Sustainability Ambassadors | Green Duwamish Watershed PBL Program

**Sustainable Community Conditions**

Neighborhood Inventory Checklist

**FULL VERSION** *including all 8 Categories*

**STEP ONE:** Take an informal walk around your neighborhood to identify the streets or natural features that will set the boundaries for your inventory. Use one of the following scales:

1. My street (name)
2. 10 blocks (names of streets defining the area
3. Half-mile radius with my house or apartment in the middle
4. 1-mile radius (like the [one-mile maps](https://www.sustainabilityambassadors.org/maps/School-Districts) of my school neighborhood)

**Here are all seven categories. Where would you like to start?**

1. **Human Population and Land Use**
2. **Transportation Infrastructure**
3. **Food Access**
4. **Size and Condition of Green Spaces**
5. **Water Bodies, Description by Type and Conditions**
6. **Stormwater Infrastructure and Water Pollution**
7. **Tree Canopy Inventory**
8. **Solar Potential**

**STEP TWO:**  Print out the inventory category you are going to focus on or use your phone or tablet to make a detailed inventory of your neighborhood. You might also want to print out a screen shot from [www.mywater.world](http://www.mywater.world) to help you see from above what you are experiencing on the ground as you walk about. Take photo documentation of what you observe to use later in building your slide presentations.

Human Population and Land Use

1. Describe the basic topographic conditions (slopes, flat areas)
2. Number of single family homes
3. Number of multi-family homes (estimate the number of units in each building)
4. Relative age of homes and apartments
   1. Very old neighborhood homes (more than 50 years old)
   2. Mid-life homes and apartments (built 20-50 years ago)
   3. Recently built homes and apartments (built within the last 10 years)
   4. Newly constructed (within the last year)
5. Perception of housing affordability in this neighborhood
6. Number of homes certified as [Built Green](https://www.builtgreen.net/BuiltGreenMap__c.aspx)
7. Number and type of buildings with solar panels installed
   1. Single family homes with solar
   2. Multi-family homes with solar
   3. Commercial buildings with solar
   4. Public buildings with solar
   5. Total count of solar panels and estimated kWh of energy generated
8. Types of commercial uses within or overlapping the boundaries of my neighborhood
   1. Office
   2. Retail
   3. Services
   4. Warehouse
   5. Manufacturing
9. Estimated human population in my inventory area
   1. Number of people who live in the neighborhood
   2. Number of people who commute from somewhere else to work here
10. Based on my informal experience of living in this neighborhood, what is the estimated racial diversity
    1. % Black
    2. % Asian, Pacfic Island
    3. % Latinx
    4. % Native American
    5. % White
11. ***Document additional questions, research topics, or insights for this section.***

Transportation Infrastructure

1. Types of roads
   1. Residential
   2. Cul De Sac
   3. Local arterial
   4. Major arterial
   5. Highway
2. Bus stops and frequency of busses
3. Bike routes
   1. Size, continuity, and condition of sidewalks
   2. Painted bike lanes on streets
   3. Dedicated bike pathways separated from roads
   4. Safe intersection crossings (crosswalks, traffic signals)
4. Train or light rail
5. Overhead jet traffic and related noise pollution
6. Document additional questions, research topics, or insights for this section.

Food Access

1. Distance (miles) to a large grocery store with fresh, organic produce
2. Distance (miles) to farmer’s market or farm stand
3. Number of (and distance to) fast food restaurants
4. Number of (and distance to) culturally appropriate restaurants
5. Number of (and distance to) small convenience stores
6. Number of (and distance to) bars
7. ***Document additional questions, research topics, or insights for this section.***

Size and Condition of Green Spaces

1. City park
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
2. School playfield
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
3. Urban farm
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
4. Community garden
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
5. Open green space
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
6. Thickly forested area
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
7. Vacant space (deforested)
   1. Well maintained (litter cleaned up, invasive plants and weeds removed, native plants healthy)
   2. Moderately maintained (some litter, invasive plants and weeds, native plants healthy)
   3. Poorly maintained (litter, overgrown with invasive plants and weeds, native plants unhealthy)
8. ***Document additional questions, research topics, or insights for this section.***

Water Bodies, Description by Type and Conditions

1. Location and description of streams
2. Location and description of ponds
3. Location and description of lakes
4. Location and description of rivers
5. Location and description of wetlands
6. ***Document additional questions, research topics, or insights for this section.***

Stormwater Infrastructure and Water Pollution

1. Number and location of storm drains
2. Types and quantity of litter around storm drains
   1. Cigarette butts
   2. Plastic wrapper
   3. Plastic bags
   4. Face masks
   5. Plastic cups
   6. Plastic bottles
   7. Plastic objects such as toys, tools, lighters, pens)
   8. Styrofoam (cups, food containers, packing material)
   9. Cardboard or paper
   10. Organic debris (leaves, grass clippings, twigs)
3. Number and location of public trash bins
4. Number, length, and condition of drain ditches
5. Number, length, and condition of bioswales
6. Number, size, and condition of rain gardens
7. Number, size, and condition of detention pounds
8. Locations of outfalls (stormwater pipes that empty into ditches, ponds, streams, rivers)
9. Evidence of pervious pavement or pavers
10. Evidence of rain harvesting systems (cisterns)
11. Evidence of [Natural Yard Care](https://kingcounty.gov/depts/dnrp/solid-waste/programs/natural-yard-care.aspx) strategies being used
12. Evidence of lawn removal in favor of Natural Yard Care and/or food gardens
13. Number of yards certified as [Natural Wildlife Habitat](https://www.nwf.org/Garden-For-Wildlife/Certify.aspx?s_src=700000000082645&s_subsrc=Search_G_Grant_CWH_Brand_Habitat%7cBackyard_Habitat&ssource=700000000082645&kw=Search_G_Grant_CWH_Brand_Habitat%7cBackyard_Habitat&gclid=CjwKCAjwqML6BRAHEiwAdquMnar8EHbQsuajJsM9TH8OIetixllX0e0Sj-k_vw1xCFGDkfaqzzbXvxoCrx8QAvD_BwE)
14. Number of pet waste dispensers in public places
15. Evidence of dog waste left by pet owners (number and location)
16. Evidence of motor oil leaks (driveways, curbside, parking lots, sludge near storm drains)
17. ***Document additional questions, research topics, or insights for this section.***

Tree Canopy Inventory

1. Tree count and location of trees (i.e. at a park) (rough estimate)
   1. Coniferous Trees
      1. Small (under 10 feet)
      2. Medium (10-30 feet)
      3. Large (taller than 30 feet)
   2. Deciduous (not bearing edible fruit)
      1. Small (under 10 feet)
      2. Medium (10-30 feet)
      3. Large (taller than 30 feet)
   3. Deciduous (bearing edible fruit)
      1. Small (under 10 feet)
      2. Medium (10-30 feet)
      3. Large (taller than 30 feet)
2. ***Document additional questions, research topics, or insights for this section.***

Solar Potential Inventory

1. Number of homes with solar panels (# / total # of homes)
2. Number of commercial building with solar panels (# / total # of comm. buildings)
3. Number of apartment buildings with solar panels (# / total # of apt. buildings)
4. Number of school buildings with solar panels (# / total # of school buildings)
5. Number of buildings of all types that have excellent solar potential (mostly flat or south-facing roof, no shade from trees)
6. How would you estimate the percentage of rooftops that could go solar?

**Challenge**

1. kWh of energy generated per year (Use [**PVWatts Calculator**](https://pvwatts.nrel.gov/pvwatts.php))
   1. Your Home:
   2. The Neighborhood:
2. Solar Radiation received (kWh / m2 / day) (Use [**PVWatts Calculator**](https://pvwatts.nrel.gov/pvwatts.php))
   1. Your Home:
   2. The Neighborhood:
3. ***Document additional questions, research topics, or insights for this section.***

**How to use the PVWatts Calculator?**

* 1. Go to the [**PVWatts Calculator**](https://pvwatts.nrel.gov/pvwatts.php) and input your address
  2. Move the pin to the top of your house and click on System Info at the top of the website
  3. Enter the correct information for each textbox (click on the ‘i’ to learn more)
  4. Click on ‘Results’ to record the data for your average solar radiation, savings, and AC Energy