

Benefits of Urban Trees

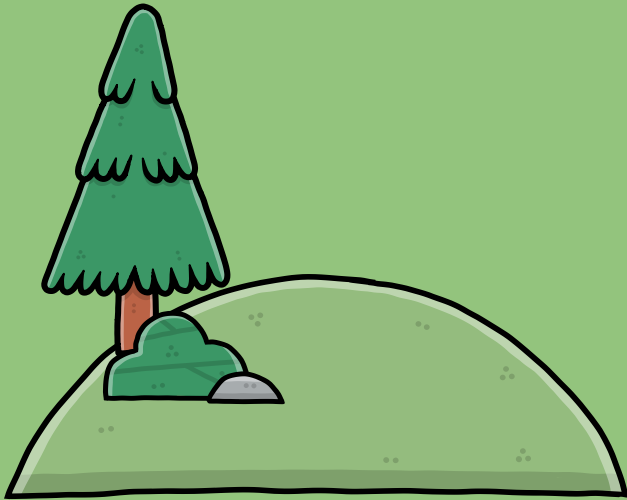


Ice Breaker!

Let's all go around and answer these following questions:

1. Why do you love trees?
2. Who are your two favorite artists right now?

What is an Urban Forest?



Urban Forest = A forest, or collection of trees, that grow in a city.

Includes:

- Parks
- Streets
- Private Property



Why are Trees So Important?

Let's take a moment and share why each of us believes trees are so important to our everyday lives. Why do we need trees?



COOLS THE AIR



**REGULATES WATER FLOW
AND IMPROVES WATER QUALITY**



**FILTERS FOR URBAN
POLLUTANTS**



**MITIGATE
CLIMATE CHANGE**



**IMPROVES PHYSICAL AND
MENTAL HEALTH**



**REDUCES AIR
CONDITIONING NEEDS**



**SAVES ENERGY USED
FOR HEATING**



**INCREASES URBAN
BIODIVERSITY**



**INCREASES PROPERTY
VALUE**

Urban Heat Island



Urban Heat Island Effect

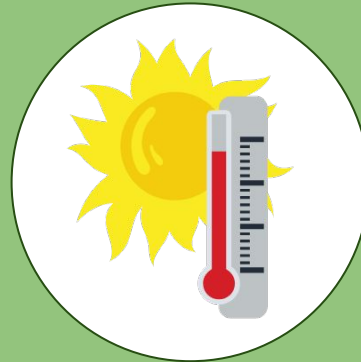
- Heat is trapped in concrete in cities → heat stays for longer
- Cities release greenhouse gases & air pollution → heat increases
- Cities, like Boston, are hotter than other places

Trees Improve Our Mental Health

- Calm us down
- Cools down environment → Encourages us to go outside
- Block noise pollution, creating more peaceful neighborhoods

Trees Improve Our Physical Health

- Cools down environment → Encourages us to go outside and exercise
- Cleaning the air → less respiratory (lung & air) diseases
- Cools down environment → less heat-related illness & death



Trees Stop Floods

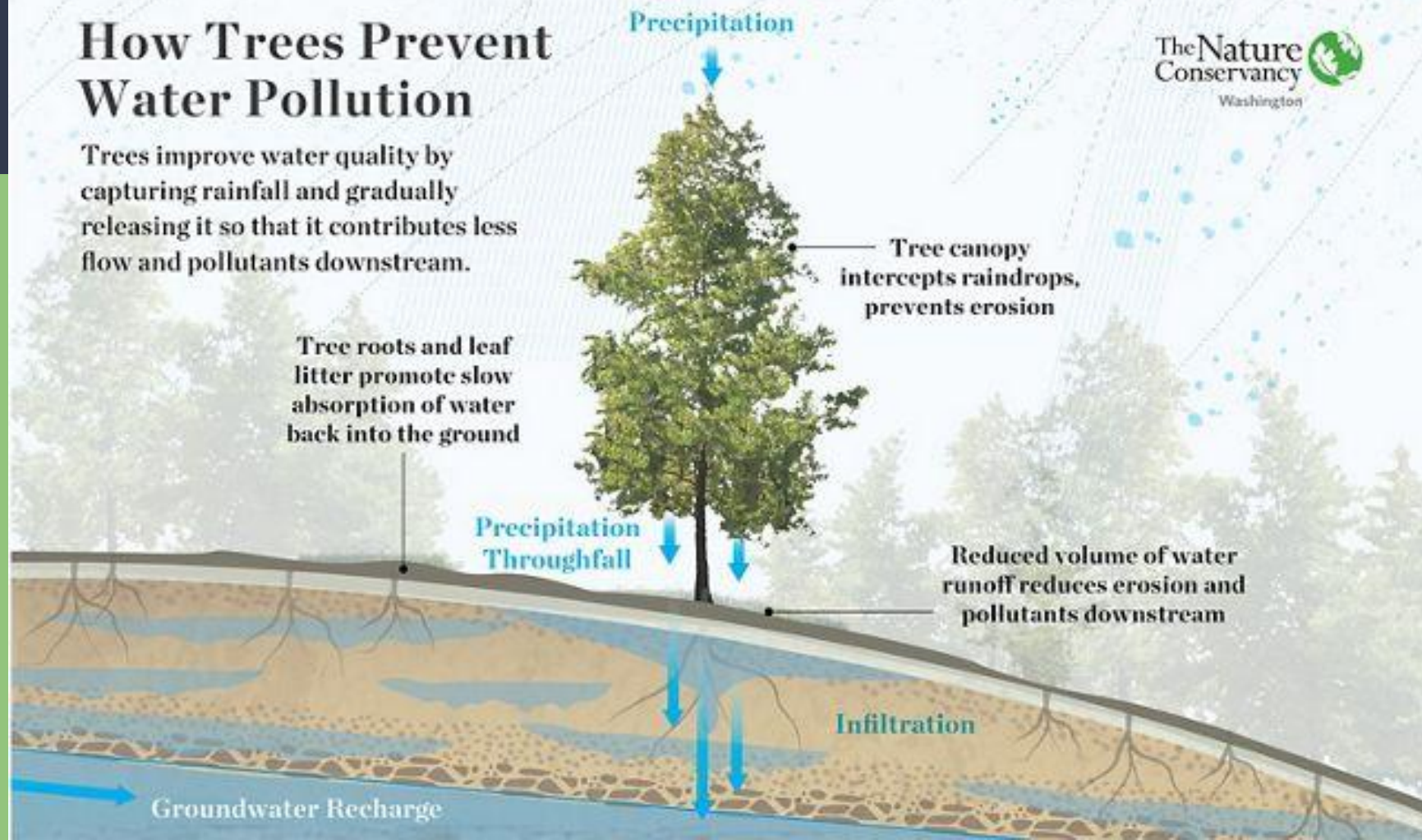
Trees' roots take in water that would cause floods.

Tree canopies intercept rainfall and slow it hitting the ground.

When it rains and your feet aren't soaked, you can thank trees!

How Trees Prevent Water Pollution

Trees improve water quality by capturing rainfall and gradually releasing it so that it contributes less flow and pollutants downstream.



Tree roots and leaf litter promote slow absorption of water back into the ground

Precipitation
Throughfall

Tree canopy intercepts raindrops, prevents erosion

Reduced volume of water runoff reduces erosion and pollutants downstream

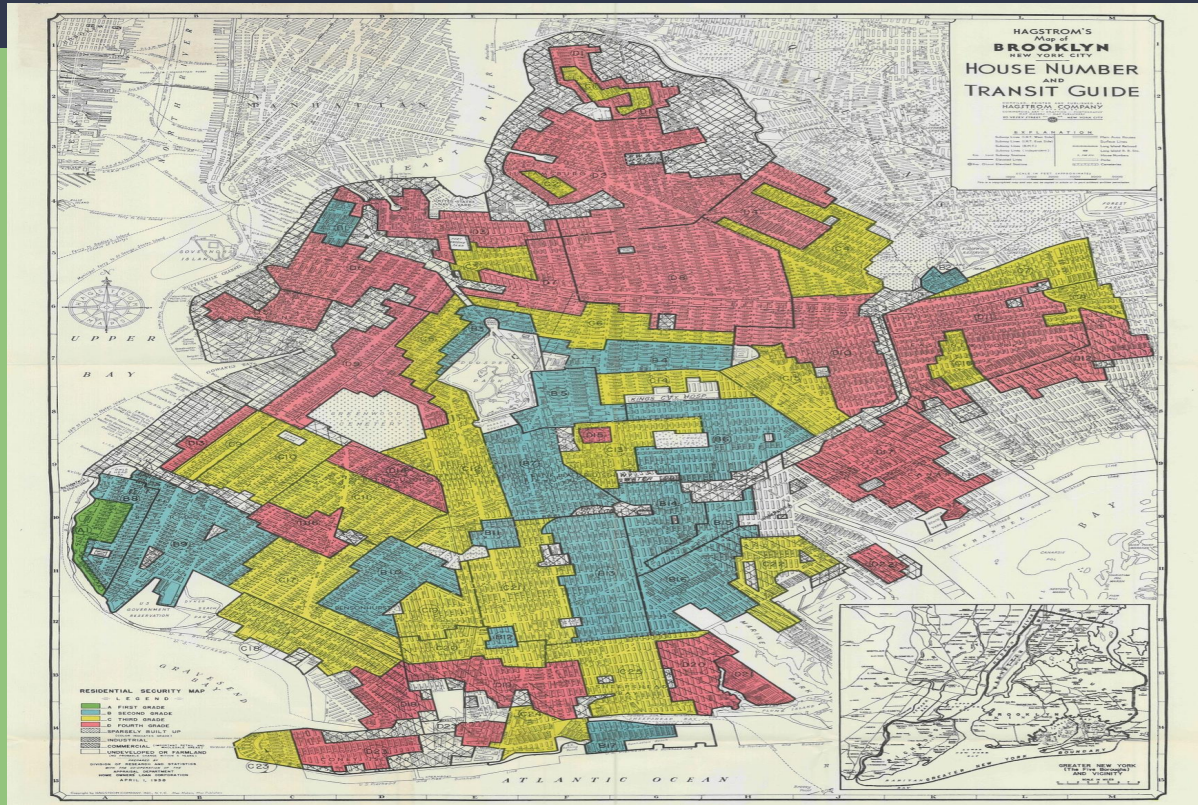
Infiltration

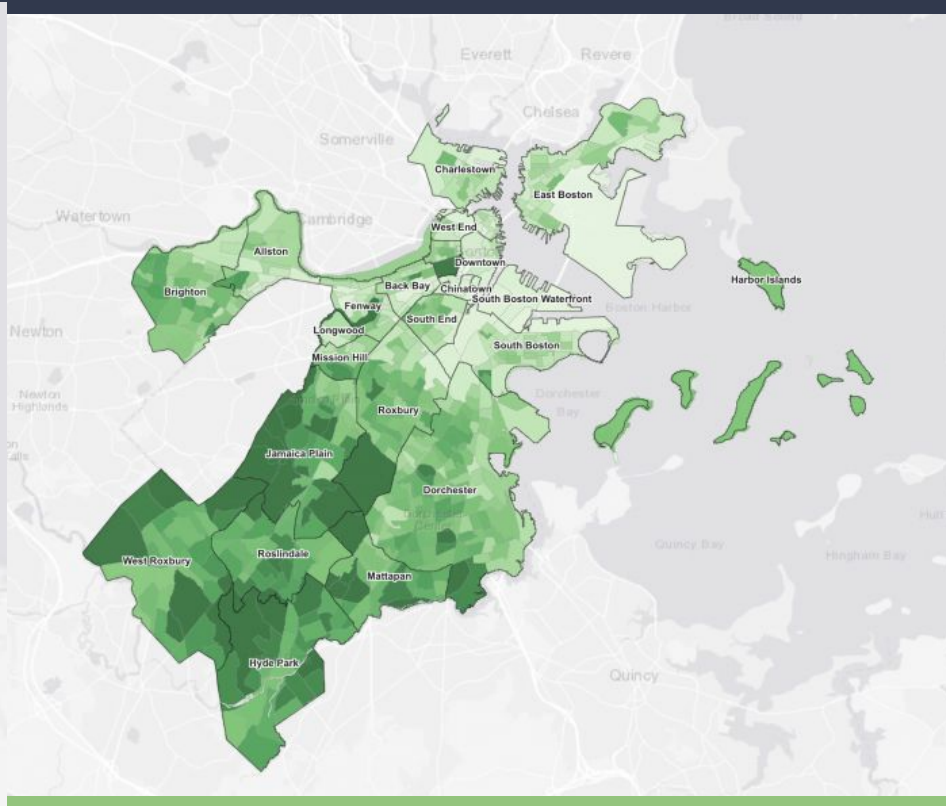
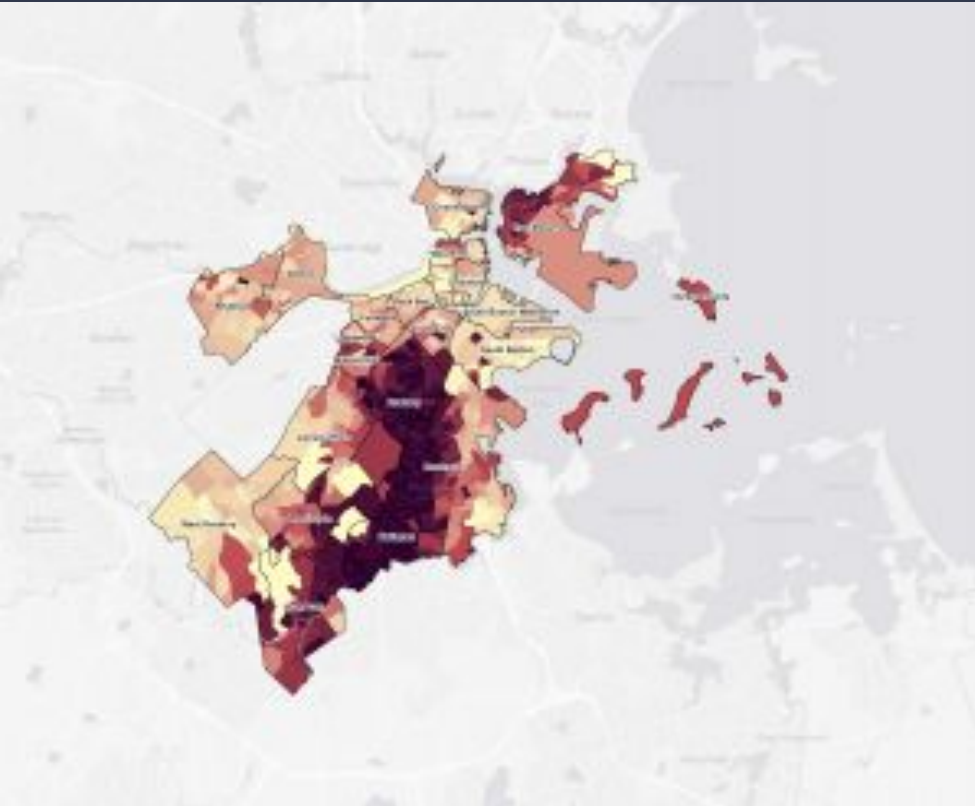
Groundwater Recharge

Environmental Justice: What is Redlining?

- Redlining = A discriminatory policy that withholds resources and funding from neighborhoods considered “hazardous” to investment. Designed to harm racial and ethnic minorities and low-income residents.
- One outcome is redlined neighborhoods have significantly fewer trees.

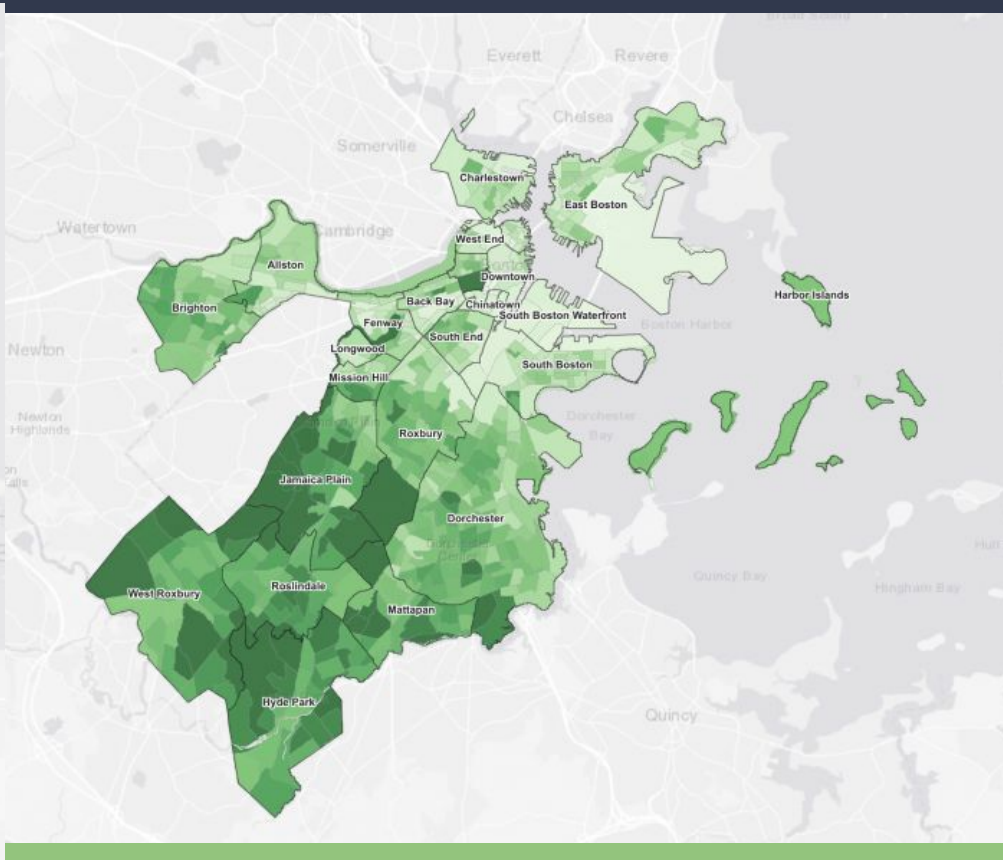
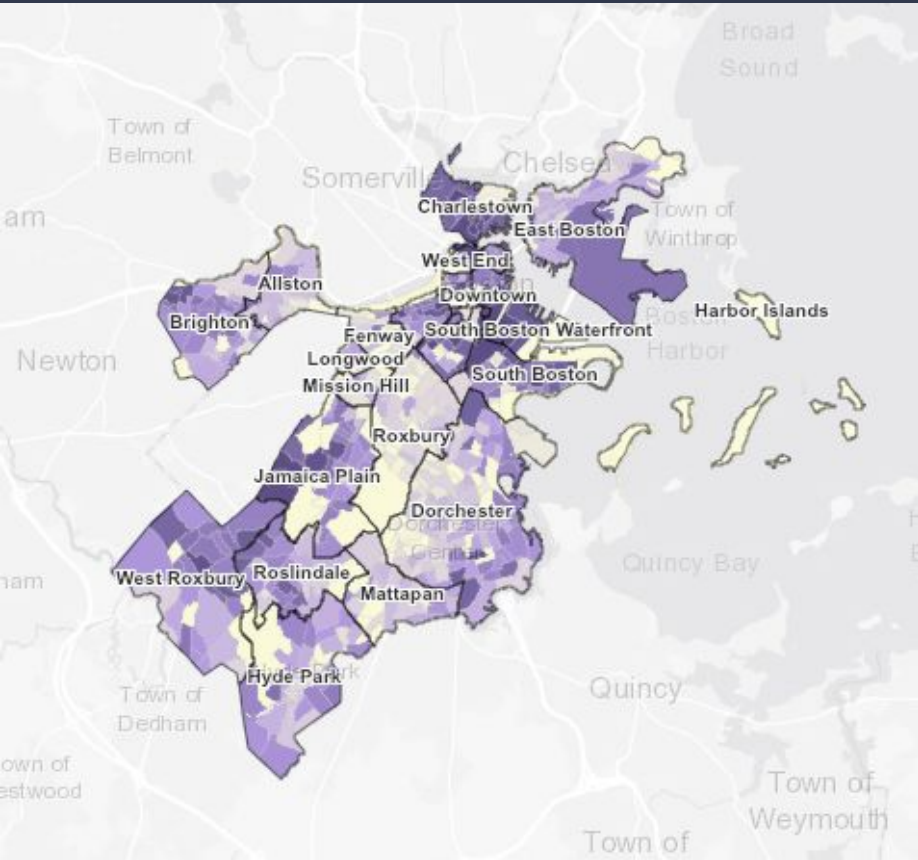
Environmental Justice: What is Redlining?





Dark Red = Higher minority population, Lighter = Lower Population

Darker green = More trees, Lighter green = Less trees



Darker Purple = Higher income, Lighter = Lower Income

Darker green = More trees, Lighter green = Less trees

Activity Time!

Draw one benefit or function of trees

Examples:

- Tree on the street reducing the heat
- Cleaning the air
- Someone picking fruit from a tree



AMERICAN FORESTS
- SINCE 1875 -

ABSORBS HEAT

THE POWER OF OUR URBAN FORESTS

HELPS
COOLING
COSTS

BOOSTS LOCAL
RETAIL SALES

CAPTURES
AIR POLLUTION

CREATES
JOBS

SHADES
THE STREET



Reflections & Discussion

1. What did you draw and why?
2. What benefits do you view as most important to your community?
3. In which ways do you think Redlining has most harmed poor communities and communities of color?
4. What else did you learn today?

