

# Action Plan for Nature-based Stormwater Strategies:

N.C. DEMLR WOW Webinar

November 17, 2021

Lauren Kolodij, North Carolina Coastal Federation



North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

# urban and rural land uses alter natural hydrology

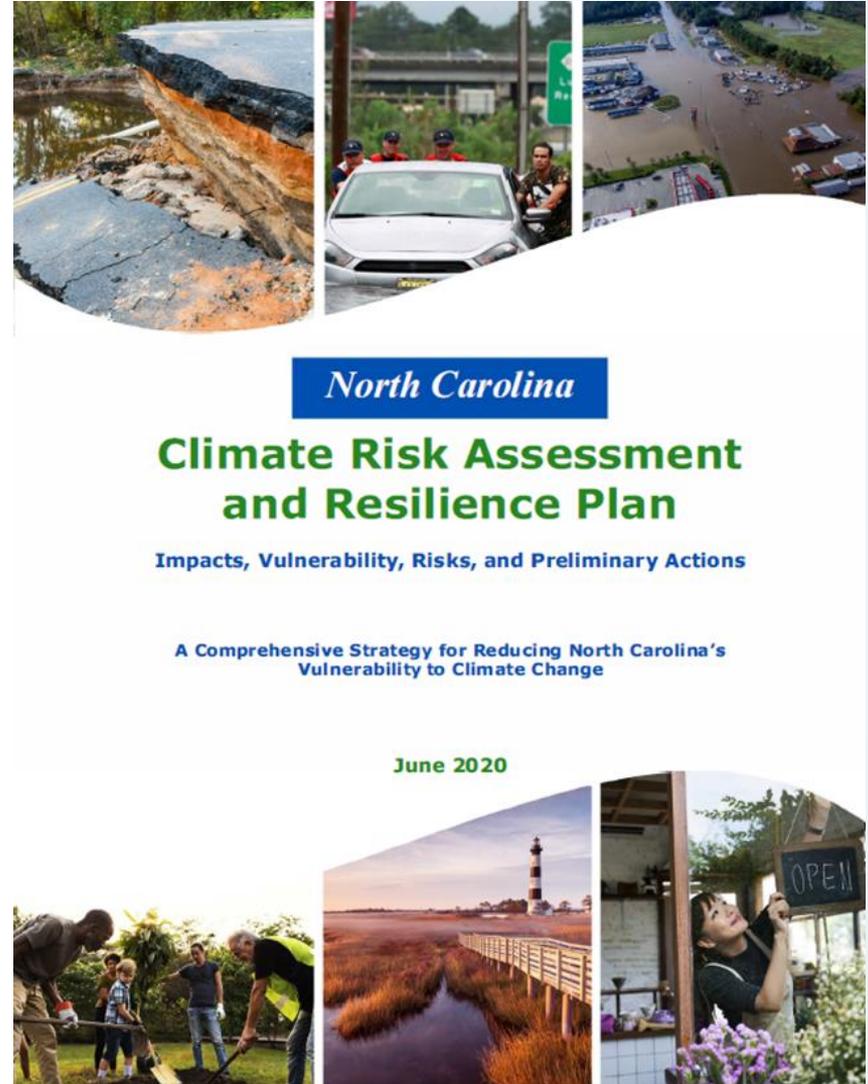


Photo credit – Jonathan Hinkle, LDSI

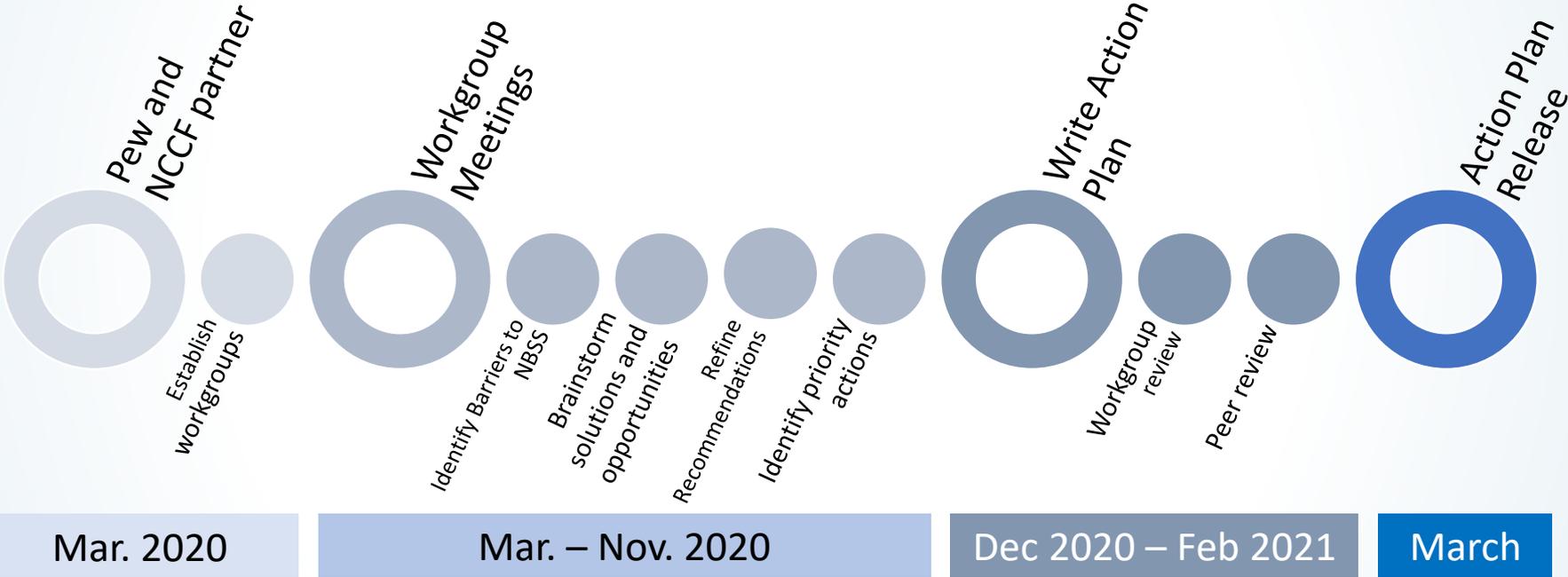
# nature-based stormwater strategies mimic hydrology



- Executive Order 80 laid out a series of climate goals including the development of a climate resilience plan.
- Found that: “The time to implement nature-based solutions is *now* due to the time required to plan, implement and grow these solutions”
- End goal with a statewide NBSS Plan: address flooding and water quality concurrently.



# NBSS Action Plan Development



# Action Plan for Nature-based Stormwater Strategies: New Development Work Group Members

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# Action Plan for Nature-based Stormwater Strategies: Stormwater Retrofit Work Group Members

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# Action Plan for Nature-based Stormwater Strategies: Roadways Work Group Members

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# Action Plan for Nature-based Stormwater Strategies: Working Lands Work Group Members

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Will McDow, *Environmental Defense Fund*

Will Morgan, *Manning, Fulton, & Skinner, P.A.*

Keith Larick, *N.C. Farm Bureau Federation*



## ACTION PLAN FOR NATURE-BASED STORMWATER STRATEGIES:

*Promoting Natural Designs that Reduce Flooding  
and Improve Water Quality In North Carolina*

MARCH 2021

The lively aesthetics of River Bluffs in Castle Hayne, N.C. result from nature-based stormwater design being incorporated throughout the site. These stormwater measures help make it a walkable park-like neighborhood while preventing flooding and protecting water quality.

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# Example: NBSS for New Development - River Bluffs



# NBSS Plan New Development Recommendations



# Example: NBSS for Retrofits - Market at Colonnade



# NBSS Plan Retrofit Recommendations



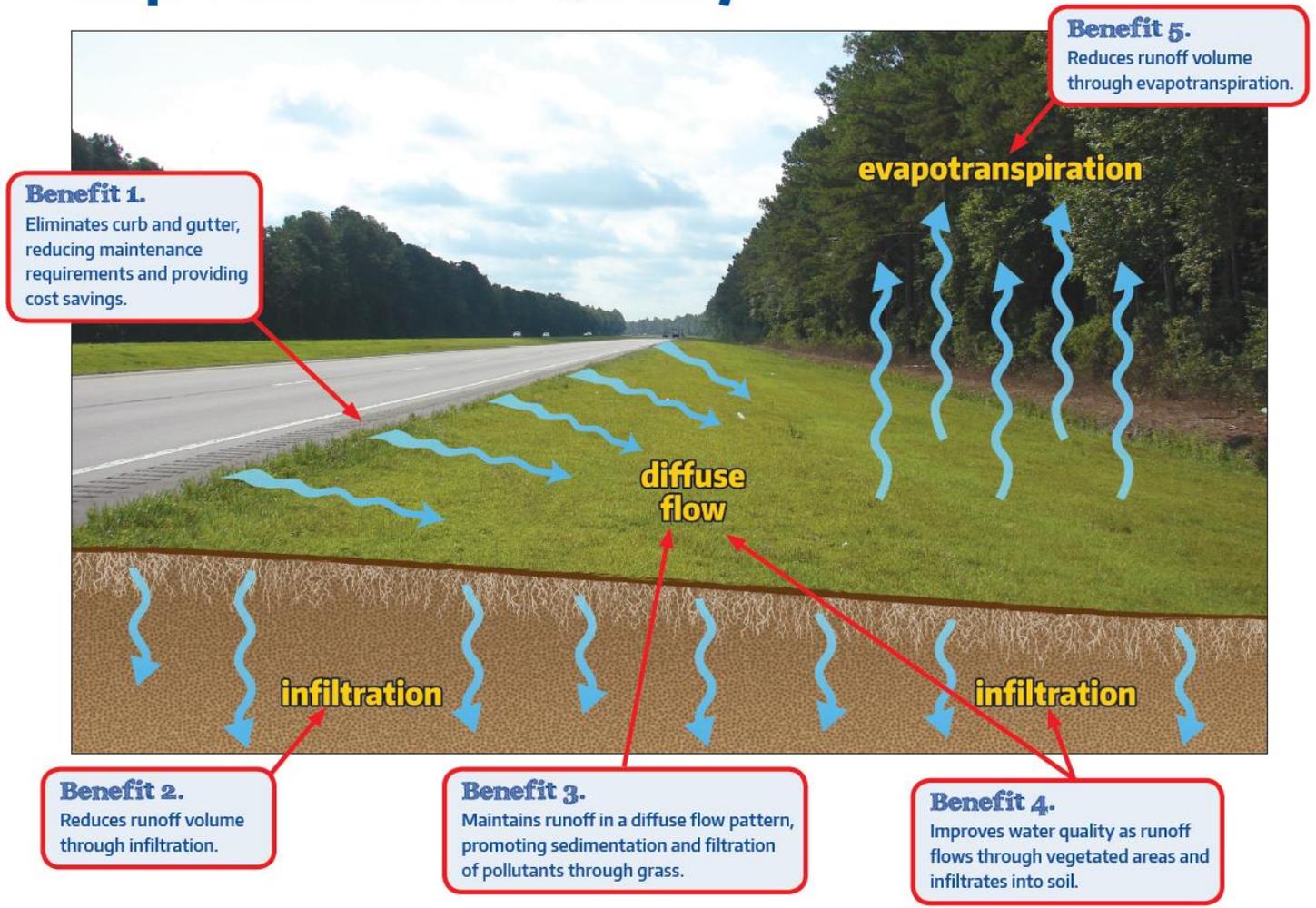
# Example: NBSS for Roadways – ROW infiltration



# NBSS Plan Roadways Recommendations



# Maximizing Shoulder Section Improves Water Quality



This NCDOT illustration shows how maximizing the shoulder section of roadways provides numerous benefits, such as reducing runoff volume.

## Example: NBSS for Working Lands – North River Wetlands Preserve

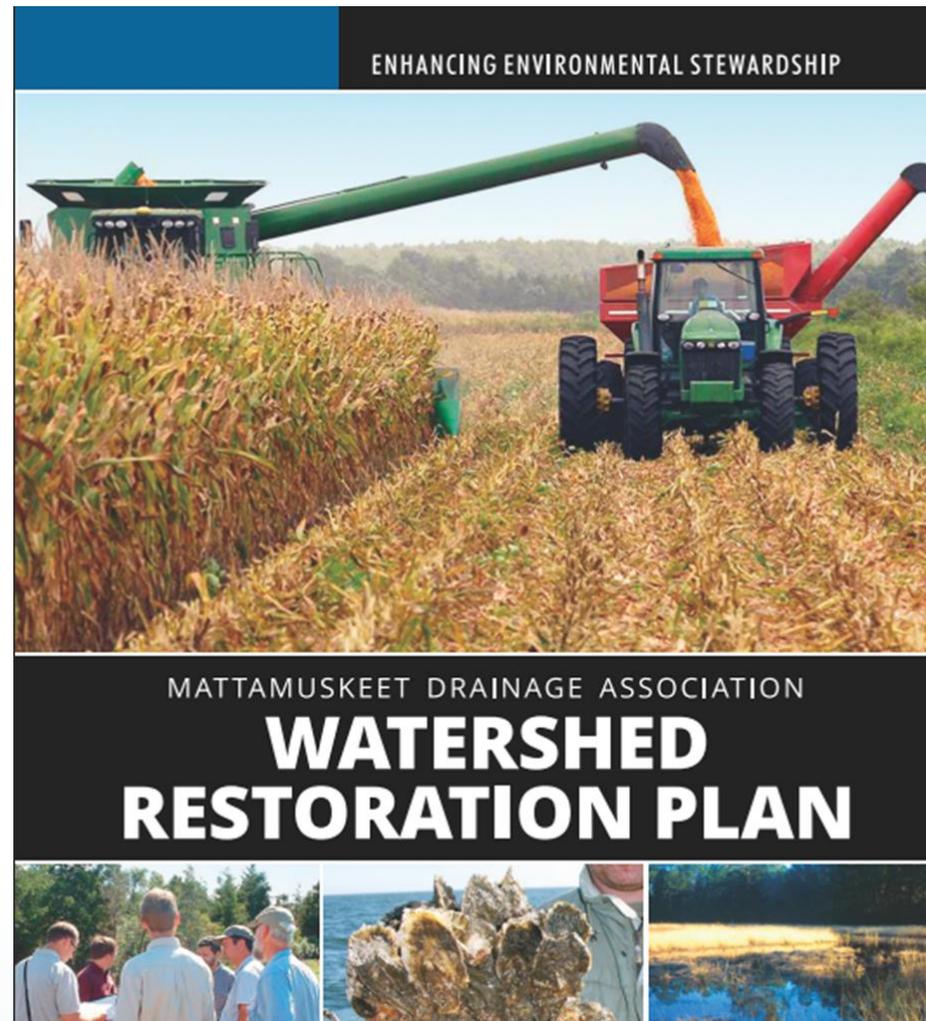


# NBSS Plan Working Lands Recommendations



# NBSS Plan's Cross-cutting Recommendations

## volume-based watershed management framework



# NBSS Plan's Cross-cutting Recommendations

State lead by example



# NBSS Plan's Cross-cutting Recommendations

increase knowledge



# NBSS Plan's Cross-cutting Recommendations

dedicated leadership to ensure success



Photo credit - [nearme.grahamstar.com](http://nearme.grahamstar.com)

# Questions and Conversation

For Nature-based Stormwater Strategies Action Plan  
and materials scan:

