



AGENDA
CHARTER TOWNSHIP OF MERIDIAN
ENVIRONMENTAL COMMISSION
REGULAR MEETING
August 4, 2021 7 pm

ZOOM MEETING: ID: **867 3903 8953** Password: **5151**

1. CALL MEETING TO ORDER
2. APPROVAL OF THE AGENDA
3. APPROVAL OF THE MINUTES
4. PUBLIC REMARKS
5. NEW BUSINESS
 - A. Conversation with Planning Director Tim Schmitt
 - B. Vice Chair Nominations
 - C. Conversation with Commissioner Applicants
 - D. Resolution to Honor Rose Vadnais
6. OLD BUSINESS
7. CHAIR'S REPORT
8. STAFF REPORT
9. Commission, Committee, Study Group and Trustee Reports (if applicable)
 - A. Board and Commissions
 - Board of Trustees
 - Brownfield Redevelopment Authority
 - Land Preservation Advisory Board
 - Planning Commission
 - Transportation Commission
 - B. Teams and Study Groups
 - Earth Club and Student Groups
 - Energy Team
 - Environmental Justice
 - Green Infrastructure Grants
 - Green Team
 - Tree Team
 - C. Other
 - Capital Area Sustainability Partnership and Ingham Environmental Commission
 - State of Michigan
10. PUBLIC REMARKS
11. ADJOURNMENT

Table of Contents

1	Agenda (Draft)
2	Table of Contents
3	Minutes (Draft)
6	Environmental Commission Contacts and Committees/Study Group (working draft)
7	Staff Update
8	Green Neighbors List
9	Resolution Honoring Rose Vadnais
10	E.C. Application: Graham Diedrich Other Apps in July Packet
15	E.C. Application: Ana Rivera-Rivera



MINUTES (DRAFT)

ENVIRONMENTAL COMMISSION

July 7, 2021

Attending: Commissioners: Anna Colby, Tom Frazier, Kendra Grasseschi, Bill McConnell, Bernadette Osborn, Annaka Saffron, John Sarver, Luca Wisinski and Courtney Wisinski; Staff: Courtland Jenkins, Stephen Gebes, and LeRoy Harvey; Guests: Valerie Lafferty, Marla Ekola, and Audrey Hirschert-Walton

Approval of the Agenda: Sarver added nomination of a Vice Chair. Grasseschi motioned to approve. Seconded by C. Wisinski. Unanimously approved.

Approval of Minutes: Colby mentioned an incomplete sentence related to inviting MacDonald to the Tree Team. Colby motioned to approve. C. Wisinski seconded. Unanimously approved.

Wetland Presentation: Grasseschi introduced Hirschert-Walton and Osborn and thanked them for their help in educating the community on the importance of wetlands. A slideshow described the importance of wetlands, their functions, wetland loss, and what we can do to help. View the slideshow [here](#). L. Wisinski asked about how we might restore wetlands while allowing growth. Hirschert-Walton mentioned Hirschert-Walton shared her experience of seeing flooding in her neighborhood and more focus on rain gardens and opportunities to restore wetlands. Sarver talked about preserves being converted into wetlands. Grasseschi acknowledged the need to understand how we can balance population growth and protect our ecosystem in the process. Grasseschi also advised educating the community on flooding protection. Sarver mentioned infill development. Grasseschi mentioned a growing interest in smaller homes/lots. Colby mentioned increased density. McConnell appreciated the presentation's focus on stormwater management, which is one of the most important things wetlands do for us. McConnell mentioned our current policy of no net loss of wetlands, land that had been drained, the use of detention ponds, and opportunities to increase density in areas less prone to flooding. C. Wisinski echoed her interest in looking at agricultural lands that had been drained, the potential restoration in drain projects, the evolution of wetland maps in the Township (with help from GIS Specialist Cara Maney), a wetland educational campaign, and an upcoming meeting with Brandie Yates (Communications Manager). C. Wisinski shared that our wetland ordinance is strong and maintaining existing wetlands is important. She reported having an initial meeting with Director Schmitt on the wetland ordinance and enforcement of it. Sarver said the education campaign is important and timely due increasing residents' concerns about flooding and climate change. McConnell acknowledged the master plan for density change, township policy to encourage higher density infill development in areas that don't flood and preserve agricultural open spaces. McConnell suggested utilizing the success of tree planting efforts to similarly energize the community to get involved in protecting the wetlands. Grasseschi expressed appreciation for McConnell's idea and acknowledged the work of Emma Campbell to educate the community on protecting the wetland ecosystem.

Potential priorities:

- Develop education campaign
- Discuss opportunities with Planning Director Schmitt and the Drain Commissioner
- Move forward with Green Infrastructure Audit/Code review
- Collaborate with Planning Commission (Master Plan, Ordinance/Code changes, Land Use Map)
- Explore further Tree Planting and/or other Community Green Infrastructure Projects including Memorial Projects or Adopt a Wetland.

Environmental Commission Appointments: It was decided to invite candidates to speak about why they want to join the Commission. Grasseschi would like to clarify the procedure. McConnell mentioned that it's Supervisor's decision. He generally encourages potential applicants to attend

meetings. Sarver invited nominations for the Vice Chair position and to talk to him if interested. Grasseschi expressed an interest in honoring Rose Vadnais.

Resolution Honoring John Esser: Several Commissioners expressed appreciation for Esser's involvement both at the Green Dialogue, at Environmental Commission meetings, and other community initiatives. Grasseschi motioned to approve the resolution. McConnell seconded and the motion was unanimously approved.

Chair's Report: Sarver reported discussions about a listening session modeled after a similar effort that the State is engaged in. Sarver also mentioned the Facebook Group as another way to get the word out about issues of importance and generate dialogue.

Staff Report: Harvey invited questions about his update in the packet. Harvey also shared results of a Commissioner survey to help determine how we meet in the future. Most appreciate the opportunity to meet on-line. C. Wisinski offered to look in to future guidance and options

Board Update: C. Wisinski reported that the Board recently held a special meeting to discuss progress on its goals for 2021. This included an update on solar installations and the diversity, equity, and inclusion plan. This will include some staff training and a review of policies and procedures. Some progress has been made. For example "banning the box" on employment applications. There has also been progress on our trail and pathway system. C. Wisinski met with Director Schmitt about the Wetland Ordinance and will meet with Cara Maney and Grasseschi about wetland maps.

Energy Team: Sarver reported that the Energy Team may do a virtual home tour and include other sustainability sites such as rain gardens. Some of the sites will be visitable for drive (bike or walk) by viewing. Solar stories videos will be used as well.

Environmental Justice: Grasseschi mentioned the desire to define EJ. She shared how we have already been discussing it relation to wetlands and DEI. Grasseschi advised looking at what success looks like in addition to hearing about issues in the community. Grasseschi asked how voices can be heard and trust can be rebuilt, as the State of Michigan Environmental Justice conference focused on rebuilding trust. Sarver suggested sharing definitions used by others at a future EC meeting.

Green Team: Harvey reported that a medicine collection is planned for July 17 in partnership with volunteers, police department, a local pharmacist, and Ingham County Health Department. Frazier mentioned the electronics collection in September.

Land Preservation Advisory Board: Grasseschi reported that LPAB met at Davis Foster Preserve on May 12 to discuss location of a lookout deck. On June 9 LPAB met at the S. Lake Lansing preserve to discuss land encroachment. Grasseschi also mentioned Emma Campbell's recent newsletter and regular activities. She encouraged joining the MCC.

Planning Commission: McConnell reported that the Planning Commission met on June 17. One item of interest was a special use permit for grading in the flood plain (moving from front yard toward the house to raise the grade around the house). McConnell suggests that this will be an ongoing challenge of how we deal with flood plain issues, insurance, etc.

State of Michigan: Frazier reported that the State has finished the education budget. There is an issue around short term rentals (such as Air B & Bs) and some attempts to preempt local control.

Tree Team: Harvey reports that Rose Vadnais is still interested in being on the Tree Team and that there may be two tree teams (one involving Directors LuAnn Maisner and Derek Perry to include policy and "Tree City" related improvements and the other involving tree planting days.

General Reports: Grasseschi mentioned a desire to refine our subcommittee and work group roles and goals. Harvey mentioned an orientation that Sarver and he provided with our newest student commissioners earlier in the day.

Public Comments: Gebes mentioned that once Executive Orders and States of Emergency expire, meetings with appointed or elected may be required to be held in person to comply with the Open Meetings Act. The Information Technology Department is working to offer hybrid options.

Adjournment: McConnell moved to adjourn. Seconded by Grasseschi. Unanimously approved at 8:25 pm. Meeting can be viewed at <https://meridianmi.new.swagit.com/videos/128689>

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A PRIME COMMUNITY
meridian.mi.us

2021 Environmental Commission & Related Committees

JOHN SARVER (12/31/20, 3 year term) CHAIR	517.290.8602 johnsarver3@gmail.com
ANNA FISCHER COLBY (12/31/23)	314.221.7829 anna.j.colby@gmail.com
TOM FRAZIER (12/31/2023)	517.974.5584 Fraziertom58@gmail.com
KENDRA GRASSESCHI (12/31/23)	517.282.0679 kendrathelen@gmail.com
NED JACKSON (12/31/23, 3 year term)	517.285.4319 jackson@chemistry.msu.edu
BILL MCCONNELL (12/31/22, 3 year term)	517.763.7824 mconn64@msu.edu
BERNADETTE OSBORN (12/31/21) STUDENT	517.420.4013 BernadetteKO@gmail.com
ANNAKA SAFFRON (12/31/21) STUDENT	517.930.6848 annakasaffron@gmail.com
LUCA WISINSKI (12/31/21, 1 year term) STUDENT	517.435.5985 lwisinski23@gmail.com
COURNEY WISINSKI (TRUSTEE LIAISON)	517.410.1527 wisinski@meridian.mi.us
STAFF: LEROY HARVEY	517.505.2809 harvey@meridian.mi.us

Committees, Study Groups and Liaisons

Brownfield Redevelopment Authority	Ned
Capital Area Sustainability Partnership (CASP)	Bill, Anna, LeRoy, Valerie Lafferty, Cliff Walls
Energy Team	John, Roger Eberhardt, JoAnn Render, Heidi Porter, Rob Kaercher, Valerie, LeRoy
Environmental Justice Study Group	Courtney, Kendra, Sarah Allen
Green Infrastructure Grants for Schools	Rose, John, LeRoy
Green Neighbors Network Steering Committee	John, Kendra, Sarah, LeRoy
Green Team	Tom, Ellen Dillman, Anne Perkins, Elaine Putvin, Dave Batten, Sarah Allen, Luca, LeRoy
Ingham County Environmental Commission	Sarah
Land Preservation Advisory Board	Kendra
Meridian Board of Trustees	Courtney
Okemos Earth Club, Climate Action & Support	Luca, Bernadette, Annaka, Audrey, Courtney, Kendra, LeRoy
Planning Commission	Bill
State of Michigan Legislative News	Tom
Transportation Commission	Bill
Tree Team	Rose Vадnais, Derek Perry, Michelle Beloskur, Emma Campbell, Jane Greenway, Kati Adams
Wetlands	Courtney, Kendra, LeRoy, Cara (GIS Specialist)

Staff Update: August 2021

Energy-Related

- Energy Team meeting Aug 12 to discuss solar plans in 2022, Solarize Meridian Project Part II, etc.
- Meridian's largest PV array (on the Service Center) will be complete as of our August Meeting.
- Meridian will host a Solar and Sustainable Tour in the month of October. We are open to suggestions for sites, such as those on our "Green Map" bit.ly/meridiangreenmap

Recycling Center: We have requested quotes from designs firm (for improvements to the Recycling Center. We still have not determined the feasibility of Granger's offer to provide compactors/containers for another location. Proximity to our offices may be key, based up the need to keep the space tidy and functional. Locations such as the Service Center, North Mall lot, or the Municipal Complex may be desirable.

Other:

- **Green Gazette:** The latest Green Gazette was distributed July 31st. If you have story suggestions or questions, please contact LeRoy. The Green Gazette has other updates (Medicine collection, Green Fair, Native Plant Presentation) that I won't report here.
- **Green Neighbors Network:** If any of you would like to help with this, let me know.
- **Green Dialogue:** Green Dialogues continue every Wednesday at 9am More at <https://bit.ly/green-conversation> This month we had informative presentations by Emma Campbell and Charles Hauser (Granger)
- **Capital Area Sustainability Partnership:** Subcommittees have begun to meet with this regional partnership. I've joined the Building Standards/Ordinances group.
- **Green Fair Aug 28:** We are going to have a few tents with environmental themes at a Saturday Farmers Market from 8am – 2pm.

	Meridian Neighborhood List (draft)	Groups self-identified by Green Neighbors
	Autumn Park Condo Association	Bear Lake
	Banyon Park Home owners Association	Briarwood
x	Bear Lake Property Owners Association	Chippewa Hills (3)
	Beech Tree Lane Homeowners Association	Chippewa Woods
	Braemoor Homeowners Association	Cornell
x	Briarwood Homeowners Association	Cornell Woods (2)
	Carriage Hill North Condo Association	Forest Hills (3)
	Cedar Bend Heights Heritage Neighborhood Association	Faith Lutheran Church
	Champion Woods Homeowners Association	Keystone
	The Chateau Condo Association	Lake Lansing
x	Chippewa Woods Homeowners Association	Lakeview Heights
x	Cornell Woods Homeowners Association	Meridian
	Country Green Homeowners Association	North Meridian Rd
x	Cove At Whitehills Lakes	Okemos Road
	Coyote Creek Condo Owners Association	Rails to Trails
	Crestwood Association Inc.***	Sapphire Lakes
	Dobie Heights Homeowners Association	Sapphire Lakes condominium association
	East End Condo Association	Sierra Vista
	East Meadows Condo Association	Stockbridge
	East Pointe Homeowners Association	Strawberry Farms
	Eastgate Neighborhood Association	Sundance Estates
	Ember Oaks Homeowners Association	Tacoma Hills
	Emerald Lake Condominium Association	The Cove at Whitehills Lakes
	Everett Farms Homeowners Association	Van Atta (Davis/Foster),
	Fieldstone Village Homeowners Association	Wellington Rd (Nextdoor)
x	Forest Hills Homeowners Association	West and East Sleepy Hollow Lane
	Georgetown Homeowners Association	West Reynolds on Lake Lansing
	Greens at Walnut Hills Condo Association	Woodside Haslett
	Hamilton House Condo Association	
	Heartwood Homeowners Association	
	Hiawatha Lakes Homeowners Association	
	Hiawatha Park Homeowners Association	
	Hidden Valley Homeowners Association	
	Indian Hills Homeowners Association	
	Indian Lakes Estates Homeowners Association	
	Indian Woods Estates II Homeowners Association**	
x	Keystone Homeowners Association	
	Kinawa View Homeowners Association	
x	Lake Lansing Property Owners Association	
	Lake O' The Hills Homeowners Association	
	Lakeside Village Association	
	Lakeside Village North Association	
	Lakeside Village South Association	
	Lakeside Village West Association	
	The Meadows Association of Homeowners	
	Meridian Hills Condo Association	
	Meridian Village Condo Association	
	Nemoke Trail Condo Association***	
	New Forest Hills Homeowners Association	
	North Shore Condo Association	
	Northport Meridian Condo Association*	
	Okemos Preserve Condo Association	
	Ottawa Hills Homeowners Association***	
	Pine Creek Circle Condo Association	
	The Riverfront at Okemos Condo Association	
	Riverwood Homeowners Association	
	Sanctuary Homeowners Association	
x	Sapphire Lakes Homeowners Association	
	Shaker Heights Homeowners Association	
	Shaw Place Condo Association	
	Sierra Ridge Homeowners Association***	
x	Sierra Vista Homeowners Association	
	Skyline Hills Neighborhood Association	
	Songbird Pointe Condo Association	
	Sower Blvd Condo Association / Nature's Bend**	
	Spring Lake Homeowners Association	
	Sylvan Glen Trust	
x	Tacoma Hills Homeowners Association	
	Walden Pond Condo Association	
	Wardcliff Homeowners Association	
	Whispering Oaks Homeowners Association	
	White Birch Condo Association	
	Whitehills Lakes Homeowners Association	
	Wildflower Estates Homeowners Association	
	Wildwood Lakes/Dream Lake Homeowners Association	
	Wind-N-Wood Homeowners Association**	
	Wood Creek Homeowners Association	
	Wood Valley Homeowners Association	
	Woodhill Condo Association	



RESOLUTION HONORING ROSE VADNAIS

At a regular meeting of the Environmental Commission of the Charter Township of Meridian, Ingham County, Michigan, held on the 4th day of August, 2021 at 7:00 p.m.

The following resolution was offered by Commissioner _____ and supported by Commissioner _____.

WHEREAS, Rose Vadnais has enthusiastically dedicated her time, expertise, and creativity to environmental initiatives;

WHEREAS, Rose Vadnais has served as an Environmental Commissioner and been a regular participant at Environmental Commission meetings; and

WHEREAS, Rose Vadnais has regularly participated in “green dialogues” with the community; and

WHEREAS, Rose Vadnais has participated in the formation of a Tree Team and led research in to Tree City USA designation; and

WHEREAS, Rose Vadnais has helped with development of a program offering Green Infrastructure Grants to local schools;

WHEREAS, Rose Vadnais remains committed to environmental stewardship, environmental justice, and environmental education in our community, in her work, and in her personal endeavors;

NOW, THEREFORE, BE IT RESOLVED BY THE ENVIRONMENTAL COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN, INGHAM COUNTY, MICHIGAN as follows:

The Environmental Commission of the Charter Township of Meridian, by means of resolution, extends to Rose Vadnais grateful thanks for her commitment and voluntary efforts on behalf of all residents of the community.

ADOPTED: YEAS: _____

I, the undersigned, the duly qualified Chairperson of the Environmental Commission of Meridian Township, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Environmental Commission on the 4th day of August, 2021.

John Sarver, Chair

Submitter DB ID 13899
IP Address 73.145.132.9
Submission Recorded On 07/11/2021 8:34 AM
Time to Take the Survey 15 minutes, 18 secs.

Page 1



Public Service Application Form

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

***Special conditions restrict eligibility for appointment**

1.

Communications Commission*

Community Resources Commission

Downtown Development Authority*

Economic Development Corporation

Environmental Commission

Planning Commission

2. **Occupation:**

Graduate Student

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

I am interested in voter apathy especially. If there was any board related to voter outreach, or a commission that related to strengthening Meridian Township's relationship with our community, I would be very interested!

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

I graduated with an undergraduate degree in International Relations and public affairs. I also have a minor in Public Relations. Currently, I am enrolled to begin my Master of Public Policy program in the fall. In addition to the knowledge and insight these degrees have given me, I believe a key asset of mine is being able to digest information and communicate it to an audience: something that would be key for the boards you have listed.

Additionally, I have experience being a member of student government at Michigan State University. This means that I could have an easier time transitioning to the business of the day.

5. **Contact Information:**

Name: Graham Diedrich

Occupation: Graduate Student

Place of Employment: Michigan State University

Home Address: 5754 Ridgeway Dr, Apt 17, Haslett MI 48840

Phone (days): 517-974-6046

Phone (evenings): 517-974-6046

Date: 07/11/2021

Email: diedgr@msu.edu

Graham Diedrich

5754 Ridgeway Dr,
Apt 17,
Haslett, MI 48840
(517) 974-6046
diedgr@msu.edu

11 July 2021

To whom it may concern,

Throughout my previous positions, I have contributed to positive results through effective organization, prioritization, creativity, and follow-through on key projects. I believe that my strengths and qualifications are an ideal match for the goals of Meridian Charter Township.

I have almost four years of customer service and communicative public affairs experience in political campaigns and government relations. In my former position at the Democratic Party of Wisconsin, I exercised a calculated and methodical approach to problem-solving. While I am independently motivated, I appreciate collective efforts and collaborate productively within group settings. Moreover, I am competent in data analysis, social media management, constituent relations, and technical writing with a proficiency in communication management.

To illustrate the scope of my career history and professional competencies, please take a moment to review my enclosed resume. I am grateful for your evaluation of my credentials and subsequent response.

Sincerely,

Graham Diedrich



Graham David Diedrich

"I have over four years of experience working in the public affairs, political campaigning, and data analysis industries. I led my first digital campaign in 2017 for the French presidential election. Since then, I have held positions with the Michigan Democratic Party, the Democratic Party of Wisconsin, and others in various organizing roles."

East Lansing, MI | (517) 974-6046 | diedgr@msu.edu | <https://grahamdiedrich29.wixsite.com/resume>

Work Experience

Practical Political Consulting

June 2021-present

Polling Canvasser

- Contract work for PPC, one of Michigan's leading opinion polling and data analysis firms
 - Opinion data collection to gauge the success of classified ballot measures
-

U.S. Census Bureau

April 2021-present

Field Representative

- Data collection and analysis for the [2021 American Housing Survey](#)
 - Certified in extensive training of civilian privacy protections including Title 13, U.S. Code
 - Boosting public confidence in the reliability and effectiveness of government data and programs
-

On Earth Peace

January 2021-April 2021

Development Assistant Intern

- Coordinated and directed a development team of three other interns
- Oversaw the launch of the [Just Peace Leaders](#) campaign, boosted digital engagement by 18%
- Focused on creating sustainable fundraising sources by evaluating donor networks and current organizational expenditures via Microsoft Excel
- Digital fundraising through Facebook

Democratic Party of Wisconsin

September 2020-November 2020

Field Organizing Intern

- Used NGPVAN to contact potential volunteers, register voters, and GOTV
 - Registered and trained volunteers for virtual phone banking
 - Grew social media engagement by 12% on Facebook and Twitter
 - Increased Democratic turnout by 21% in the St. Francis, WI area
-

Michigan Democratic Party

April 2020-August 2020

Social Media & Design Intern

- Created digital infographics and videos using the Adobe Suite in order to increase party exposure
 - Managed accounts with over 25,000 followers across Twitter, Facebook, and Instagram
 - Heavily engaged with constituent relations and policy questions
-

Sierra Club Michigan Chapter

December 2019-April 2020

Development Assistant Intern

- Communicated and explained anti-environmental legislation in Michigan to voters
 - Came up with the idea for "Weekly Action Minute" videos on Facebook and TikTok
-

Education

Department of Political Science | Michigan State University **September 2021-present**

Master of Public Policy

- Relevant courses: *Quantitative Methods, Microeconomic Theory, Policy Evaluation, Public Policy, Policy Development and Administration, Public Finance, Policy Workshop, Issues in Public Policy*
-

James Madison College | Michigan State University

August 2019-August 2021

B.A. International Relations, Minor in Public Relations

- Graduated with an undergraduate degree in two years
- Maintained a high GPA, ending with a 3.75
- Dean's List Fall 2019, Spring 2020, Summer 2020, Fall 2020, Spring 2021, Summer 2021
- Member of the JMC Student Senate and the JMC Kennedy Democrats
- Relevant courses: *Microeconomics, Identity and Community, Public Affairs, Writing for Public Relations, Principles of Public Relations, Methods of Communication Inquiry, Survey of International Economics, World Politics and International Security, Russian Foreign Policy, Social Research Methods, Quantitative Analysis for Social Regression, International Environmental Policy*

Organizations & Projects

Graham Diedrich For State Representative

May 2021-present

Candidate, Treasurer, & Chief of Staff

- Managing my campaign to represent the 69th district in the Michigan House of Representatives
 - Hiring and managing a volunteer and intern staff
 - Creating fiscal reports, fundraising campaigns
 - Connecting with like-minded political and non-political organizations and institutions
-

Tracking Biden

November 2020-April 2021

Founder & Director of Operations

- Analyzing legislation, executive orders, and government appointments announced during the Biden Administration
 - Increasing website traffic and follows on social networks by 25% each week
 - Hiring and interviewing interns to help grow the organization
-

En Marche! Europe

February 2017-May 2017

Founder & Social Media Coordinator

- Self-started digital campaign that targeted potential voters through social media
 - Gained over 10,000 followers and improved post engagement by 20% during the campaign period
 - Recognized by the national campaign in France
-

Skills

- **Hard Skills:** Policy and data analysis, international and domestic governmental affairs, campaigning, constituent services, management experience, public relations, integrated marketing
- **Soft Skills:** Adobe Suite, GSuite, Microsoft Suite, Affinity Photo, NGPVAN, NationBuilder, Excel, ActBlue

Submitter DB ID 13922
IP Address 2600:1702:3eco:5a90:4d64:c709:239f:3ofd
Submission Recorded On 07/19/2021 1:55 PM
Time to Take the Survey 8 minutes, 48 secs.

Page 1



Public Service Application Form

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

***Special conditions restrict eligibility for appointment**

1.

Environmental Commission

2. **Occupation:**

PhD Student

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

Not answered

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

Not answered

5. **Contact Information:**

Name: Ana Lucrecia Rivera Rivera

Occupation: PhD Student

Place of Employment: MSU

Home Address: 1620 5th Avenue, Apt. B2

Phone (days): 4085060417

Phone (evenings): 4085060417

Date: 07/19/2021

Email: rivera59@msu.edu

6. **Attach Resume**

Resume is attached [CV_AnaRivera.pdf](#)

7. **Attach Cover Letter**

Cover Letter is attached [CL-Env_AnaRivera.pdf](#)

July 19, 2021

Dear Sir/ Madam,

I am submitting my application to serve on the Environmental Commission. I am confident that I am an ideal candidate for this position.

I hold a Bachelor's in Architecture, where my focus was sustainable design. I also hold an MSc. in Environmental Systems. My thesis focused on the use of satellite images to analyze urban heat islands (UHIs) for Monterrey, Mexico. I also included the sociodemographic characteristics of the population to locate individuals at-risk. For my MA. in Geography at San Jose State, I studied the distribution and intensity of UHIs and their relationship with the built environment. As a current Ph.D. student in the Geography Department at Michigan State University, I continue working on urban climate topics. Specifically, my dissertation will explore heat vulnerability indices from a medical geography perspective. I will harness my architecture and urban design knowledge to propose heat mitigation strategies. Last Spring, I took an environmental law course at MSU College of Law. I am now planning to attend law school, with a focus on environmental law, as soon as I complete my degree.

Since my arrival to the US in 2013, I have volunteered as a GIS consultant for several environmental non-profit organizations in Santa Clara and San Mateo counties in California. I was part of the first class of the Sierra Club Loma Prieta Chapter's Environmental Stewardship program, where I learned about critical environmental issues. I also went through Committee for Green Foothills Leadership Academy, an 8-month training program that provided me with the foundations to run and participate in successful conservation and environmental advocacy campaigns.

The impact of climate change on the Midwest will have a detrimental effect on the most vulnerable: the poor, elderly, and children. Although Meridian Township has been at the forefront of climate sustainability, it is not exempt from these negative impacts. With an increasing population and resulting land use/land cover change from natural to artificial surfaces, more severe and prolonged economic and health impacts will affect Meridian residents. As a member of this community, it is my duty to increase awareness of climate change and help to built resiliency.

I will bring my expertise in these topical areas and technologies to this important position. I appreciate your time and consideration. I look forward to speaking with you in the near future.

Best regards,



Ana Lucrecia Rivera Rivera
Ph.D. Candidate
Global Health and Medical Geography Lab
Department of Geography, Environment, and Spatial Sciences
Michigan State University

ANA LUCRECIA RIVERA RIVERA

Department of Geography, Michigan State University, East Lansing, MI
Contact: (408) 506 0417; rivera59@msu.edu

EDUCATION

Ph.D. in Geography: 2023 (expected)

Michigan State University (MSU), East Lansing, MI; Overall GPA: 4.0/4.0

Preliminary title: Urban Heat Island in Monterrey, Mexico: A Human-Environment Interaction Study

Master of Arts in Geography: 2018

San Jose State University (SJSU), San Jose, CA; Overall GPA: 4.0/4.0

Thesis: Distribution of urban heat islands and their relationship with urban morphology in San Jose, California

Master of Science in Environmental Systems: 2012

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Mexico; Overall GPA: 94.75/100

Thesis: Analysis of urban heat islands in Monterrey, Mexico

Bachelor of Architecture: 2008

Universidad de Monterrey, Mexico; Overall GPA: 85.34/100

Final Project: Regeneration of a former train station

RESEARCH EXPERIENCE

GIS Consultant: Geospatial Center, Stanford University; 2016-2018

Provide GIS support to the academic community

Create cartographic products for publications

Develop and teach new QGIS workshops

Locate, acquire, and validate primary types of geographical data sources

GIS Analyst: Department of Meteorology, SJSU, CA; 2017-2018

Create Local Climate Zone Data for uWRF. Interdisciplinary study between SJSU, CUHK, and UC Berkeley

Develop cartographic products for NASA Health and Air Quality and Applied Science (HAQAST) Project

Remote Sensing Analyst: Synergis at Google, Mountain View, CA; 2016-2017

Track high definition satellite imagery; perform quality inspections

Capture imagery patterns for decision making

GIS Technician: ITESM; *Nuevo Leon, Mexico*; 2010-2011 and 2013

Assess Hurricane Alex impacts via LiDAR for the National Water Commission (CAN) of Mexico

Prepare reports for grant submission and write papers for journal publication

Cartographer: El Colegio de la Frontera Norte, *Mexico*; 2012

Design and produce maps for the Program of Urban Development & Land-Use, Coahuila State, Mexico

Perform qualitative assessment of Habitat Program, Mexican Ministry of Social Development

TEACHING EXPERIENCE

Teaching Assistant: Department of Geography, Environment and Spatial Sciences, MSU; 2019-Present

Undergraduate course: Health and Medical Geography

Online undergraduate courses: Introduction to Meteorology, Intro to Geographic Information

GIS Instructor: The GIS Education Center at City College of San Francisco, CA; 2017-2018

Develop and teach ArcPro workshops for the City and County of San Francisco staff

Teach Introduction to Open-Source GIS (QGIS) to working professionals

Lecturer (Graduate): Urban Planning Department, SJSU; 2018

Graduate course: GIS Overview-Urban Planning Applications

Instructional Student Assistant: Urban Planning and Geography Departments, SJSU; 2016- 2017

Undergraduate course: Introduction to Mapping and Geographic Information Systems

Graduate course: Introduction to GIS for Urban Planners

Teaching Assistant: ITESM; *Nuevo Leon, Mexico*; 2010- 2011 and 2012- 2013

Undergraduate courses: GIS for Civil Engineers; Environmental Ordinance

HONORS AND FELLOWSHIPS

Michigan State University, Diversity Torch Award; 2020

Ford Foundation, Predoctoral Competition, Honorable Mention; 2019

Michigan State University, Enrichment Fellowship, five years full tuition; 2018-2023

San Jose State University, Honor Society of Phi Kappa Phi, inductee; 2016

National Council for Science and Technology (CONACYT), Fellowship Program to Train and Develop Scientists and Technologists (PFDCyT, Mexico), monthly stipend; 2010-2011

Universidad de Monterrey (Mexico), Outstanding Project: Architecture Undergraduate Program, 2008

VOLUNTEER EXPERIENCE

Advisory Board, Committee for Green Foothills, CA, 2021-Current

Co-president, Support Women in Geography (MSU Chapter), *MI*, 2019-2020

GIS/Data Volunteer, Indicators Committee at Sustainable San Mateo County, CA, 2014-Current

Board Member, Lansing Latino Health Alliance, *MI*, 2019

Board Member, New Leaders Council, CA, 2016-2017

Committee Member, Silicon Valley Water Conservation Awards, CA, 2014-2018

GIS/Data Volunteer at Transform California, CA, 2015

GIS/Data Volunteer at Sierra Club, Loma Prieta Chapter, CA, 2015

Content Leader at Sustainable Silicon Valley, CA, 2013-2014

Regional Technical Staff of the LEED Program at Mexican Green Building Council, *Mexico*, 2011

Member of Consulting Committee at ECOVIA (Bus of Rapid Transit), *Mexico*, 2011

SKILLS

Software:

GIS: ArcInfo, ArcView, ArcGISPro, ArcMap, QGIS

Remote Sensing: ERDAS, SAGA, Earth Engine, Mars (for LiDAR)

Architecture and Design: Autocad, 3D Viz, Freehand, Photoshop, Illustrator

Statistics and Data Visualization: SPSS, Tableau, Stata

Environmental Modeling: ENVI-Met (Building proficiency)

Computer Languages: Python, R, SQL (Basic proficiency)

Languages: Spanish (Native), English (Complete fluency), French (Elementary proficiency)

US VISA Status: Permanent Resident (Green Card) allowed to work until November 2025

PUBLICATIONS

Rivera, A., Yepez, F.D., Moore, N.J., Kim, J.H., Mendoza, A., Lozano-Garcia, F., and Bornstein, R.D., n.d.: Longitudinal Analysis of the Monterrey UHI: Built Environment and Human Risk. *Remote Sensing*. *Under Review*.

Freedman, F.R.; English, P.; Wagner, J.; Liu, Y.; Venkatram, A.; Tong, D.Q.; Al-Hamdan, M.Z.; Sorek-Hamer, M.; Chatfield, R.; **Rivera, A.**; Kinney, P.L. 2020: Spatial Particulate Fields during High Winds in the Imperial Valley, California. *Atmosphere* 2020, 11, 88. <https://doi.org/10.3390/atmos11010088>

McRae, I., Freedman, F., **Rivera, A.**, Li, X., Dou, J., Cruz, I., Bornstein, R. (2020). Integration of the WUDAPT, WRF, and ENVI-met models to simulate extreme daytime temperature mitigation strategies in San Jose, California. *Building and Environment*, 184, 107180. <https://doi.org/10.1016/j.buildenv.2020.107180>

Rivera, A., 2017: Extreme heat and climate change (policy brief). Millennial Compact with America: An Agenda for the Future. New Leaders Council. Washington, DC

Yepez, F., Lozano, D., Vela, P., and **Rivera, A.**, 2013: Assessing hydrometeorological impacts with terrestrial and aerial Lidar data in Monterrey, México. *ISPRS-International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, **1(2)**, 271-276

PRESENTATIONS

McRae, I., Bornstein, B., Freedman, F., **Rivera, A.**, Dronova, H., Fraker, H., Ren, C., Li, X., and Dou, J. 2020. Integration of the WUDAPT, WRF, and ENVI-Met Models to Simulate Urban Heat Island Mitigation Strategies in Downtown San Jose, California. *100th American Meteorological Society Annual Meeting*, Boston, MA

McRae, I., Freedman F., **Rivera, A.** 2018: Bridging WUDAPT, urbanized WRF and ENVI-met research platforms to study the effects of urban morphology and meteorology on building-scale design. *10th International Conference on Urban Climate*, New York, NY

McRae, I. Freedman F., **Rivera, A.** 2017: WUDAPT, uWRF, ENVI-MET Coupling for Site-Specific Urban Heat Island Analysis in San Jose, CA. *2017 Community Modeling and Analysis System Conference*, Chapel Hill, NC

Freedman, F., **Rivera A.**, Dou, J., Ren, C., Bornstein, R. 2017: WUDAPT-based urban-WRF and HYSPLIT-STILT modeling of San Jose, California: Developments to support case study applications for urban air pollution and heat islands. *2017 Meteorology and Climate - Modeling Air Quality Conference*, Davis, CA

Rivera, A., 2017: Local Climate Zones (LCZ) for Urban Heat Analysis (UHI) in Downtown San Jose, CA. Poster, *23rd Annual California GIS Conference*, Oakland, CA

Rivera, A., 2016: Identifying population vulnerable to extreme heat events in San Jose, CA. Poster, *American Geophysical Union Meeting*, San Francisco, CA

Sain, S., **Rivera, A.**, Skancke, A., and Rohrmeier, K., 2016: Applied urban geographic research techniques. SJSU graduate student presentation, panel session, *American Association of Geographers Meeting*, San Francisco, CA

Rivera, A., 2016: Characterizing vulnerable population living under UHIs in Santa Clara County, California. *Geographical Society Annual Conference*, San Jose, CA

Rivera, A., 2016: Environmental factors and their impact on American Communities. *SJSU College of Social Science, Graduate Student Colloquia*, San Jose, CA

Rivera, A., 2016: Combining sensors to map urban surfaces: An object-based classification approach. *22nd Annual California GIS Conference*, Anaheim, CA

Yepez, F, Lozano D., **Rivera A.**, and Vela, P., 2013: Evaluacion de impactos hidrometeorologicos a lo largo del Río Santa Catarina empleando LIDAR terrestre y aéreo. *Reunion Nacional SELPER-Mexico, San Luis Potosi, Mexico*

Rivera, A., and Lozano, D., 2012: Analysis of urban heat islands in Monterrey City, Mexico using remote sensing and geographic information systems. *Reunion Internacional SELPER Conference*, Cayenne, French Guiana

Rivera, A., Villareal, J., and Lozano, D., 2011: Identificación de zonas prioritarias de atención por parametros sociales y areas verdes en el Area Metropolitana de Monterrey. *Reunion Nacional SELPER*, Morelia, Mexico. ISBN: 978-607-02-3172-8