

Voluntary Property Acquisition Program & Landscaping Maintenance Standards

September 18, 2024



Agenda

Landscaping and maintenance standards

Acquisition program update

RAMP overview

Draft sign for acquired properties

Questions

WHCA Engagement

Meeting	Date
WHCA Meeting	March, 2019
WHCA Meeting	November, 2019
WHCA Meeting	September, 2020
WHCA Meeting	June, 2021
WHCA Meeting	February, 2022
Spout Run Joint Civic Association Meeting	March, 2022
Spout Run Joint Civic Association Meeting	September, 2022
Spout Run Joint Civic Association Meeting	September, 2023
Community Meeting 4437 N. 18 th St Demolition	October, 2023
Community Meeting 4423 N. 18 th St Demolition	February, 2024
WHCA Meeting	April, 2024
Community Meeting 4434 N. 19 th St Demolition	August, 2024
Spout Run Joint Civic Association Meeting	September, 2024
WHCA Meeting	September, 2024
Community Meeting 4434 N. 19 th St Demolition	October, 2024

What we have heard from the community



Desire for properties to be well maintained with regard to mowing, plant maintenance, tree trimming, leaf management, snow removal



Survey indicated high interest in native plants and rain gardens for the properties



Survey indicated interest in public use of properties as open space



Interest in future plans/designs for acquired properties and schedule

How we have responded



Meeting with the community prior to each demolition project, communicating updates, and responding to all questions and concerns during the process



Developing a landscaping and maintenance approach similar to Parks general residential park areas



Developing draft landscape and maintenance standards for the acquired properties



Maintaining regular communications, meetings, and updates with the community



Overview of Concepts for DRAFT Maintenance and Landscaping Standards

DRAFT Landscaping and Maintenance Standards

- When do the standards apply--after demolition and turf establishment
- Purpose of acquired properties
- Definition of Overland Relief
- Maintenance Considerations
- Type of Maintenance Activities
- Frequency of Maintenance
- Landscape Materials and Placement
- Other minor improvements

Maintenance Considerations

Landscaping and use must be consistent with the Overland Flow Pathway and character of Neighborhood

Cost effective

Ease – maintenance must be easy and uncomplicated using existing County Contracts

Landscaping should require minimal, if any, watering

Minimize pests and nuisances

Minimize potential debris flow during a flood

Comply with Virginia law governing use of funds from stormwater utilities

Types of Maintenance

- Grass Mowing
- Snow and ice removal from sidewalks
- Fence maintenance, if present
- Litter Removal
- Leaf Mulching or Removal (in fall/autumn)
- Tree pruning and maintenance
- Removal of invasive species in areas that are not turf
- Watering to establish planted areas
- Maintenance of signage
- Pest control

Standards Review Process

- We understand you are eager to review the landscape and maintenance standards
- Standards are undergoing internal County review for consistency
- We have shared some of the key elements of the policy with you tonight
- We will share the full draft standards with you soon for your feedback

What is the plan for acquired properties?



Re-establishing overland relief flow paths for water during large storm events for flood mitigation.



Provide access to existing stormwater infrastructure to conduct necessary maintenance or upgrades



Location of future stormwater infrastructure



Construction of stormwater detention facilities



Potential for co-locating water quality and stormwater capacity projects

Potential Future Uses for Acquired Properties

Increase trunk storm sewer capacity

- Expand existing pipes
- Add additional pipes

Future construction would impact any new landscaping installed following the demolition of the homes.



Underground Detention Vault

Future construction would impact any new landscaping installed following the demolition of the homes.



Recent Questions

Does property acquisition reduce flooding?

Acquiring the properties **reduces flood risk** by removing residents from a location that has a higher risk of flooding. Acquiring the property does not directly reduce flooding but provides more space (overland relief) for floodwaters. Eventually, the County may acquire enough property to expand the system capacity or install infrastructure to detain flood waters.

Will the County daylight the stream that used to flow in this area? During Arlington's development, more than 60% of streams were buried in storm water pipes. Currently, there are many homes, roads and other neighborhood assets on top of the former stream. Much more space would be required to daylight the stream.

Recent Questions

Can the County place a covenant in the deeds of the properties that they can only be used for stormwater management, even in the future? We understand the request to legally codify the intent of the voluntary acquisition program and the future use of the properties. In this situation, the County would be making a covenant with itself, which may not offer as much protection as might be expected with a covenant.

Can the community use the properties for walking, playing ball or block parties? Yes, similar to what happens organically at other County owned properties that do not have amenities, structures or reservations. Our expectation is that neighbors would respect each other for any organic activities.



RAMP-ING UP FOR STORMS

RISK ASSESSMENT AND MANAGEMENT PLAN

RAMP, the County's Risk Assessment and Management Plan, is a comprehensive framework for modeling, measuring and reducing risk in the face of the increasing frequency and intensity of storms and flood-related impacts influenced or caused by climate change.

The RAMP has updated Arlington's climate projections for flooding, sea level rise and storm surge using 2040, 2070 and 2100 as the climate time horizons. Further, the RAMP has created inundation maps for each of the climate time horizons, identified Critical Government Facilities and completed Vulnerability and Risk Assessments for nine priority watersheds. The Risk Assessments combine economic, environmental and social risk; the latter designed to reflect vulnerability and risk specific to moderate- to high-Social Vulnerability Index communities.

RAMP (Risk Assessment and Management Plan)

- Prior to the RAMP, flood mitigation planning used ATLAS 14, a common and widely-used NOAA Tool
- ATLAS 14 lags in updates but, critically, uses past and present storm/flood data only (temporal stationarity)
- **The RAMP expands upon past and present data, with climate projections and modeling for 2040, 2070, and 2100**
 - RCP 8.5 with moderate forcing
 - Inland flooding, sea level rise, and storm surge
 - Present and future 2-D flood mapping within the key watersheds identified as flood-vulnerable

Core RAMP Elements

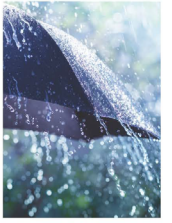
- **Updated Climate Projections**
 - Multiple climate vulnerabilities and climate “horizons” or timeframes
- **Inundation Maps / Updated IDF Curves**
 - modeled on a Watershed-Scale over multiple climate horizons (2040, 2070, and 2100)
- **Vulnerability Assessments**
 - Calculations factoring critical civil/civic assets, environmental impacts, and social vulnerability
- **Risk Assessments**
 - Direct, indirect and cascading impacts based on 1) total loss or replacement, lost revenue, increased costs of O&M, loss of economic activity
- **Capital Projects, Programs and Policies to Mitigate and Manage Flooding in Arlington County**
 - By type and cost-benefit calculations
- **Market Impacts and Analysis**
 - Impacts on bonding/cost of debt, re/insurance, land use

Draft Signs for Acquired properties

What the community requested:

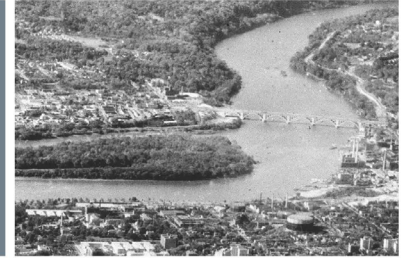
- What's causing the problem
- What we and the County are trying to achieve
- Suggestions for residents, such as not allowing downspouts to empty onto impervious surfaces, and then flow directly into the street.
- *Or something simpler with a QR code*

Flood Resilient Arlington Making Space for Stormwater - Overland Relief Pathway



Loss of Streams and Floodplains

From the 1930s to the 1950s, Arlington was the fastest growing county in the nation. At that time, there were no regulations to protect streams, or to manage stormwater from new construction. As Arlington rapidly grew, two thirds of Arlington's streams and floodplains were buried in stormwater pipes, and homes and businesses were built over top. These former stream valleys have a higher risk of flooding due to their low elevation, despite the underground stormwater pipes.



What is overland relief?

Modern stormwater design requires "overland relief", which is a safe pathway for floodwaters during storm events. If Arlington were built today, regulations would require overland relief to sufficiently pass the 100 year storm. Buildings, fences or other obstructions would not be allowed in the path of flood waters, and public easements would always be required. However, these requirements cannot be applied retroactively.



System Constraints

In Waverly Hills, Arlington's historical development pattern resulted in a stormwater system that weaves between homes, lacks public easements for improvements, and has insufficient space for overland relief for larger storm events. This development pattern has contributed to the flash flooding and property loss experienced in the Waverly Hills neighborhood. The County worked with WHCA for several years to explore multiple stormwater system upgrades to reduce flood risk. However, because of the system constraints, no infrastructure improvements were identified that could sufficiently reduce flood risk.

Overland Relief Pathway

To reduce flood risk for the community and better respond to future climate change, the voluntary property acquisition program was established. The County is purchasing some properties on a voluntary basis to provide overland relief, expand the storm system capacity and reduce flood risk to the community. Creating an overland relief pathway will provide space for floodwaters during large storms.



Reducing Runoff at Home

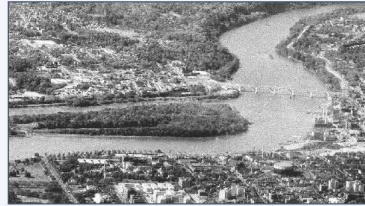
Interested in learning how you can reduce runoff on your property? Scan the QR codes below with your phone's camera to learn how to reduce runoff at home or reduce your flood risk.



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Stormwater at Home

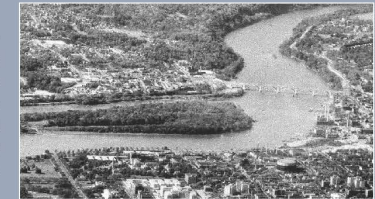


Reduce your Risk of Flooding

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Stormwater at Home



Reduce your Risk of Flooding

Community
Meeting,
October 2, 7
PM

Community Meeting – Demolition 4433 18th St North

October 2, 7 PM. Please join DES staff to discuss plans for the demolition of the home and stabilization of the property at 4433 18th St North. The County has purchased the property at 4433 18th St North as part of a [stormwater improvement program](#) to provide overland relief or expand the storm system capacity and reduce flood risk to the community.

Questions?

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