

ENVIRONMENTAL COMMISSION

AGENDA (PREPARED 01-13-21)

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Date: Wednesday, January 20, 2020

Time: 6:00 pm

Place: Virtual meeting via Zoom due to COVID19 restrictions
Meeting ID 890 2729 0544, Passcode 161161

I. Call to Order

II. Roll Call

III. Adoption of the Agenda

IV. Election of Officers:

- a. Chairman
- b. Vice Chairman
- c. Secretary

V. Approval of the meeting minutes for 12-16-20

VI. Citizen Comments (3-minute limit)

VII. Environmental Action Plan

- d. Finalized at 12-16-20 Environmental Commission Meeting
- e. Scheduled to be submitted to City Council at 01-26-21 meeting

VIII. Discussion of Environmental Commission's 2021 Agenda Items

IX. Commissioner Comments

X. Next Meeting – Wednesday, February 17, 2021 at 6:00pm via Zoom

XI. Adjournment

ENVIRONMENTAL COMMISSION

MINUTES

Date: Wednesday, December 16, 2020

Time: 6:00 pm

Place: Virtual meeting via Zoom due to COVID19 restrictions
Meeting ID 868 1655 0757, Passcode 161161

I. Call to Order Chair Kevin Lund called the Environmental Commission meeting to order at 6:07 pm.

II. Roll Call

Present: Commissioner Monica Day, Commissioner Nicholas Haney, Commissioner Kelsey Heck, Commissioner Bethany Hersha, Commissioner Kelli Kazmier, Commissioner Kevin Lund and Commissioner Jill Ramsey

Absent: None

Staff: Troy R White, City of Jackson Engineering

III. Adoption of Agenda

Motion made by Commissioner Heck and seconded by Commissioner Kazmier to adopt the agenda as presented.
Motion approved unanimously.

IV. Approval of the minutes for the November 18, 2020 meeting

Motion made by Commissioner Hersha and seconded by Commissioner Haney to approve the minutes as presented.
Motion approved unanimously.

V. Citizen Comments (3-minute limit)

None.

VI. Commission Appointment Discussion

Mr. White informed the Commission that City Council, at its December 8, 2020 meeting, reappointed Jill Ramsey to a one-year term as an ex-officio member of the Environmental Commission. Her appointment will expire on December 31, 2021. Commissioner Ramsey will need to be sworn in at the Office of the City Clerk.

VII. Review and Discuss Environmental Commission's Environmental Action Plan (EAP) Edits

a. Executive Summary

Commissioner Kazmier generated additional text since last Commission meeting.

There was general discussion that most of the original issues and priorities that were brought to the Commission originally have been incorporated into the proposed EAP.

Motion made by Commissioner Haney and seconded by Commissioner Hersha to approve the Executive Summary as presented for substance. Motion approved unanimously.

Discussion then focused on grammar and presentation of the Executive Summary. The first and second paragraphs were modified to reduce the number of lines and thereby make the entire Executive Summary fit on a single page.

Motion made by Commissioner Heck and seconded by Commissioner Haney to approve the Executive Summary for grammar. Motion approved unanimously.

The Executive Summary is finalized.

b. Introduction and Overview

Commissioner Hersha generated additional text since last Commission meeting. There was discussion that the content of the newly generated text is covered by the last sentence in the Chapter 6 summary. Therefore, the newly generated text was not added to the EAP.

Commissioner Kazmier suggested that chapter titles in the Introduction and Overview be used as the titles for each chapter in subsequent pages for the sake of consistency.

Motion was made by Commissioner Haney and seconded by Commissioner Ramsey to approve the Introduction and Overview as presented for substance. Motion approved unanimously.

Discussion then focused on grammar and presentation of the Introduction and Overview. Extra blank lines were removed.

Motion was made by Commissioner Kazmier and seconded by Commissioner Hersha to approve the Introduction and Overview for grammar. Motion approved unanimously.

The Introduction and Overview is finalized.

c. Chapter 1

The title of Chapter 1 was modified to "Current Work to Date" to match the Introduction and Overview.

The memo dated 02-19-20 from Amber Clark to the City Manager, Patrick Burtch, was removed from the AEP.

A couple of extra blank spaces were removed. Also, changes were made to use big "C" and little "c" in the word "city" consistently.

Reference to the former use of City Hall for a bank was removed.

Motion was made by Commissioner Kazmier and seconded by Commissioner Heck to approve Chapter 1 for both substance and grammar. Motion approved unanimously.

Chapter 1 is finalized.

d. Chapter 2

The title was modified to "Waste Management, Reduction and Recycling" to match the Introduction and Overview.

Motion was made by Commissioner Kazmier and seconded by Commissioner Ramsey to approve Chapter 2 for both substance and grammar. Motion approved unanimously.

Chapter 2 is finalized.

e. Chapter 3

The title of Chapter 3 was modified to "Protection of Water Resources" to match the Introduction and Overview.

Motion made by Commissioner Haney and seconded by Commissioner Heck to approve Chapter 3 for both substance and grammar. Motion approved unanimously.

Chapter 3 is finalized.

f. Chapter 4

The title of Chapter 4 was modified to "Energy Efficiency, Resource Management and Transportation" to match the Introduction and Overview.

The format of the Tactics and Recommendations section was modified to remove bullet points and use only numbers with a single downstream parenthesis. It was decided that this format will be applied to the Tactics and Recommendations sections of all chapters in the EAP.

Motion was made by Commissioner Kazmier and seconded by Commissioner Ramsey to apply the above referenced format to the Tactics and Recommendations section of all chapters in the EAP. Motion approved unanimously.

Continued discussion regarding Chapter 4:

Extra line spaces were added for the sake of consistency.

Commissioner Day suggested the use of the graphic on page 109 of the final version of the Jackson City + County Non-Motorized Plan be used rather than the outdated graphic from a previous draft City + County Plan. The suggested graphic was added to the AEP.

Motion was made by Commissioner Hersha and seconded by Commissioner Heck to approve Chapter 4 for both substance and grammar. Motion approved unanimously.

Chapter 4 is finalized.

Commissioner Ramsey left the meeting at 6:57.

g. Chapter 5

The title of Chapter 5 was modified to "Sustainable Lane Use" to match the Introduction and Overview.

Periods and bullets were modified for the sake of consistency.

Motion made Commissioner Kazmier and seconded by Commissioner Haney to approve Chapter 5 for both substance and grammar. Motion approved unanimously.

Chapter 5 is finalized.

h. Chapter 6

The title of Chapter 6 was modified to "Community Engagement" to match the Introduction and Overview.

The text for the third bullet point was modified to change "Sharp Park" to "Ella Sharp Museum" and to include "Dahlem Center" and "Active Jackson".

Motion was made by Commissioner Day and seconded by Commissioner Haney to approve Chapter 6 for both substance and grammar. Motion approved unanimously.

Chapter 6 is finalized.

i. Appendix

No action taken. The appendix, which was removed from the EAP at the previous Commission meeting remains removed. An appendix will not be included in the EAP.

j. Submittal of final AEP to City Council

Motion was made by Commissioner Hersha and seconded by Commissioner Kazmier to submit the EAP to City Council. Motion approved unanimously.

Mr. White will prepare a cover letter and submit the EAP for inclusion on the City Council meeting agenda. The EAP will most likely be submitted for the 01-26-21 City Council meeting.

VIII. Approval of 2021 Meeting Schedule

Motion made by Commissioner Heck and seconded by Commissioner Kazmier to meet at 6:00 pm on the third Wednesday of each month in 2021. Motion approved unanimously.

IX. Commissioner Comments

Commissioner Kazmier discussed to need to determine the priorities for future consideration by the Commission.

Commissioner Day suggested that a list for of items that can be developed into detailed recommendations be generated.

Commissioner Kazmier requested that Chair Lund bring the previously developed list of priorities to the next Commission meeting.

X. Next Meeting

Next meeting is scheduled for 6:00 pm on Wednesday, January 20, 2021.

XI. Adjournment

Motion made by Commissioner Haney and seconded by Commissioner Kazmier to adjourn. Motion approved unanimously. Meeting ended at 7:47 pm.

ENVIRONMENTAL COMMISSION

MINUTES

APPROVED 12-16-20

Date: November 18, 2020

Time: 6:00 pm

Place: Via Zoom (due to Covid19 restrictions)

I. Call to Order Chair Kevin Lund called the Environmental Commission meeting to order at 6:09 pm.

II. Roll Call

Present: Commissioner Nick Haney, Commissioner Kelsey Heck, Commissioner Bethany Hersha, Commissioner Kelli Kazmier and Commissioner Kevin Lund

Absent: Commissioner Monica Day and Commissioner Jill Ramsey

Staff: Troy R White, City of Jackson Engineering

III. Adoption of Agenda

Motion made by Commissioner Heck and seconded by Commissioner Haney to adopt the agenda as presented. Motion approved unanimously.

IV. Approval of the minutes for the October 21, 2020 meeting

Motion made by Commissioner Kazmier and seconded by Commissioner Hersha to approve the minutes as presented. Motion approved unanimously.

V. Citizen Comments (3-minute limit)

None.

VI. Discussion of Inactive and Active Commission Appointment Status

a. Commissioner Heise's term expired 05-29-19. Removal action is unnecessary.

b. Term has expired for Ex-Officio Commissioner Ramsey.

Commissioners discussed making an inquiry with Commissioner Ramsey about her intention regarding continued service on the Environmental Commission. It was determined that staff (Troy White) will inquire of Commissioner Ramsey via email if she will seek reappointment.

Motion made by Commissioner Kazmier and seconded by Commissioner Haney to close discussion of Item VI. Motion approved unanimously.

VII. Review and Discuss Environmental Commission Climate Action Plan Edits

- a. Executive Summary – *Commissioner Kazmier to generate additional text. See below.*
- b. Introduction and Overview – *Commissioners Heck and Hersha to generate additional text. See below.*
- c. Chapter 1 – previously approved for both substance and grammar. *No discussion.*
- d. Chapter 2 – previously approved for both substance and grammar. *No discussion.*
- e. Chapter 3 – previously approved for both substance and grammar. *No discussion.*
- f. Chapter 4, Section A – previously approved for substance, not yet approved for grammar. *No discussion.*
- g. Chapter 4, Section B – previously approved for substance, not yet approved for grammar. *No discussion.*
- h. Chapter 4, Section C – previously approved for substance, not yet approved for grammar. *No discussion.*
- i. Chapter 4, Section D – previously approved for substance, not yet approved for grammar. *No discussion.*
- j. Chapter 5 – not yet reviewed

Section 5A – Sustainable options for vacant city-owned lots. Minimal discussion.

Motion made by Commissioner Haney and seconded by Commissioner Heck to approved Section 5A as presented for content. Motion approved unanimously.

Section 5B – sustainable options for privately owned lots.

Commissioner Kazmier suggested that two bullet points be added to Tactics and Recommendations:

- i. Recommend that existing ordinances be reviewed and recommendations for modifications be made to make ordinances amenable to urban farming – gardening, apiculture (beekeeping) and chicken keeping.
- ii. Recommend that existing ordinances be reviewed and recommendations for modifications be made to make ordinances amendable to “natural” or “no-mow” landscaping.

Commissioner Hersha concurred and stated that ordinances should not prohibit urban farming.

Motion made by Commissioner Hersha and seconded by Commissioner Heck that Section 5B be approved for content with inclusion of the above additions to the Tactics and Recommendations subsection. Motion approved unanimously.

- k. Chapter 6 – Education and Outreach

General discussion:

The content generated to date is conceptual and is a list of general ideas for this chapter.

Commissioner Lund suggested creating a fall event similar to Earth Day events held in the spring to raise awareness beyond the Earth Day season. Perhaps something that high-lights current actions being taken to benefit the Grand River such as the GREAT cleanup, city leaf pick-up and street sweeping.

Commissioner Heshha suggested community partners be included in such as effort. Potential partners might include the Jackson District Library and the Dahlem Center among others. Commissioner Haney suggested a potential partner may be the Jackson County Conservation District.

Commissioner Kazmier suggested September for a fall event as there are several days in September that are designated for environmental awareness and action.

Commissioners Lund and Hersha suggested that the City might promote annual events that are being held annually by local organizations.

Commissioner Hersha suggested a survey to determine the community's priorities. Commissioner Kazmier suggested that this might be an opportunity to understand the varying environmental concerns within the community.

Commissioner Hersha suggested that previous surveys performed by others such as the Planning Commission may be a source of data. The use of previous survey data would allow for more timely progress and less works.

Commissioner Lund discussed the State of Michigan's inventory of sites that are contaminated due to past land use (i.e. for industry and gas stations) and the potential to use this database as a tool to inform the public of existing conditions and current monitoring and corrective activity.

Commissioner Hersha suggested that reference to the State's database be included in the report. Commissioner Lund suggested that language be included to the report to recommend the use of the State's data as a tool to provide information to the public and raise awareness.

Commissioner Haney suggested that Commissioners email their ideas for Chapter 6 to him. He will turn the general ideas into text for consideration at the next Commission meeting.

Commissioners Heck and Hersha will generate text for the Introduction for consideration at the next Commission meeting.

Commissioner Kazmier suggested that language be added to move the document from being primarily a climate action plan to an overarching environmental policy plan. Commissioner Kazmier will draft text for inclusion in the introduction and/or executive summary for consideration at the next Commission meeting.

I. Appendix – no content generated to date.

Commissioners Haney and Kazmier discussed what should be included in the appendix. A previous idea was to list those items that did not rise to highest priority (and were therefore no included in the document).

Commissioner Heck suggested that these items be left off out of the document but kept on a list for future consideration by the Commission.

Motion made by Commissioner Haney and seconded by Commissioner Hersha to remove the appendix from the document. Motion passed unanimously.

Motion made by Commissioner Kazmier and seconded by Commission Haney to conclude discussion of Item VII for the evening. Motion passed unanimously.

VIII. Commissioner Comments

Commissioner inquired about Colleen Sullivan as a possible applicant to join the Commission.

Commissioner Lund inquired about the need for a City Council representative to the Environmental Commission and who might that representative be. Conversation was inconclusive. Topic will be revisited at a future time.

IX. Next Meeting

Next meeting is scheduled for 6:00 pm on Wednesday, December 16, 2020.

Chair Lund stated that the goal of the next meeting will be to finalize the document so that it can be submitted to City Council for consideration in January 2021.

Chair Lund stated that comments for Chapter 6 need to be provided to Commissioner Haney by the end of November 2020.

X. Adjournment

Motion made by Commissioner Hersha and seconded by Commissioner Heck to adjourn. Motion approved unanimously. Meeting ended at 7:33 pm.

City of Jackson Environmental Action Plan Date: 12/16/20

Authoring Commissioners: Amber Clark, Monica Day, Bethany Hersha, Kelsey Heck, Kelli Kazmier, Kevin Lund, Nicholas Haney, Sarah Nielson, Jill Ramsey, Troy White

Executive Summary

In February of 2018, the Jackson City Council created the Environmental Commission (EC) following the recommendation of Mayor Derek Dobies. The EC was tasked with helping to create a healthier, greener, and more sustainable future for the City of Jackson. The EC will examine policy and make recommendations to the city council for implementation of strategies towards this end. The EC is composed of members with experience in natural resource management, environmental health and safety, sustainable energy use and urban development, the science of climate change, and environmental justice. It is the goal of the EC to engage with community of Jackson to set priorities and address challenges as we move toward improving the quality of life for our citizens.

Over the past year and a half, this commission has begun the process of identifying priorities and actionable recommendations for the city. We have listened to community stakeholders and organizations, brought together ideas based in our own areas of expertise, as well as incorporated best practices from our peer communities. While there is much to be done, we present this document as a summary of our goals for our work and for the future of the city. As a part of our work, we will continue to expand and reevaluate our progress on these goals. Furthermore, we seek to deepen our connections within our community to ensure that environmental issues are addressed and the possibility for productive collaborations are leveraged.

The City of Jackson has made good progress in recent years towards a more sustainable and cleaner future. This Environmental Action Plan is designed to provide a framework for continuing and expanding this legacy. Implementation of this plan will allow the city to:

- Make our community a more sustainable, resilient, affordable, and vibrant place to live
- Improve the health and wellbeing for the community and the environment
- Conduct our local government operations in a more energy and resource efficient manner
- Utilize our public spaces and resources in environmentally friendly ways
- Allow our community to better prepare for the impacts of climate change

This plan suggests many actions related to energy efficiency, renewable energy, recycling and waste reduction, transportation, and water management. This plan includes objectives to:

- Reduce landfill waste by 10% in 5 years by 2025
- Protect public water resources and water infrastructure
- Reduce city wide carbon emissions by 90% by 2050
- Implement a healthy and sustainable food initiative by 2025
- Incorporate public education and communication into all work

It is the hope of the EC that the following recommendations will serve as a catalyst for Jackson to make progress on its environmental challenges and propel Jackson to become a state leader among environmentally friendly cities.

Introduction and Overview

This Environmental Action Plan is designed to recommend to City Council environmental best practices that simultaneously protect the prosperity and health of our citizens and our natural systems. All of the goals explained within support this overall objective. We have outlined specific areas of interest as our first priorities for the city in the following chapters.

Chapter 1: Current Work to Date

As a community, we can only begin to make progress once an inventory of challenges and current efforts have been compiled. The City of Jackson has been making significant progress in a number of areas. These efforts deserve recognition for the positive effects they have had in our community. These initiatives also serve as the launching point for many of the initial efforts of the commission.

Chapter 2: Waste Management, Reduction, and Recycling

According to the Environmental Protection Agency, 139 million tons of trash were sent to landfills and only 35.2 percent of municipal solid waste was recycled or composted in 2017.¹ Production of trash and in particular single-use plastics has caused serious environmental damage to ecosystems and wildlife resulting in the Great Pacific Garbage Patch increasing to an estimated surface area of 1.6 million square kilometers as of 2020.² Continuously increasing trash waste is unsustainable and developing methods to reduce trash production and remediate current environmental contamination are key goals for communities, like ours, world-wide.

Chapter 3: Protection of Water Resources

The water crisis in Flint brought into stark relief the importance of protecting local water infrastructure and access for the health of communities³. Aging infrastructure and our community's history of industrial production leave our water resources vulnerable to pollution and other health hazards⁴. While we are currently keeping up with these challenges it will be important to remain vigilant as we move to improve our communities water resources. We must continue to offer clean, affordable water to our citizens while balancing the various demands on our water resources and planning for potential changes in climate.

Chapter 4: Energy Efficiency, Resource Management, and Transportation

The changing climate affects us all, and is the result of growing greenhouse gas emissions in our atmosphere from a variety of sources. The changing climate will also have a direct impact on our communities and our citizens, such as more extreme rainfall events and flooding, combined with negative impacts on agriculture, infrastructure, and human health.⁵ The IPCC 2018 Special Report recommends that to mitigate climate change and to keep the world under 1.5 degrees Celsius, carbon dioxide emissions need to be reduced by 45% by 2030, and should reach net-zero by 2050.⁶ To reach this goal, cities, states, and nations will need to make large transformations in energy systems, transportation, land use, urban infrastructure and industrial systems. There is a unique opportunity for cities to take the lead in the mitigation and adaptation effort, and this is a key goal of the Environmental Action Plan.

1 <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>

2 <https://theoceancleanup.com/great-pacific-garbage-patch/>

3 <https://www.nrdc.org/flint>

4 www.infrastructurereportcard.org

5 http://glisa.umich.edu/media/files/Great_Lakes_NCA_Synthesis.pdf

6 Section C.1 in IPCC 2018 SR Summary for Policy Makers <https://www.ipcc.ch/sr15/chapter/spm/>

Chapter 5: Sustainable Land Use

Environmentally-friendly land use and the development of green spaces have well-established benefits in environmental management, energy consumption, property values, and quality of life for city residents⁷. Recent research has suggested cities may contribute to biological diversity, ecological resilience, and agricultural sustainability through targeted urban landscaping ordinances⁸. It has also become increasingly clear that cities have a role to play in ensuring access to healthy and sustainable food for its citizens. Environmental use policy provides ample opportunities for cities to simultaneously decrease their ecological footprint while improving the well-being and connectedness of their citizens to their natural environments.

Chapter 6: Community Engagement

The strength of our community depends on a clean and healthy environment. While Jacksonians value our natural resources, we have a history of environmental degradation that we must address. As we address this history, we must engage with our community to leverage the talents and expertise already available here to build resources that can improve our lives. Furthermore, it is our role to ensure that our successes are communicated to people of our city to build trust in our ability to address the challenges that we face. Finally, it is critical that we recognize that across our community we do not face environment challenges equally. A key part of our work will be to ensure that environmental ordinances are not discriminatory and address historical inequalities that have resulted from economic, racial, and environmental injustices.

⁷ [Www.epa.gov](http://www.epa.gov)

⁸ <https://www.ecologyandsociety.org/vol11/iss1/art34/>

Chapter 1 – Current Work to Date

Crime Prevention through Environmental Design

Crime reduction is a continuous topic for City of Jackson leadership, as it is a proactive attempt to limit the opportunities of clandestine behaviors. The City of Jackson applies the four basic principles of CPTED to conceptual designs and the Master Plan for the community regularly. With natural access control, the City approves plans or encourages development to reduce potential escape routes and allow opportunities for the public to see into an open space. This is achieved with the planting of natural foliage in the landscape design. The city encourages natural surveillance, low landscaped shrubs, and large clear windows of store fronts to reduce the opportunities of illegal activity.

Environmental Protection Standards

The City of Jackson's Development team encourages new projects to have as much green space as possible for the public's use. Developments receive additional project "credits" for approval of the project if they preserve existing vegetation and requiring the replacement of vegetation should some be removed. See City of Jackson Ordinances Section 28-110 Environmental Protection Standards.

Narrowing of Major Streets, Widening of Sidewalk Paths

A more walkable community is a City of Jackson initiative and whenever possible, development projects will include the updating of sidewalks and streetscapes to encourage no motorized transportation. With the new I-94 corridor improvement, MDOT installed new sidewalks large enough to connect to the bike trail and lead into the city. Five-foot paths encourage the public to walk or ride, in addition to connecting footpaths to bike trails, residents have more opportunity to safely enjoy the natural landscape.

Tree City

Previously the city's Forestry department managed the city's trees with excellence but due to the real estate recession of 2009, the city was unable to afford a robust Forestry Department. That did not reduce the city's commitment to tree preservation. Through creative planning the city continues to add new street trees during development. The Environmental Commission may be interested in incorporating an initiative to replace the city's Forestry department. Our landscape standards also stipulate specifications on the city tree fund and the funds collected are not allowed in the city's General Fund and may only be used for the purchase and installation of planting trees and shrubs.

Landscape Ordinance/Maintenance

The City of Jackson's Landscape ordinance protects and enhances the environment for the continued vitality of all land uses in the city. This establishes minimum standards for the design, installation and maintenance of landscape improvement. It restricts the approval of any site plan development that does not adhere to city landscape standards. Developers may earn credits by preserving existing vegetation, moving the required vegetation elsewhere on the site, using larger plant materials or an equal alternative measure. See Sec 28-105 H.

Smart Energy District

Consumers Energy requested community collaboration from the City of Jackson to create the Smart Energy District. The district will run from Michigan Ave, to Blackstone, to Pearl and ending at Jackson Street. The goal is to create a district that receives at least 40% of the energy from renewable energy resources.

Efficiency Upgrades

City Hall has undergone many efficiency updates from automatic LED lighting in all offices to reduce energy waste in locations where lights remain on. A new heating system was engineered to heat and cool the City Hall building.

Noxious Weed Ordinance Update

In February 2020, the Environmental Commission sent recommendations to the City Council to revise the Noxious Weed Ordinance to include invasive species. The City Council approved and adopted these recommendations in April 2020.

Champion Trees⁹¹⁰

The City of Jackson is home to several 'Champion Trees', rated by their girth by The University of Michigan, Jackson Audubon Society, and are cataloged in a database and compete for state as well as national recognition.

Lead Paint Rehabilitation Grant¹¹

The City of Jackson was awarded a grant of \$2.9 million in 2018 to help with removal and remediation of lead-based paint hazards. This grant expires at the end of 2020, and could help fund projects that improve public as well as environmental health.

Lead Copper Rule Remediation¹²

In 2018, the State of Michigan expanded the Michigan Safe Drinking Water Act. Michigan now has the strongest protections in the nation regarding lead in drinking water. These changes require the creation of inventories of lead service lines, implement plans for the removal of lead service lines, and lowered the allowable level of lead in drinking water.

Covid-19 Relief No-Water Shutoff Funding¹³

In September of 2020, the City Council voted to allocate additional funding to assist residents with unpaid water bills because of the Covid-19 pandemic.

“With 1,702 residential water customers behind on paying water bills, the City of Jackson is expanding a program that helps residents with unpaid water bills. The Jackson City Council recently voted to allocate an additional \$121,000 in federal COVID-19 relief funds to its Water Shutoff Protection Program and allow low-income renters to apply for assistance. “

9 <https://jacksonaudubon.org/Jackson-Big-Trees>

10 <https://quod.lib.umich.edu/m/mbot/0497763.0042.101?rgn=main;view=fulltext>

11 <https://www.mlive.com/news/jackson/2019/04/jackson-struggling-to-spend-29-million-lead-paint-control-grant.html>

12 https://www.michigan.gov/mileadsafe/0,9490,7-392-92852_93738---,00.html

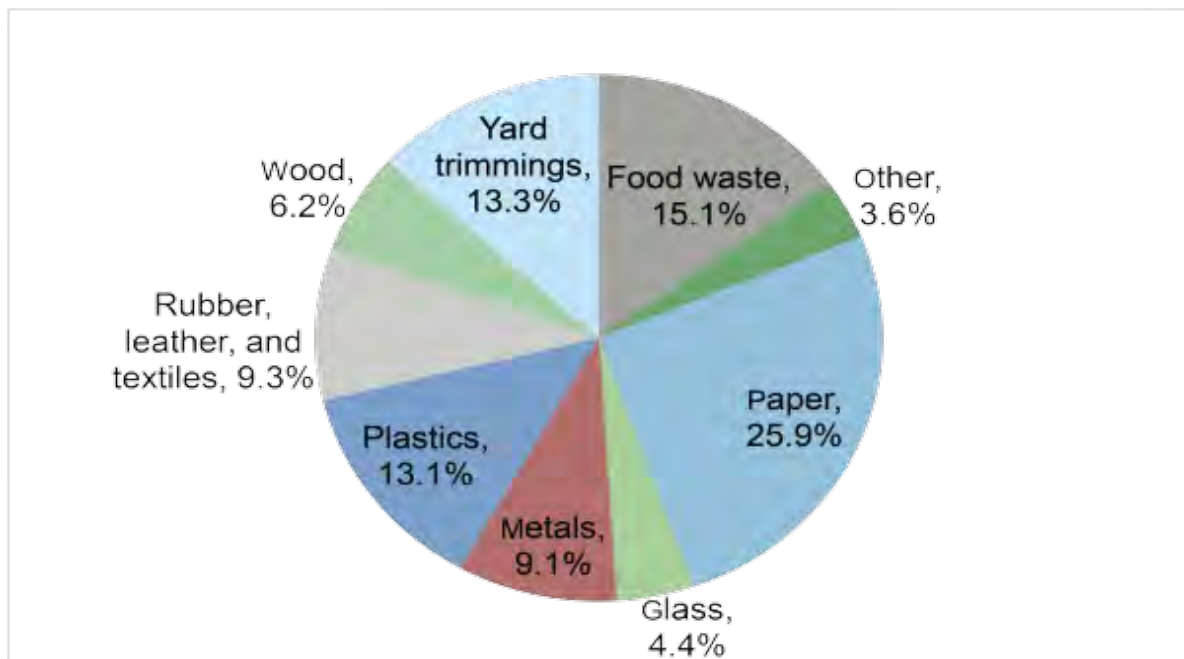
13 <http://cityofjackson.org/CivicAlerts.aspx?AID=607>

Chapter 2 – Waste Management, Reduction, and Recycling

2-A Waste Management and Recycling

“If we modernize our waste systems, enhance our recycling operations, and provide weekly, year round yard waste we truly will have greener, cleaner neighborhoods.” - Derek Dobies¹⁴

Municipal Solid Waste, more commonly known as trash or garbage, is a chronic feature of all cities and towns. It is produced from household, commercial, industrial, and government sources in the form of yard wastes, packaging, food scraps, appliances, and all other matter that is thrown away in the course of daily living.¹⁵



Total U.S. MSW Generation by material for 2015. (EPA)

There are many ideas for the sustainable management of municipal solid waste, including but not limited to: reduction of material at the source, landfills, combustion, composting and recycling. Composting¹⁶ and recycling¹⁷ are widely used across many cities in the United States.

In 2016, Jackson County amended their Solid Waste Management Plan. In this document, the County laid out details for three different scenarios for county-wide waste management, and ultimately selected a “hybrid” scenario for the county. This report could be a useful resource for the City of Jackson, and could provide guidance as to the creation of a city-wide waste management plan.¹⁸

¹⁴ <https://medium.com/@derekdobies/mayor-dobies-2019-state-of-the-city-address-transcript-ba4aba05bd1b>

¹⁵ <http://css.umich.edu/factsheets/municipal-solid-waste-factsheet>

¹⁶ <https://www.drawdown.org/solutions/food/composting>

¹⁷ <https://www.drawdown.org/solutions/materials/household-recycling>

<https://www.drawdown.org/solutions/materials/industrial-recycling>

¹⁸ <https://www.co.jackson.mi.us/DocumentCenter/View/3086/Jackson-County-Solid-Waste-Management-Plan-Draft-2016-Amendment-of-the-1998-Update?bidId=>

Tactics & Recommendation

- 1) Provide City Council with a report that detail best options for city-wide Waste Management. Create a waste inventory for the City of Jackson (such as the EPA chart above).
- 2) Recommend to Council to create an ordinance to maintain and manage resident waste including a single hauler and requiring residents to subscribe to a service.
- 3) Provide City Council with recommendation of financially feasible options for recycling receptacles on public property.

2-B Reduce City Wide Plastic Use

“Plastic touches all of our lives, from the food packaging we buy to the computers we work with and the cars we drive. But many of the plastics you touch in your daily life are used only once and thrown away.” - Ocean Conservancy¹⁹

Plastics are all around us in our daily lives, from plastic bottles, to packaging, to medical equipment and cars. Much of this plastic is designed to be only used once and then thrown away. Mismanaged plastic can end up in inland waterways, and then make its way to the ocean. 55% of plastic produced ended up discarded or in landfills in 2015.²⁰

At the global level, it is estimated that between 70 – 80% of all plastic waste found in the oceans originate from inland sources.²¹

However, many national, state, and local governments are taking action to reduce plastic waste and much of this action starts at the source. The best way to reduce the amount of plastic in circulation is to use less plastic products from the outset.

Tactics & Recommendations

Request an emphasis on accessible recycling of plastics Promote use of water bottle refill stations

19 <https://oceanconservancy.org/trash-free-seas/plastics-in-the-ocean/>

20 <https://ourworldindata.org/plastic-pollution>

21 <https://ourworldindata.org/plastic-pollution>

Chapter 3 – Protection of Water Resources

3-A Water Resources Protection

“No water, no life. No blue, no green.” - Dr. Sylvia Earle

Water resources are one of the most essential for life on this planet, and for life in the City of Jackson. The Grand River as an example, is deeply tied into the history of Jackson, and the identity of our community. The health of the river, and other water sources, is part of the health of the City of Jackson.

The health of our water is interconnected with the health of our communities, and the health of our environment. As the Flint Water Crisis has shown, as well as PFAs contamination throughout various site the state of Michigan, water is not only a vital resource but also a fragile one. Maintaining healthy water resources free of containment such as lead, pollution and other health issues is of great concern. Taking action to protect water resources and for water conservation are crucial to our wellbeing now, and into the future.

A changing climate can also put additional stresses on water supplies. Increased rainfall and precipitation is one likely culprit, and can have a strong impact on water resources. These impacts can range across storm water and drainage, foreign particles, agricultural and chemical runoff, as well as flooding and other issues that impact community as well as environmental wellbeing.

Tactics and Recommendations

- 1) Plan for protection of our natural source water
- 2) Petition stakeholders to place charges for water usage in rental properties on the tenants/user
- 3) Provide City Council with feasible options to have no water shut-offs (possibly only in winter)

Chapter 4 – Energy Efficiency, Resource Management, and Transportation

4-A Recommend/Implementation of a Reforestation Initiative to increase local tree canopy

“By conducting the city’s first tree canopy survey, I hope we can study where to plant even more trees to not only beautify our neighborhoods and improve physical and mental health, but to clean and reduce stormwater runoff, decrease our cooling bills, and increase property values.” - Derek Dobies²²

Trees and forests are vitally important for the health and sustainability of our city. Michigan was once completely covered in forests, but centuries of logging, development, and agricultural expansion have left us with far fewer trees and less resilient forests.²³

Afforestation, creating forests where there are none, is one of the top ways to tackle carbon emissions, and a changing climate.²⁴ On a smaller and more local scale, trees are vital for sustainability as well as public health. Increasing the tree coverage and canopy of local cities can help to reduce the heat island effect, keep communities cool, retain water, and help reduce energy use.²⁵



Tactics and Recommendations

- 1) Recommend that Council take necessary steps to receive Tree City USA designation
- 2) Research and recommend local Tree Canopy Survey options and associated costs to implement City-wide Tree Survey
- 3) Research opportunities for planting native trees and present findings to Council on ways that increased tree canopy

22 <https://medium.com/@derekdobies/mayor-dobies-2019-state-of-the-city-address-transcript-ba4aba05bd1b>

23 <https://www.michiganradio.org/post/wilderness-wasteland-how-destruction-michigan-s-forests-shaped-our-state>

24 <https://www.drawdown.org/solutions/tree-plantations-on-degraded-land>, <https://www.drawdown.org/sectors/land-sinks>

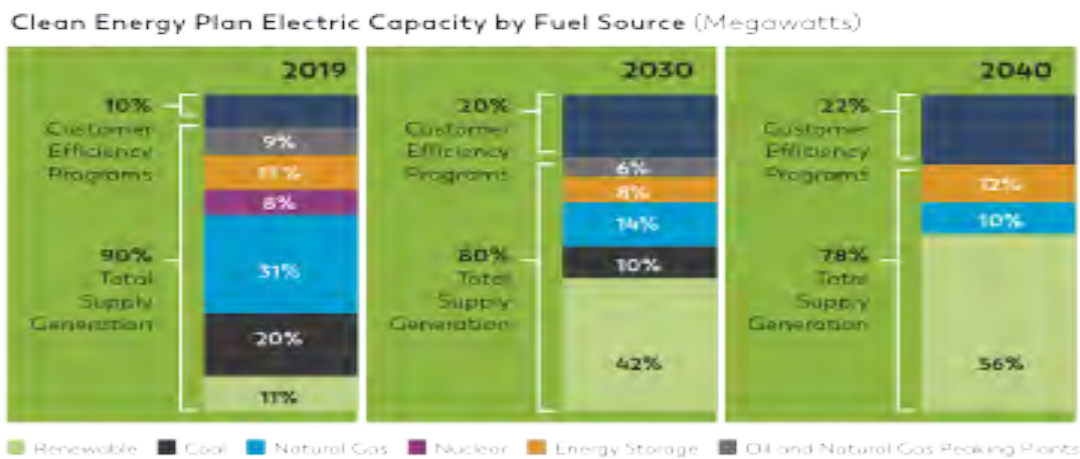
25 <https://www.arboday.org/trees/climatechange/treeshelp.cfm>

4-B Support Renewable Energy resources

“I have a simple hope for all of us in Michigan. When we look into the eyes of our grandchildren and they ask about climate change, I want us to be able to say, “that’s something we used to worry about.” - Patti Poppe²⁶

Among the one hundred solutions proposed by Project Drawdown, renewable energy occupies three of the top ten most impactful solutions.²⁷ This includes onshore wind turbines, solar farms, and rooftop solar panels. There are many ways that this can be accomplished, including continued support for city renewable energy projects such as the proposed Smart District.

Consistent with the goals of this Climate Action Plan, much of Jackson's power comes from the Consumer's Energy grid system. Consumer's Energy has released a new Clean Energy Plan²⁸ in 2019. By meeting Consumer's own stated goals, Jackson has the potential to meet many of the goals of this Action Plan.



The Clean Energy Plan is built around an increase in renewable energy, storage, efficiency, as well as a 90% reduction in carbon emissions. Also of note is the decommissioning of coal based generation sources. In addition, many of Consumer's Energy stated goals are also consistent with the goals listed in the IPCC 2018 Special Report, granting a unique opportunity to simultaneously meet many goals related to renewable energy, as well as energy efficiency. (Section 4-C below.)

Tactics and Recommendations

- 1) Meet with community stakeholders regarding Jackson Smart Energy District and determine the role the Environmental Commission will play in implementing renewable energy options
- 2) Give recommendations to City Council how current commission can support increase of renewable energy or other carbon offsets
- 3) Recommend that City Council support Consumer's Energy Clean Energy Plan, which incorporates 90% clean energy sources (56% from renewable energy), and 90% reduction in carbon emissions by 2040.

²⁶ <https://www.mlive.com/news/2019/08/clean-energy-plan-is-consumers-energys-commitment-to-people-planet-prosperity.html>

²⁷ <https://www.drawdown.org/solutions>

²⁸ www.Micleanenergy.com

4-C Support city wide energy efficiency projects

“Energy efficiency is the unsung hero when it comes to reducing carbon dioxide emissions, because no matter how great our technological advancements are, the cheapest, cleanest kilowatt-hour will always be the one that is never used,” - US Senator Angus King²⁹

Electricity generation accounts for almost 40% of annual global greenhouse gas emissions.³⁰ As such, one of the quickest routes to a cleaner, and greener city is to use electricity more efficiently. A reduction in the total use of electricity and energy has a measurable reduction in the corresponding emissions. Consumer's Energy, as in Section 4-B, has greater energy efficiency built into their long-term plans, and here too, the City can benefit from the cleaner grid.

In addition, there are many routes the City can take on its own to reduce energy consumption. Among them are more efficient buildings, lighting, and city infrastructure. Synergies could also exist from other places in this Plan, such as trees and green space, which notably reduce the heat island effect, and can lead to less energy needed for heating and cooling.

Tactics and Recommendations

- 1) Research requirements of Green Building Certification
- 2) Recommend to Council per the requirements, to enroll City of Jackson into the City LEED Certification program
- 3) Recommend Council Support the Consumer's Energy Clean Energy Plan, which includes a 22% reduction in energy use by 2040

29 <https://www.smith.senate.gov/us-sens-tina-smith-angus-king-jeff-merkley-press-enhance-nations-energy-efficiency-capabilities>

30 <https://www.drawdown.org/solutions/electricity-generation>

4-D Support city wide efforts to increase walkability and non-motorized transportation

“A virtuous cycle is clear: With more infrastructure come more riders. Perhaps counterintuitively, with more infrastructure and more riders, safety improves. And the more bicycles there are traversing a city, the more it reaps numerous returns on investment, including the health benefits of cleaner air and greater physical activity.” - Drawdown “Bicycle Infrastructure”

With the goal in mind to reduce carbon emissions, low and zero-carbon transportation become an important consideration. Walkable cities³¹ and bicycle infrastructure³² are good ways to reduce the carbon impact of moving people around and supporting these efforts can have other effects on environmental impact as well as community health.

There is a draft called the Jackson City+ County Non-Motorized Plan³³ that proposes multiple bicycle and other use trails that connects the City of Jackson with other areas around the county, as well as multiple State Parks and other important areas of recreation including water trails and county parks.



31 <https://www.drawdown.org/solutions/buildings-and-cities/walkable-cities>

32 <https://www.drawdown.org/solutions/buildings-and-cities/bike-infrastructure>

33 <https://walkbike.info/jackson/>

(From Jackson City + County Non-Motorized Plan)

Tactics and Recommendations

- 1)) Recommend to Council to complete building family friendly network as defined in the Jackson City + County Non-Motorized Plan
- 2) Research urban options to encourage more pedestrians in City of Jackson.

Chapter 5 – Sustainable Land Use

5-A Sustainable options for vacant city owned lots

The creation of a sustainable plan for land-use has a huge number of benefits for environmental and human wellbeing. The proper management of land can sequester carbon, cool local areas, protect and conserve natural spaces, and enhance biodiversity. Similar in many ways to water resources, the sustainable management of land-based systems can support human and natural wellbeing.

In this section, there are huge number of possible routes and impactful solutions:³⁴

- Urban gardens
- Farm to Table
- Forestry (Afforestation, restoration, preservation, etc)
- Parks/Green spaces
- Cultivated habitats

In context of public spaces, the City of Jackson has the potential to develop a comprehensive plan that enhances city beauty, environmental sustainability, and community health and wellbeing. Many ideas can enhance and support existing policies and ordinances such as:³⁵

- To aid stabilizing the environment's ecological balance
- To provide visual buffering and enhance beautification of the city
- To encourage the preservation of existing trees and vegetation
- To conserve energy, and to protect the public health, safety, and general welfare

Tactics and Recommendations

- 1) Research options for re-purposing vacant lots (urban gardens, farm to table, forestry, etc)
- 2) Research Urban pollination efforts and options for lots and process for certification under Bee City USA program
- 3) Recommend to Council to create pilot plan/implementation for possible re-purpose of vacant lots as suggested by the Commission

34 <https://www.drawdown.org/sectors/land-sinks>

35 Landscape Standards Ordinance Sec 28-105

5-B Sustainable options for privately owned lots

Cities are more than just buildings and public lots. Cities are made up of people, every day private citizens. It is impossible to create a viable climate plan without including residents, and especially privately owned lots. Community support is crucial for success, and so input and feedback is necessary. The City can work in conjunction with private citizens to help create sustainable neighborhoods and landscaping regulations that allow for the growth of private gardens, cultivated spaces, and a whole host of other ideas that boost community as well as environmental wellbeing.

Many of the ideas of Action Item 5-A can come into play here as well, with education and outreach that encourage citizens to create private and community gardens, grow natives trees and plants, and cultivate their own spaces in ways that serve environmental function, increase land value, as well as make the city more pleasing and beautiful.

Tactics and Recommendations

- 1) Encourage planting of beneficial native plant species on private lots
- 2) Investigate status of current ordinances for urban farming (Keeping bees & chickens)
- 3) Review landscape ordinance to encourage natural landscaping

Chapter 6 – Community Engagement

The success of this action plan depends on interaction with the public. Education and outreach are the keys to this success. Through these effort citizens can remain informed and engaged with the environmental efforts of the city. There are a lot of forms this education and outreach can take:

- Environmental Commission booths/tables at city events (Earth Day, etc)
- Pamphlets, articles, printed education material for distribution, education and feedback
- The City of Jackson and Jackson County is home to numerous organizations and non-profits, and coordination and networking with these organizations can promote existing work and feedback into efforts of the Environmental Commission. Such organizations include those such as the Grand River Environmental Action Team (GREAT), the Jackson District Library, Ella Sharp Museum, Dahlem Center, Active Jackson, and Jackson County Conservation District.
- Each month throughout the year provides numerous options to highlight different efforts, such as National Pollution Prevention Day (September), Earth Day and Arbor Day (April)
- Education and outreach are two way streets. Engaging with the public is an essential part of the work, but so is feedback from citizens. Surveys, citizen feedback and input are all vital components.
- Coordination with state level agencies such as EGLE to create informational and awareness efforts for public education.

ENVIRONMENTAL COMMISSION

2021 MEETING SCHEDULE

APPROVED 12-16-20

Meetings of the Environmental Commission will be conducted on the 10th floor of City Hall at 161 W Michigan Avenue unless restrictions due to the Covid-19 pandemic dictate that meetings be conducted virtually. Meetings will commence at 6:00pm on the following dates:

Wednesday, January 20, 2021

Wednesday, February 17, 2021

Wednesday, March 17, 2021

Wednesday, April 21, 2021

Wednesday, May 19, 2021

Wednesday, June 16, 2021

Wednesday, July 21, 2021

Wednesday, August 18, 2021

Wednesday, September 15, 2021

Wednesday, October 20, 2021

Wednesday, November 17, 2021

Wednesday, December 15, 2021