheastMichiganMarch2014.pdf

Stormwater Drainage Program

A case study in Detroit quantified the combined advantage of pervious pavement and a rain garden on a church's parking lot. Using the EPA's stormwater management model, they calculated that a 4,530 square foot rain garden and a 33,000 square foot patch of pervious pavement reduced stormwater runoff volume by 70%, even during the heaviest six-hour period of precipitation in Detroit's recent history (2016).[1] In Detroit, there is an added incentive for property owners to use green infrastructure because they are charged a drainage fee based on the impervious surface area on the property. However, they may also earn a "green credit" for actions such as redirecting downspouts into areas where natural infiltration can take place.

tremendous stormwater capturers and beautiful landscapes to behold. While most of them are regulated at the state level, the city can continue to monitor their health and work with partners to protect those that remain.

The Zoning Ordinance also permits accessory stormwater control features such as swales, pervious paving, rain gardens, rain cisterns, vegetated roofs, and other methods. Ypsilanti has one city-sponsored rain garden at the Freighthouse that is managed by volunteers, and several curbside raingardens in Depot Town that are maintained by the DDA with volunteer assistance and assistance from local merchant groups.

In partnership with Washtenaw County Conservation District (WCCD), the Sustainability Commission has offered support to promote WCCD workshops to residents, encourage tree planting on residential lots, and identify a site and volunteers for an Earth day tree planting event. Washtenaw County has staff dedicated to teaching master rain gardener certification courses and provides technical advice for planting one on private property. The City of Ypsilanti also won bronze at the Michigan Sustainability Conference in 2019 for its work with the Washtenaw County Water Resources Commissioner to provide free consultations to households interested in developing or enhancing rain gardens.[23]

In addition to enhancing green stormwater infrastructure, some expansion to grey infrastructure may also be needed. Ypsilanti was recently awarded a Stormwater, Asset Management, and Wastewater (SAW) grant. With the funds, the City mapped its storm sewers and plans to upgrade its software to aid in continuing to monitor and record its conditions. With improved information about existing infrastructure, Stormwater Management Plans can be tailored to specific areas for improvement so that estimates for expansion are based on accurate data. Using climate change predictions for precipitation and updated inventory on the storm sewer system, Ypsilanti can continue to use the Capital Improvement Plan to plan for greater stormwater capacity with greater precision.

Drinking Water Sources

There are 13 water wells within the City: four type 1 (community) wells, now closed; one type 2 (facility) well, now inactive; four household wells, and four irrigation wells.[24] These are personal wells that the owners are responsible for testing. The City of Ypsilanti, through the Ypsilanti Community Utilities Authority, sources water from the Great Lakes Water Authority for its municipal water system.

The Ypsilanti Community Utilities Authority provides a municipal water system and requires households that can be serviced by municipal sewer shall be, according to ordinance 106-22. At the point of a sewer hookup, the City encourages households to use the municipal water system, and as most of the few remaining households convert, the installation of personal wells is no longer necessary nor advisable.

The City created two well exclusion areas which are written into local ordinances and recorded with the Register of Deeds. Well exclusion areas were instituted to protect property from water contamination. One, in the downtown, prohibits wells adjacent to a parcel where there was a leak from a former gas station; the other, in the Bell-Kramer neighborhood, prohibits wells adjacent to the former landfill.

What the City can focus on is how to improve services through its water and wastewater provider Ypsilanti Community Utilities Authority (YCUA). Because wastewater treatment plants are energy-intensive, and provide an essential service to households, upgrades to this system are a win-win. Potential policies are two-fold. First, the City and YCUA can collaborate on home and business water efficiency financing programs to reduce total load and peak flow rates, saving energy at the plant and potentially lowering water bills for households. Secondly, advances to sensors and software can also improve their energy efficiency so that our water sources and treatment can contribute less to emissions.[25] The City can also continue to work with YCUA on water transmission infrastructure upgrades and maintenance; this minimizes potential waste from leakages and helps to minimize the risk of lead or other exposure from older pipes.

Sustainability Goals: Water

GOAL: Protect the watershed from further contamination.

- ~~Establish a Sensitive Features Overlay Zoning District along the Huron River and Paint Creek and implement LID standards and chemical bans~~
- Consider a sensitive features overlay zone providing a buffer around the Huron River and Paint Creek that provides site and use regulations tailored to the proximity to these waterbodies.
- Invest in consistent enforcement for compliance to the sensitive feature overlay zoning district.
- Continue to pursue updates to the zoning ordinance, such as tree protection regulations, that preserve and improve vegetation that can mitigate stormwater impacts.
- Continue to support the work of the Washtenaw County Water Resources Commissioner and other partners to educate members of the public, particularly single-family homeowners, on stormwater issues.
- Monitor adherence to the City's phosphorous fertilizer and tar sealcoat ordinances for effectiveness.
- Work with Washtenaw County Environmental Health to research the status of remaining private wells and provide resources and recommendations for testing water quality to property owners

GOAL: Preserve and expand the City's capacity to deal with heavy rainfall to mitigate negative effects on people and property.

- Incorporate capacity upgrades for grey stormwater management into the CIP based on predictions for greater precipitation
- Update the flood maps, including FIRM, based on climate projections and changes to the river channel since the FIRM formulation in the 1970s
- Investigate an equitable stormwater fee schedule that encourages converting impervious to pervious surfaces and proper use of rain barrels or other detention/retention systems.

[23] Michigan Green Communities (MGC). 2019 MGC Challenge Participants and Awards. https://migreencommunities.com/blog/
[24] Michigan Open Data Portal, "Water Wells – South Central & Southeastern Michigan" http://gis-michigan.opendata.arcgis.com/datasets/water-wells-south-central-southeastern-michigan?geometry=29.491%2C-17.893%2C-105.860%2C71.775
[25] Ypsilanti Climate Action Plan. 2012. Pg 30.

- Consider banning basements or enforce floodplain standards in boundaries where the soil has limited capacity to handle stormwater
- Develop a Stormwater Management Plan
- Continue to pursue the removal of the Peninsular Dam
- Continue to maintain City lands that are in the flood zones and vacant for stormwater and floodwater mitigation.
- Pursue GSI projects in the City parks, particularly in the flood zones.
- Pursue conservation &/or access easements along the Huron River.
- Explore offering incentives to property owners to retrofit existing buildings and site improvements with stormwater-friendly infrastructure, including rain gardens.
- Explore the potential to equitably enact a stormwater fee structure to encourage private retrofit stormwater infiltration and detention infrastructure

GOAL: Promote resources for water conservation and testing to ensure access efficiency upgrades and clean water

- Work with YCUA to develop home and business water efficiency financing programs
- Promote Great Lake Water Authority program WRAP to perform conservation audits and funds for repairs to help reduce low-income households reduce water bills
- Collaborate with YCUA on water conservation and infrastructure improvement projects.

City of Ypsilanti
Department of Public Services
DRAFT 2020

2020 Annual Report
Sustainability Commission
Ypsilanti, Michigan

INTRODUCTION

The Sustainability Commission of the City of Ypsilanti is governed by the City of Ypsilanti's Code of Ordinances, Chapter 2, Section 171, allocates the following tasks to the Sustainability Commission:

a. To create a model of sustainability through efforts to advocate, educate and promote the social, economic and environmental health of the community now and into the future.
b. To broaden the lens and scope of energy and environmental needs in the future such as wind, solar, clean air, water and improving infrastructure.
c. To recognize natural resources as chief assets of the City of Ypsilanti and encouraging responsible stewardship of these assets.
d. To collaborate with citizens, employees, employers, service providers and other governmental agencies and educational agencies to share ideas.
e. To create a Sustainability Plan.
f. To review the City of Ypsilanti's Climate Action Plan, Alternate Fuel Policy, the Michigan Green Communities Challenge, and other plans and policies and to continue the work of said plans and policies.
g. To prioritize stainability policies.

In 2020, the Sustainability Commission's membership was as follows:

Keith Michalowski (chair)
Nancy Heine (vice-chair)
Julia Bayha
Christian Cannon (resigned December)
Bryan Foley
Katy Greenwald
Takunia Collins
Beth Gibbons
Emily Drennen (resigned June)
Desirae Simmons (appointed November)

There were three vacant youth seats as of December 2020.

As a best practice and per §2-174(e), the Commission shall provide an annual report to City Council. This report discusses,

1. The operations of the Commission during the past year
2. The status of any on-going activities, including the Michigan Green Communities Challenge
3. The progress towards the goals laid out in the Climate Action Plan and Energy Plan
4. Recommendations to the legislative body related to sustainability

SUSTAINABILITY COMMISSION OPERATIONS

The Sustainability Commission held regular monthly meetings during 2020; these meetings were held virtually via Zoom after March due to the pandemic. The October regular meeting of the Commission was cancelled due to a short-notice issue with the Open Meetings Act with regards to the pandemic. In October, Sustainability Commission had a special joint meeting with Planning Commission for discussion of the draft Sustainability Plan.

The Commission passed 3 resolutions (native plants, environmental justice, sustainability plan adoption) and supported numerous projects and proposals, including A2Zero, Solarize, resilience hubs, public recycling, expansion of recycling, and the Peninsular Dam project. It also worked to draft the Sustainability Plan, which was submitted to the Planning Commission to be incorporated into the ongoing Master Plan update after a brief public review process in October.

Included in this year's annual report is the draft implementation matrix from the draft Sustainability Plan.

Plan Implementation Matrix

These goals and their matrices are taken directly from the Climate Action Plan (2012) and Energy Plan (2018).
Capital Improvements Plan = CIP; Zoning Ordinance = ZO

	Timeframe	Lead Party	Status
Sustainability Goals: Earth			
GOAL: Eliminate new instances of soil contamination and responsibly deal with the legacy of existing polluted sites			
· Explore creation of an overlay zone, or other zoning or building regulations, to control the types of uses that may be permitted in areas with soils that would allow for easy transmission of contamination, or uses that have a high risk of contamination near ecologically sensitive areas, such as waterways.	Mid	CED	
· Research and confirm existing sites of contamination with EGLE	MID	CED	
· Use Brownfield TIF capture to fund remediation of sites that may be redeveloped.	ONGOING	CED	
· Continue to work with the Washtenaw County Brownfield Redevelopment Authority to remediate sites.	ONGOING	CED	
· Explore and pursue grant opportunities to remediate sites that may not be good candidates for commercial redevelopment or that pose an immediate threat.	ONGOING	CED	
GOAL: Ensure buildings and infrastructure are constructed in a manner complementary to soil structure, slopes, and drainage.			
· Make soil information available to all, and directly provide information on soil structure to those who choose to build a new structure that requires a foundation.	ONGOING	CED	
· Incorporate green infrastructure into planned capital improvement projects wherever possible, and identify potential sites for demonstration projects.	ONGOING	DPS	
· Strengthen zoning protections to limit erosion in areas of steep slopes.	NEAR	CED	
Sustainability Goals: Water			
GOAL: Protect the watershed from further contamination.			
· Consider a sensitive features overlay zone providing a buffer around the Huron River and Paint Creek that provides site and use regulations tailored to the proximity to these waterbodies	MID	CED	
· Invest in consistent enforcement for compliance to the sensitive feature overlay zoning district	ONGOING	CED	
· Continue to pursue updates to the zoning ordinance, such as tree protection regulations, that preserve and improve vegetation that can mitigate stormwater impacts.	ONGOING	CED	
· Continue to support the work of the Washtenaw County Water Resources Commissioner and other partners to educate members of the public, particularly single-family homeowners, on stormwater issues.	ONGOING		
· Monitor adherence to the City's phosphorous fertilizer and tar sealcoat ordinances for effectiveness.	ONGOING		
· Work with Washtenaw County Environmental Health to research the status of remaining private wells and provide resources and recommendations for testing water quality to property owners	ONGOING		
GOAL: Preserve and expand the City's capacity to deal with heavy rainfall to mitigate negative effects on people and property.			
· Incorporate capacity upgrades for grey stormwater management into the CIP based on predictions for greater precipitation	ONGOING	DPS	
· Update the flood maps, including FIRM, based on climate projections and changes to the river channel since the FIRM formulation in the 1970s	LONG	DPS	
· Investigate an equitable stormwater fee schedule that encourages converting impervious to pervious surfaces and proper use of rain barrels or other detention/retention systems.	MID	COUNCIL/ DPS	

	Timeframe	Lead Party	Status
· Consider banning basements or enforce floodplain standards in boundaries where the soil has limited capacity to handle stormwater	LONG	CED	
· Develop a Stormwater Management Plan	MID	DPS	
· Continue to pursue the removal of the Peninsular Dam	ONGOING	MANAGER	
· Continue to maintain City lands that are in the flood zones and vacant for stormwater and floodwater mitigation.	ONGOING	VARIOUS	
· Pursue GSI projects in the City parks, particularly in the flood zones.	ONGOING	DPS	
· Pursue conservation &/or access easements along the Huron River.	ONGOING	CED	
· Explore offering incentives to property owners to retrofit existing buildings and site improvements with stormwater-friendly infrastructure, including rain gardens.	LONG		
· Explore the potential to equitably enact a stormwater fee structure to encourage private retrofit stormwater infiltration and detention infrastructure	LONG		
GOAL: Promote resources for water conservation and testing to ensure access efficiency upgrades and clean water			
· Work with YCUA to develop home and business water efficiency financing programs	MID		
· Promote Great Lake Water Authority program WRAP to perform conservation audits and funds for repairs to help reduce low-income households reduce water bills	ONGOING		
· Collaborate with YCUA on water conservation and infrastructure improvement projects.	ONGOING		
Sustainability Goals: Energy			
GOAL: Decrease the community's emissions by 171,310 metric tons of CO_2e by 2030.			
· Work with the City of Ann Arbor to investigate bulk buying of renewable energy through the Community Choice Aggregation Legislation.	ONGOING		
· Purchase renewable energy credits (RECs) for City operations.	LONG		
· Promote state policies, incentives, grants, and Community Energy Management programs that encourage energy efficiency and renewable energy to property owners.	ONGOING		
· Promote Washtenaw County's weatherization program for low-income homeowners.	ONGOING	CED	
· Work with community stakeholders to initiate an energy competition. The university and City can partner together to challenge another city and university to an energy reduction competition.	LONG		
· Implement an inter-departmental site plan review process with attention to sustainability-related strategies such as energy use and efficiency, generation and offsetting of emissions, on-site water management and infiltration, etc.	ONGOING	CED	
· Investigate the feasibility of a microgrid.	LONG		
· Review and incorporate aspects of the International Dark Sky Model ordinance to reduce energy waste (i.e. motion activated lighting on municipal buildings)	MID	DPS	
· Participate in or sign-on to regional, national, or international commitments to energy, climate, and sustainability including but not limited to the Paris Climate Agreement, the Sierra Club's "Ready for 100" pledge, the Global Covenant of Mayors for Climate and Energy.	SHORT	COUNCIL	
· Develop an electric charging vehicle infrastructure strategy	MID	DPS	
· Create a green rental certification program to encourage energy-efficient improvements	MID	CED	
· Work with the HDC to incorporate historically compatibly fixtures that are dark sky compliant	ONGOING	CED	
· Continue to pursue policies and projects that improve nonmotorized transportation.	ONGOING	DPS/CED	
· Continue to encourage solar energy installations throughout the City.	ONGOING	CED	

	Timeframe	Lead Party	Status
· Partner with other agencies, such as YCUA , DTE, and MiSaves to provide education and incentives for energy use reductions, both residential and commercial.	ONGOING		
· Continue to participate in local, regional, national, and international efforts for climate mitigation and adaptation.	ONGOING		
· Continue membership in communities such as ICLEI that help support local efforts to combat and adapt to climate change.	ONGOING		
GOAL: Decrease government operation emission in support of attaining citywide net zero by 2030			
· Establish an Energy Manager position to be responsible for the following duties:	MID	MANAGER	
o Improve knowledge of energy management among city staff and appointed officials among staff			
o Create a data-driven system that is replicable over time, and includes annual forecasts, benchmarks for energy use reductions, and an internal reporting protocol			
o Work with the Sustainability Commission to produce an annual report that highlights where emission reductions and procedural improvements have been made			
o Improve communications with facility managers, utility providers, and relevant contractors to resolve issues quickly			
o Increase outreach to and participation of industrial and commercial customers in renewable energy and energy efficiency projects			
o Research and utilize the most efficient equipment available			
· Continue to incorporate renewable energy into the energy portfolio of each government building including back-up generation	ONGOING	DPS	
· Re-establish the City's revolving loan fund for energy efficiency projects.	MID	MANAGER	
· Conduct a GHG inventory every 5 years using input from 2012 & 2018 findings in the ICLEI GHG framework	LONG	DPS	
· Improve fleet fuel efficiency with clean diesel, alternative fuels, and electrification.	ONGOING	DPS	
· Publicly report on progress made toward energy goals.	ONGOING	DPS/CED/MANAGER	
· Continue to make energy-efficiency improvements to City owned facilities	ONGOING	DPS	
ENERGY: Reduce the amount of waste generated in Ypsilanti that enters landfills			
· Conduct a waste audit to understand the baseline composition of the waste stream at the municipal operations and community level	SHORT	DPS	
· Help publicize local re-use opportunities, such as the Buy Nothing Project and Freecycle.	ONGOING	CED	
· Implement an educational campaign on existing recycling and composting options	SHORT	DPS	
· Expand recycling to public spaces and all City facilities by placing artful, educational, and engaging waste sorting stations throughout the community	MID	DPS	
· Create a coordinated recycling system that has a one stop for difficult-to-recycle materials including electronics and refrigerant management	LONG	DPS	
· Increase access to curbside recycling services to multi-family units	MID	DPS	
· Define Zero Waste for Ypsilanti using the Zero Waste hierarchy. Set a goal for City operations to be zero waste (excluding medical waste) by a specific date with annual benchmarks.	LONG		
· Require that any events with a City permit provide for recycling, compost, and provide a discount for Zero Waste events	LONG		
· Require government operations to use durable or compostable materials	MID		
· Implement a pilot program for a municipal kitchen compost system with high food-waste generators.	LONG		
· Investigate a partnership with a commercial-scale compost operation	MID		

	Timeframe	Lead Party	Status
· Pilot curbside community composting services for leftover food	LONG		
· Investigate funding sources to bring down the cost of a biodigester	MID		
· Permit onsite composting of mulched leaves	DONE		
· Continue to explore options to improve recycling and composting opportunities within the City and with partners.	ONGOING	DPS	
Sustainability Goals: Biodiversity			
GOAL: Expand and protect natural habitats			
· Incorporate model language for rewilding landscaping into the city's ordinance	SHORT		
· Create informational materials for property owners on preferred and prohibited plants	SHORT	SUSTAINABILITY	
· Rezone undeveloped land on Mansfield and on Clark to a more protective zoning district	MID	CED	
· Continue to support the local food system	ONGOING	CED	
· Support traffic calming and other infrastructure design that help reduce animal road crossing mortality	ONGOING	DPS/CED	
· Promote "bird safe" designs and "lights out" programs during migratory season	SHORT	CED	
· Consider programs for habitat improvement such as bat houses, pollinator gardens, and others as they develop			
· Train inspectors to spot wildlife-friendly plants to prevent their removal	ONGOING	CED	
· Continue to monitor health of the city's wetlands and work with the Washtenaw County Parks and Recreation to protect them	ONGOING		
· Partner with the County to inventory land that could be nominated for NAPP			
· Encourage warm light to protect insects	ONGOING	CED	
· Encourage use of native and climate-change adapted plants wherever possible	ONGOING		
· Work with DTE to provide warmer, more night-sky friendly public lighting.	ONGOING	DPS	
· Review the existing lighting ordinance and update to explicitly permit motion-sensitive lighting.	SHORT	CED	
· Review and incorporate aspects of the Dark Sky Model Lighting Ordinance to reduce negative effects on insects and migratory birds	MID	CED	
GOAL: To preserve and expand a resilient tree canopy			
· Implement a tree preservation ordinance	MID		
· Plant additional street trees and trees in parks in accordance with the Urban Forest Management Plan, with a particular prioritization of those sites indicated by the Tree Equity map.	ONGOING	DPS	
· Increase and diversify the public tree stock according to the Urban Forest Management Plan	ONGOING	DPS	
· Invest in tree maintenance	ONGOING	COUNCIL	
· Continue the City's Arbor Day Tree City USA designation	ONGOING		
· Coordinate tree planting efforts with sidewalk maintenance efforts and considerations.	ONGOING		
· Update street planting guidelines to prioritize tap roots species and vary pit size by species	SHORT		
Sustainability Goals: Complete Neighborhoods			
GOAL: Maintain and expand transportation options including the development of bicycle, pedestrian, and sharing networks.			

	Timeframe	Lead Party	Status
· Implement a parking cash-out alternative benefit option for City employees	SHORT	HR	
· Prioritize transit-oriented development	ONGOING	CED	
· Partner with the DDA and AATA to provide a discounted transit pass as an alternative to downtown parking permits	MID	DPS	
· Encourage corporate sponsorship of transit passes and infrastructure to encourage employee bus and bikeshare ridership	MID	DPS	
· Consider pursuing car, scooter, or bike-sharing programs with Eastern Michigan University as a partner.	ONGOING	CED	
· Close sidewalk gaps	ONGOING	DPS	
· Add bicycle lanes to major thoroughfares and trunklines	ONGOING	DPS	
· Retain the mix of uses within each corridor but allow them throughout the area.	ONGOING	CED	
· Restore two-way function to Cross, Huron, and Hamilton Streets.	LONG	DPS	
· Separate Cross and Washtenaw for vehicle traffic.	LONG	DPS	
· Restore Harriet Street as the Main Street of adjacent neighborhoods.	LONG	CED	
· Prioritize pedestrians at crosswalks, and investigate where pedestrian walk signs can be made automatic	MID	DPS	
· Work with MDOT to make state-owned roads more accessible to nonmotorized users	ONGOING	DPS	
· Coordinate with Townships and WCPRC on Border to Border (B2B) trail development	ONGOING	DPS	
· Encourage police enforcement and legislative support for bike and pedestrian safety	ONGOING	YPD	
· Improve neighborhood walkability by improving sidewalk connectivity and conditions. Prioritize the improvement of nonmotorized connections that link neighborhoods and job centers.	ONGOING	DPS	
· Continue to support the development of intercity and commuter rail	ONGOING	MANAGER	
· Coordinate citizens to advocate for slower traffic speeds on state owned corridors	ONGOING		
GOAL: Incentivize energy efficient and socially responsible development			
· Consider density bonuses, particularly on transit and commercial corridors, in exchange for developers meeting criteria that achieve city goals	MID	CED	
· Incentivize US Green Building Council's LEED for Neighborhood Development standard for new development	MID	CED	
· Develop a Green Business/Neighborhood Certification program	LONG	CED	
· Seek affordable housing development and identify parcels where it can locate near services	ONGOING	CED	
· Continue to prioritize infill development	ONGOING	CED	
· Continue to provide a variety of housing options, including affordable housing and missing middle housing.	ONGOING	CED	
· Provide a Sustainability Commissioner liaison to a neighborhood interested in developing an eco-district	ONGOING	SUSTAINABILITY	
GOAL: Increase neighborhood resiliency during times of disruption.			
· Identify walkable/bikeable neighborhood resource centers throughout the City, such as community centers, churches, schools, or social clubs.	SHORT		
· Work with these identified resources to increase their capacity to serve as emergency resource centers, including backup power generation, emergency shelter, and food and resource distribution.	MID		
· Work with the Health Department and other partners to make resources available for community leaders who wish for their homes to serve as small-scale resources during disruptions.	ONGOING		

	Timeframe	Lead Party	Status
Sustainability Goals: Communication			
GOAL: Play a leading role in educating Ypsilanti residents on sustainability topics.			
· Implement an educational series about energy efficiency in different venues with a focus on teaching the most vulnerable populations about resources that help reduce their utility bills	ONGOING	SUSTAINABILITY	
· Continue to work with sustainability-related organizations to develop and offer in school guest lectures, field trips, and other learning opportunities with local schools	ONGOING	SUSTAINABILITY	
· Work with schools to reduce waste and incorporate reusable items on campus	ONGOING	SUSTAINABILITY	
· Determine a designated point person on city staff to direct sustainability-related questions or comments to the correct department			
· Promote the city's energy, climate, and sustainability vision through the established online newsletter and develop other municipal marketing materials to update residents on city efforts, key sustainability topics, and easy-to-follow tips at home	ONGOING	SUSTAINABILITY	
· Organize competitions between municipal employees, business owners, and neighborhoods that promote sustainability-focused activities:	ONGOING	SUSTAINABILITY	
· "Bring Your Green to Work,"			
· Energy treasure hunts,			
· Adopting catch basins or green infrastructure,			
· Zero waste days,			
· Smart commute weeks, and challenges to bike, walk, or take public transit to work.			
· Partner with Ypsilanti Community Schools on communication and education efforts.	ONGOING		
· Consider creating a Communications Specialist position to lead and coordinate communication and education efforts within the City.	MID	MANAGER	
· Make critical public documents accessible and multilingual	ONGOING	MANAGER	
· Publicize available efficiency and support programs, such as the County's weatherization program and YCUA's water assistance program.	ONGOING		
GOAL: Develop the datasets necessary to determine where disaster relief should be targeted			
· Conduct an Environmental Justice analysis that identifies vulnerable populations and structures that are disproportionately impacted by climate change	LONG		
· Work with SEMCOG and the County to expand local air quality monitoring system	SHORT		
· Investigate infrastructure materials that can weather extreme weather	ONGOING		
GOAL: Mitigate the damage inflicted on residents, infrastructure, and property from extreme weather.			
· Implement renewable backup power systems for areas of refuge and emergency facilities	ONGOING	DPS	
· Collaborate with landlords, YCUA, and DTE to ensure that in a time of crisis essential water and gas/electricity are not shut off	ONGOING	CED/MANAGER	
· Work with Washtenaw County to develop a Hazard Mitigation Plan.	MID	YPD/YFD/DPS	
· Partner with Washtenaw County to expand emergency preparedness and communication tools including a multilingual and universally accessible plan that includes climate change predictions	MID	MANAGER	
· Work with the County to identify additional accessible warming and cooling shelters	MID		
· Require occupied residential rental units to have one air-conditioned room	MID	CED	

	Timeframe	Lead Party	Status
· Review response protocol and update where needed to respond to severe storm events	MID	MANAGER	
· Continue to explore Resilience Hubs in coordination with local community partners and facilities.	MID		
· Publicize available utility assistance programs, such as THAW, leading into and during peak heating and cooling seasons.	ONGOING		
· Work with Washtenaw County and utility partners to ban utility shutoffs for nonpayment during states of emergency or extreme weather events.			
· Improve snow and ice response for sidewalks	ONGOING	DPS (PUBLIC) CED (PRIVATE)	

LOOKING FORWARD

The Sustainability Commission plans to focus on implementation of the following Sustainability Plan goals:

- Continue to recruit additional members, including youth members.
- Explore additional opportunities for installation of renewable energy, particularly in the former landfill area.
- Support a pilot of resilience/emergency hubs
- Support recycling expansion, including public recycling, drop-off center & additional drop off opportunities, onsite recycling for multifamily properties
    - Improve recycling education and outreach
- Support urban gardening food system, pollinator, and cultural support.
- Support neighborhood-level sustainability efforts
- Perform outreach to youth, including offering internship/volunteer opportunities

ACTION

The Sustainability Commission adopted this report at its regular March 2021 meeting and approved transmittal to City Council.