

# Grade Lawn Away from Structure

## Overview

- Grading a yard involves modifying the slope of the yard so that stormwater flows downhill and away from the structure and its foundation.
- The risk of floodwaters inundating the foundation increases when the structure is the lowest point on the property.
- Grading a lawn so that stormwater preferentially flows away from the foundation of a structure can reduce flood risk by preventing flooding in basements or crawlspaces during storms.
- Grading a lawn away from the structure also prevents pooling in the yard which can also prevent mosquito population growth.
- If possible, it is ideal to route water towards a stream or natural waterbody.
- Ideally, a yard is graded to have a slope of 5%-25%. Greater slopes can lead to erosion.
- Ensure that the grading will not cause flooding issues on neighboring properties.
- After grading a yard, bare soil will be exposed. Planting grass/native plants on the exposed soil will reduce erosion potential and stabilize the newly graded lawn.



## 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, grade the lawn away from the primary structure.





# I-ADAPT

## Yard Adaptation

### Grade Lawn Away from Structure

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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
Regrade yard	\$700-\$5,000	Flood damage recovery (professional clean-up, mold removal, replacement/ repair of flood damaged items)	1 inch water ↓ 1 foot water \$10,800-\$53,500+ ↓ \$29,400-\$143,500+
Replant grass or native plants	\$150-\$1,600	Mosquito control	\$400-\$600 per treatment
<b>ESTIMATED TOTAL COST</b> (residential sized lawn)	<b>\$850-\$6,600</b>	<b>ESTIMATED TOTAL SAVINGS</b>	<b>\$11,200-\$144,100+</b>

## Expected Maintenance

- Regular lawn maintenance.
- Periodically ensure that erosion is not occurring anywhere on the lawn.

## Additional Resources

- [FEMA: Reducing Damage from Localized Flooding](#)

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

## Potential Funding Sources

- [Building Resilient Infrastructure and Communities Grant \(BRIC\)](#)

## Additional Actions

- Ensure that the new grading will not cause flooding on neighboring properties.
- Ensure that downspouts are directed away from the structure and that gutters are cleaned out on a regular basis.

## Permitting Agencies

Contacts for permitting requirements include but are not limited to the following:

- Your city and/or county government for local flood ordinances or regulations
- Your city and/or county government for building permits
- [DNREC Coastal Construction Permit](#)
- [DNREC Wetlands and Subaqueous Lands Permit](#)

## Who to Contact

- [811 Call Before You Dig](#)
- Drainage contractor

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)

