

Grow the Forest

Project Status: Ongoing



Forest project, year one.

Project Summary

Background

Planting trees offers numerous benefits—wildlife habitat, water quality improvements, temperature regulation, stormwater management, and beautification to name a few. Planting trees in areas previously used for other purposes, like agriculture fields or septic drain fields, has the power to increase forest acres. While it cannot replace the benefits of preserving an existing forest, tree plantings can help grow the forest.

Project Description

Traditional tree plantings were planted in Plantations of a limited number of hardwood trees species (in solid tree tubes for deer protection). This has been a best practice for over 50 years. However, the Delaware Center for the Inland Bays is experimenting with new approaches, known as Applied Nucleation, and is achieving faster and better results. Instead of planting in rows, like crops, we plant in clusters, like mini-forests, or we plant a combination of clusters and rows.

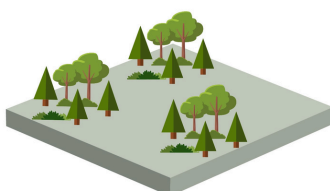


After a few years, planted trees can become a forest.

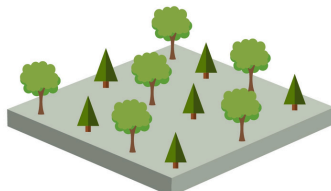
Objective

With populations on the rise across the Inland Bays watershed, agricultural and forested lands are being rapidly replaced by development. The goal of tree plantings is to promote high quality forests that build resilience to storms, climate change, and the impacts of a changing landscape.

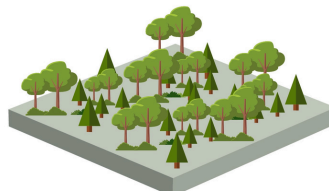
APPLIED NUCLEATION



PLANTATION



COMBINED METHOD



Project Contact:

Meghan Noe Fellows, Director
of Estuary Science & Restoration
mnoefellows@inlandbays.org

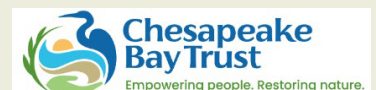
Partner(s):

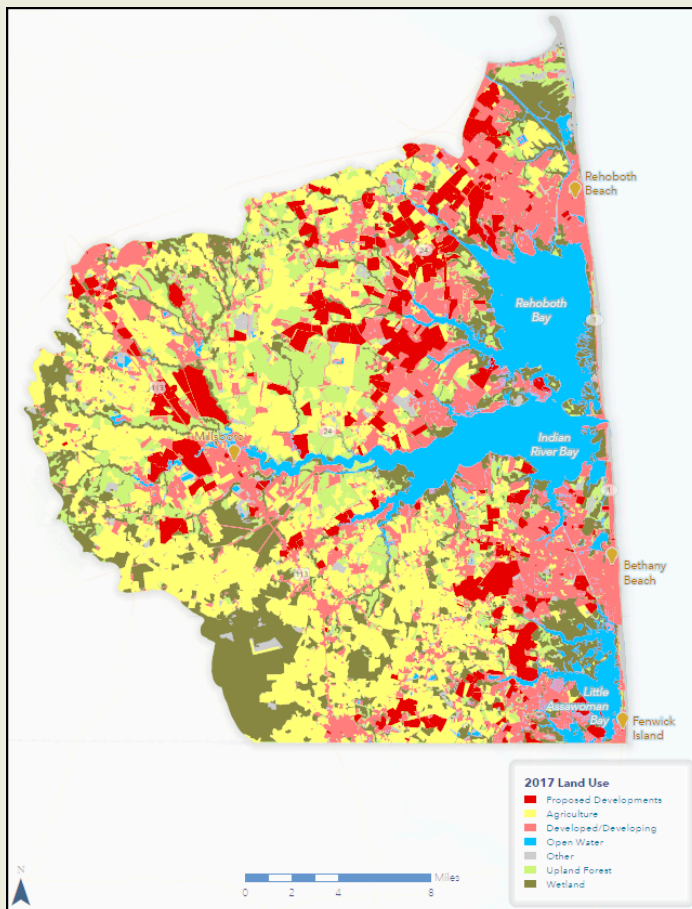
Fairfax County Department of
Public Works, Virginia

Fairfax County Park Authority,
Virginia

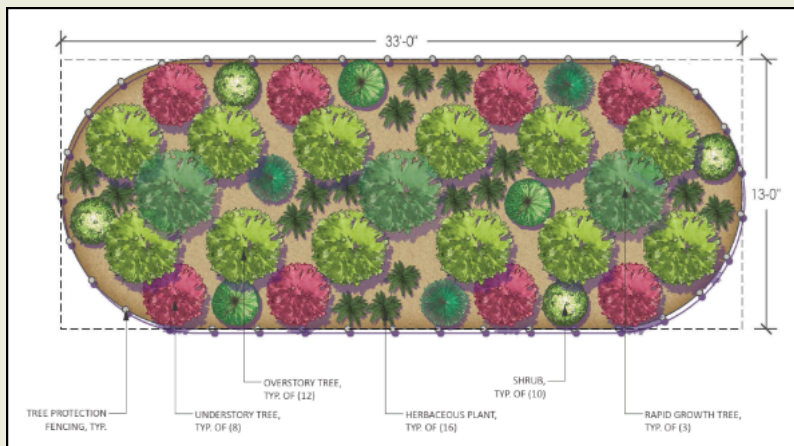
Funding Partners:

Maryland Department of Natural
Resources, Anne Arundel
County, Baltimore City, and the
Chesapeake Bay Trust





Land use in the Inland Bays (2017). From 1992 to 2017, development increased by 32 square miles, or 78%.



This homeowner-friendly layout adds ferns and other flowers in the compact forest. Figure courtesy of Fairfax County, Virginia

Outcomes/ Conclusions

The Center's research has shown that the nucleation method effectively increases the total amount of carbon stored in the soil, organic matter, tree canopy, and the layer of leaf litter on the forest floor. These are all good indicators that the forest is growing, and are metrics that participatory scientists can gather about each reforestation project to monitor progress over time.

Growing a forest is more than just planting the right tree, it is about understanding the needs of the trees, needs of the forest, and how to get there efficiently.



The soil beneath the developing forest can be the first indicator of returning function.

How You Can Help

Plant more forests! The nucleation technique can be adapted to wherever you are in the watershed—from a private lot to 10's of acres. Planting a meadow between the nucleations provides the additional benefits of promoting pollinator habitat and reducing mowing needs.



DELAWARE CENTER FOR THE
INLAND BAYS
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39375 Inlet Rd
Rehoboth Beach, DE 19971
(302) 226-8105

The Delaware Center for the Inland Bays is a non-profit organization established in 1994 to promote the wise use and enhancement of the Inland Bays and its watershed. With its many partners, the Center conducts public outreach and education, develops and implements restoration projects, encourages scientific inquiry and sponsors research. To learn how you can get on board with the bays, visit inlandbays.org.