

Chesapeake Bay Preservation Plan Implementation Update

March 16, 2022

Arlington County Department of
Environmental Services



Chesapeake Bay Preservation

- Act
- Ordinance
- Plan



The Chesapeake Bay Preservation Act (Bay Act) was enacted by the Virginia General Assembly in 1988 to protect and improve water quality in the Chesapeake Bay through land use management.

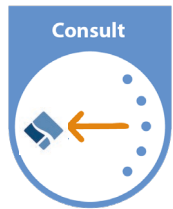
Since local governments have the primary responsibility for land use decisions, the Bay Act expanded their authority to manage water quality.

To comply with the Bay Act, Arlington adopted the Chesapeake Bay Preservation Ordinance in 1992 (with updates in 2003, 2011 and 2014) and the Chesapeake Bay Preservation Plan in 2001.

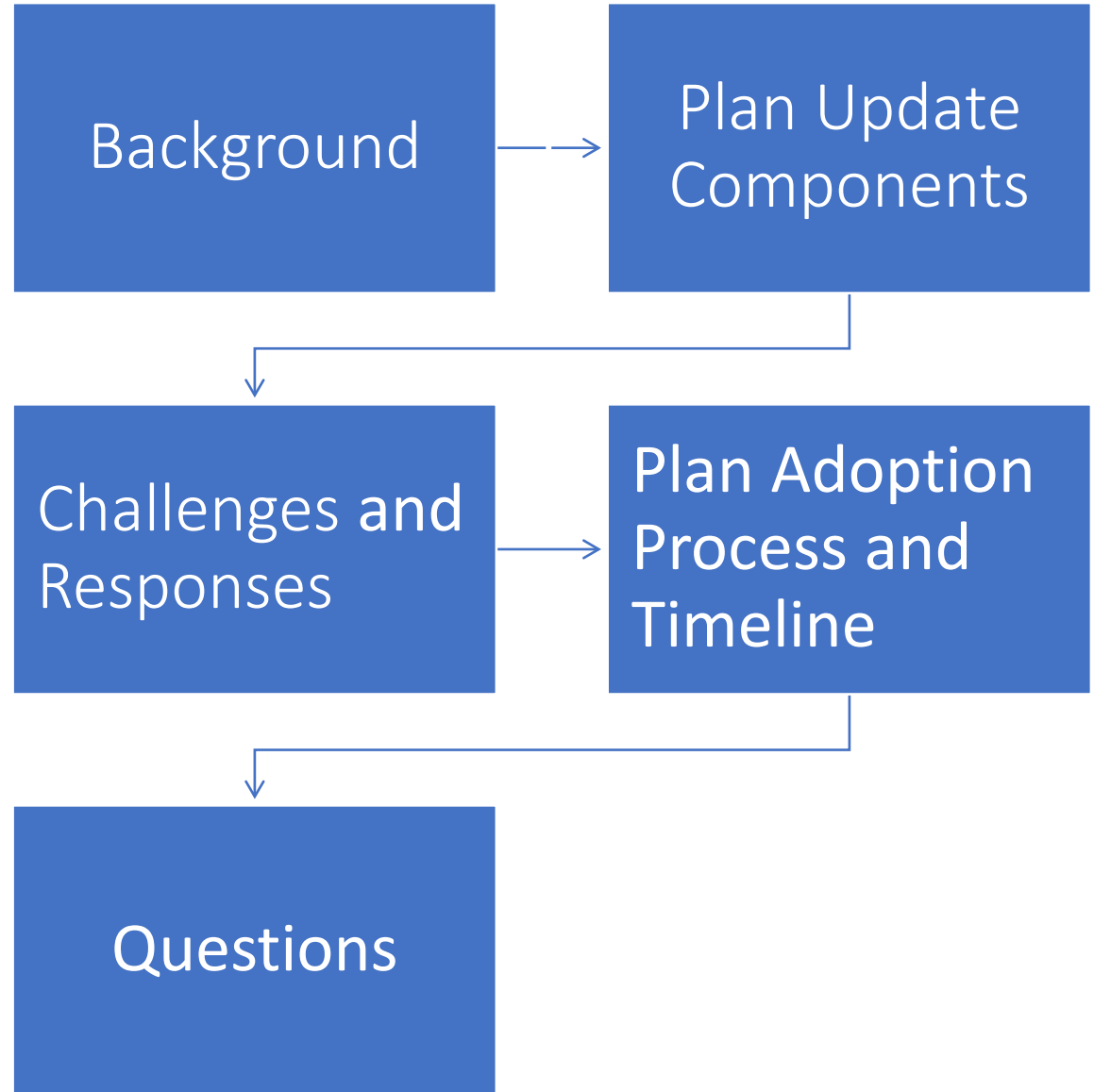
Why This Update Now?

- Localities must maintain a current Chesapeake Bay comprehensive plan element to comply with the Bay Act.
- Virginia Dept of Environmental Quality recently audited Arlington's Chesapeake Bay Program (2020-21).
- Feedback: Program is strong and comprehensive but **need to update 2001 Preservation Plan to reflect current program.**
- Administrative update; no new policy.
- Timeline: Draft plan by summer 2022. Final plan and County Board adoption in winter-spring 2023.

Agenda



Project triggered by legislative, regulatory or policy requirements.



Chesapeake Bay Preservation Plan

Elements required to be included in the CBPP (per the Bay Act):

Defining and mapping of RPA areas

Criteria to prevent increase in pollution during development

Controls for land use, development and subdivision

Inclusion in comprehensive plan and ordinances



Since 2001: A Stormwater Odyssey



Since the 2001 adoption of the Chesapeake Bay Preservation Plan, the stormwater program has grown tremendously in rigor and breadth beyond the scope of the original plan



Highlights include establishing the 2008 Stormwater Tax, adoption of the 2014 Stormwater Ordinance and Master Plan, and inclusion of Chesapeake Bay pollution reduction in Arlington's Stormwater Permit



The County is now updating the Chesapeake Bay Preservation Plan to reflect the current stormwater program, regulations and policies, and also to identify new challenges and opportunities.

Minimizing Environmental Impacts of Development

Since 2001, how have the County's efforts to minimize direct impacts to natural resources evolved?

2003

- Expansion of RPAs beyond minimum requirements
- RPAs extended to include all streams, open channels, adjacent steep slopes, and buffer area
- Tree canopy requirements part of Bay ordinance revisions.

2014

- Adoption of comprehensive new Stormwater Management Ordinance
- Incorporation of tree canopy replacement requirements

2018

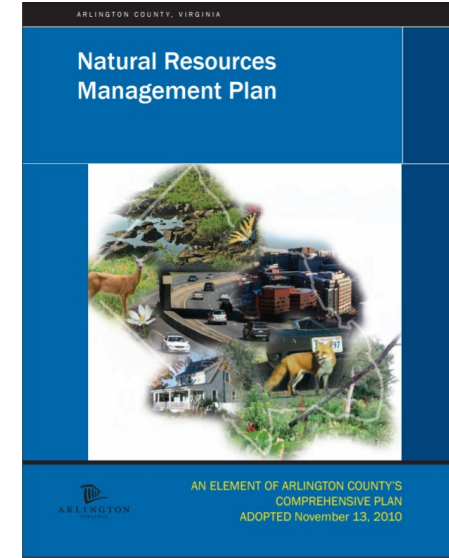
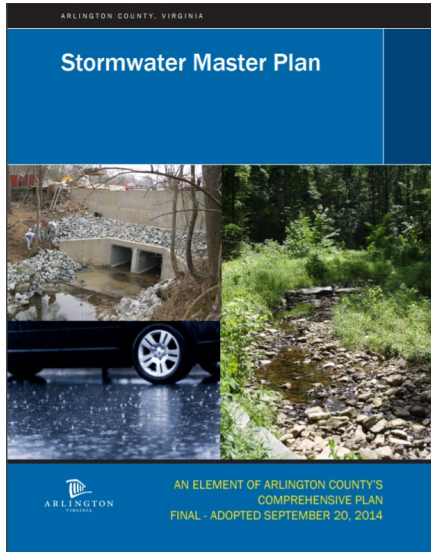
- RPA Map Update
- Fully incorporated into plan review process

2021

- LDA 2.0 upgrades for single family home development

View on AC Maps: <https://gis.arlingtonva.us/apps/acmaps.html>

Planning and Policy Framework



Stormwater Master Plan and Stormwater Permit

Resource Protection Area Map

Floodplain Ordinance and Flood Insurance Rate Maps

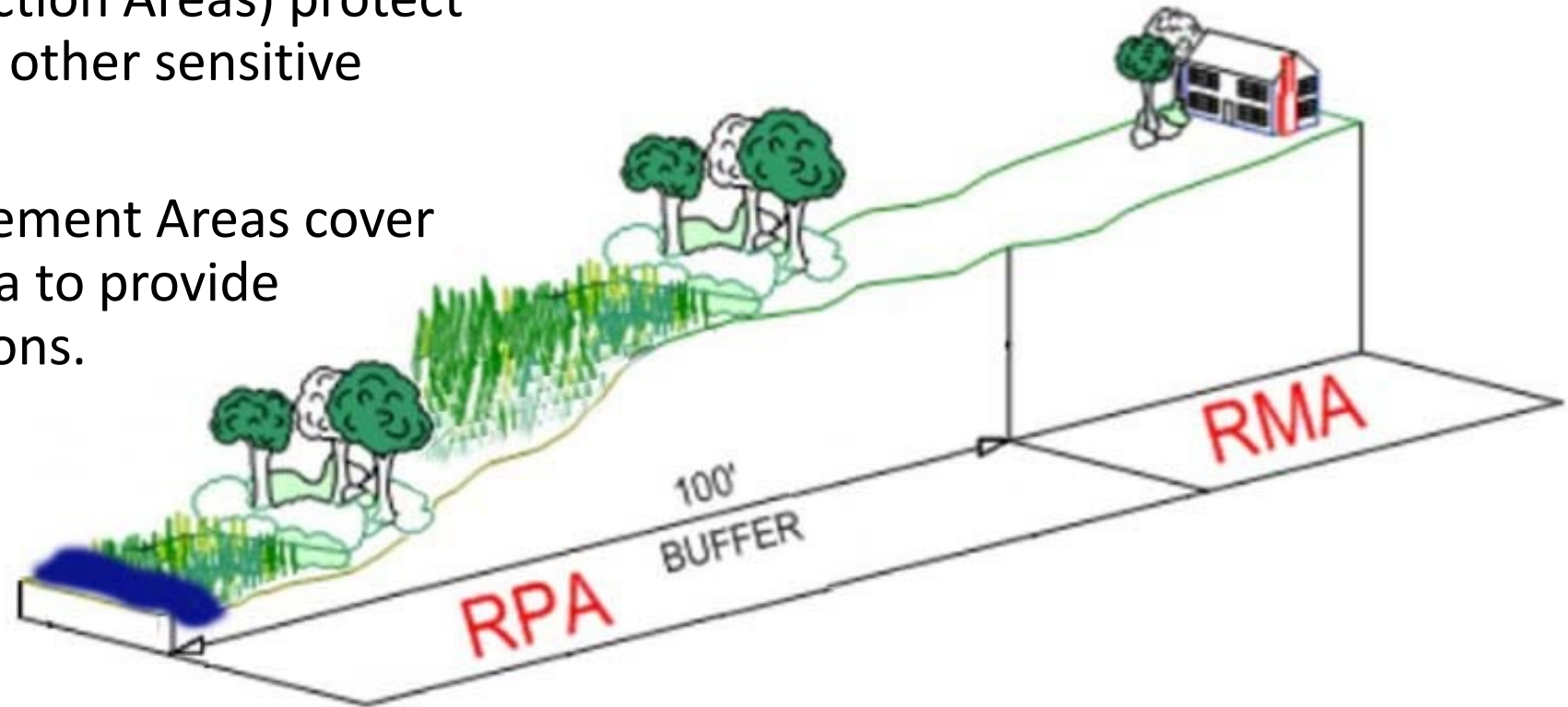
Public Spaces Master Plan

Forestry and Natural Resources Plan

The new Chesapeake Bay Preservation Plan will reference and summarize other key plans, policy and regulatory maps. Sector plans are also components of the planning framework.

Resource Protection Areas and Resource Management Areas

- Chesapeake Bay Preservation Areas (or Resource Protection Areas) protect stream buffers and other sensitive areas.
- Resource Management Areas cover remaining land area to provide additional protections.



Resource Protection Area (RPA) - Extensive Review



Appendix C. Water Quality Impact Assessment Data Sheet

Project Address 1305 N Quintana ST		Date: 07/07/2020	
Applicant Name/Affiliation: Jim James Designer/Builder		Applicant Contact Information (phone and email): 703.555.4545 Jim.James01@builder.com	
Owner/Client Name: Doris Smith		Owner/Client Contact Information (phone and email): 703.335.9679 SmithDoris64@gmail.com	
Section 1: Type of activity proposed			
Activity type (check all that apply):		<input checked="" type="checkbox"/> Deck, patio, or retaining wall <input type="checkbox"/> Landscaping (includes tree removal) <input type="checkbox"/> Utility work <input type="checkbox"/> Fence <input type="checkbox"/> Other (please describe):	
<input type="checkbox"/> New construction (residential, commercial, public, etc.) <input type="checkbox"/> Alteration of non-residential structure <input type="checkbox"/> Residential addition <input type="checkbox"/> Detached residential structure			
Section 2: Key details of the proposed activity			
Complete all that apply		Explanation	
Total area of disturbance on parcel (sf)	1,387	Includes building footprint plus a 10' foot buffer. Also includes all soil disturbance, ingress/egress areas, stockpiling areas, etc.	
Area of disturbance within RPA (sf)	0	Includes removal of trees > 3" in diameter	
Area of disturbance on slopes greater than or equal to 15 percent located adjacent to landward RPA boundary (sf)	0	Does not apply to RPA parcels along Chain Bridge Road (15 percent and greater slopes are included as part of RPA)	
Complete all fields		Explanation	
RPA encroachment (ft)	Left third of parcel or site	Existing condition: 145' Proposed condition: 145'	The distance (in feet) from the existing or proposed structure to the designated RPA feature (edge of stream or open channel, wetland, etc.). Encroachments of zero (0) indicate the project will impact the stream or other RPA features.
	Middle third of parcel or site	Existing condition: 160' Proposed condition: 160'	
	Right third of parcel or site	Existing condition: 190' Proposed condition: 190'	
Total development footprint in RPA (sf)	0	0	The existing footprint includes the area of any existing structures, patios, decks, walkways, etc. Proposed footprint is the anticipated post-project area of all structures, additions, decks, walkways, ingressed areas behind a retaining wall, etc.
Impervious footprint in RPA (sf)	0	0	Total area of impervious surfaces within the RPA (rooftops, pavement, etc.)

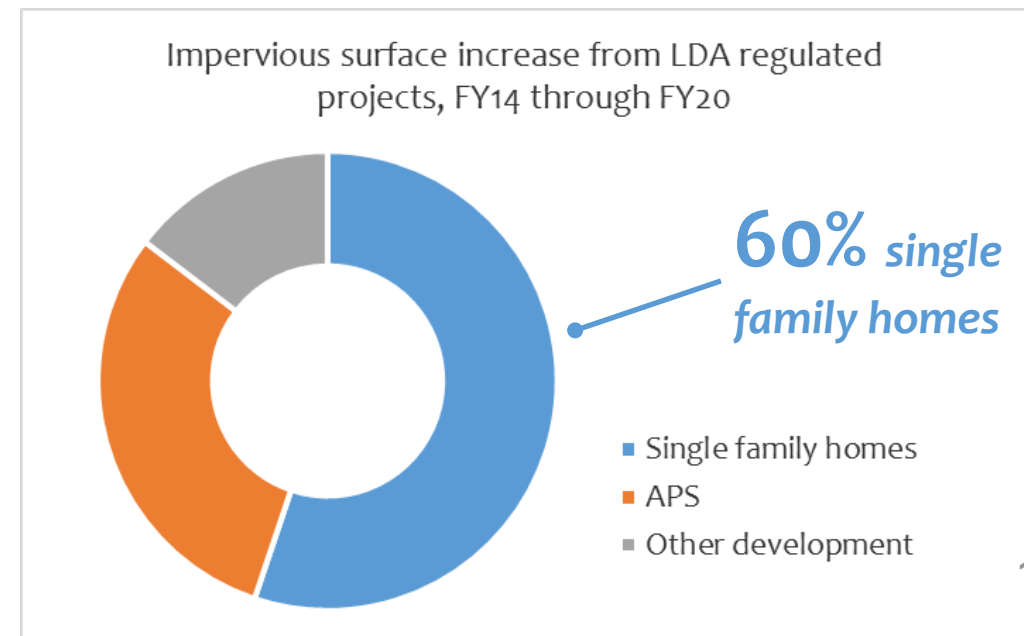
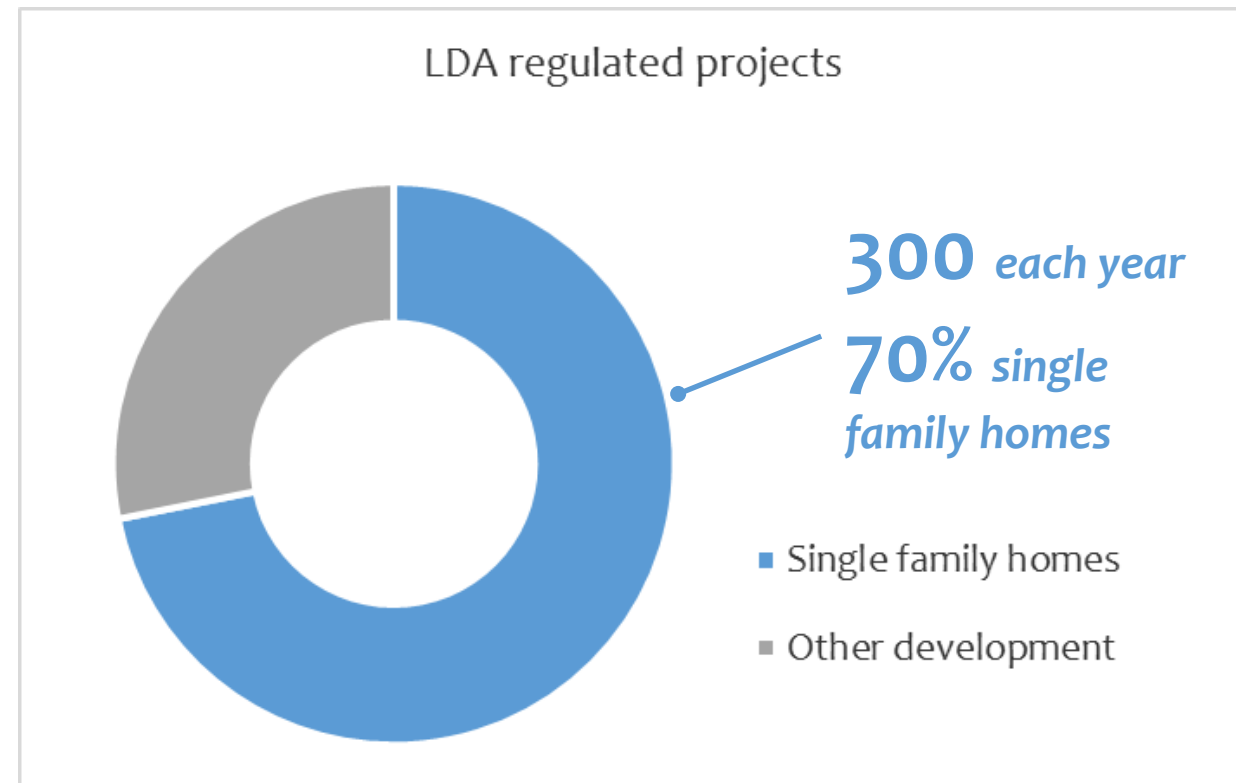
(OVER)

- RPA review applies to all projects
- Applicant must submit a Water Quality Impact Assessment
- Mitigation and Buffer Enhancement is required if there is impact
- Tree removal in RPA is reviewed

Land Disturbing Activities Permit and Program

- Applies to 'land disturbing activities' that exceed 2,500 square feet*
- Board chose State option in 2014 to continue to regulate single family homes
- Regulates construction and post-construction runoff

*minimum State threshold



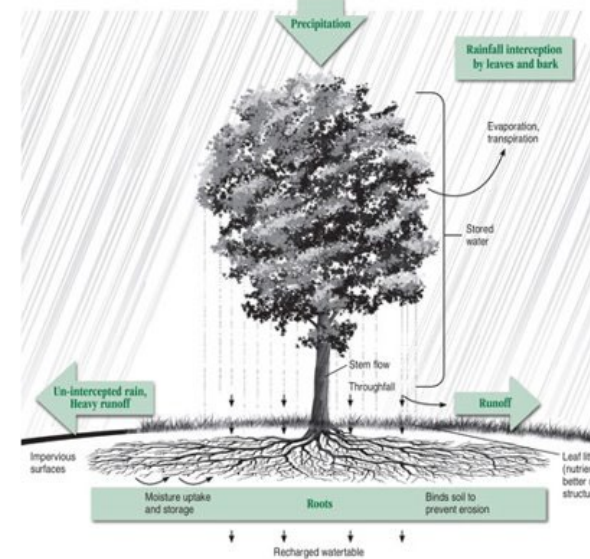
Growth and Development Pressures: LDA 2.0

New 2021 program to:


- Manage more stormwater on-site
 - Emphasis on heavy rainfall and protecting downhill properties; More reliability
 - 3" of runoff from increased impervious surfaces
- Gravity detention tanks
- De-compact and amend soils to absorb more runoff and improve plant growth
- Improve accounting for stormwater benefit of trees



New home soils **10x** more compacted than existing home soils



Shoreline and Stream Resilience

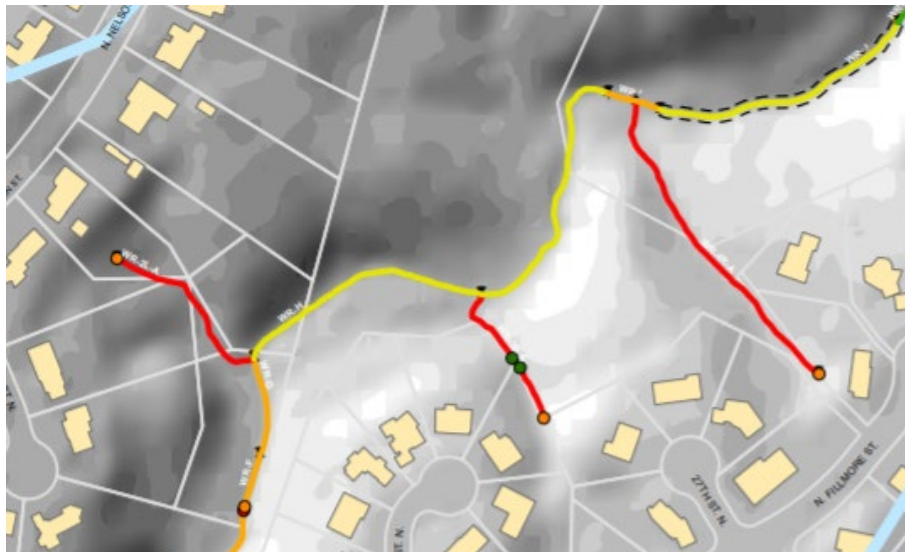
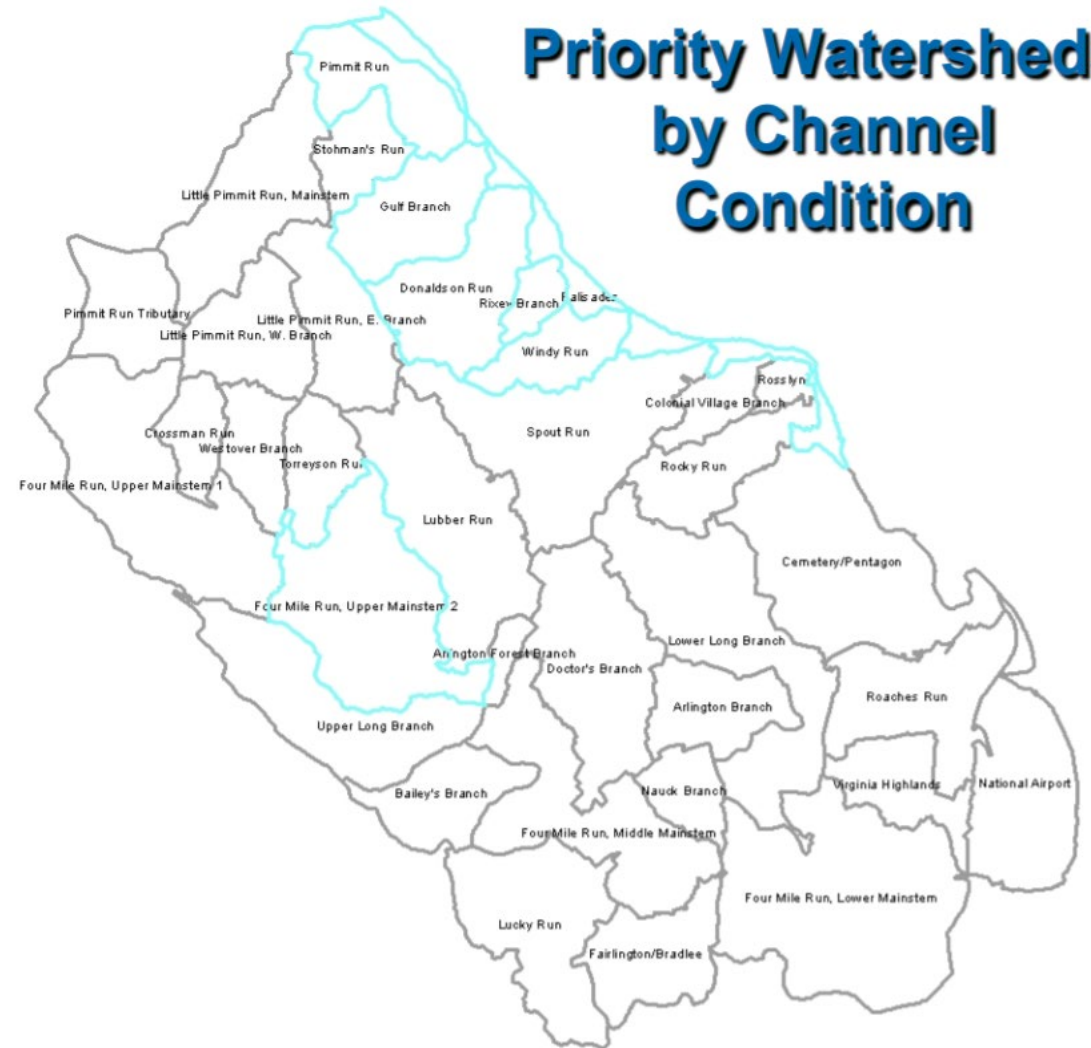
A scenic view of a stream with a paved path and a field of yellow flowers in the foreground. The stream is calm and reflects the sky. The path is paved and has yellow dashed lines. The field of yellow flowers is dense and vibrant. In the background, there are trees and a building.

- How have the County's efforts to address stream bank erosion evolved since 2001?
- 2014 Stormwater Master Plan included comprehensive stream assessment and prioritization of restoration/repair
- Four Mile Run Living Shoreline; Donaldson Run and Windy Run stream projects
- Updated stream assessment in ~FY23
- Future: Explore alternative stream project approaches and suitability for Arlington streams

Stream Condition and Streambank Erosion

- Stream condition assessment (2011)
- Update planned for FY2023
- Inform project planning
- Prioritize severe, active erosion (downcutting and widening), exposed sanitary sewer infrastructure

Priority Watersheds by Channel Condition



Public and Private Waterfront Access

- Access to water includes Potomac River, tidal Four Mile Run, etc.
- Planning framework: Public Spaces Master Plan, 4MR Master Plan and design guideline reference
- Future: Rosslyn Boathouse, Parks trail map
- Private ownership is limited and subject to guidelines (E.g. Amazon waterfront area)
- Fishing occurs but is not a designated activity in public parks



Looking Forward: Challenges and Responses

- Climate Change – Frequency and Intensity of Heavy Storms
 - Virginia Flood Awareness Week March 13-19
- Possible Future Transition to a Stormwater Utility Fee
- Biophilic Cities Network Opportunities
- Chesapeake Bay Amendments on Trees and Climate Change
- Growth and Development Pressures

Plan Adoption Process and Timeline



Project triggered by legislative, regulatory or policy requirements.

- Timeline and Future Updates



Questions or Comments?



*Project triggered by
legislative, regulatory or
policy requirements.*

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