



Public Space/Climate Change

PATRICIA OHMANS
KNIGHT FELLOWSHIP APPLICATION

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My Story: How a magazine writer ended up caring most about public spaces and climate change. A few facts about me.

My Neighborhood: Publicly known for its pathologies, but bursting with joy and potential. Meet Frogtown, my home for 39 years.

Our Accomplishments: We started a decade ago, with a crazy idea about a new park with an urban farm. Ten years later, we're going strong. Read Frogtown Green's season report for 2018.

Our Environment: Minnesota is known for its clean environment. Frogtown, unfortunately, is not. Check out the EPA's environmental justice index for our neighborhood.

Our Vision: Climate change will hit us hard. Here's a rendering and description of our plan for the Lily Pad, a seasonal, outdoor sustainability resource center.

My Story

CHILDHOOD

I'm a third culture kid. I lived 18 years in Bolivia, Uruguay, Venezuela, Colombia and Brazil. I speak Spanish fluently. I love to dance and garden.

CAREER

After Antioch College, I wrote for the *Atlanta Constitution*, *Minneapolis City Pages* and lots of magazines.

As a public health educator, I've worked with people with AIDS, migrant workers, refugees, and patients with limited English.

WHAT I THINK ABOUT NOW

- My neighborhood
- How communities thrive
- Converting vacant land to green space
- Environmental justice
- Climate change

At 65, I know my life's work: building healthy public spaces in Frogtown, where I've lived since 1981.

I co-founded a 13-acre park here, and have run Frogtown Green since 2009 as my vocation.



My Neighborhood

DIVERSE

Frogtown is multicultural, multiracial, and truly diverse. It is vibrant, lively, entrepreneurial and neglected.

CHALLENGED

The average household income in Frogtown for a family of four is under \$35,000. 26% of adults have not graduated from high school.

VULNERABLE

More than 28% report that they speak English "less than very well." More than 30% are children, under age 18. More than 14% report a disability.

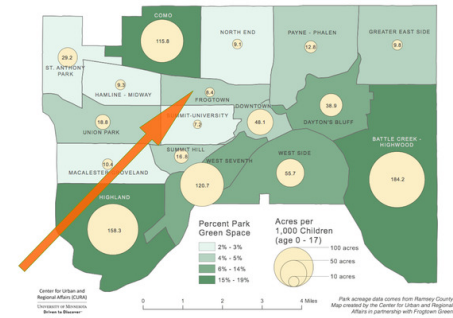
Figure 75: Thomas-Dale/Frogtown Neighborhood Target Area Key Demographics (2015 American Community Survey 5-Year Estimates)

Population	15642
Race	Asian 36.1%
	Black 29.3%
	Native American 1.9%
	Other 3.1%
	Two or More Races 6.1%
	White 23.4%
Poverty	35.3%
Language	Hmong 1743
	Other Asian Language 636
	African Language 482
	Vietnamese 450
	Spanish 368
Place of Birth	Laos 1228
	Thailand 843
	Vietnam 611
	Myanmar 574
	Ethiopia 364
	Somalia 327

My Neighborhood

LESS GREENSPACE

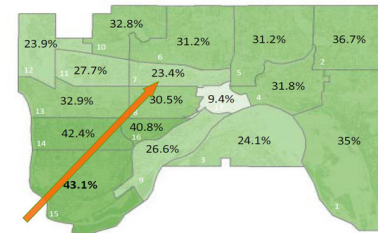
The gold circles represent greenspace acreage, per child, in each of St Paul's neighborhoods. Frogtown is indicated with the orange arrow.



Frogtown 2019: **STILL** a greenspace deficit

FEWER TREES

The city's goal is 35% tree canopy coverage. At 23%, Frogtown has less tree canopy than any neighborhood besides downtown.



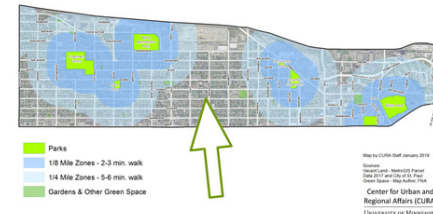
Frogtown: A tree canopy deficit

(map from St Paul city website)

GREENSPACE DESERT

In the middle of the neighborhood, there is no public space within a ten minute walk, a goal of most urban and park planners.

District 7 Parks and Approximate Walking-Distance Buffer Zones



Central Frogtown: a greenspace desert

Our Accomplishments: Frogtown Green

Frogtown Green's 2018 Season Report

Can You See Yourself in These Pics?

Picture yourself planting veggies and trees

So many folks helped make Frogtown greener this year! More than 15 gardeners planted, sowed and reaped a harvest at **The Lily Pad**, our community greenspace at Dale Street and Lafond Ave. Gardeners young and old grew corn, artichokes, squash, hot peppers and a bumper crop of tall sunflowers. Another 40 beds were cultivated at **Our Village Community Garden**, growing strong since 2012. We partnered again with gardeners from Youth Farm's Frogtown program, Loaves & Fishes food program, and residents of the nearby high-rise apartment and townhomes, and welcomed support from Banbro, Inc.

Meanwhile, thanks to Unity Church-Unitarian, the **Tree**

Frogs purchased and planted 30 trees in residents' front and back yards. Since 2011 the Tree Frogs have planted more than 400 new trees in Frogtown!



Picture the kids learning about water & nature



This year, our watershed education program, **FrogLab**, went on the road! We spent the summer at parks and schools, teaching kids about the importance of water stewardship to keep people (and frogs!) healthy. FrogLab held 22 sessions with hundreds of kids, thanks to support from the Capitol Region Watershed District.

We also greatly expanded **Monarch City**, the pollinator and native gardens we maintain at West Minne Rec Center, with help from student volunteers from St Agnes and Young Adult Koinonia.

Frogtown Green is a resident-led, volunteer-driven initiative to make Frogtown the greenest, healthiest and most beautiful neighborhood in St Paul. More information at frogtowngreen.com or 651-757-5970.

Frogtown Green's 2018 Season Report

Help Make Frogtown Green!

Picture us all, celebrating green

We had plenty of occasions to celebrate a greener, healthier neighborhood this year. We collaborated with our partners at WaterFest and at **Hmongtown Marketplace** during a two day festival in July. And we were proud to co-host the 1,000+ visitors to Frogtown Park & Farm's third annual **Harvest Fest!** With support from the Trust for Public Land, we also sponsored a park clean-up, raingarden plantings, *sepak takraw* games and several birdwalks led by a resident birder.



Picture yourself with Frogtown Green in 2019!



What's on tap for next year? More of the same? You bet. Want to be part of it? Great!

We'll start with our annual Green Gathering. The 2018 Green Gathering brought us together to share our schemes and dreams for the growing season; plan to attend **2019's Green Gathering** at Rondo Library in late February. If you'd like to join forces to make Frogtown the greenest, healthiest and most resilient neighborhood in St Paul, we'd love to have you. Find out how to volunteer, donate or help out at www.frogtowngreen.com

Frogtown Green is sponsored by Health Advocates, Frogtown-based public health consultants. We are supported by grants, donations and tons of volunteer, resident energy. Join us in 2019!

Our Environment

POLLUTION

According to the EPA, Frogtown ranks above the 80th percentile nationally for critical pollutants and toxins such as diesel particulate matter, hazardous waste and lead paint.

Our neighborhood is above the 90th percentile in the region for these measurements, and above the 96th percentile in the state.

These environmental disparities already affect the health of Frogtown residents, triggering asthma, heart disease and cancer. The hotter summers, flooding, and severe winter storms that will come with climate change will exacerbate health problems with environmental causes.



EJSCREEN Report (Version 2018)

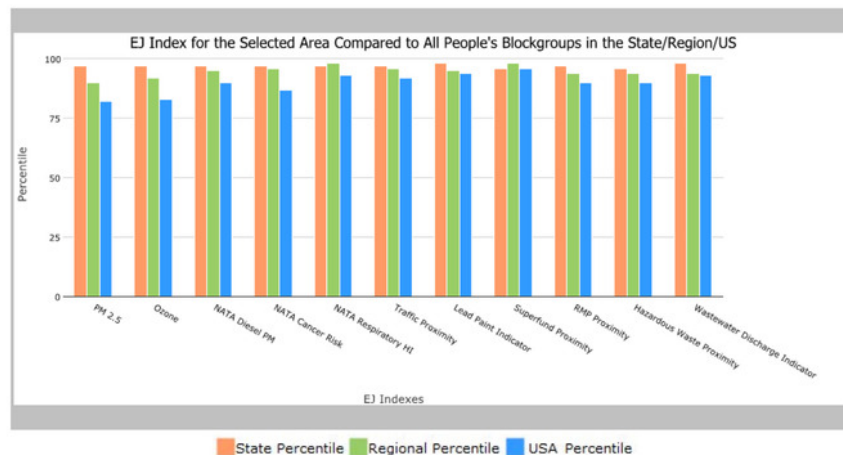


the User Specified Area, MINNESOTA, EPA Region 5

Approximate Population: 14,506

Input Area (sq. miles): 1.43

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	97	90	82
EJ Index for Ozone	97	92	83
EJ Index for NATA* Diesel PM	97	95	90
EJ Index for NATA* Air Toxics Cancer Risk	97	96	87
EJ Index for NATA* Respiratory Hazard Index	97	98	93
EJ Index for Traffic Proximity and Volume	97	96	92
EJ Index for Lead Paint Indicator	98	95	94
EJ Index for Superfund Proximity	96	98	96
EJ Index for RMP Proximity	97	94	90
EJ Index for Hazardous Waste Proximity	96	94	90
EJ Index for Wastewater Discharge Indicator	98	94	93



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

Our Vision: The Lily Pad



THE LILY PAD

An outdoor sustainability resource center for the Frogtown neighborhood, building climate change resilience and promoting the environmental health benefits of green space. The Lily-Pad could empower Frogtown residents and residents of other urban neighborhoods to prepare for climate change in affordable and effective ways.

Our Vision: The Lily Pad

Climate change will hit Frogtown hard, according to scientists and urban planners. Here's a modest proposal to help our neighborhood prepare for the extreme weather ahead; turn the long-underused lot at Dale Street and Lafond Avenue into a sustainability resource center and community learning space.

Predicted effects of our warming climate include sharp changes in water and air temperature and quality; decreased food security; severe summer and winter storms; loss of tree canopy and more. Information, education, hands-on training and access to resources for Frogtown residents will help them prepare for the inevitable shocks and stresses of climate change.

If planners and dreamers with Frogtown Green succeed, "The Lily Pad", a 20,000 square foot, city-

owned lot at the southwest corner of Dale and Lafond) will be the place where that preparation can happen. The Lily Pad is currently managed by Frogtown Green, along with a variety of loosely organized partners. In 2017 and 2018 Frogtown Green members renovated the Lily Pad with flower plantings and community vegetable gardens.

"We want to expand this renovation for the next 5-7 years, to turn the Lily Pad into an innovative, hands-on, environmental health learning site," says Frogtown Green director Patricia Ohmans., a 40 year resident of the neighborhood.

"The Lily Pad already includes community garden beds, a seasonally roofed gazebo, planted fruit trees and lawn space for gatherings. Its next incarnation

could be as a one-stop shop for information about sustainable households and communities," Ohmans says.

"The Asian elders who gardened on much of the space this past summer are already setting an example of how to grow local food, sustainably."

In 2019, Frogtown Green envisions developing the lot further, as an outdoor learning center, with exhibits and areas focusing on:

- *Alternative transit*, with a bike repair station with air and tools and a solar-powered charging station for hybrid or electric vehicles and phones
- *Tree canopy*, with shade trees in hydroponic gravel beds for fall giveaways

- *Prairie and native plants* in garden beds or a landscaped maze
- *Waste management*, with compost bins and recycling containers and interactive teaching games; and
- *Water stewardship*, with rain barrels and pervious pavement walkways.

With support and funding the lot could also demonstrate small-scale, resiliency-building at the household level:

- *Home improvement*, with a tiny house for a residential caretaker or site office. The house could incorporate sustainability-focused features such as passive solar panels, a green or reflective roof, and ways to catch rain water.



From desolate vacant lot to collective garden to climate change learning center? Neighborhood activists, gardeners and artists want the lot at Dale and Lafond to serve the community.



Our Vision: Public Space/ Climate Change

Theme	Display Ideas	Conceptual Images	Why this matters	Potential Partners
Pollution	<p>Alternative Transportation</p> <ul style="list-style-type: none"> Bike repair station Nice Ride station Solar powered charging station Kiosk with information on public transit options <p>Home Improvements</p> <ul style="list-style-type: none"> Tiny house for residential caretaker or site office with sustainability focused features such as solar panels, green or reflective roof, cistern Kiosk explaining home features Renewable energy examples <p>Tree Canopy</p> <ul style="list-style-type: none"> Shade trees in hydroponic gravel beds for fall giveaway Kiosk with information about Emerald Ash Borer, as well as tree recommendations for a warming climate 	 	<p>In the face of climate change, rising temperatures, and higher rates of pollution, many homes will be negatively impacted. The financial burden of cooling in increasingly hotter summers can be combatted by planting more trees which provide much needed shade and can lower interior temperatures.</p> <p>Home improvements which make houses more efficient and less reliant on fossil fuels help to lower electricity costs and become more resilient to changing fuel needs. Alternative modes of transportation help to limit fossil fuel use as well and stop excessive pollution from creating detrimental health impacts like asthma.</p>	<ul style="list-style-type: none"> Center for Energy and Environment Smart Trips Home Energy Squad CenterPoint Energy Xcel Energy Solar and Wind Programs Health Providers for a Healthy Climate Fresh Energy Great River Energy Made in Minnesota Solar Incentive Program NeighborWorks Home Partners
Waste Management	<ul style="list-style-type: none"> Compost bins and demonstration for household composting Recycling containers Kiosk with waste management app and information on alternative waste management sites 		<p>40% of food in the United States is thrown away and the average person creates almost 5 pounds of trash a day. With a growing population and an increasing appetite for consumable goods, the question of where does this trash go and who does it impact is a huge problem. By implementing composting into our daily lives, we can divert up to 72% of the waste entering landfills. This compost can then be used to enrich soil and grow more plants and food for the community.</p>	<ul style="list-style-type: none"> Eureka Recycling City of St. Paul Sustainability Program Ramsey County Hamline Department of Sustainability University of Minnesota Department of Sustainability
Food Security	<ul style="list-style-type: none"> Community vegetable garden with tool shed Pollinator-friendly plantings and lawn Fruit and nut trees in hydroponic gravel beds for fall giveaway kiosk with food source app Outdoor kitchen demonstration site Winter greenhouse Bur Oak tree exhibit (ideal native food tree) 		<p>Access to fresh, healthy, and affordable produce in Frogtown is hard to come by. Implementing community vegetable gardens can help provide the neighborhood with access to these foods and</p>	<ul style="list-style-type: none"> Green Earth Growers Shared Ground Farmers' Co-op Frogtown Farm Good Acre Frogtown Neighborhood Association
Water Stewardship	<ul style="list-style-type: none"> Appropriately sited and maintained rain garden French drain demonstration Rain barrels and rain chains Groundwater demonstrations Pervious pavement walkways Kiosk with storm sewer cutaway and other water information <p>Prairie and Native Plants</p> <ul style="list-style-type: none"> Prairie plant maze Kiosk with photos of prairie flowers and animals that feed from them Native plants in the rain garden and pollinator garden 		<p>Climate change will not only cause hotter summers and colder winters, it will also cause more extreme weather events like flash flooding and droughts. In the land of 10,000 lakes fresh water seems overly abundant, but with pollution and overuse this will not be for long. Responsible water management can help clean runoff and help it infiltrate back into the ground for drinking water. Collecting rain water and using it for irrigating lawns and gardens can also help to lower your water bill. Planting native plants create harder landscapes that require less maintenance and provide habitats for local wildlife.</p>	<ul style="list-style-type: none"> CRWD Science Museum University of Minnesota Extension Gardner's Supply Company Landscaper's Companion App Minnesota Department of Natural Resources Ward One Council Office The Trust for Public Land



More

Frogtown Green: frogtowngreen.com

Health Advocates: healthadvocates.info

Greening Frogtown archive: greeningfrogtown.com

- cover photo: mural at Dale Street. photo by Krissana Mara
- contents page photo by Hillel Natanson
- Patricia Ohmans photo by Tony Schmitz
- Frogtown demographic information: MN Department of Transportation, 2018 and Wilder Foundation MN Compass
- Frogtown greenspace, tree canopy and park deficit maps by Jessi Wyatt, University of Minnesota
- Frogtown Green 2018 report: photos and design by Patricia Ohmans
- Frogtown environmental justice index from the US EPA, epa.gov/ejscreen/environmental-justice-indexes-ejscreen
- Lily Pad rendering by Maggie Krantz and Alexandra Boese
- Lily Pad concept and description appeared in November-December issue of *Greening Frogtown*