Micro-IP3 Strategy

Learn more about IP3 Strategy here

Neighborhood Tree Inventory

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1. Impact Design

Impact Statement - If I count the number, type, and age of trees in my neighborhood and determine the percentage of land area covered by trees where I live, then I can take action to support and improve my city's tree canopy goals.

Community Alignment	
Group	**Goal/Action**
King County Stewardship	3 Million Trees — Five-year goal to plant, protect, and prepare a combined 3 million trees by the end of 2025. See many benefits of trees.

Procedure - *Steps for implementation!*

1. Go outside to walk around and analyze the health of trees in my neighborhood. Decide the boundaries for my neighborhood assessment so I know the land area.
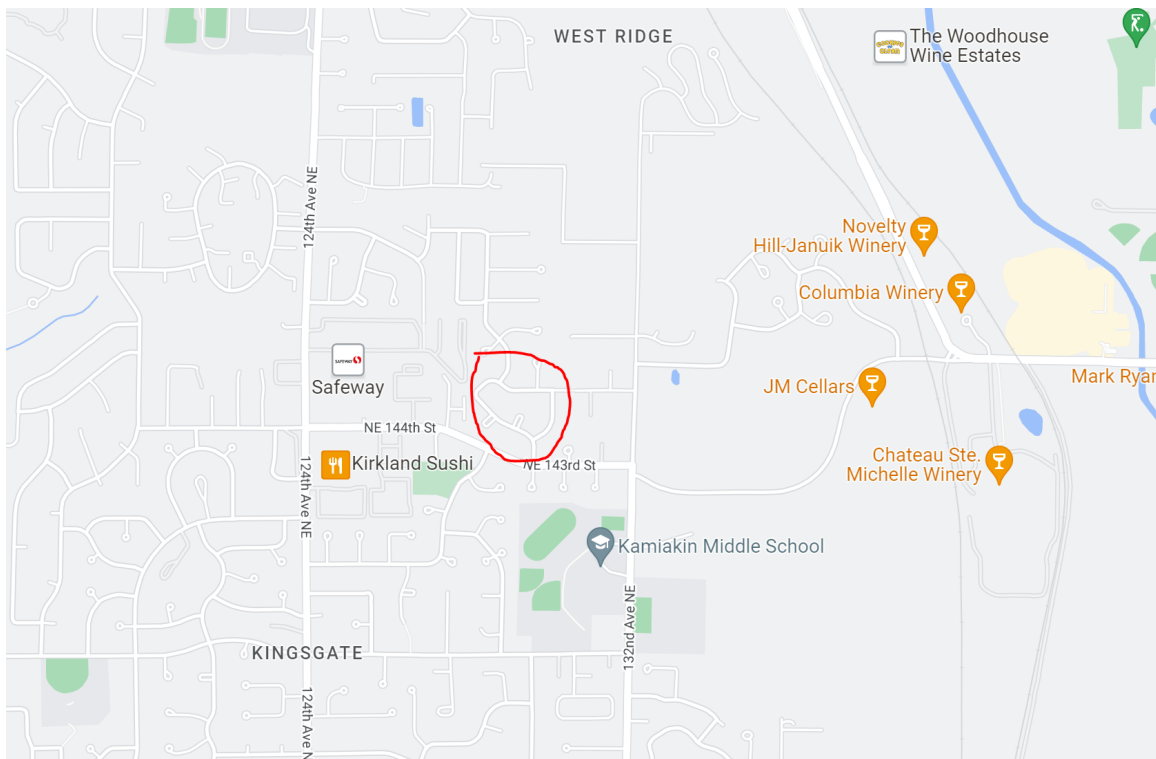
This is an image of my neighborhood where I conducted my observations and research for the trees and data relating to these trees.

2. Collect data on the type, age, and location of trees! My findings can be recorded onto a spreadsheet, written in a journal, or however I see fit!
   The trees in my neighborhood consist mainly of douglas fir, sitka spruces, black cottonwood, and some vine maple trees. The ages ranged between the mid teens to the mid forties, on average (there where many trees that had very many whorls, making it difficult to count and determine the age of some of the trees in my neighborhood) With these struggles of counting the whorls correctly, I found that many ranged between 15-40+ years. I determined the age of these trees through counting the branch whorls, as most of these trees were located on private property and I was unable to physically go up to and measure these trees. I determined that the trees were, overall, pretty healthy, this was based on the way the barked looked and from comparison with pictures on the internet of healthy trees of specific species to the ones in my neighborhood.

3. Determine the health of the trees in my neighborhood by analyzing my data. Do the quality of trees depend on their type? Are older trees more likely to offset CO2 emissions? How might tree health be affected by its roots lifting sidewalks? Find answers by reading reliable articles and write down my analysis below my data.
   I used many databases to find ways to determine the age of trees and found that the most efficient method was the branch whorl method, which is counting the whorls in a tree and converting each whorl into one year. I had to use this method because for many of the trees I was unable to physically measure their growth, because of their location.

4. Finalize my impact data by averaging the data for each category (type, age, location.)
   I have determined that the trees in my neighborhood, mainly from basic observation, are on average, fairly healthy. The amount of watering and overall gardening that takes place in my neighborhood allows me to know that these trees are watered fairly often, and the bark looks similar to that of healthy trees of the same species, which I found online in my research. Because my neighborhood is on an elevated hill, we get a lot of sun, so watering is important for maintaining proper tree health.

5. Communicate my impact to stakeholders!

2. Impact Data Tracking - *Quantify your impact!*

Some questions to consider…
- How is tree health defined?
  I found this somewhat difficult to decide and figure out when conducting the research for this project, because the trees varied in species so the health and way of determining health varied for each tree.
- How does the type of tree affect offsetting CO2 emissions?
  Specific species of trees work with CO2 emissions in many different ways.
- How does age affect tree processes?
  When younger, the tree is still growing so the health levels are not necessarily the highest they could be, so as they grow they get stronger, normally.
- Where do trees look the most or least healthy?

They look most healthiest in yards that have gardens or well-kept plants, probably due to usual watering habits from these households that have trees in their yards.

3. Impact Storytelling - *Share your data with who needs to know!* **See more** [tips](#)

Think on 4 scales of stakeholders… Family, School, Community, and Aligned Groups

Stakeholder	Interests	Approach
Family — Parents	Protecting trees	**Conservation:** Start a conversation about what else we can do for trees on our property
Community — Peers & Staff (Sustainability Ambassadors)	Community Involvement, Youth Development	**Vlog:** Film and edit a short vlog of my neighborhood adventure to share with peers and community members. I'll hold conversations with neighbors, peers, colleagues, and more, about widespread community tree planting for students and the Kirkland community.
Community — Neighborhood Council	Healthy neighborhood	**Graphs:** Create a bar graph that uses rectangular bars to represent different values to show comparisons among categories, such as the average CO_2 offsetted by the trees in my neighborhood using their average ages, type, and location. Share it with my neighborhood council or city to set up a future tree planting initiative!
Aligned Groups — **Green River Coalition**	A non-profit organization that collaborates with community, municipalities, nonprofits, educational institutions and other agencies to protect and enhance the Green River and our watershed.	**Email for Connections:** Ask to be connected with other organizations and their tree planting events. I may be sent opportunities to participate in upcoming reforestation events.

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