

Extend Downspouts

Overview

- When non-extended downspouts end at the base of a structure, stormwater may pool against the foundation. Pooling water can lead to foundation damage and/or flooding in the basement, crawlspace, or even the ground floor.
- Extending downspouts will ensure that the stormwater draining from the structure's roof will flow away from the structure's foundation.
- Most downspout extension projects can be completed as a Do-It-Yourself project.
- Extend the downspouts so that water flows downhill and away from the structure. Ideally, the downspouts will flow towards a natural drainage feature.
- Ensure that the downspouts do not flow directly onto impervious surfaces such as driveways, sidewalks, or roads.
- In addition to extending the downspouts, it is essential to ensure that the gutters are frequently cleaned out and that the lawn is graded away from the structure so that water does not pool next to the building.
- When installing extended downspouts, consider installing a rain garden or stormwater planter to absorb the excess stormwater runoff.



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Key Takeaways

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

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

To help avoid flood damage costs, extend the downspouts to ensure that they route stormwater away from the structure.

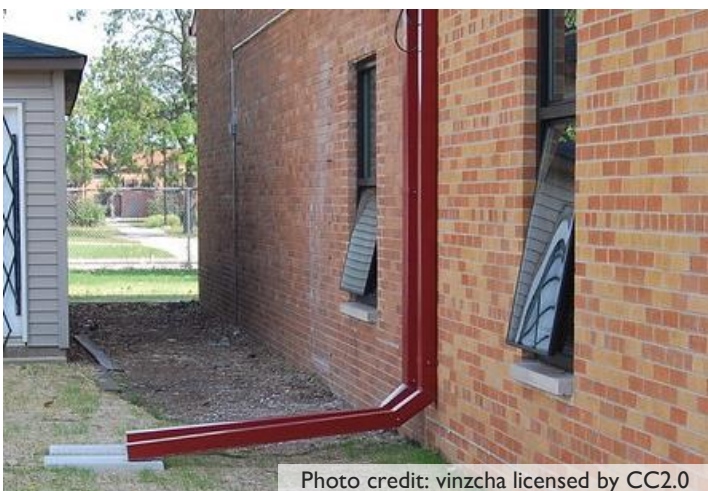


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I-ADAPT

Exterior Adaptation

Extend Downspouts

Estimated Costs/Benefits

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

Potential Costs		Potential Benefits	
Item	Estimate	Post-Flood Recovery Actions	Estimate
Downspout elbow	\$7-\$25	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+
Downspout extension	\$7-\$30	Remove standing water	\$1,300-\$13,500
		Mosquito control	\$400-\$600 per treatment
ESTIMATED TOTAL COST	\$14-\$55	ESTIMATED TOTAL SAVINGS	\$12,500-\$157,600+

Additional Resources

- [FEMA: How to Make your Home Safer and Stronger](#)
- [FEMA: Twelve Disaster Rebuilding Tips for Less Than \\$50](#)

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

Expected Maintenance

- Periodically check gutters and downspouts for clogging.
- Periodically check downspouts for leaks.

Additional Actions

- Ensure that gutters are functioning properly.
- Install gutter guards to help prevent leaf litter buildup.
- Ensure that the lawn is graded so that stormwater flows away from the structure.

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

Who to Contact

- Landscaping company if applicable

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

