"Nature-based Stormwater Strategies"

Increased Volumes of Stormwater Runoff and Flooding

- Both urban and rural land uses alter natural hydrology.
- Alterations effect the land's capacity to collect and absorb rain and storms.
- Stormwater runoff causes flooding.
- Stormwater runoff carries pollutants to surface waters.
- Intensity and frequency of storms are magnifying problems.
- Statewide Issue.

Urban and Rural Land Uses Alter Natural Hydrology Result in Flooding and Surface Water Degradation









Impact of Nature-based Stormwater Strategy Approach

- Maintain natural hydrology and capacity of land to collect and infiltrate.
- Mimic natural hydrology (retrofits).
- Reduce flooding.
- Protect and restore water quality.
- Result in more resilient communities statewide.
- Multiple co-benefits including economic and aesthetic.

Snapshot of Nature-based Stormwater Strategies









Working Together Toward Solutions:

- Governor's Executive Order 80
- June 2019 Workshop
- Determined Need to Assemble Experts to Collaborate Toward Solutions
- Project Team Formed
- Work Groups Assembled



Work Group Goals:

- Develop and implement consensus-driven statewide Nature-based Stormwater Strategy Action Plan.
- Increase the use of naturebased stormwater strategies where practicable to reduce flooding and protect water quality.



Work Group Charge:

- Evaluate current use of nature-based stormwater strategies, opportunities and need.
- Identify real and perceived impediments to its use.
- Formulate set of recommendations for advancing where feasible.

Project Schedule:

March 2020	Introductory meeting, identify impediments to implementation
May 2020	Compile policy, funding, and promotion needs for nature-based strategy implementation
July 2020	Develop draft Plan with tools to advance policies, funding, and promotion
Nov. 2020	Review and finalize Plan
March 2021	Host Nature-based Stormwater Strategy Summit



Nature-based Stormwater Strategies for New Development

Nature-based stormwater strategies for new development utilize the landscape to infiltrate, filter, store and evaporate runoff throughout a development site.

Instead of directing stormwater to ditches, pipes and ponds, nature based strategies capture and absorb rain before it becomes polluted runoff. These strategies include bioretention, permeable paving and disconnecting impervious surfaces.

Nature-based strategies are most effective when incorporated early into the design phase of new projects.



Nature-based Stormwater Strategies for Stormwater Retrofits

Nature-based stormwater strategies for existing land uses include costeffective landscaped features and other designed and engineered techniques to infiltrate, store and filter rain where it falls.

Retrofitting existing developments by disconnecting impervious surfaces to slow stormwater runoff and promote infiltration can restore a site's natural hydrology and capacity to capture and treat runoff.



Nature-based Stormwater Strategies for Roadways

Nature-based stormwater strategies for highways, roads and streets utilize natural and built features to infiltrate and transport stormwater runoff, reducing its rate and volume.

Techniques like grassed roadside shoulders, sand filters, and others can reduce flooding and improve water quality by reducing the polluted stormwater runoff flowing into waterways.



Nature-based Stormwater Strategies for Working Lands

Nature-based stormwater strategies for working lands include devising strategies to actively manage drainage water, wetlands, and riparian areas to infiltrate and filter runoff.

Nature-based strategies restore or replicate the natural hydrology and the capacity of the land to reduce flooding and naturally treat runoff within and from farm and forest lands.

