LOW IMPACT DEVELOPMENT IN NORTHERN VIRGINIA
What is Low Impact Development?

- manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.
LID Principles

- Increase Infiltration
- Minimize Imperviousness
- Minimize Disturbance
- Reduce Runoff
- Retain Natural Drainage
- Filter, Absorb Pollutants
Our vision:
An informed community working together to protect natural resources.
Education & Engagement
- Watershed Science
- Stream Monitoring
- Storm Drain Marking
- Watershed Friendly Garden Tours

Technical Assistance
- Soil Characteristics
- Drainage
- Erosion
- Plan Review
- Stormwater Permit Support

Urban Conservation
- Stream Restoration
- Rain Gardens
- Rain Barrels
- Composters
- Conservation Landscaping
- Ag Cost-Share

Collaboration & Partnering
- Local, State, & Federal Govt
- Industry
- Nonprofits
- Community Leaders
- Watershed Roundtables
Growth in Fairfax County

Population

Households


Population: 200,000 400,000 600,000 800,000 1,000,000 1,200,000

Households: 400,000 600,000 800,000 1,000,000 1,200,000
LID Principles

- Increase Infiltration
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Roles of NVSWCD

Learn
- Communicate with peers
- Visit sites & attend conferences

Pilot
- Design & install practices

Monitor
- Assess performance

Share
- Provide trainings
- Feature sites in annual tours & events
- Engage in policy discussions

Support
- Provide technical review / assistance
- Provide resources (BYO-rain barrels)

Research
- Monitor emerging trends, concerns and techniques
- Perform intensive assessments
Physical Assessment of Selected Rain Gardens in Fairfax County (2007)
## Maintenance

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Opportunity!</th>
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<tr>
<td>Not enough trained landscaping companies</td>
<td>Establish a regular training / certification program.</td>
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<td>Many HOAs haven’t budgeted for maintenance needs…</td>
<td>Provide HOAs with a general maintenance cycle and associated costs.</td>
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<td>Create a support fund for HOAs, if acceptable.</td>
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In 2012, we had:
- 1.1 Million Residents
- 400,000 Households

In 2025, we anticipate:
- 1.2 Million Residents
- 450,000 Households

Between 2011 and 2012, roughly 8% of the population were new to the area.
Coast Guard HQ, Washington, D.C.
3rd Largest Green Roof in the World
To Google…

- Northern Virginia SWCD Resources
  - Rain Garden Guidebook
  - Residential Low Impact Landscaping Handbook
  - Solving Drainage & Erosion Online Guidebook
  - Rain Barrel Partnership

- Low Impact Development Center
  - Inspiration, Landscaping

- Chesapeake Stormwater Network
  - Design Standards, Inspection, Maintenance, Credits
Thank you!

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