

# Plant Trees

## Overview

- Trees provide many ecosystem services such as erosion control, soil stability, flood prevention, shade and heat reduction, privacy, increased property value, aesthetic value, etc.
- In order to help reduce flooding, plant native tree species throughout the yard.
- Leaf canopies of trees help reduce erosion by slowing down rain before it reaches the ground. Roots take up water and create soil conditions that promote infiltration rather than runoff.
- The root systems of trees also help stabilize the soil as the roots help hold the soil in place during flooding events.
- Only plant native tree species which are well-suited for the ecosystem of the area.
- In addition to trees, consider planting shrubbery or other native plants.
- After planting trees, record their location on the [Tree For Every Delawarean Initiative \(TEDI\)](#) website.

## Considerations for tree planting:

- Soil type
- Function (flood prevention, shading, etc.)
- Species
- Tree size
- Insect susceptibility
- Exposure to sun and wind
- Human activity in direct proximity to the tree
- Location in proximity to structures, sidewalks, power lines, etc.
- Post-planting maintenance requirements
- Personal preference



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## Key Takeaways

During storm events, water may pool in yards or flood structures.

Flooding can cause extensive damage to the interior and exterior of structures. Additionally, pools of water can harm landscaping and provide breeding grounds for pests such as mosquitos.

To help avoid flood damage costs, plant trees throughout the yard.



# I-ADAPT

## Yard Adaptation

### Plant Trees

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## Estimated Costs/Benefits

\*U.S. dollars (2022), estimates are subject to change

Potential Costs		Potential Benefits		
Item	Estimate	Post-Flood Recovery Actions	Estimate	
Trees (cost is highly dependent on species and age of the tree)	\$30-\$170 per tree	Flood damage recovery (professional clean-up, mold removal, replacement/ repair of flood damaged items)	1 inch water	\$10,800-\$53,500+
			↓	↓
			1 foot water	\$29,400-\$143,500+
Landscape labor (if necessary)	\$50-\$100 per hour	Mosquito control	\$400-\$600 per treatment	
<b>ESTIMATED TOTAL COST</b>	<b>\$30+</b>	<b>ESTIMATED TOTAL SAVINGS</b>	<b>\$11,200-\$144,100+</b>	

## Expected Maintenance

- Regular lawn maintenance.
- Mulch and prune the planted trees as directed by local tree nursery.

## Additional Resources

- [DNREC A Tree for Every Delawarean](#)
- [Native Plant Nurseries Serving Delaware](#)
- [Recommended Trees by the Delaware Forest Service](#)
- [Tree Selection and Placement](#)

Resources can also be found at <https://de.gov/iadapt>

## Potential Funding Sources

- [Building Resilient Infrastructure and Communities Grant \(BRIC\)](#)
- [Delaware Water Pollution Control Revolving Fund](#)
- [FEMA Flood Mitigation Assistance Grant](#)
- [FWS Partners for Fish and Wildlife Program](#)

## Additional Actions

- After planting trees, record their location on the [Tree For Every Delawarean Initiative \(TEDI\)](#) website.
- Ensure that the new trees are not going to cause issues with neighboring properties.

## Permitting Agencies

- Your city and/or county government for local flood ordinances or regulations

## Who to Contact

- [811 Call Before You Dig](#)
- [DNREC A Tree for Every Delawarean](#)
- Landscape company
- Local tree nurseries

Technical definitions and more information are located on the I-ADAPT website: <https://de.gov/iadapt>.



This information is intended to be used for planning purposes. It is not intended to substitute or take precedence over the guidance of design engineers, contractors, utility companies or regulatory agencies.

For more information, contact DNREC's Division of Climate, Coastal and Energy at [DNREC\\_IADAPT@Delaware.gov](mailto:DNREC_IADAPT@Delaware.gov)

