

# SpoCanopy



## Enhancing Community Engagement through Free Trees

Justyce Brant

*Restoration Coordinator*


The Lands Council





# THE LANDS COUNCIL





*we protect & revitalize the Inland Northwest's*

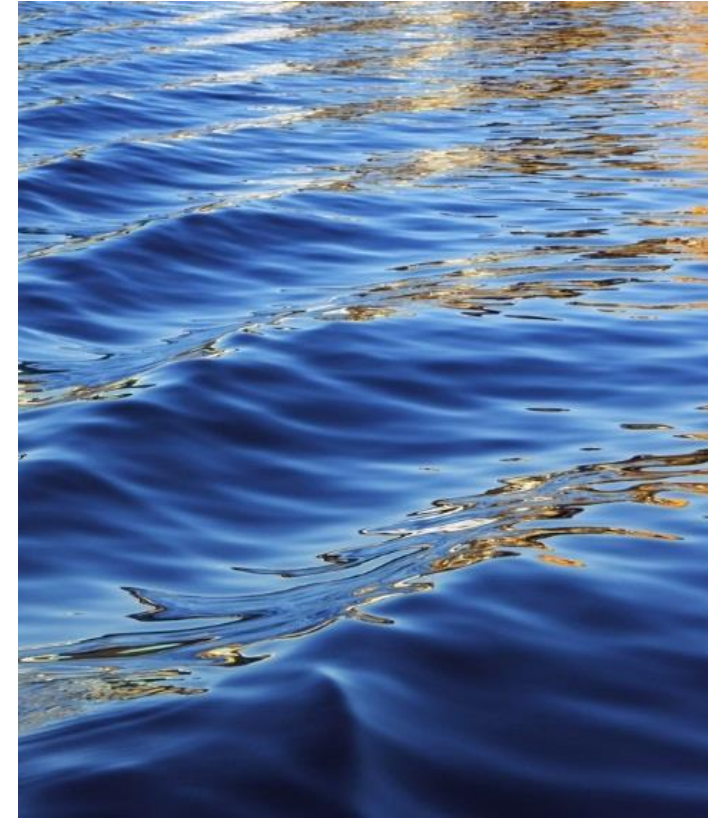
# FORESTS WATER & WILDLIFE

---

[www.landscouncil.org](http://www.landscouncil.org)



# Our Programs and Community Involvements



# RESTORATION

WE INSTALL RIPARIAN BUFFERS TO IMPROVE WATER QUALITY AND BENEFIT SURROUNDING WILDLIFE

## 105,000

TREES

Planted in the last  
12 years

The Lands Council plants THOUSANDS of native trees and shrubs each year in riparian (streamside) buffers along degraded tributaries - and we also install beaver dam analogs (BDAs).

### WHAT IS A BDA?

- BDAs are "humanmade" beaver dams.
- BDAs promote aquifer storage, create wetlands, and wildlife habitat.
- BDAs improve water quality while trapping sediment, raising the water table, and gradually reconnecting an incised channel with its floodplain.



Did you know? A beaver's front teeth never stop growing. To keep them from getting too long, beavers have to constantly chew on wood.

Poor land use practices including unsustainable agriculture, forestry, grazing, and urban development have degraded water quality in our watersheds. This also causes erosion, sedimentation, riparian buffer loss, wetland destruction, and contaminated stormwater runoff.

To improve water quality in our watersheds, The Lands Council recruits private landowners and implements riparian restoration activities on their properties.



Improving water quality is so key to our mission here at The Lands Council.

We continue to build awareness of Spokane River toxics in economically underprivileged and ethnic communities. As members of the Spokane River Regional Toxics Task Force, we are working to remove toxic PCB's (polychlorinated biphenyls) from the river.



# EDUCATION

WE ARE COMMITTED TO CREATING A SUSTAINABLE FUTURE & LASTING LEGACY FOR FUTURE GENERATIONS

# 10,054

YOUTH

Taken on STEM Field Trips  
Since 2011



We work in local schools to get students outdoors and we educate them on the natural world, water quality, and resource issues.

Nature is everywhere and yet a lot of us have little opportunity to get outside and experience it. So many of us are becoming increasingly disconnected from the outdoors and lack a true understanding and appreciation for the bountiful forests, water, and wildlife of the Inland Northwest.

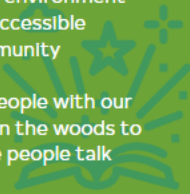
## PROJECT SUSTAIN

To promote outdoor and environmental education, The Lands Council created Project SUSTAIN.

Project SUSTAIN is an outdoor, place-based, STEM-focused (science, technology, engineering, and mathematics) environmental education program designed to restore the connection between youth and nature by enabling students to get outside, practice field science, be physically-active, and become responsible environmental stewards.

We believe that instilling care for our environment and stewardship ethics begins with accessible education opportunities for our community members.

We host public events that engage people with our mission: from group walks and hikes in the woods to community Storytelling Nights where people talk about their love of our public lands.



### Project SUSTAIN's "3E" model:

We **expose** students to the outdoors, **empower** them with relevant knowledge and skills; and **encourage** them to apply these experiences throughout their lives to become responsible environmental stewards.



## SNOW SCHOOL

As part of the Mt. Spokane field experience, students don snowshoes and hike up a hill. They dig snow pits to the ground; identify, mark, and measure snow layers; and take mass and density measurements. This allows them to calculate snow water equivalency - the amount of water that will ultimately recharge our rivers, lakes, and aquifer. We explore the relationship between our mountain snowpack and wildfires and discuss how climate change and local population growth are projected to impact the snowpack. Students also participate in a scavenger hunt focusing on plant and animal adaptations to winter and learn about avalanche awareness and safety by performing a search-and-rescue activity using beacons and probes.



# PUBLIC LANDS

WE PROTECT WILD AREAS, WHILE ACTIVELY PROMOTING RESTORATION

★ 6.7 ★  
MILLION

Acres of Public Land in Eastern Washington

Washington state is widely regarded as a model for public lands management and conservation in the United States.



Public Lands provide recreation, wildlife habitat, clean water, opportunities to hunt, fish and gather, a sense of connection to nature, and are the economic engines for many communities.



Large areas of forest and wildland are the cornerstone of ecological resilience and provide core habitat that is essential for the long-term survival and recovery of imperiled wildlife.



Conserving and protecting forests and other public lands is increasingly critical for carbon sequestration and habitat protection in the face of a changing climate.



The Inland Northwest has amazing and diverse wildlife habitat and to maintain these ecosystems, such as grizzly bears, wolves, lynx, and salmon. The Lands Council collaborates with conservation groups to restore predator populations, revive salmon populations, and protect wilderness areas.



Our wild public lands offer cherished places to hike, camp, climb, ski, wildlife watch, fish, hunt and otherwise enjoy the Inland Northwest's rich natural heritage.



The Lands Council works with the USFS, USFWS, WDFW, innovative lumber companies, Tribes, and the greater community to restore and revitalize these hugely beneficial systems.

# CLIMATE JUSTICE

WE WORK FOR FAIRNESS, EQUITY, AND SUSTAINABILITY:  
CLIMATE JUSTICE FOR FUTURE GENERATIONS

★ 13.9 ★

DEGREES

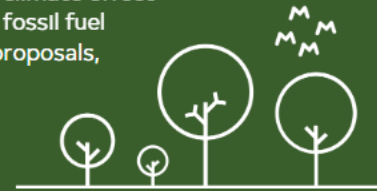
Difference in Temperature  
Between Neighborhoods in  
Spokane Due to Canopy Coverage

Beat the Heat: the air directly  
below a tree can be as much  
as 25 degrees cooler.



The Lands Council works with diverse community partners to develop equitable solutions to our region's unique challenges and center the experiences of those most impacted.

Our Climate Justice program focuses on policies related to regional climate change effects and mitigation such as public utility clean energy plans, city and county sustainability ordinances, statewide house bills with climate effect considerations, fossil fuel infrastructure proposals, and more.



Spokane has taken steps towards addressing climate change and promoting climate justice. In 2020, the city adopted a Climate Action Plan with goals to **reduce greenhouse gas emissions**, **increase renewable energy usage**, and **improve resilience to climate impacts**. The plan includes strategies such as increasing energy efficiency, promoting sustainable transportation, and engaging with communities to address equity and justice in climate action efforts.

From environmental activism, like planting trees in low canopy neighborhoods, to pushing for policy change, people across the Inland Northwest are standing up for clean water, clean food, and clean air. By participating in efforts to decrease global warming and its effects on human health, we can do our part to fight the climate crisis in our beloved Spokane.







# SPOCANOPY

WE ARE COMMITTED TO INCREASING OUR URBAN CANOPY

☆ 11 ☆  
PERCENT

Average Tree Canopy in  
Northeast Spokane - the  
Lowest in the City

SpoCanopy's goal is to increase Spokane's urban canopy by planting free street trees in low-income neighborhoods with low canopy coverage and disproportionate environmental disparities, so that all communities have access to the benefits of street trees and green spaces.

☆ 40 ☆  
PERCENT

Average Tree Canopy on  
the South Hill in Spokane -  
the Highest in the City

SINCE 2020



Over 250 volunteers have planted over 400 street trees.



Street trees provide a wide variety of benefits such as storm water mitigation, keeping our Spokane River clean, providing habitat for urban wildlife, increasing property values, providing shade, decreasing energy usage, and lowering temperature on the streets, sidewalks, and overall neighborhood.

Our SpoCanopy program has a large focus on environmental justice. We are concentrating efforts in West Central and Northeast Spokane, in areas that have below average canopy cover.

The disparity in tree canopy demonstrates a clear need to work in these neighborhoods to close that canopy gap. On top of that, Northeast Spokane neighborhoods are some of the most ethnically diverse, and the lowest-income in the state.



# Our Goal for Today



Understand SpoCanopy and Cool Canopy



Share additional information about the City's IRA grant funding



Discuss Neighborhood Project Collaborations

Spocanopy



City of Spokane



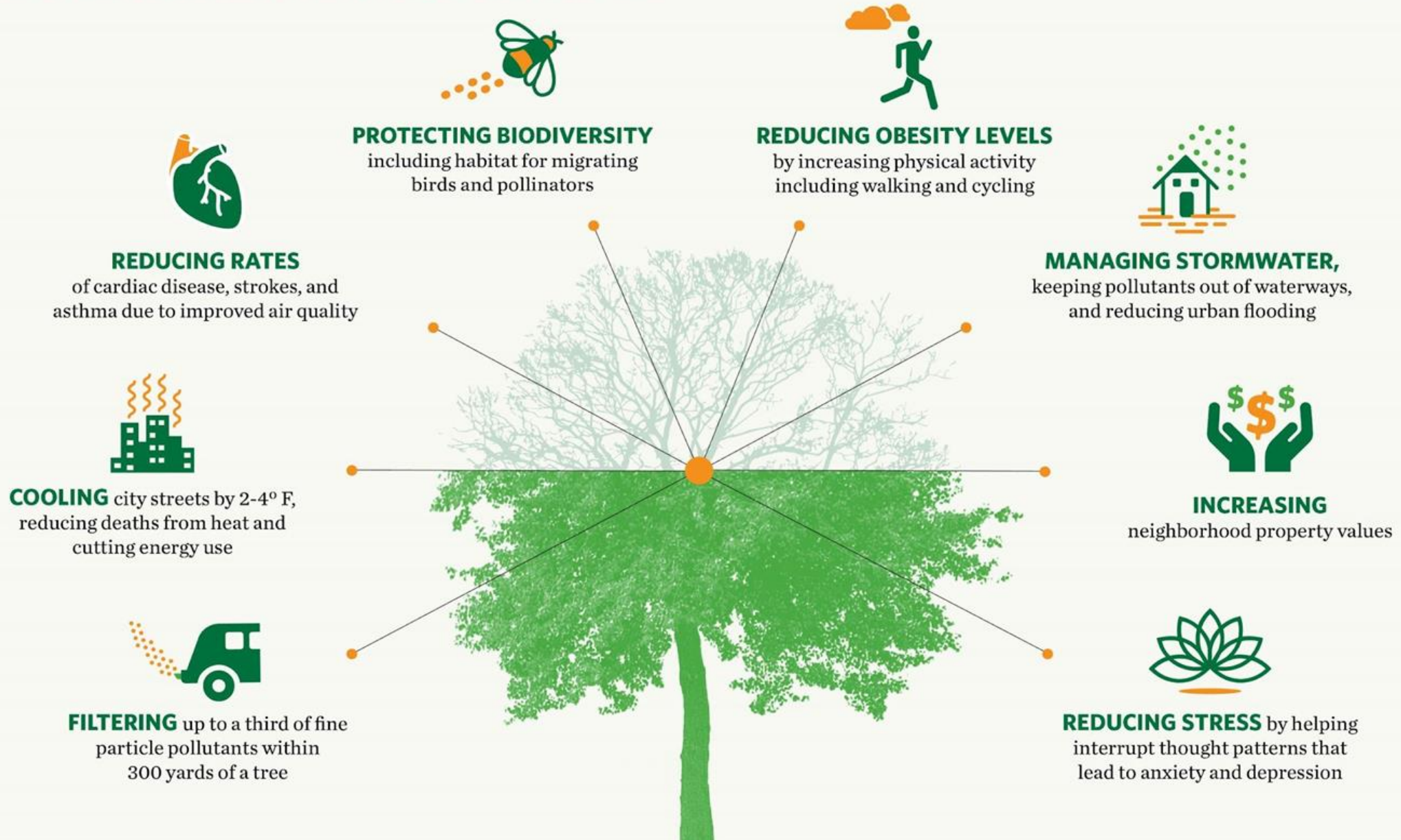
Spokane County

Cool Canopy



# Benefits of Urban Trees

Research has linked the presence of urban trees to...



## TREES & COMMUNITY



**Safety:** Residents with nearby trees and natural landscapes reported 25% fewer acts of violence.



**Value:** Having large trees along streets increases a home's value by 12%.



**Savings:** Trees reduce U.S. residential energy use by an average of 7.2% – an annual savings of \$100 for an average household.

## THE SIZE AND POWER OF 100 MILLION TREES

**The Size:** 3,500 Central Parks

**The Impact:** 578,000 tons of chemical pollution removed from the air – enough to fill 70,000 Goodyear blimps



## A TREE PLANTED TODAY MAKES LIFE BETTER FOR GENERATIONS TO COME.



### Healthier Environment

Forests provide 75% of the world's accessible fresh water by removing impurities and preventing erosion.



### Healthier Economy

Forests contribute \$33 trillion to the global economy each year.



### Healthier Society

¼ of modern medicine is derived from tropical forest plants, including treatments for diseases like cancer, malaria, and rheumatism.





# Science

## FINDINGS

### INSIDE

- Exploring Tree Planting and Mortality Links . . . . .* 2
- Return on Investment . . . . .* 3
- Increasing Urban Greenness . . . . .* 4

*“Science affects the way we think together.”*  
*Lewis Thomas*

---

## Plant a Tree and Save a Life?

### The Value of Planting More Trees in Urban Areas

---



#### IN SUMMARY

*Exposure to urban trees is associated with improved public health outcomes, including healthier infant birth weights, fewer symptoms of attention-deficit hyperactivity disorder, and decreased cardiovascular mortality. Conversely, tree loss is linked to increased rates of cardiovascular disease and higher mortality. Could this mean that trees save lives?*



# Trees as a measure of equity

---



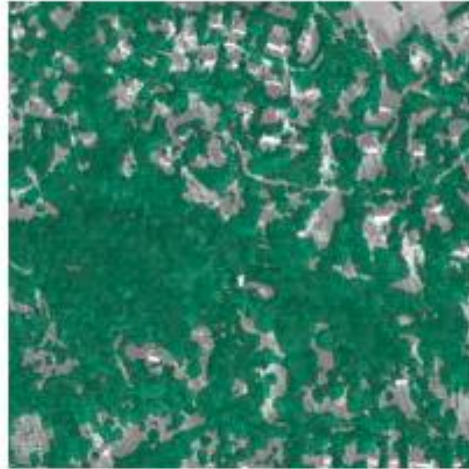
# Median Income and Canopy Coverage

## Baltimore

Median income: \$31K



Median income: \$154K

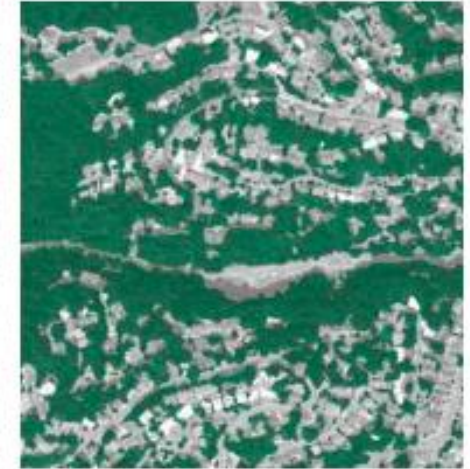


## Portland, Ore.

Median income: \$39K



Median income: \$161K

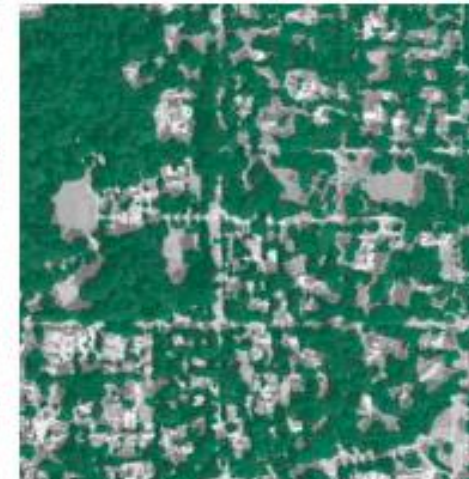


## Columbus, Ohio

Median income: \$38K



Median income: \$150K

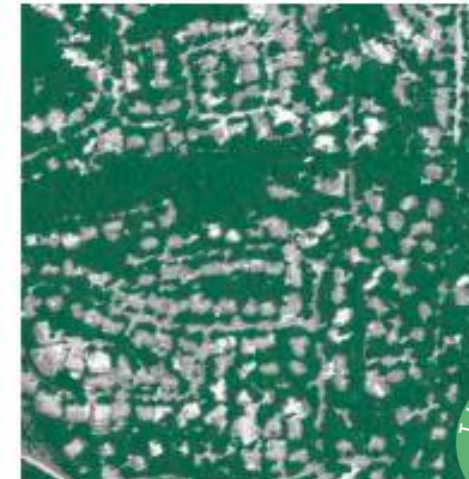


## Austin, Texas

Median income: \$59K



Median income: \$185K







# City of Spokane Tree Canopy Cover and Ecosystem Benefits

20.7%

Tree Canopy Cover

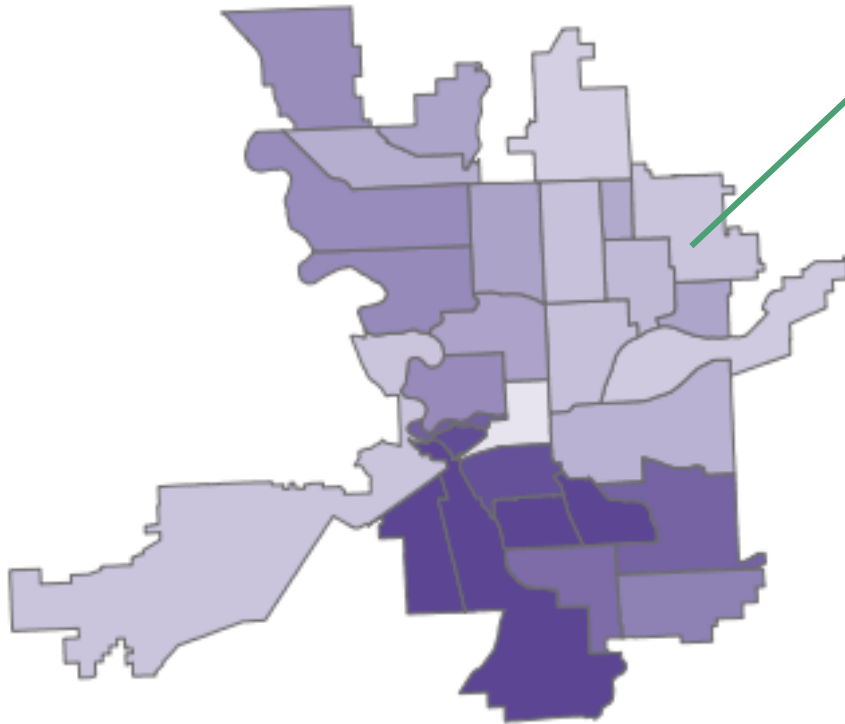
\$5.77M

Estimated Annual Ecosystem Benefits

\$44.39M

Additional Lifetime Stored Carbon Value

City of Spokane Tree Canopy Cover by Neighborhood for 2020



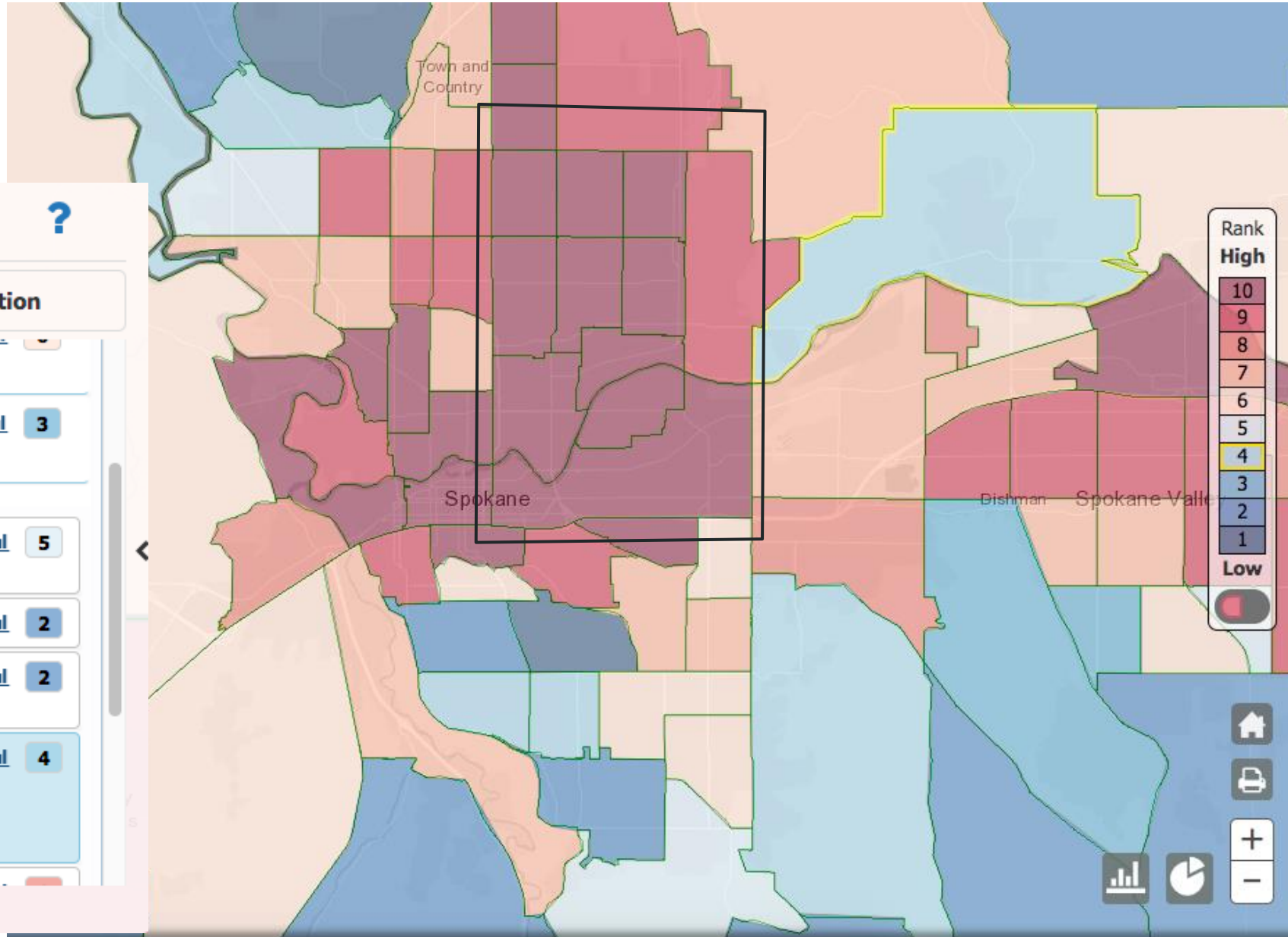
Council District	Tree Canopy Cover	Annual Ecosystem Benefits	Additional Lifetime Stored Carbon Value
<b>1</b>	<b>13.9%</b>	<b>\$1,096,950</b>	<b>\$8,400,000</b>
Bemiss	14.9%	\$89,344	\$7,000,000
Chief Garry Park	12.1%	\$154,804	\$1,300,000
East Central	16.1%	\$237,490	\$1,200,000
Hillyard	13.1%	\$147,897	\$1,300,000
Logan	13.9%	\$104,247	\$5,000,000
Minnehaha	18.4%	\$64,770	\$5,000,000
Nevada Heights	13.7%	\$113,010	\$1,000,000
Shiloh Hills	11.2%	\$147,762	\$1,300,000
Whitman	17.5%	\$37,626	\$3,000,000

Browne's Addition	32.9%	\$38,037	\$339,659
Cliff-Cannon	32.2%	\$150,442	\$765,035
Comstock	27.7%	\$188,719	\$959,696
Grandview / Thorpe	43.9%	\$330,971	\$2,955,475
Latah / Hangman	35.7%	\$837,879	\$7,482,019
Lincoln Heights	29.1%	\$366,627	\$3,273,880
Manito / Cannon Hill	38.5%	\$164,385	\$1,467,918
Peaceful Valley	29.9%	\$30,106	\$268,850
Riverside	7.8%	\$32,325	\$288,653
Rockwood	38.1%	\$190,115	\$1,697,682
Southgate	24.4%	\$227,425	\$2,030,840
West Hills	13.2%	\$650,781	\$5,811,305
<b>3</b>	<b>20.8%</b>	<b>\$1,463,666</b>	<b>\$8,570,899</b>
Audubon / Downriver	23.0%	\$217,060	\$1,103,815
Balboa / South Indian Trail	16.9%	\$121,596	\$618,355
Emerson / Garfield	18.7%	\$127,882	\$649,740
Five Mile Prairie	18.6%	\$109,400	\$556,336
North Hill	18.8%	\$150,346	\$764,553
North Indian Trail	22.4%	\$293,484	\$2,620,740
Northwest	22.6%	\$311,640	\$1,584,789
West Central	22.7%	\$132,258	\$672,565
<b>Total</b>	<b>20.7%</b>	<b>\$5,768,428</b>	<b>\$44,399,583</b>

\*Shading Indicates Degree of Canopy Cover

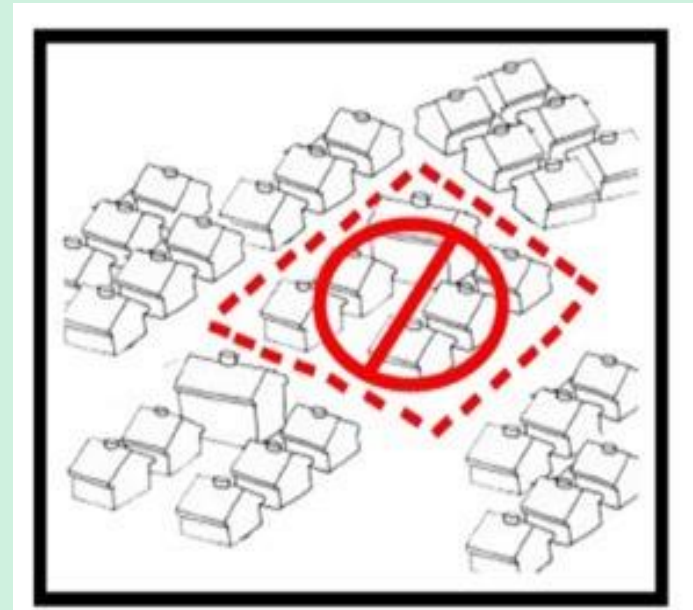
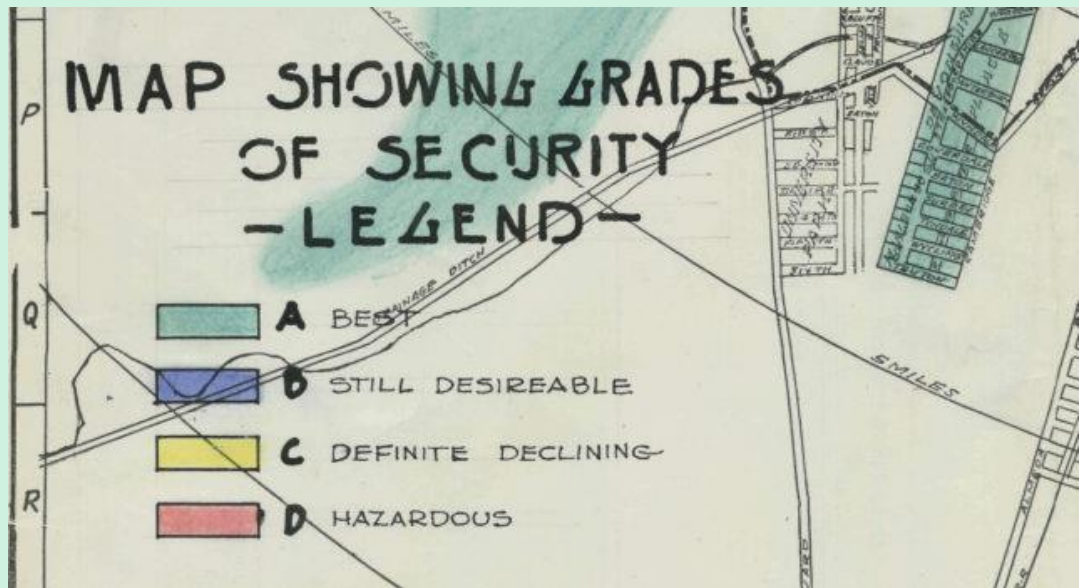


# Population living in **poverty**



# Quick history: What is **redlining**?

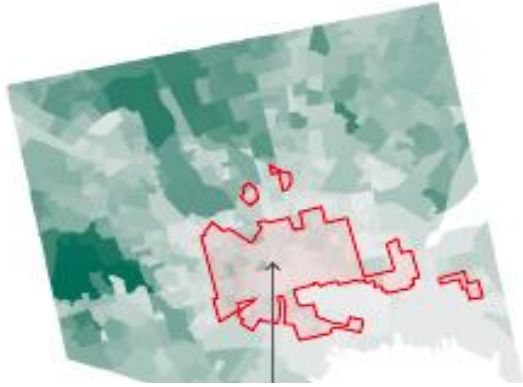
Systemic denial of services and resources to certain communities and neighborhoods either by direct removal, denial of resources or sudden increase of prices.



### Baltimore

Share of tree canopy

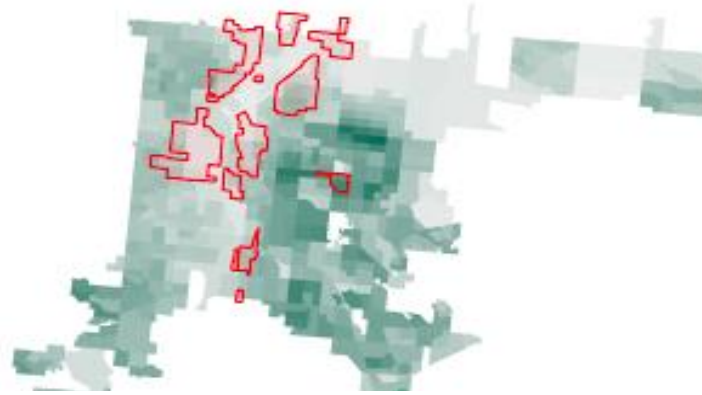
1% 83



### Denver

Share of tree canopy

1% 37



### Portland, Ore.

Share of tree canopy

2% 81

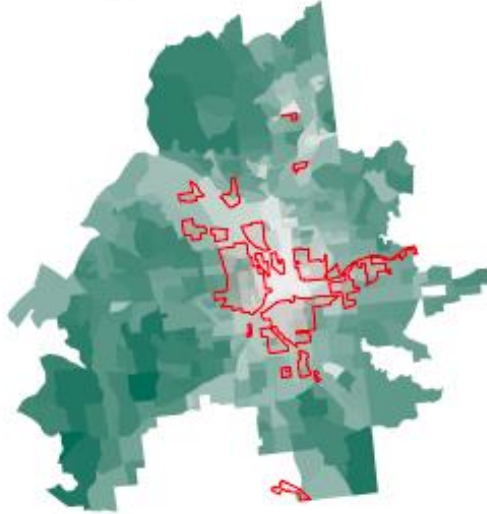


3 miles

### Atlanta

Share of tree canopy

7% 81



3 miles

### Charlotte, N.C.

Share of tree canopy

4% 80



3 miles

### Buffalo

Share of tree canopy

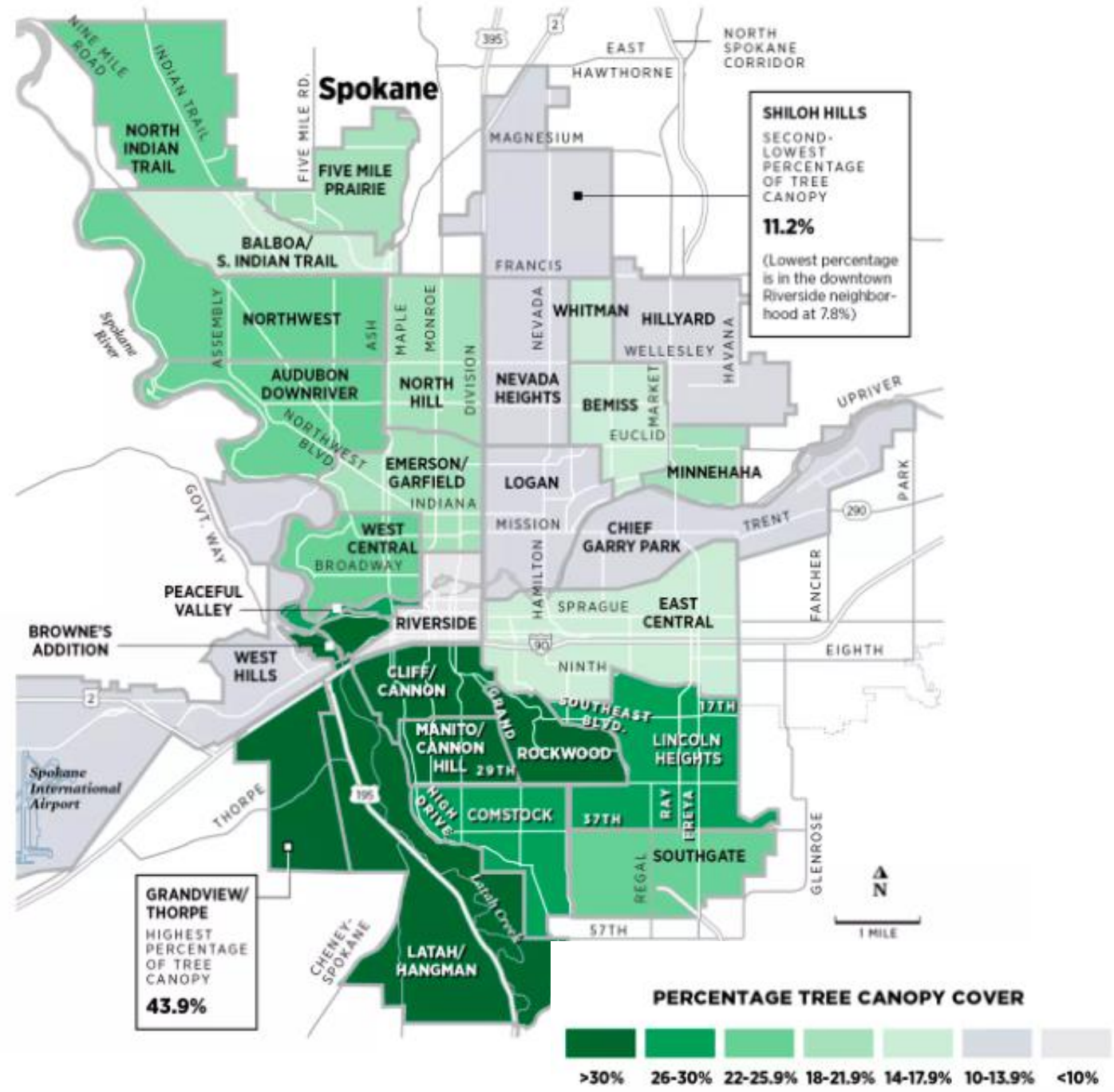
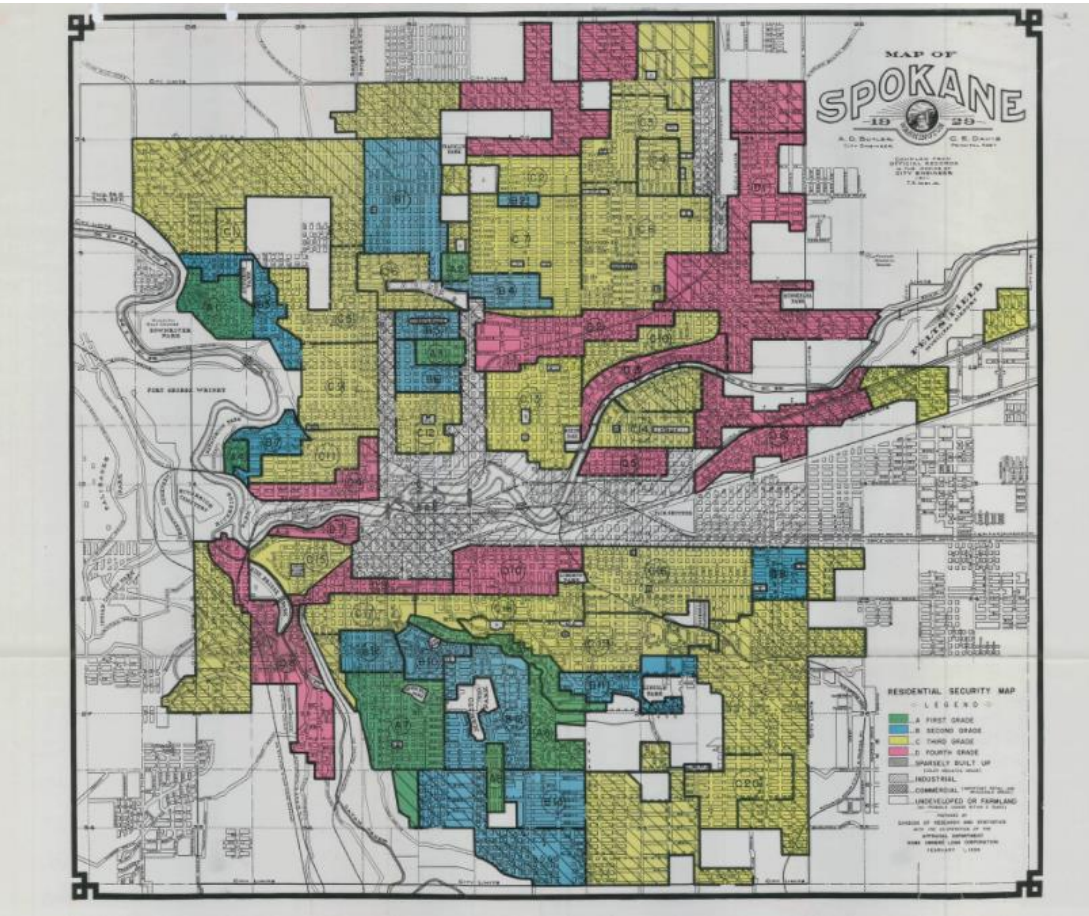
4% 54

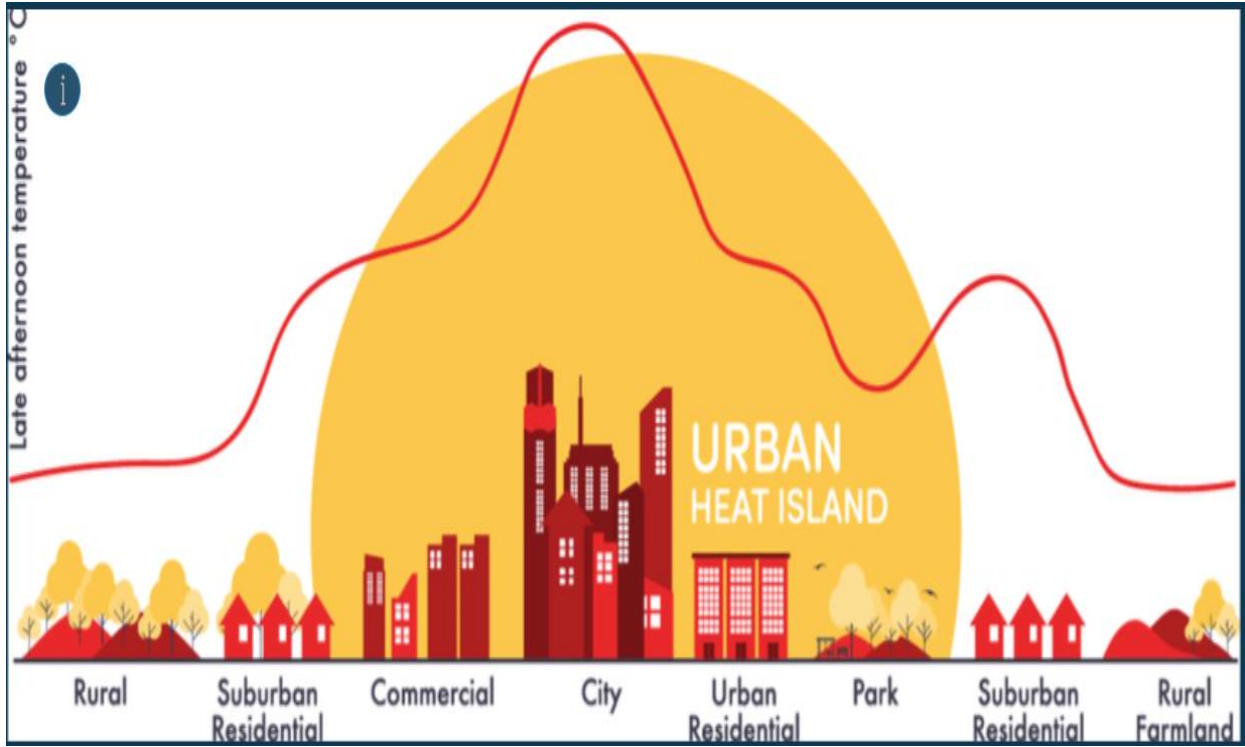
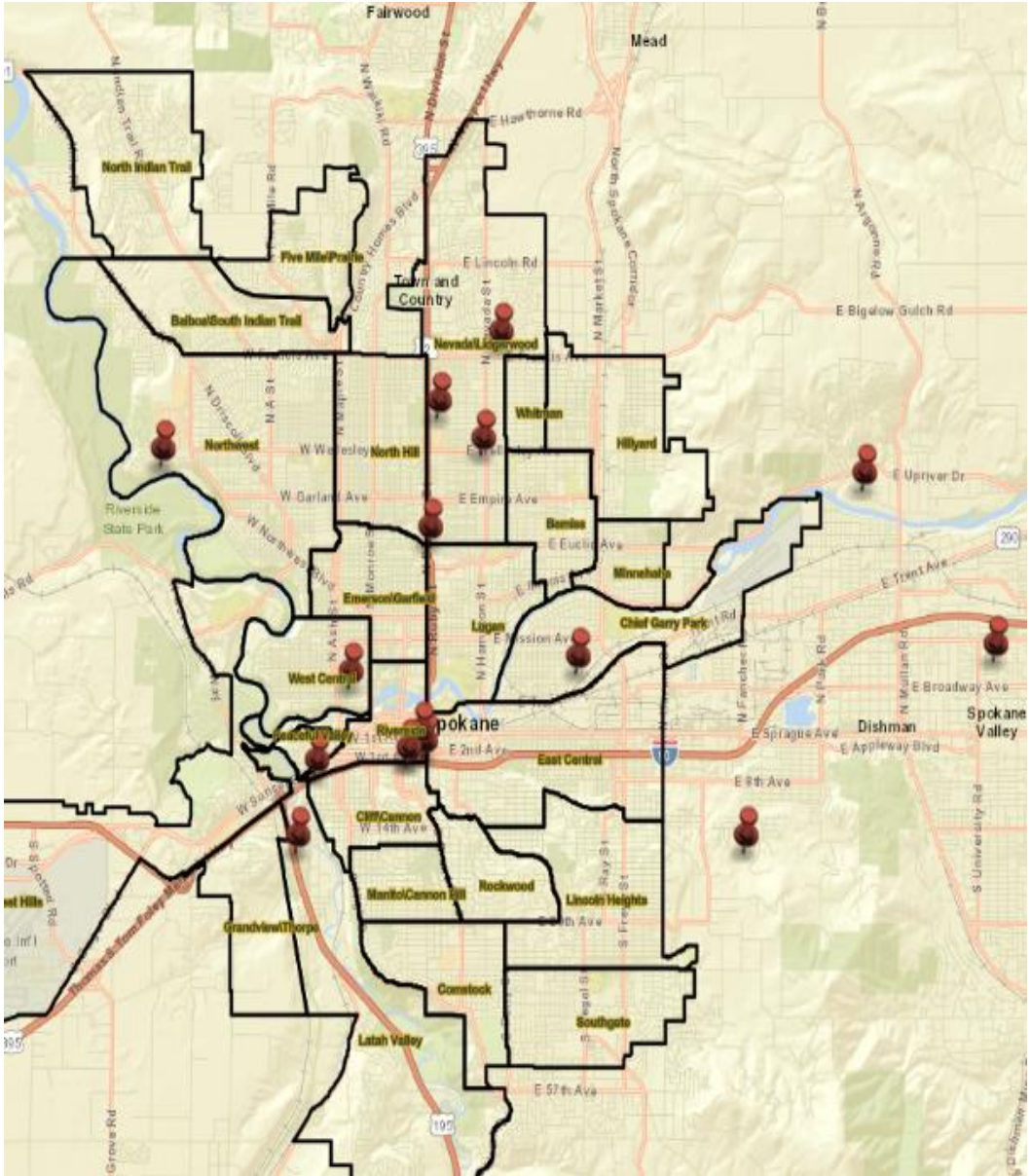


3 miles

Sources: American Forests (share of tree canopy), Mapping Inequality (redlining boundaries).







Red pins on the map depict 15 of Spokane County’s 19 confirmed heat-related deaths during the 2021 Heat Dome, others occurred within the county, but outside of the image extent or lacked a location in the release from the Medical Examiner.



SpoCanopy's goal is to equitably increase urban canopy by planting street trees in low canopy, low-income neighborhoods

---



# SpoCanopy Process and Phases



1- Start by mapping, prioritizing and planning with an equity lens



2- Canvass neighborhoods, knock on doors and leave information and alert residents on their opportunity for a free tree.



3- Organize resident interest, help residents choose the right tree for the right place.



4- Trees are planted at a community event by volunteers, the City of Spokane and TLC. Volunteers dig, plant and water the trees.



5- The trees are the responsibility of the resident, but throughout the summer Tree Stewards visit the trees to monitor their health and watering.





## **Phase1**

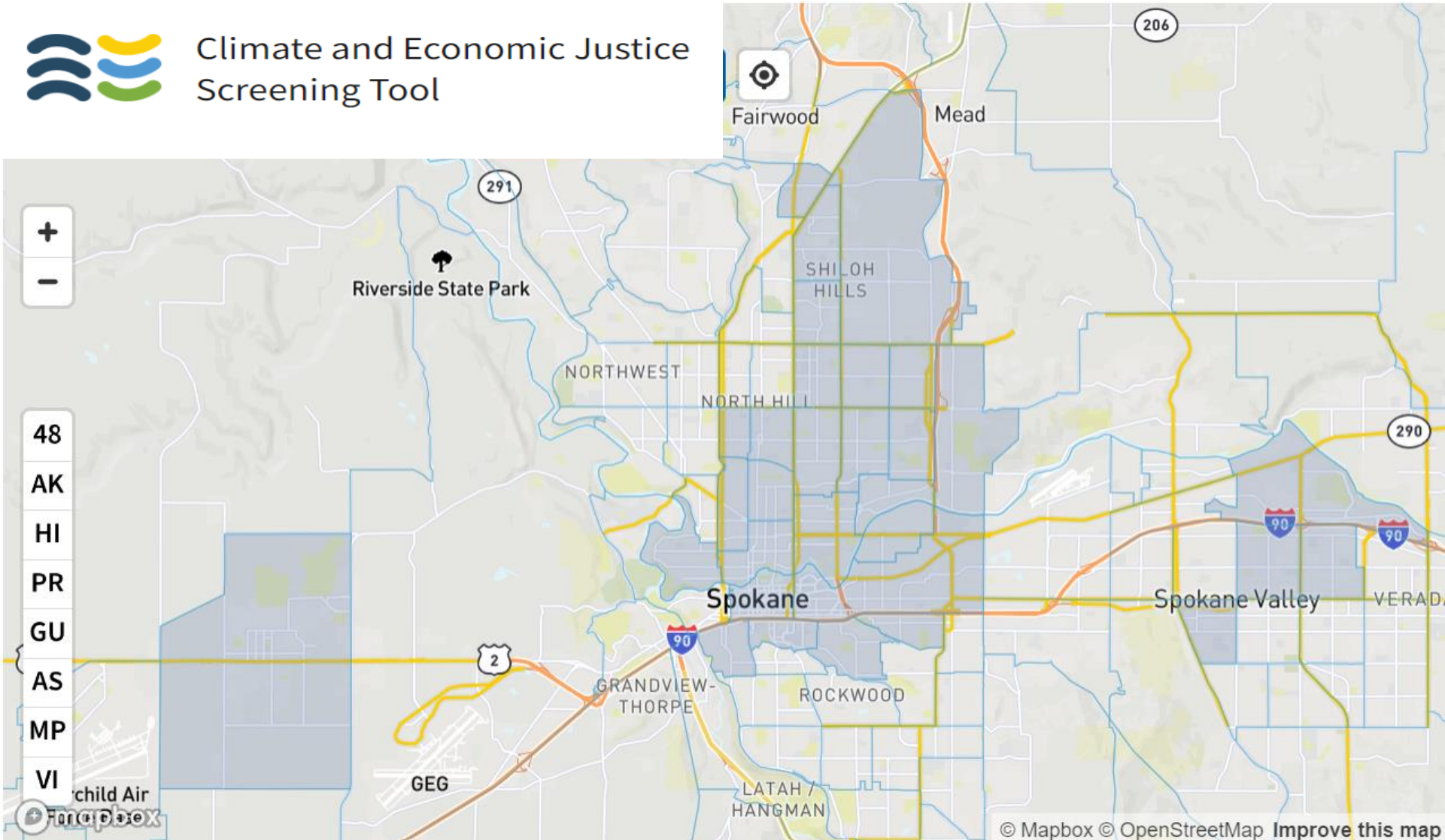
# Mapping, planning and prioritizing :

- Focus is the intersection of environmental justice and increasing environmental ecosystem benefits, and using natural solutions to mitigate the effects of climate change.
- Look at combination of canopy cover, income, diversity, environmental disparities
- Use GIS to map where street trees could potentially be planted (class I and II )
  - From there prioritize which blocks and streets we will offer the free trees to. Criteria include proximity to schools, greenways or pedestrian corridors, proximity to main arterials to reduce sound and increase air quality.

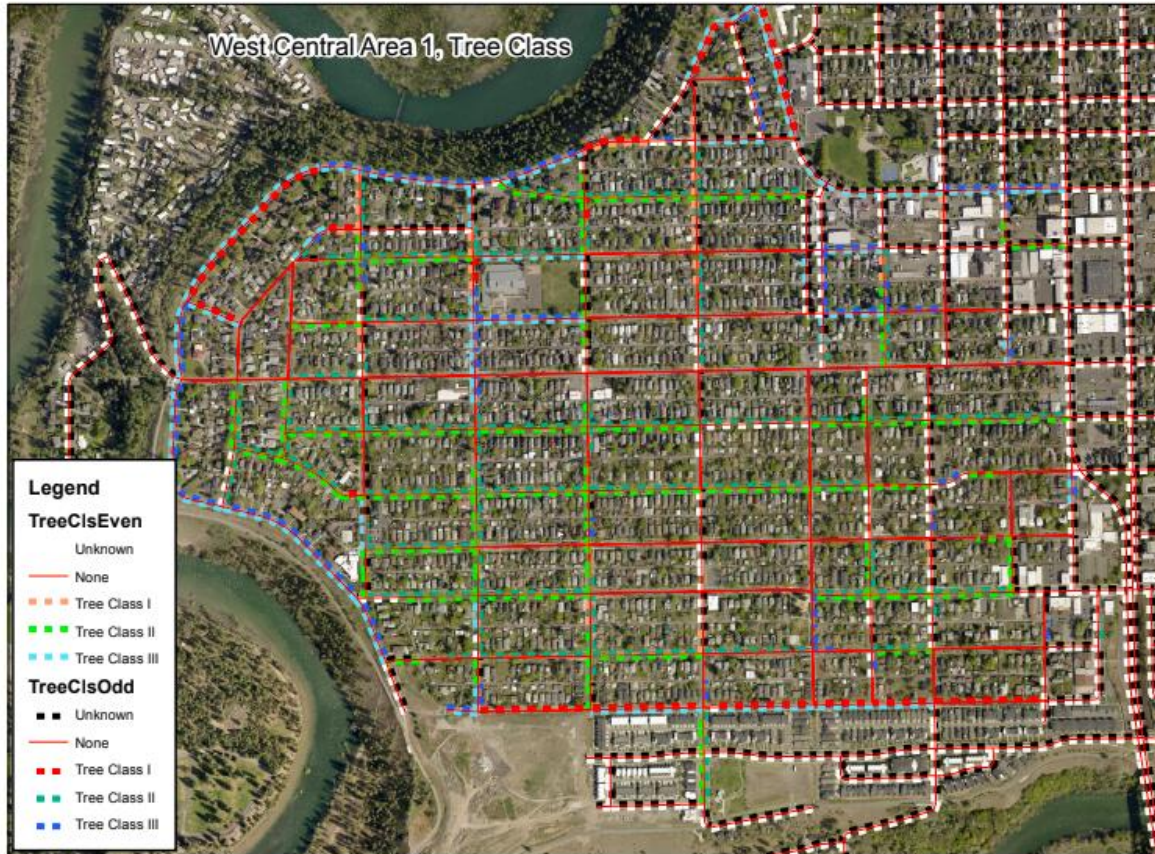
# Eligibility Criteria



Climate and Economic Justice  
Screening Tool



# Canopy Density block-by-block

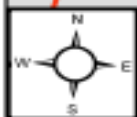


Block#	FullName	TreeCl	TreeCl	TreeCt	TreeCt	TreeRatOd	TreeRatEv	Ave Rat
1400	N Chestnut St			0	0	0	0	0
2100	W Maxwell Ave			0	0	0	0	0
900	N Elm St			0	0	0	0	0
2700	W Bridge Ave	3	3	0	0	0	0	0
1700	N Holliston Rd			0	0	0	0	0
1600	N West Point Rd			0	0	0	0	0
1500	N Belt St			0	0	0	0	0
2700	W Sherwood Ave			0	0	0	0	0
1700	W Sinto Ave		2	0	0	0	0	0
1400	N Oak St		2	0	0	0	0	0
1300	N Oak St			0	0	0	0	0
1800	W Sinto Ave			0	0	0	0	0
1400	N Elm St			0	0	0	0	0
1300	N Elm St			0	0	0	0	0
1900	W Sinto Ave			0	0	0	0	0
1400	N Cannon St			0	0	0	0	0
1400	N Belt St			0	0	0	0	0
2000	W Sinto Ave			0	0	0	0	0
1400	N Chestnut St			0	0	0	0	0
1300	N Cochran St			0	0	0	0	0
1300	N Nettleton St	2	0	0	0	0	0	0
1300	N Chestnut St			0	0	0	0	0
2000	W Sharp Ave			0	0	0	0	0
1300	N Oak St			0	0	0	0	0
1200	N Oak St			0	0	0	0	0
1700	W Sharp Ave			0	0	0	0	0
1200	N Elm St			0	0	0	0	0

# Master Tree Planting Plan Street Tree Planting Priorities

## West Central Neighborhood

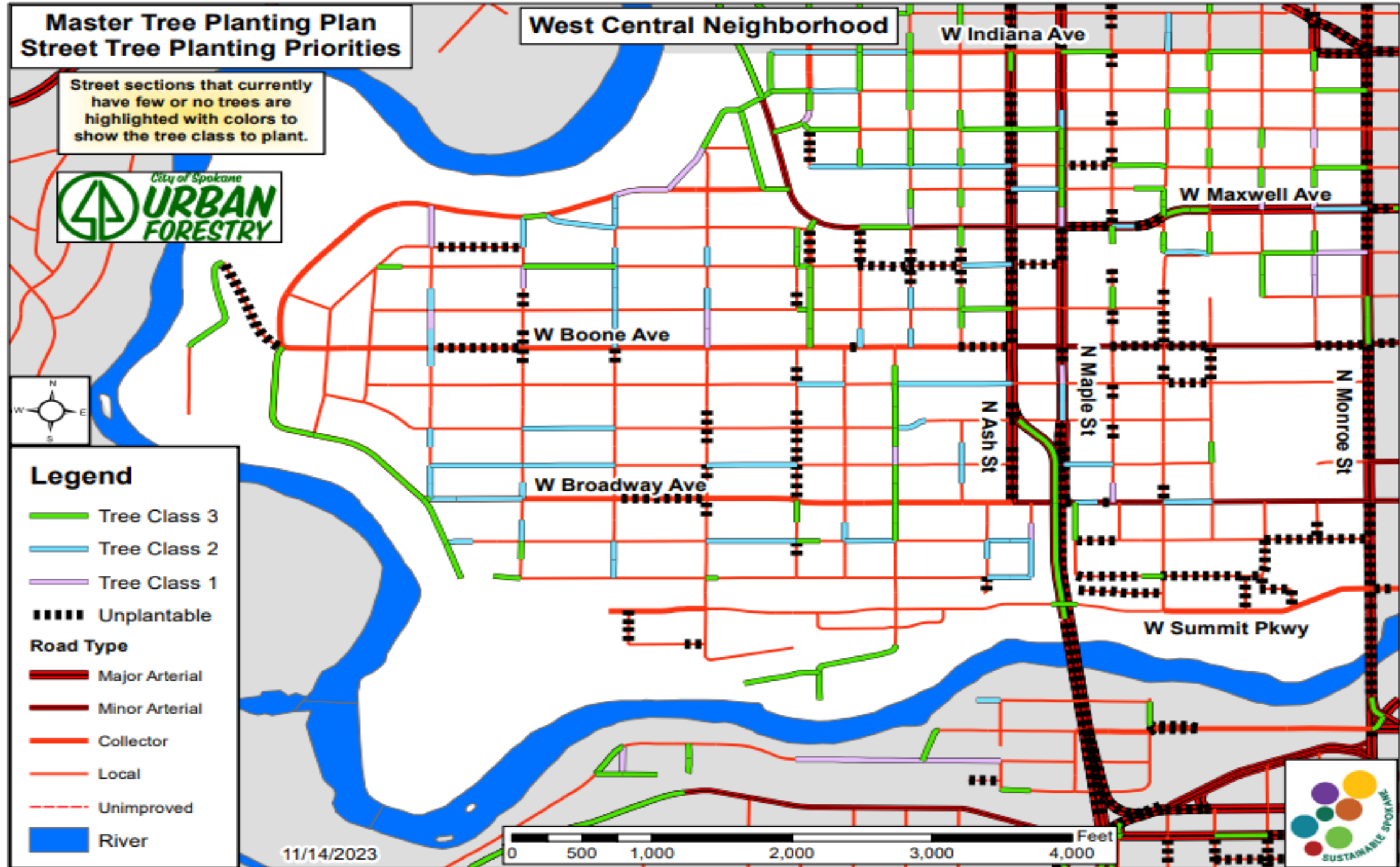
Street sections that currently have few or no trees are highlighted with colors to show the tree class to plant.



### Legend

- Tree Class 3
- Tree Class 2
- Tree Class 1
- Unplantable
- Road Type
  - Major Arterial
  - Minor Arterial
  - Collector
  - Local
  - Unimproved
  - River

11/14/2023



# Street Trees - Class II



## Phase 2



# Neighborhood Outreach

SpoCanopy is community-lead, for the community by the community. Through outreach and education SpoCanopy aims to not only plant trees and increase our canopy, but to increase awareness, investment and stewardship over their trees and canopy. SpoCanopy empowers residents to improve the environmental quality of their neighborhood, increase the value of their homes, and build a sense of place by taking action and planting trees.

Hit the pavement! Volunteers canvass streets, talk to residents, and leave information on how to sign up for a free tree.

- They will organize and do initial outreach
- Leave flyers and info at doors and on community boards
- Setting up meetings with neighborhood stakeholders
- Table at community events to distribute information on value of street trees and promote planting.

Once residents have agreed to a tree, we will leave a promotional yard sign in their yard!



James, TLC's outreach intern, canvassing neighborhoods 2020





# Neighborhood Outreach





**We are  
planting  
trees in your  
neighborhood.  
Your home  
is eligible!**



Planting trees. Building community.

**Trees make our homes,  
health and environment  
better.**



**TREES INCREASE  
PROPERTY VALUE**  
and save money  
on energy costs.



**TREES HELP KEEP  
PEOPLE HEALTHY,**  
boosting immune  
systems and lowering  
stress.



**TREES PROTECT  
OUR WATER AND  
AIR QUALITY** by  
filtering out  
pollution.



**TREES CAN UPTAKE 100  
GALLONS OF WATER  
PER DAY,** keeping  
pollutants from the  
Spokane River.



**It's all free!** We'll work with you to choose a tree that works for your site - we will make sure to stay clear of utility lines or other potential conflicts. We'll provide instructions for your tree's care — and we'll check up on it to make sure it's healthy and thriving.

**Interested?**

If you would like SpoCanopy to plant a tree in front of your home, contact us at [www.landscouncil.org/urban-canopy](http://www.landscouncil.org/urban-canopy) or call (509) 838-4912.



Planting trees.  
Building community.

*SpoCanopy is a program of City of Spokane Urban Forestry, in collaboration with The Lands Council. We want to ensure every person in every neighborhood in Spokane has access to trees and green space. That's why we work with residents and volunteers to plant trees and beautify our city. Our goal is for every neighborhood in Spokane to have 40% canopy cover by 2030.*

*This material is funded through a Public Participation Grant from the Washington State Department of Ecology. The content was reviewed for grant consistency but is not necessarily endorsed by the agency.*







**Phase 3**

## Tree Planting Events



- Volunteers plant the trees during a neighborhood tree planting event.
- With the help of The Lands Council's staff and City Arborists, volunteers are given the tools to dig large 3-foot deep holes, then plant the trees, water them and mulch them.
- These events are a fun, hands-on way for our community to make a difference!







# Maintenance and Tree Care

- Residents are required to sign an **MOA** agreeing to water and maintain their tree for its lifetime.
- TLC will establish an **Tree Steward** volunteer role. Tree Stewards will be assigned a number of trees to monitor throughout the summer. Leaving tree care reminders for residents that need to water.
- In the case that the residents do not heed the tree care reminders, Tree Stewards will ask nearby neighbors to monitor the tree and provide water. Finally they will alert TLC, who will go out to water the tree.
- Water and care in the first 3 years will help the street tree establish and will yield a healthy mature tree that provides ecosystem benefits.



# Cost to Water a Tree

Newly planted trees need about 20-30 gallons of water every week for the first few years.

Any guesses on how much it costs Spokane residents to water a tree for the first few years?

**\$1 per year**



# SpoCanopy Expo-Forest



Any guesses on how many trees we planted last spring?

**782!!!**



- 421 Ponderosa Pine (plus an undetermined amount of Rocky Mountain Juniper) seedlings
- 70 Ponderosa Pines (larger stock)
- 70 Western Larch
- 40 Austrian Pine
- 36 Autumn Brilliance Apple Serviceberry
- 35 Espresso Kentucky Coffee tree
- 35 Harvest Gold Linden
- 20 Forest Green Italian Oak
- 20 Honey Locust
- 12 English Oak
- 10 Norway Maple
- 8 Douglas Fir
- 3 Emerald Sunshine Elms
- 2 Eastern Redbuds



# Questions on SpoCanopy & Cool Canopy?



# City of Spokane IRA Grant Updates

- Spring 2024, The City of Spokane was awarded \$6,000,000 for Urban Forestry
- Tree Removals
  - 433 removals identified
  - Removal notices are mailed or hand delivered 30 days in advance
  - Priority on High Risk Trees in low-income neighborhoods.
- Tree Maintenance
  - Focus on major risk trees over houses, roads, or sidewalks
  - Improving street and sidewalk clearance and large deadwood

Need resources for your neighborhood?

<https://my.spokanecity.org/urbanforestry/programs/tree-equity/TreeEquitySpokane@spokanecity.org>





# Enhancing Community Engagement through Free Trees

**“You Don’t Have to Move to Live in a Better Neighborhood”**

- City of Spokane Office of Neighborhood Services

Let’s work together to improve your neighborhoods and the environment at the same time!



# Enhancing Community Engagement Through Free Trees

- **Empower Residents to Shape their Neighborhood**
  - Determine the feel of your personal neighborhood by choosing your trees
- **Neighborhood Identity and Legacy**
  - Create a long-term vision for greenery in your neighborhood, plant trees to celebrate events or milestones or create “heritage groves”
- **Increased Public Safety**
  - Increase walkability and support traffic calming projects
- **Increase outreach for SpoCanopy and Neighborhood Councils**
  - Partner to spread awareness about neighborhood councils in your community
- **Opportunities for Community Stewardship**
  - Make an annual tree planting event for the community featuring booths and treats from local businesses
  - Let the people in your community be part of building better neighborhoods



# Contact Information

Justyce Brant, [jbrant@landscouncil.org](mailto:jbrant@landscouncil.org)

*We are here to help! Don't hesitate to reach out!*

