Summer 2023 – i-Tree Open Academy
Session 2: **Online with MyTree, i-Tree Design, and i-Tree Planting**

Jason Henning

Krista Heinlin

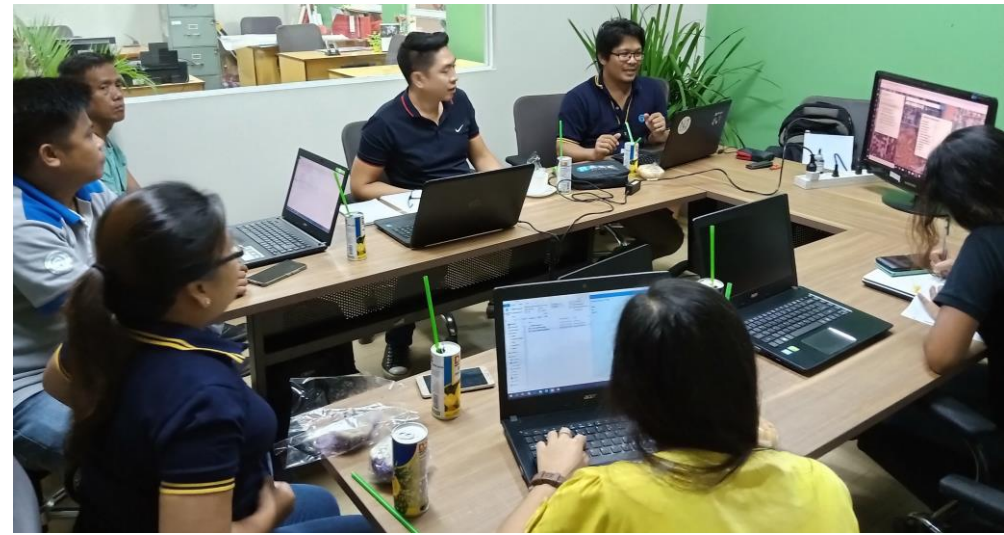*Dave Bloniarz*

Jay Heppler

Ana Castillo

Eric Greenfield

Scott Maco

Plan for today

1. Introduce the online tree tools

2. MyTree Demo

3. i-Tree Design Demo

4. i-Tree Planting Demo

5. Comparing these online tools

Milwaukee's Trees
Help Us Breathe Easier
Think about it...

The 2023 i-Tree Suite of Tools

Core individual tree tools

MyTree *

Planting

Design

Core canopy tools

OurTrees

Canopy *

Landscape

Eco *

Utilities

County

Database *

Species *

Research Suite *

Tree Map *

API *

. . .

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

i-Tree is a Cooperative Initiative among these partners

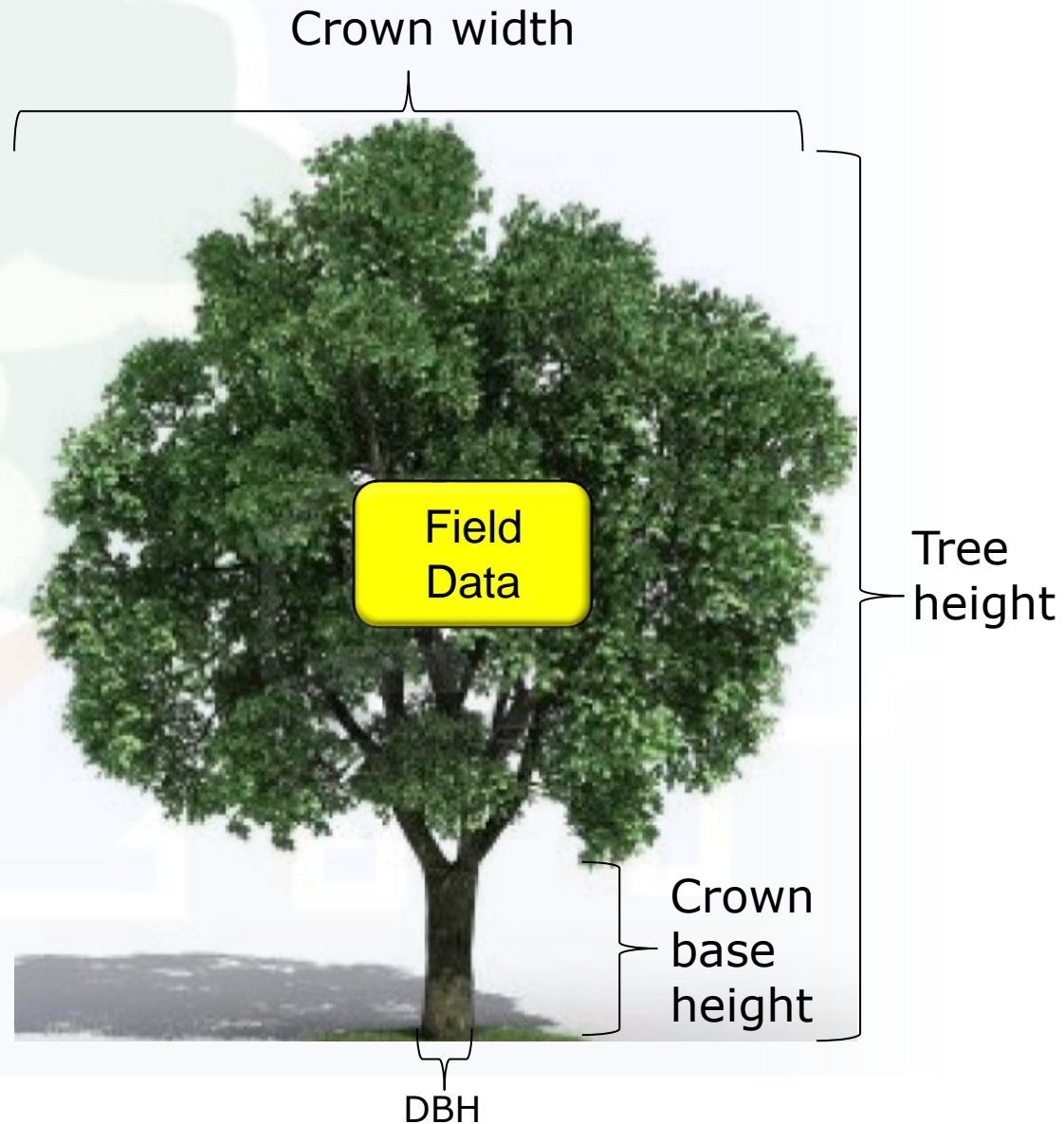DAVEY · Arbor Day Foundation · sma SOCIETY OF MUNICIPAL ARBORISTS · ISA International Society of Arboriculture · CaseyTrees WASHINGTON D.C. · ESF State University of New York College of Environmental Science and Forestry

i-Tree Tool Relationships

i-Tree model basics: data ➡ tree benefits

Crown width

Field Data

Tree height

Crown base height
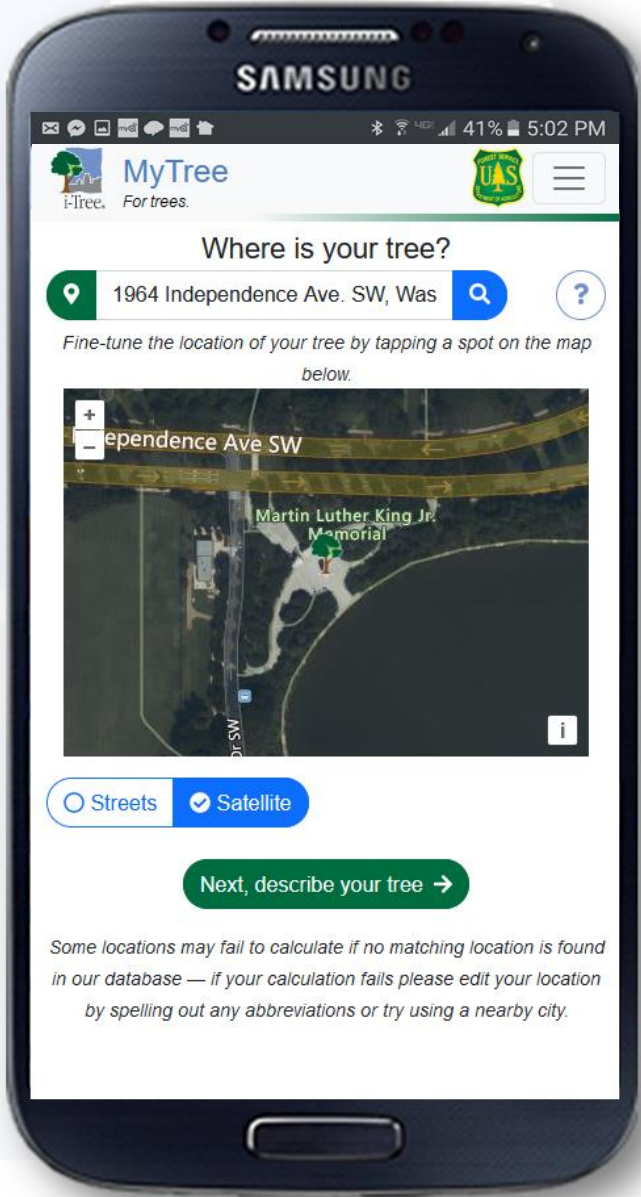
DBH

Key field variables

- DBH
- Species
- Crown measurements
- Tree health
- Building interactions
- Light availability

Simple tools require simplifying assumptions

- Crown assumptions
- Less specific inputs
  - e.g. Health categories
- Fewer outputs
- Species list excludes shrubs
- Mortality assumptions

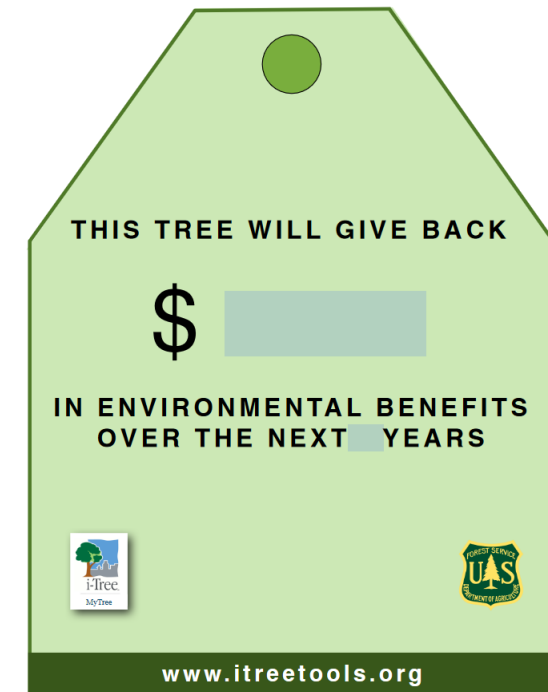# Let's give MyTree a try

MyTree: Common uses

- Education
- Engagement
- Connect people to the benefits of the trees around them

[Photo Source: L. Paqueo 2022]

[Photo Source: J. Garden 2017]

This tree gives back $2,168 worth of environmental benefits over the next 15 years.
EVERY TREE COUNTS

THIS TREE WILL GIVE BACK
$ ___
IN ENVIRONMENTAL BENEFITS
OVER THE NEXT ___ YEARS
www.itreetools.org

https://www.unri.org/news/treetags042019/

MyTree: Strengths and limitations

Strengths

- Simple to use

- Created for mobile devices

- Easy to grasp outputs

- Quick

- 20 year projection

Limitations

- No ability to save projects

- Not great for more than 10 trees
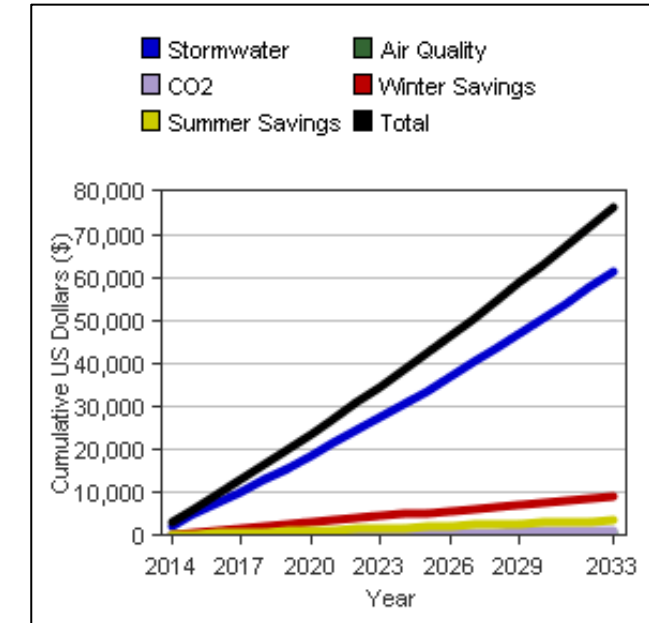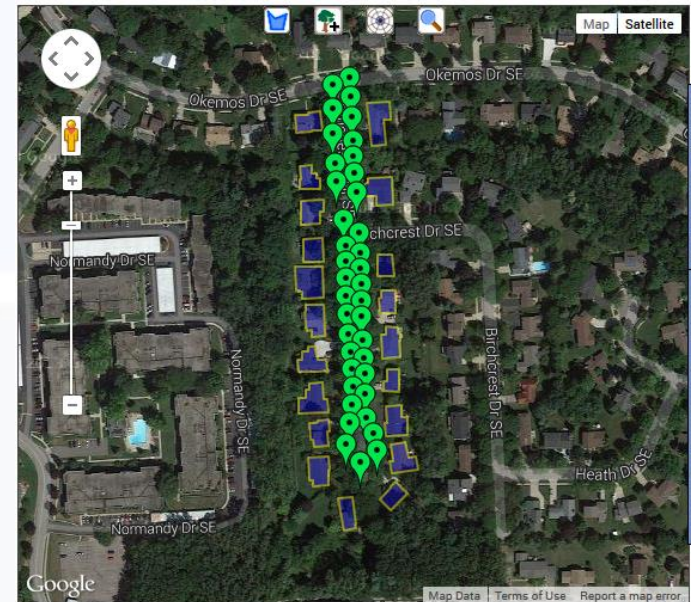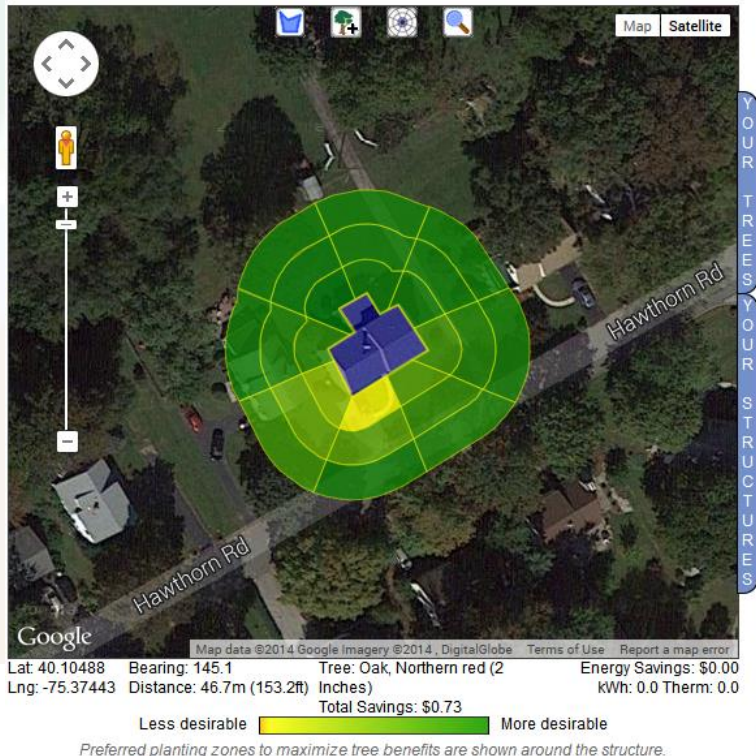
- No internet = no MyTree

Upcoming Features
- Mapping collected trees (in beta, trilliontrees.itreetools.org)
- Support for group projects

i-Tree Design: Common uses

- Connecting with property owners

- Engaging visuals

- Landscape planning

- Scenario evaluation

i-Tree Design: Strengths and limitations

Strengths

- Great visuals (maps, benefits web, graphs)

- Shareable report

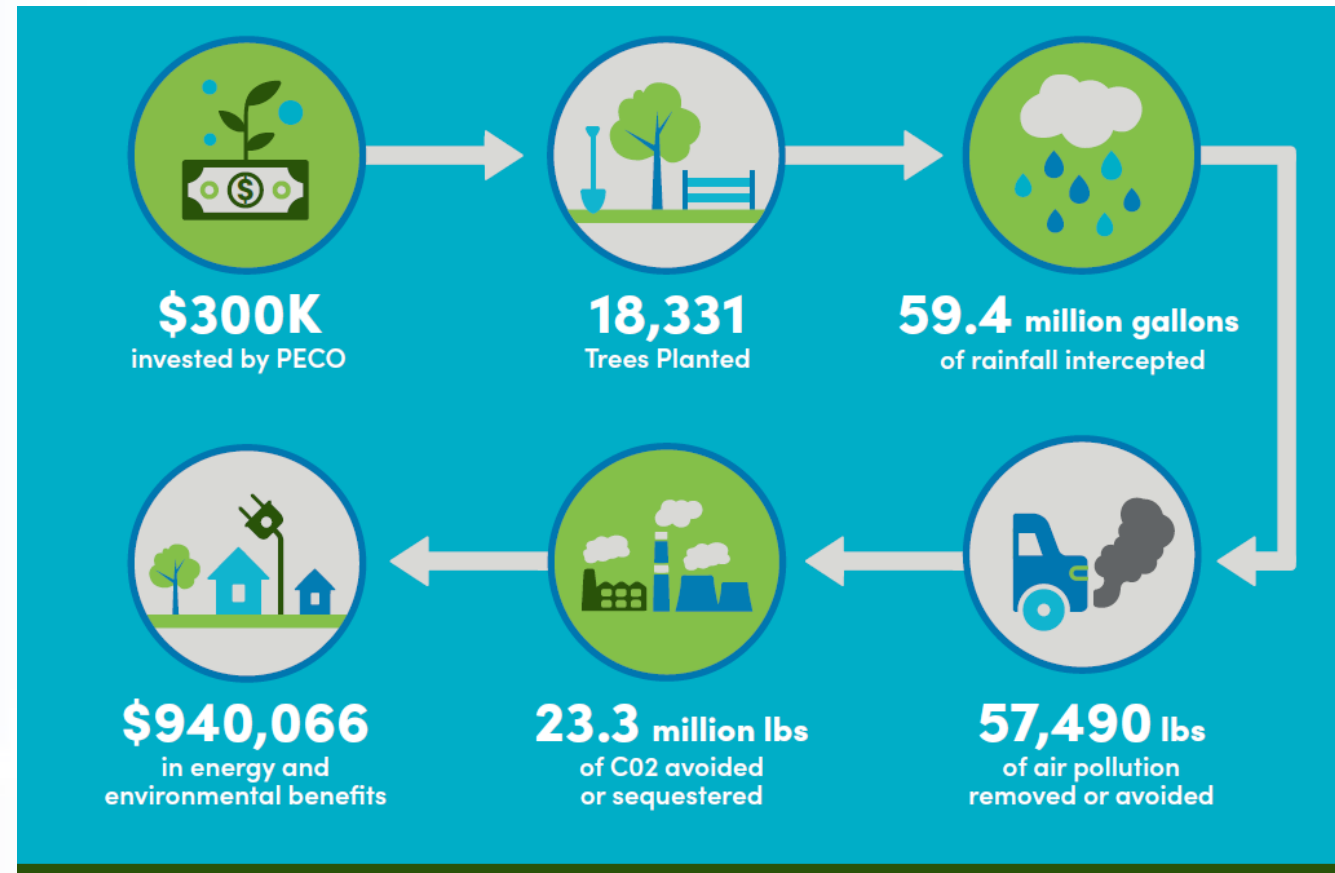- Interactive evaluation

Limitations

- Limited to a handful of buildings and few dozen trees

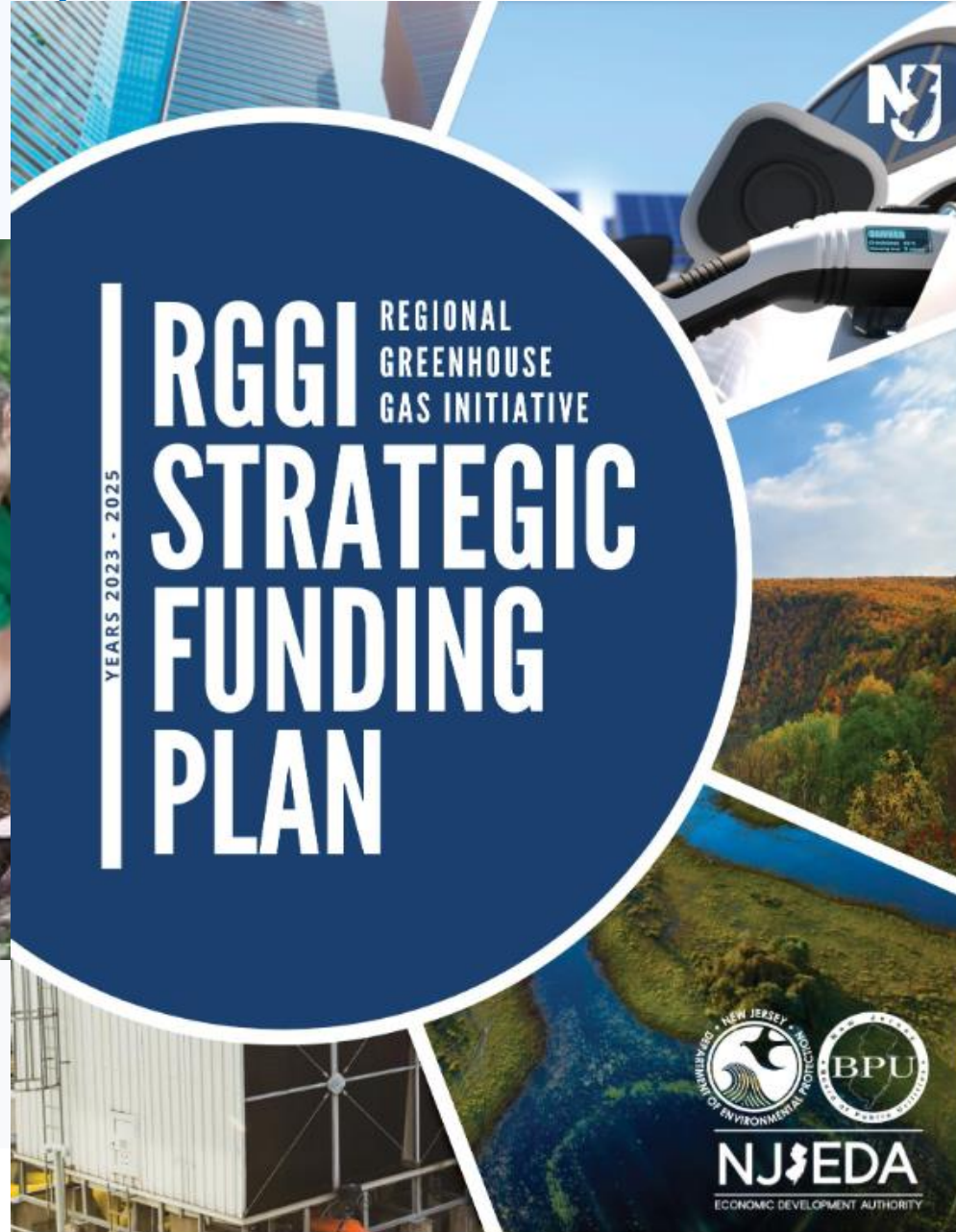- Helps to have a mouse for drawing

Upcoming Features

- Modernization
- Expanded capacity

i-Tree Planting: Common uses

- Tracking planting projects
- LEED Certification of landscapes
- Carbon accounting
- Funding requests/reporting
- Sustainability impact reporting

$300K invested by PECO

18,331 Trees Planted

59.4 million gallons of rainfall intercepted

$940,066 in energy and environmental benefits

23.3 million lbs of C02 avoided or sequestered

57,490 lbs of air pollution removed or avoided

PHS

peco AN EXELON COMPANY

2019-2021 Tree Planting
Projected 20 year cumulative values
Source: US Forest Service Northern Research Station & iTree

i-Tree Planting: Example Use

i-Tree Planting: Strengths and limitations

Strengths

- Easily project thousands of trees
- Flexible projection length
- Includes mortality
- Editable parameters

Limitations

- Regionalized planting list
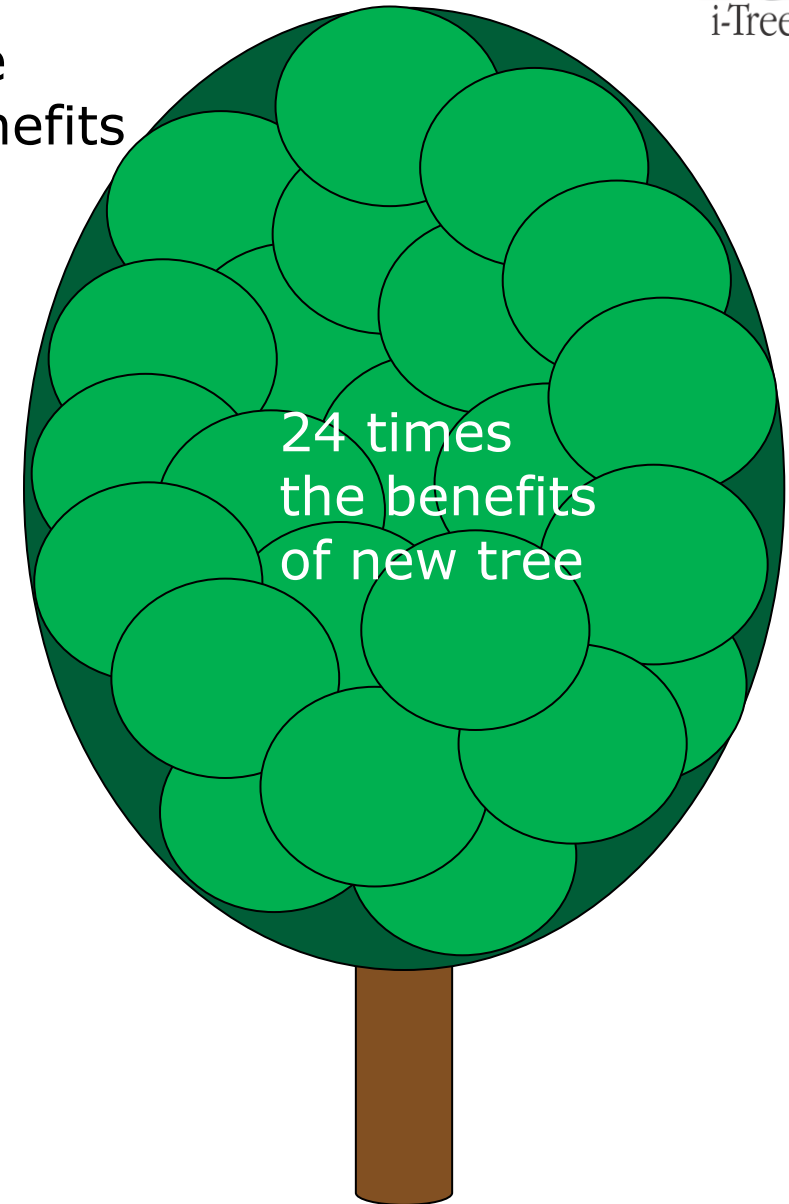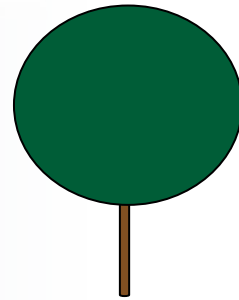- Simplifies mortality schemes

Upcoming Features

- Expanded results
- Benefits graph
- Annual results

Flexible applications

- Compare species
- Evaluate the impact of maintenance (change condition or mortality)
- Estimate time to replacement for removed trees
- Evaluate policy decisions

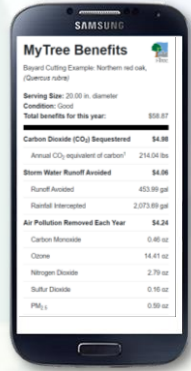18 inch red maple
$40.35 / yr in benefits

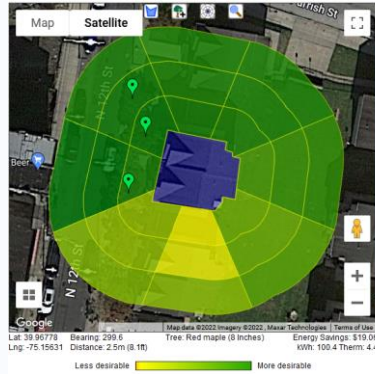24 times the benefits of new tree

2 inch red maple
$1.64 / yr in benefits

Tool Characteristics

MyTree

- Great for groups
- Quickest and easiest
- Simple to use on a mobile device
- Education settings
- Good for up to 5-10 trees per person

Design

- Great visuals
- Connect people to their own trees
- Multiple buildings and a few dozen trees
- Nice to have a mouse for drawing

Planting

- Perfect for planting projects
- Easily project hundreds of trees
- Ideal for carbon accounting
- Funding requests/reporting
- Use if you have many trees of each species
- More convenient on a desktop/laptop

Give the homework a try

We will be offering continuing education credits (CEUs) for both the International Society of Arboriculture (ISA) and the New Jersey state Urban and Community Forestry program. One CEU is available for each of the live sessions attended.

How:

All sessions will be streamed live via this **Microsoft Teams link**. All sessions will be recorded and posted below as well as on the i-Tree YouTube channel, so that you can catch up on anything you missed. There are no requirements for this course, and there will be self-directed exercises that you can use to gain experience using the tools. You are encouraged to submit any questions related to the course via info@itreetools.org, and there will be opportunities to ask questions during certain live sessions and office hours.

When:

Each session is one hour long and offered Wednesdays at 1:00 pm (Eastern US time). Note: Office hours days and times may vary.

- **August 2nd – Introduction to i-Tree**. Understand the basic science of i-Tree and the USFS research behind it. Explore the relationships between the i-Tree tools and the data they provide. Start to consider which i-Tree tools will be best for the application you have in mind.
    - Video recording
    - Presenter slides
    - Self-directed exercise - Session 1 ⬅
    - Q&A
- **August 9th – Online with MyTree, i-Tree Design, and i-Tree Planting**. Explore the easiest to use online i-Tree tools for individual trees. Get a better sense of their advantages and most common uses.
    - Video recording (coming soon)
    - Presenter slides (coming soon)
    - Self-directed exercise - Session 2 ⬅

https://www.itreetools.org/support/i-tree-open-academy-summer-2023