



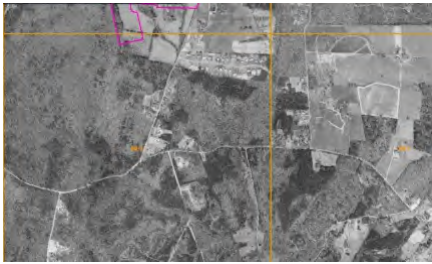
We work with the people who work the land.

Landowner Conservation Programs



1

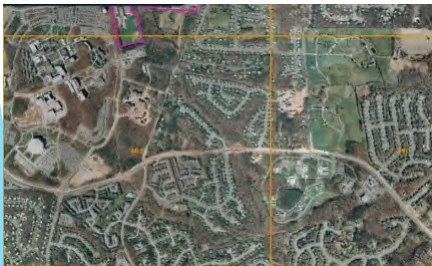
Changing Landscapes: Development



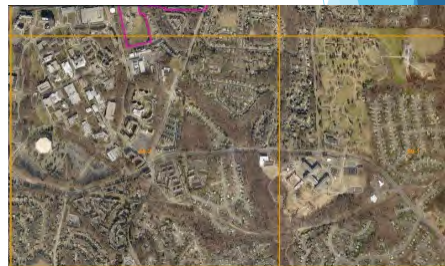
1960



1980



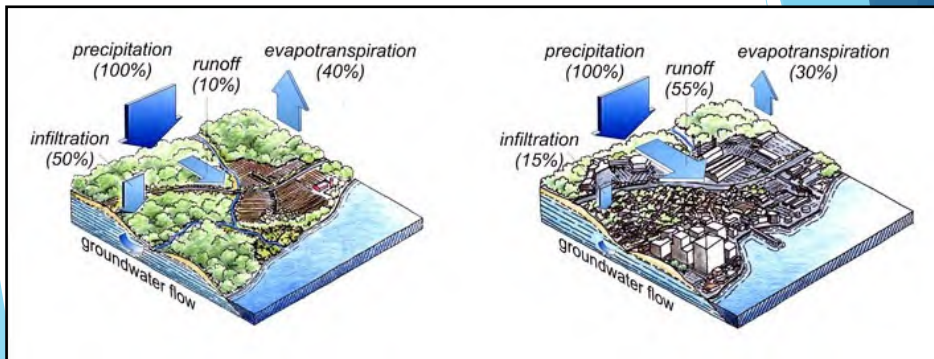
1990



2024

2

Changing Landscapes: Imperviousness



3

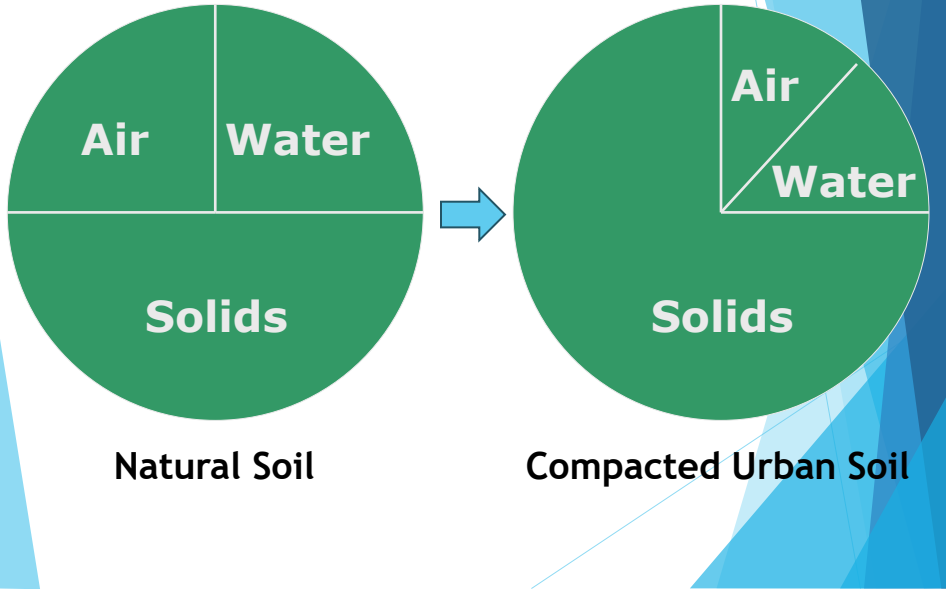
Changing Landscapes: Imperviousness

- Compaction
- Causes significant loss in pore space
- Reduces the ability of air and water to infiltrate into the soil
- ✦ Impervious "light"



4

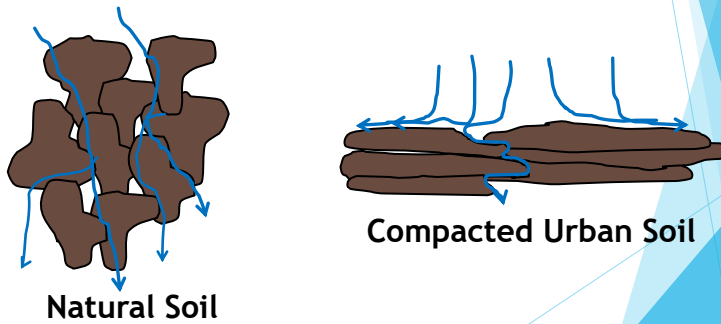
Changing Landscapes: Imperviousness



5

Changing Landscapes: Imperviousness


○ Compaction



6

Changing Landscapes: More Runoff



 = Impervious Surfaces  = Compacted Soil

Reston Pkwy at
Southlakes Dr

7

More Runoff: The Results

Impervious surfaces and compacted soil create increased runoff volumes.

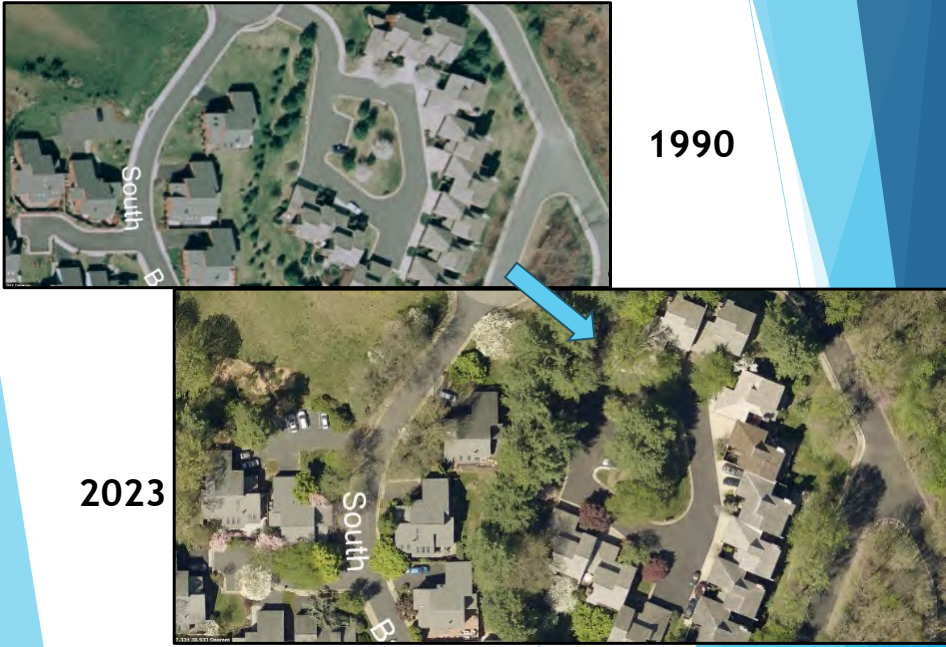
Without a suitable flow path, those increased volumes can lead to...

- ▶ Flooding
- ▶ Erosion
- ▶ Waterlogging



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Changing Landscapes: Increasing Shade



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Increasing Shade: The Results

- ▶ Patchy grass growth
- ▶ More erosion



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Assistance Available

- ▶ The Northern Virginia Soil and Water Conservation District serves small landowners, clusters and HOAs through three programs
 - ▶ Flood Mitigation Assistance Program (FMAP) → Provides Grant Funding
 - ▶ The Conservation Assistance Program (CAP) → Provides Grant Funding
 - ▶ Residential Technical Assistance Program (RTA) → Provides Ideas & Advice
 - ▶ Home Turf → Provides Ideas & Advice

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FMAP: Flood Mitigation Assistance Program




- ▶ For structural flooding
- ▶ 50% reimbursement for eligible floodproofing practices, up to \$5,000
- ▶ Launched July 1st



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FMAP: Flood Mitigation Assistance Program

- ▶ Funded by the Stormwater Service District Fee
- ▶ Approved List of Practices
 - ▶ 25 practices
 - ▶ “Other” category

Windows		
Practice	Description	County Review Requirements
Install permanent glass protection materials or floodproof windows	<p>During significant flooding events, moving debris or simple pressure can break windows that are not adequately protected.</p>  <p>Permanent glass protection can prevent damage from flooding and other extreme weather events. Floodproof windows or those with glass protection are passive systems that protect from rising floodwater and debris impact. They are typically hurricane impact-rated and tested to withstand more than 10' of water and large object collision.</p>	No reviews or permits needed.
Install basement window covers	<p>Fixed, translucent, water-tight covers installed on near grade or below grade basement windows provide increased protection against surface flooding.</p>  <p>To significantly increase effectiveness, basement window protection should be custom fitted and installed, as studies have shown inexpensive, plastic models offer minimal protection.</p>	No reviews or permits needed.
Install custom	<p>A ground floor or basement window well should have a central drain that is either connected to an interior or</p> 	<p>Before you begin:</p> <p>Approved practices may require applying for and the issuance by Land Development Services of building and/or mechanical, electrical and plumbing permits.</p>

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FMAP: Flood Mitigation Assistance Program

- ▶ How to apply
 - ▶ Install a practice on the approved list
 - ▶ Save receipts, take pictures
 - ▶ Apply after work completed
 - ▶ Reimbursement nearly guaranteed



Listed Practice: Sump Pump Battery Backup

- ▶ Install a practice not on approved list
 - ▶ Save receipts, take pictures
 - ▶ Apply as “other” category after work is completed
 - ▶ Reimbursement on case-by-case basis

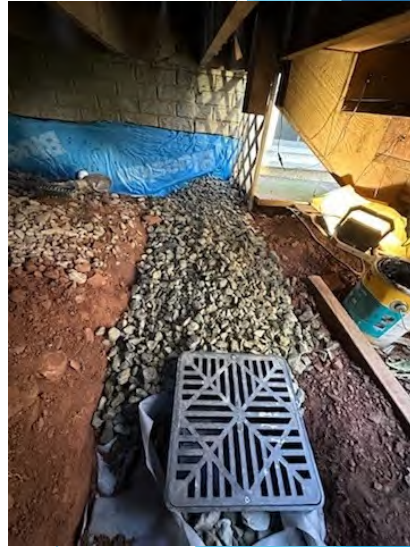


Unlisted Practice: Downspout Extension and Catch Basin

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FMAP: Flood Mitigation Assistance Program

- ▶ **Uncertain?**
 - ▶ Consult with Conservation District first
 - ▶ Good for those who want to install practice not on approved list
 - ▶ Good for those who don't know what practice to install
 - ▶ Good for those who want second opinion



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FMAP: Flood Mitigation Assistance Program

- ▶ **Who may apply?**
 - ▶ Homeowners and renters
 - ▶ HOAs and Condo Associations
 - ▶ Places of Worship
- ▶ **Who may not?**
 - ▶ Commercial properties
 - ▶ Properties in Towns of Vienna & Herndon



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FMAP: Flood Mitigation Assistance Program

▶ Next Steps: Publicity!

- ▶ Increase awareness and applications
- ▶ Goal is thousands of applications/year
- ▶ To date: \$45,111 in grant money disbursed to 24 applicants



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FMAP: Flood Mitigation Assistance Program

▶ Next Steps: Publicity!

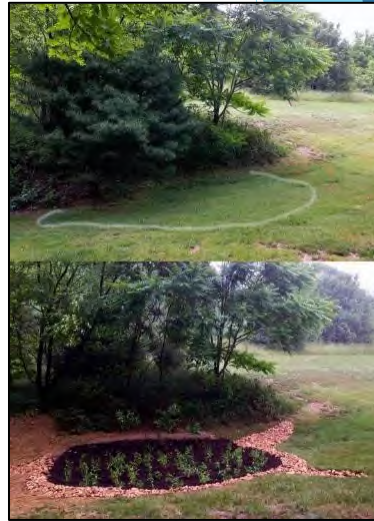
<https://www.fairfaxcounty.gov/soil-water-conservation/fmap>



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Conservation Assistance Program (CAP)

- ▶ For flooding and/or erosion problems in the yard.
- ▶ Eligible projects solve the drainage or erosion problem while benefitting local water quality
- ▶ Only certain types of projects qualify



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CAP: Eligible Practices

- ▶ Conservation Landscaping
- ▶ Rain Gardens/Bioretention
- ▶ Dry Wells/Infiltration Trenches
- ▶ Permeable Paving
- ▶ Impervious Surface Removal
- ▶ Rainwater Harvesting
- ▶ Green Roofs
- ▶ Constructed Wetland
- ▶ Vegetated Stormwater Conveyances
- ▶ Living Shorelines



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CAP: Eligible Practices

▶ Conservation Landscaping

▶ a.k.a. native plants!

▶ Specs

- ▶ Must replace turf or bare soil or soak up excess runoff
- ▶ Use only species native to VA
- ▶ Can be a meadow, trees, or a mulched bed
- ▶ Planting density must be high



80% cost-share with a \$7,000 cap

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CAP: Conservation Landscaping



80% cost-share with a \$7,000 cap

22

CAP: Conservation Landscaping



80% cost-share with a \$7,000 cap

23

CAP: Conservation Landscaping



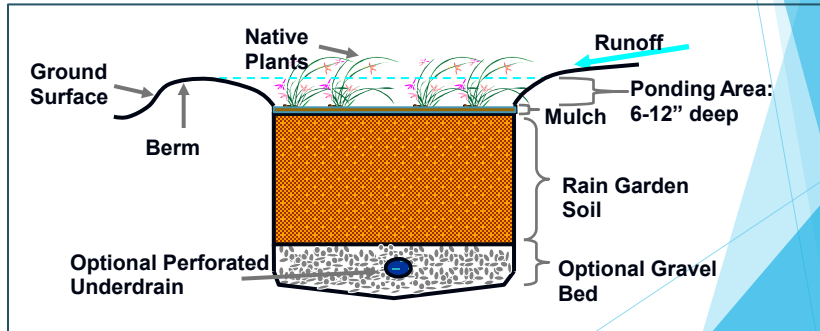
80% cost-share with a \$7,000 cap

24

CAP: Eligible Practices

▶ Rain Gardens

- ▶ A sunken garden that captures and absorbs runoff



80% cost-share with a \$7,000 cap

25

CAP: Rain Gardens

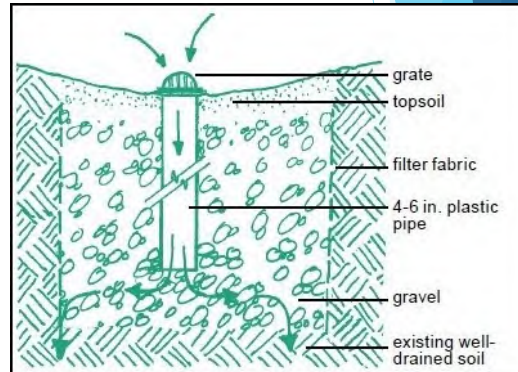


80% cost-share with a \$7,000 cap

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CAP Eligible Practices

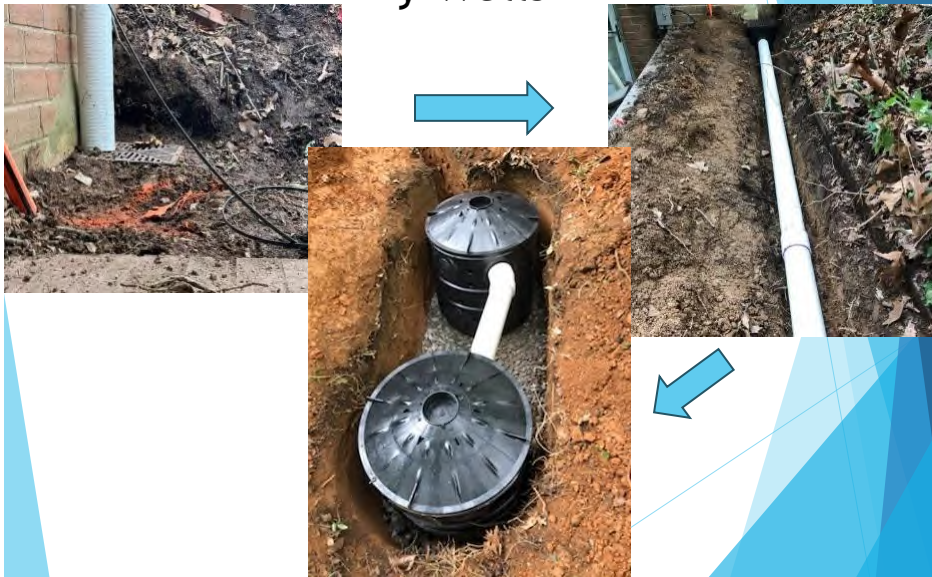
- ▶ **Dry Well**
 - ▶ Buried pit of gravel that absorbs runoff



80% cost-share with a \$7,000 cap

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Conservation Assistance Program: Dry Wells

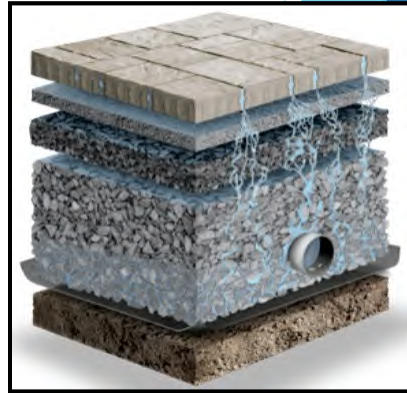


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Conservation Assistance Program: Water Quality Practices

▶ Permeable Paving

- ▶ Allows runoff to soak down into gravel base



\$14/square foot up to \$20,000

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CAP: Permeable Paving



Before

After

30

CAP: Permeable Paving



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CAP: Impervious Surface Removal



\$10/square foot with a \$20,000 cap

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Conservation Assistance Program: Maintenance

- ▶ All projects that receive funding must be maintained for 10-years!



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Conservation Assistance Program: How to Apply

- ▶ Submit a site visit request
- ▶ Conservation District staff will visit, determine which CAP projects are suitable
- ▶ Submit your application to Conservation District for review
- ▶ Start construction after District approval
- ▶ District inspects project after installation and reimburses applicant
- ▶ Practice must be maintained for 10 years



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Conservation Assistance Program: Who Can Apply?

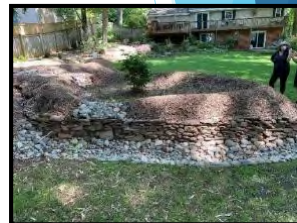
- ▶ Residential property owners
- ▶ Homeowners or Condo Associations
- ▶ Places of Worship
- ▶ Commercial Properties
- ▶ Vienna and Herndon property owners are eligible



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Conservation Assistance Program: Who Can Apply?

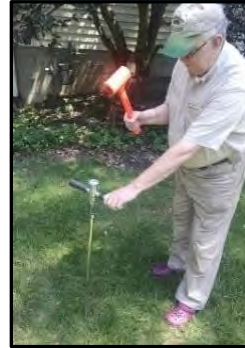
<https://www.fairfaxcounty.gov/soil-water-conservation/vcap>



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The Home Turf Program

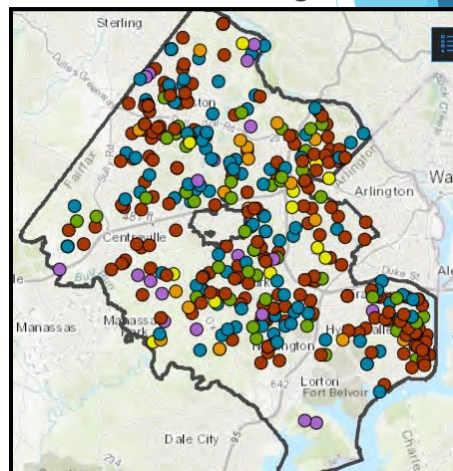
- ▶ Master Gardeners visit your home
 - ▶ Measure the lawn area
 - ▶ Identify types of grass & weeds
 - ▶ Collect soil for testing
 - ▶ Create a nutrient management plan for proper lime and fertilizer application
- ▶ The most ecologically sensitive lawn is one that is healthy and lush



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Residential Technical Assistance

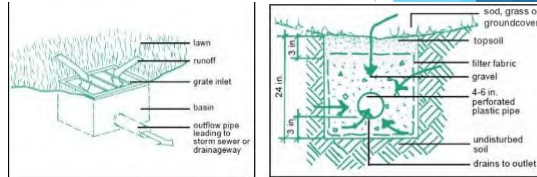
- ▶ Technical consultations with our staff concerning:
 - ▶ Drainage problems
 - ▶ Erosion issues
 - ▶ Landscaping problems



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Residential Technical Assistance

- ▶ What it does
 - ▶ Diagnoses problems
 - ▶ Suggests solutions
 - ▶ Provides second opinions
- ▶ What it doesn't do
 - ▶ Take sides in disputes
 - ▶ Provide grants



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Take Advantage!



We work with the people who work the land.

- ▶ Home Turf Program: <http://fairfaxgardening.org/home-turf/>
- ▶ Residential Technical Advice: conservationdistrict@fairfaxcounty.gov

FMAP Questions?

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RTA Questions?

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