

# Action Plan for Nature-based Stormwater Strategies: Promoting Natural Designs that Reduce Flooding and Improve Water Quality in North Carolina

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## *Executive Summary*

North Carolinians are increasingly affected by damage and disruptions from flooding. To solve this problem, state leadership, local governments, landowners and businesses are embracing innovative development and planning approaches that employ or replicate nature to soak up rainwater and reduce stormwater runoff.

Now, that support must be put into action across the state, from the coast to the mountains, and across landscapes, from farms to dense cities. The Action Plan for Nature-Based Stormwater Strategies was developed by the North Carolina Coastal Federation with the support of The Pew Charitable Trusts, and input of four expert work groups focusing on opportunities for use of nature-based stormwater strategies in new development, stormwater retrofits, roadways and working lands. The Action Plan puts forward the following recommendations, and critical first steps that the state government, communities, businesses and nonprofits can take to make North Carolina more resilient and improve water quality.

**Cross-Cutting Recommendations:** As the four work groups considered how to address these impediments at the state, local and project-specific level, four recommendations were identified and encouraged across those discussions.

1. State and local governments need to lead by example by promoting the use of nature-based stormwater strategies and implementing them widely where practicable.
2. Increase education, outreach and professional training for nature-based stormwater and watershed management strategies.
3. Create a Nature-Based Stormwater Steering Committee to ensure continued stakeholder engagement and leadership in support of long-term, meaningful progress.
4. Establish effective watershed management that focuses on protecting, restoring or mimicking natural water systems to reduce flooding and improve water quality.

**Critical First Steps:** With this action plan in hand, over the next year the organizations and stakeholders engaged in this planning effort intend to focus on a number of initial steps that will be necessary to accomplish these outcomes.

1. Develop a comprehensive watershed management framework.
2. Conduct an economic study on costs and benefits of nature-based stormwater strategies in North Carolina.
3. Promote demonstration projects that exemplify the value of nature-based stormwater strategies with real world projects.
4. Provide accurate information on maintenance cost for nature-based stormwater strategies and amend the stormwater design manual to include this data.
5. Streamline modifications to existing post construction stormwater permits to encourage use of nature-based stormwater strategies.
6. Advance state and local policies promoting nature-based stormwater strategies.
7. Form the Action Plan Steering Committee to spearhead efforts to move forward with recommendations in this Action Plan.
8. Establish a work group to coordinate future planning for education and outreach.
9. Organize North Carolina Department of Transportation (NCDOT) work group to tackle NCDOT's priority actions, including updating its toolbox to more fully include nature-based stormwater strategies.
10. Educate the North Carolina Congressional delegation on opportunities to substantially increase the amount of financial resources for working lands and conservation coming from the federal Farm Bill and other federal programs.