i-Tree Open Academy

2025

Session 4: Seeing the Forest for the Trees

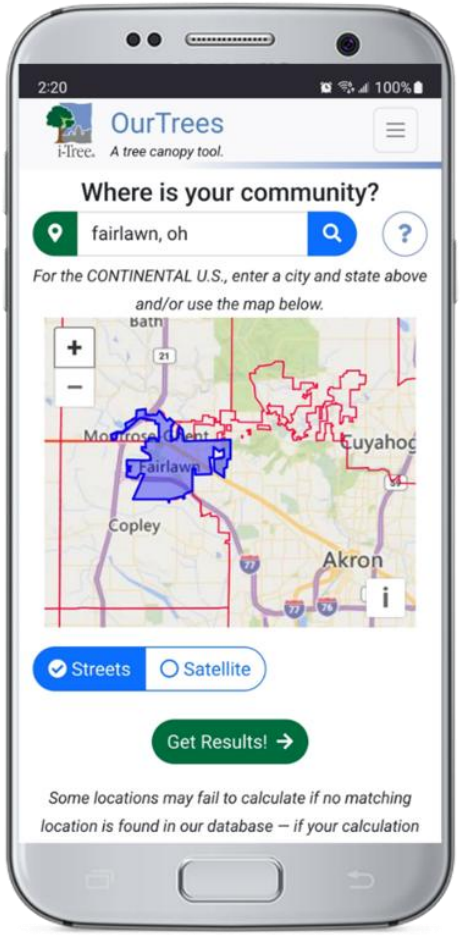
i-Tree Landscape and map-based tools for benefits assessment

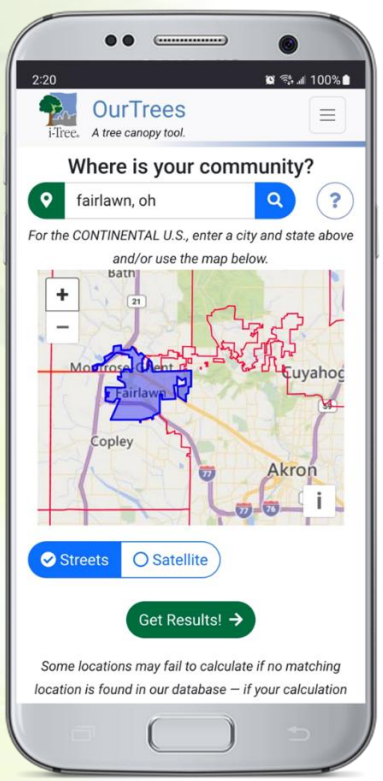
May 28, 2025
1:00pm Eastern Time

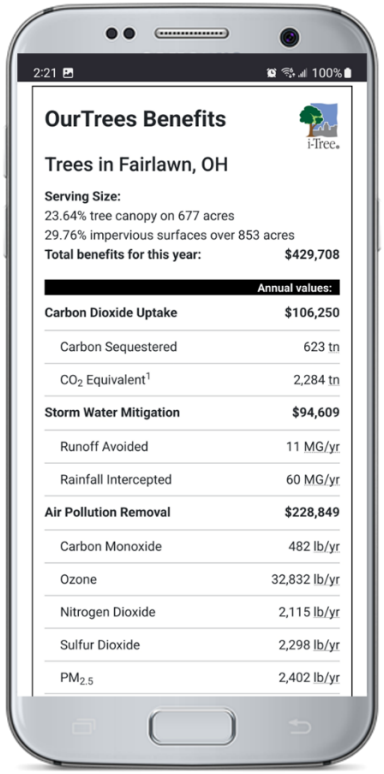
i-Tree is a Cooperative Initiative among these partners

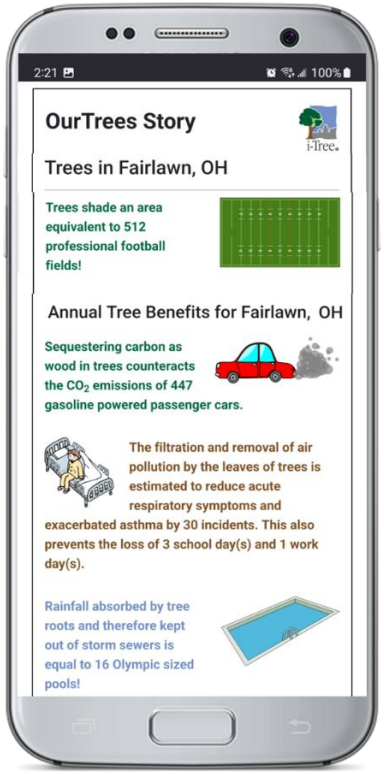
OurTrees

- A snapshot of the tree canopy cover of your community
- See tree canopy benefits in minutes
- Based on US Census and NLCD tree canopy cover data
- Mobile friendly tool









OurTrees.itreetools.org

Outreach with i-Tree

- Educate the public with OurTrees, which helps them become invested in caring for the trees

OurTrees Benefits

Trees in Bowling Green, KY

Serving Size:
20.78% tree canopy on 5,026 acres
28.33% impervious surfaces over 6,850 acres
Total i-Tree benefits for this year: $3,687,893

Annual values:	
Carbon Dioxide Uptake	**$2,555,715**
Carbon Sequestered	5,906 tn
CO_2 Equivalent[1]	21,656 tn
Storm Water Mitigation	**$486,997**
Runoff Avoided	54 MG/yr
Rainfall Intercepted	333 MG/yr
Air Pollution Removal	**$645,181**
Carbon Monoxide	3,058 lb/yr
Ozone	202,040 lb/yr
Nitrogen Dioxide	31,522 lb/yr
Sulfur Dioxide	8,050 lb/yr
$PM_{2.5}$	9,512 lb/yr

Values are totals to date:	
Carbon Dioxide Uptake	**$77,206,158**
Carbon Storage	178,418 tn
CO_2 Equivalent[1]	654,198 tn

i-Tree Landscape

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Core individual tree tools

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Core canopy tools

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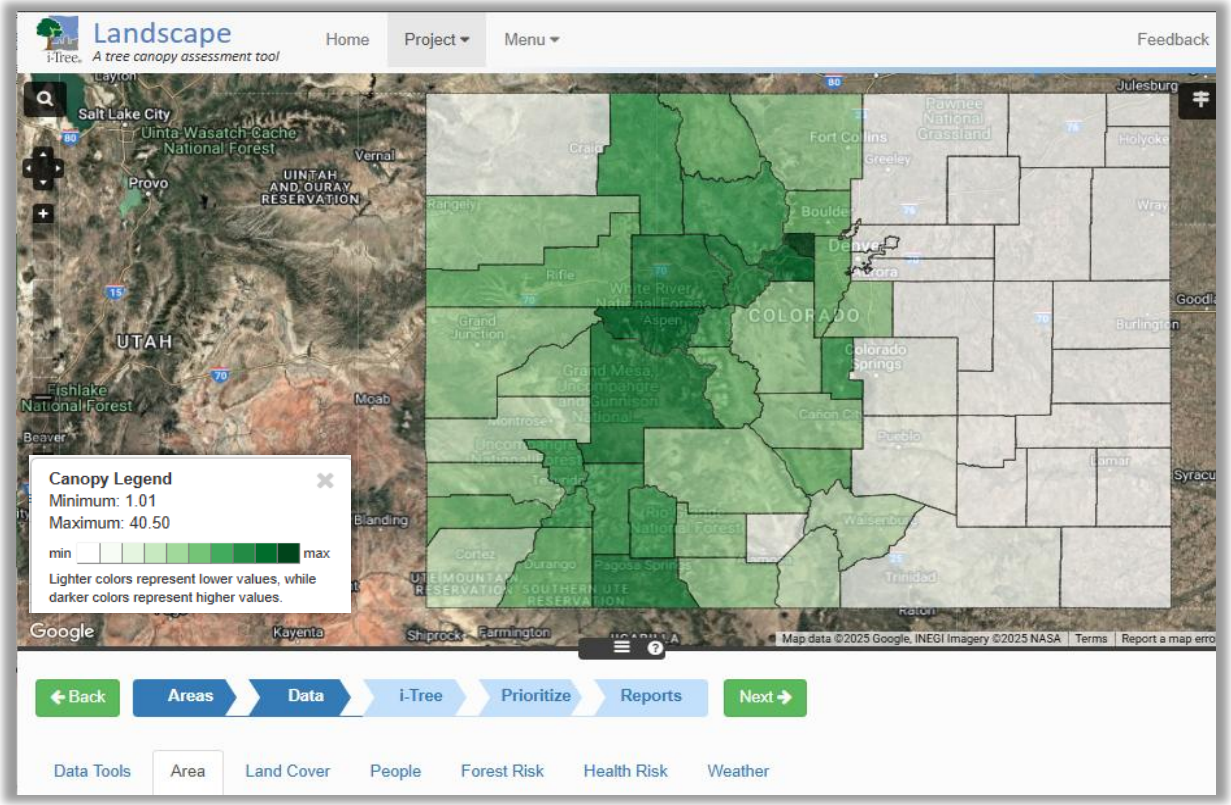
* *i-Tree Tools that can be used internationally*

i-Tree Landscape

See your canopy benefits in action

- **Visualizing your environment:** see it in context
- Trees + people +habitats + infrastructure = *connections*
- Landscape brings **USFS tree benefits science** to a nationwide map tool and offers a rich set of complimentary data
- See the spatial distribution of resources and risks: visualizing **canopy impacts at neighborhood scale**
- Includes updated 2021 National Land Cover Data!!
- Allows for prioritization analysis among pre-set geographies: ***"right tree, "right place"***

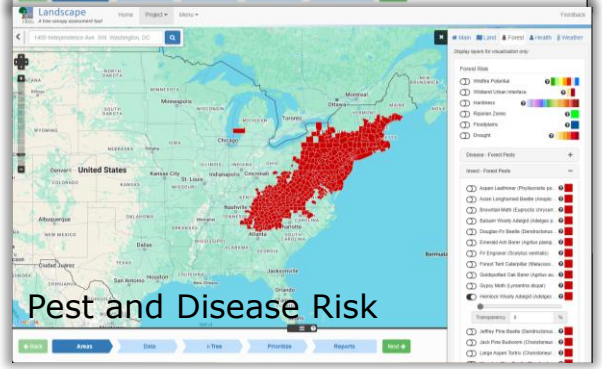


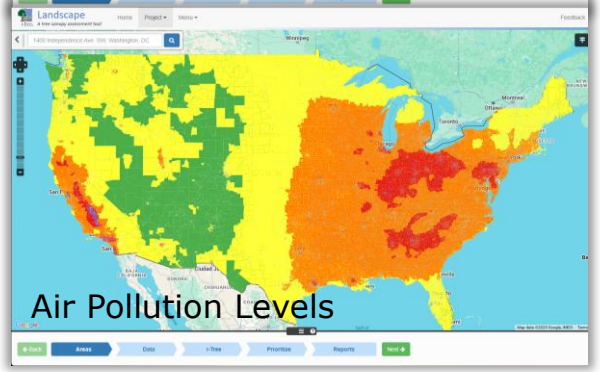
landscape.itreetools.org

i-Tree Landscape

Today we will:

- Explore what data the maps have to offer
- Learn how to navigate the map and make selections for display and analysis
- Talk about what it means to use the data and the map to identify priority areas: which tree benefits or environmental/demographic factors are ones I want to put at the forefront of decisions about resources





i-Tree Landscape

Canopy assets in context:

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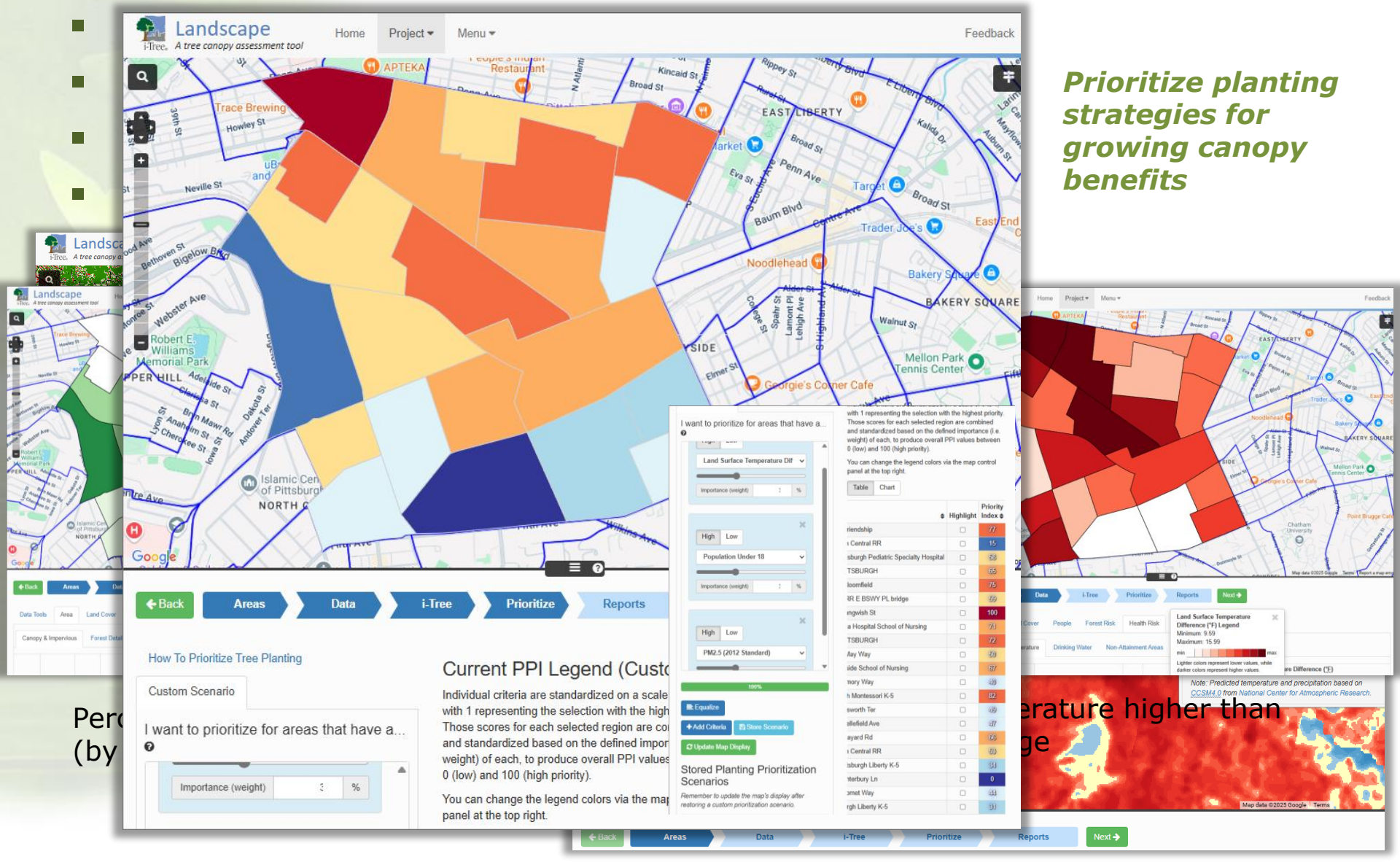

Prioritize planting strategies for growing canopy benefits

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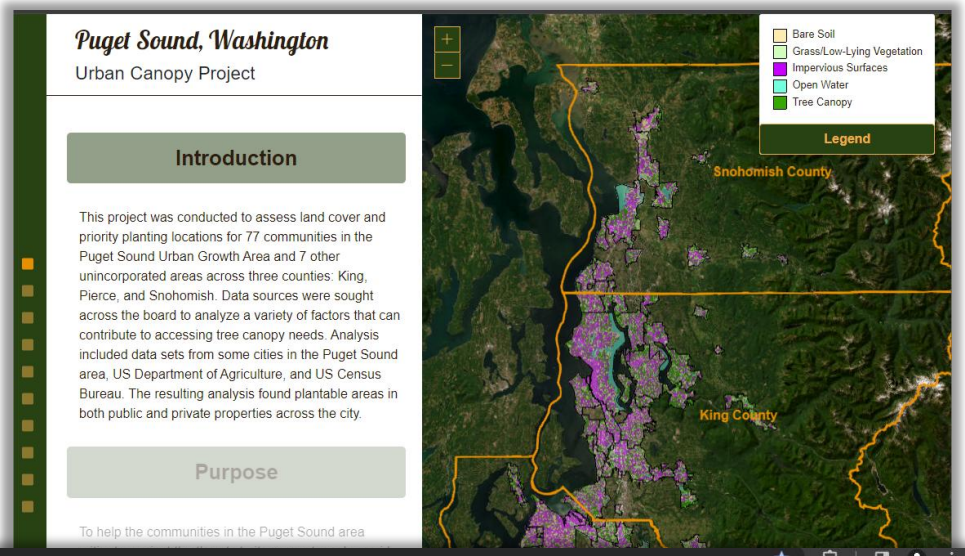
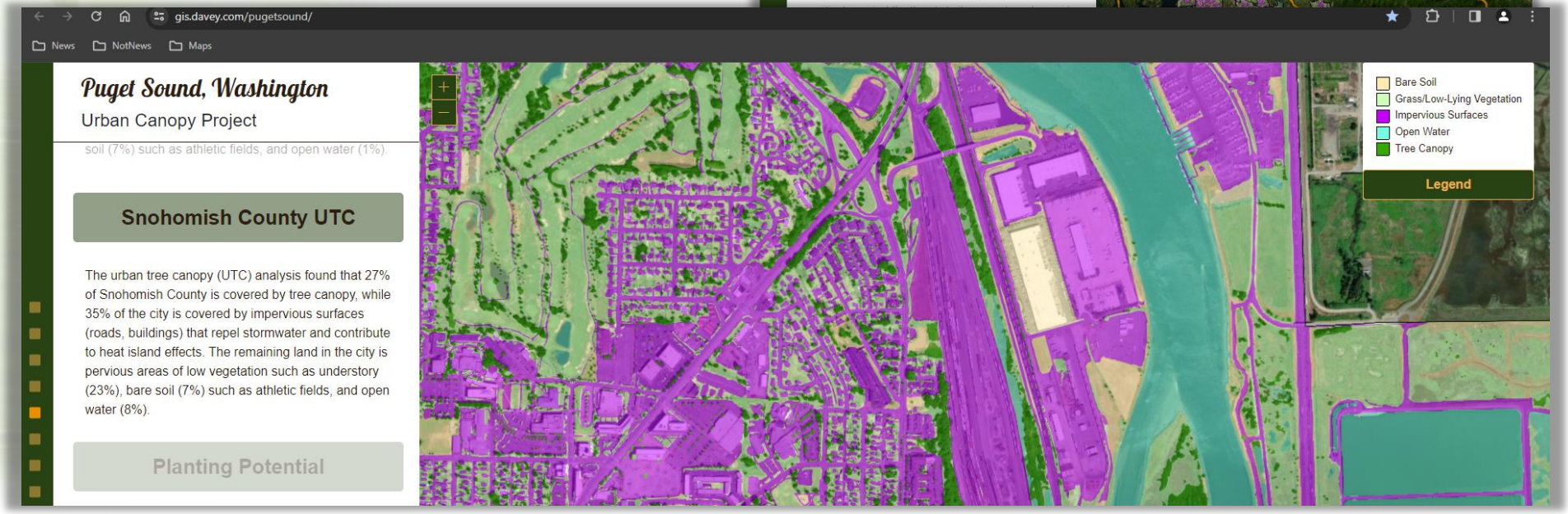
i-Tree Landscape

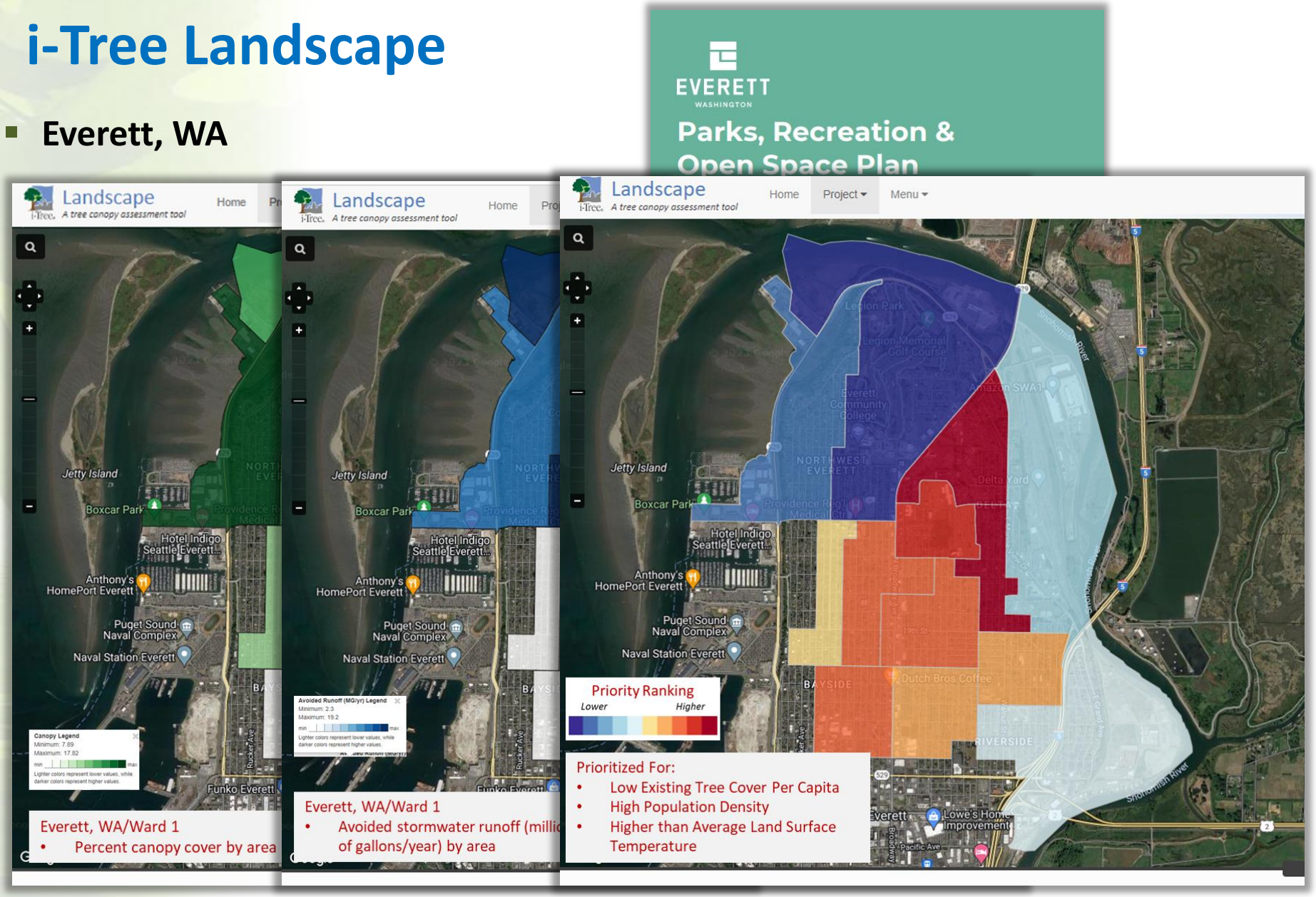
- **The power of partnership**
  - Puget Sound, The Nature Conservancy, and DRG
  - High resolution land cover data across urban growth corridors
  - Assessment of plantable areas





i-Tree Landscape

- **Everett, WA**



i-Tree Landscape

- **Chesapeake Tree Canopy Network**
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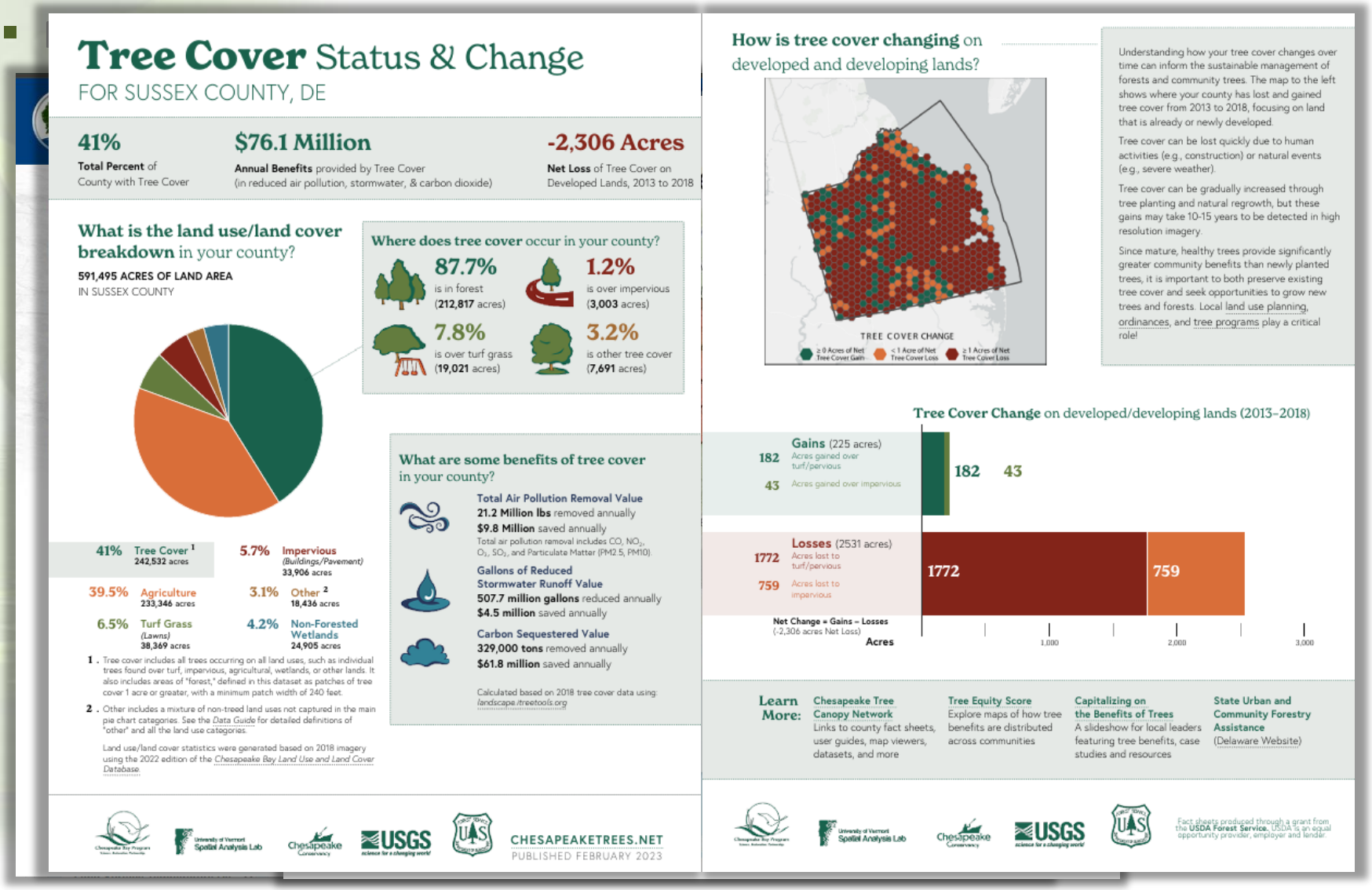
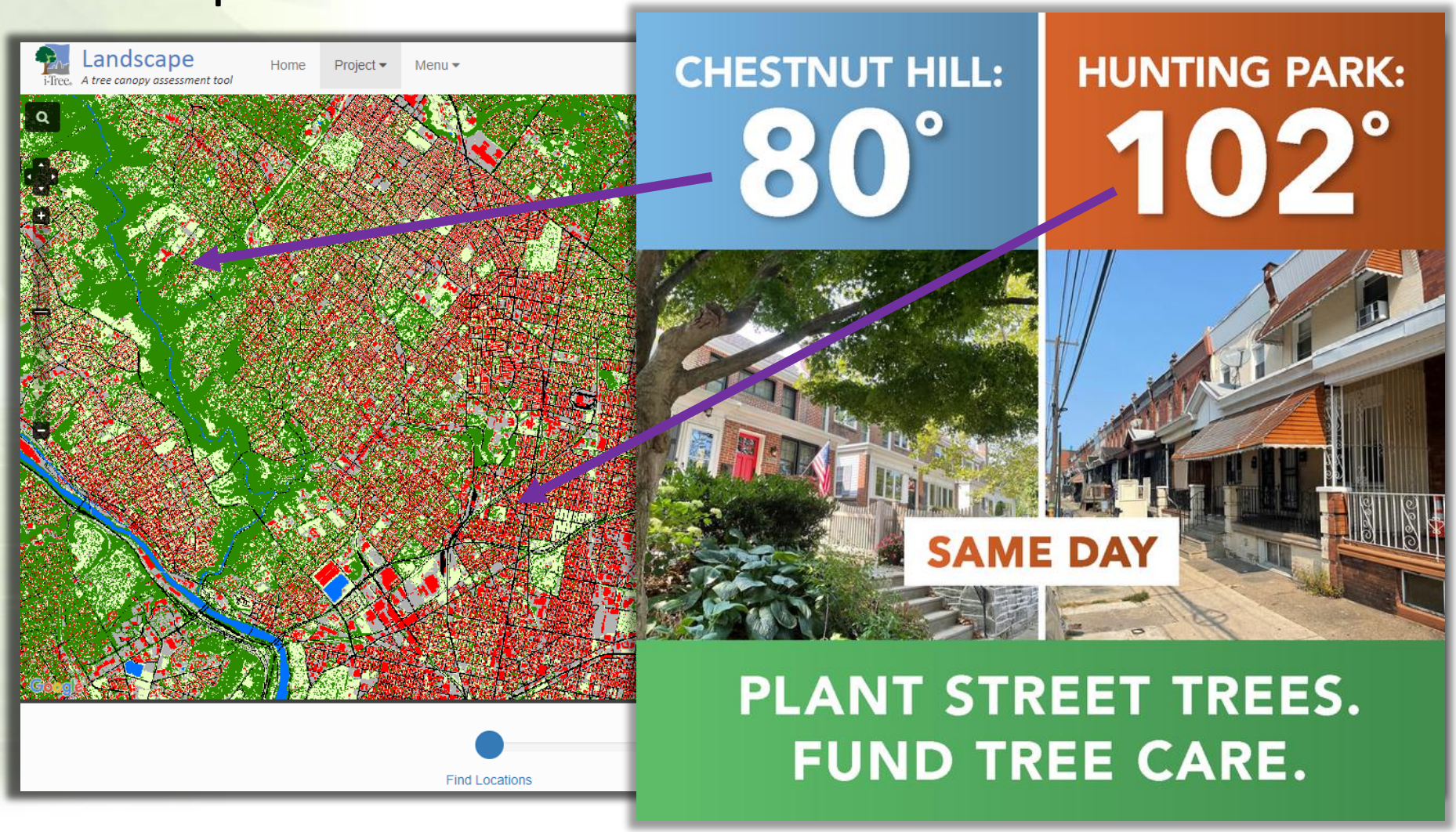


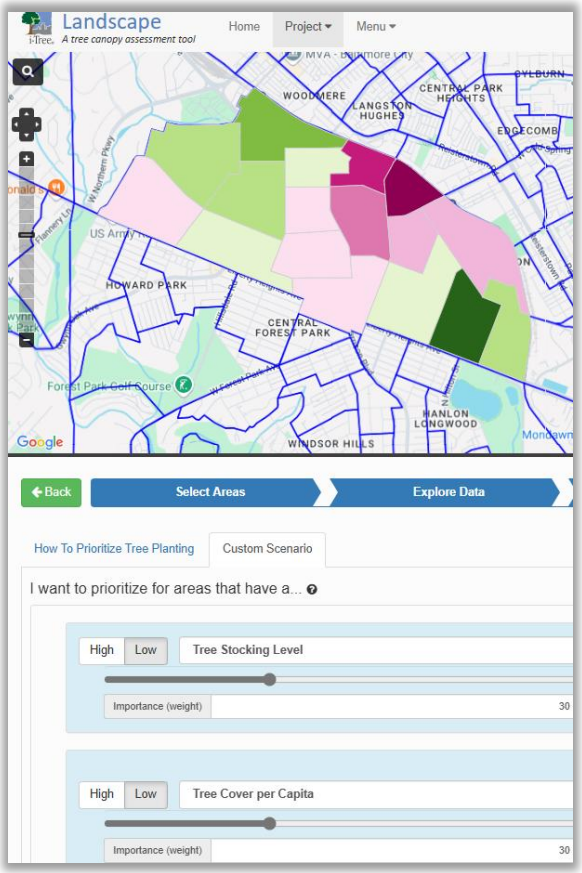
i-Tree Landscape

- Chesapeake Tree Canopy Network
- **Philadelphia Tree Plan**



Letting it all sink in!

- See impacts on geographic scales that can highlight benefits in action
  - Distribution of canopy and other resources: where does your landscape fit?
- Estimate future impacts of weather
- Spatial breakdown of benefits: visualize data at neighborhood scales
- See impacts alongside demographic info that can inform decisions for planting and local priorities
- Prioritization and Limitations
  - Focus on neighborhoods where you want to increase canopy benefits
  - Data layers are publicly available, and not directly downloadable from Landscape itself
  - For use in the US, working with layers available on a nationwide level



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