

Little Pimmit Run 2nd Watershed Planning Workshop

June 4th, 2009
Yorktown High School

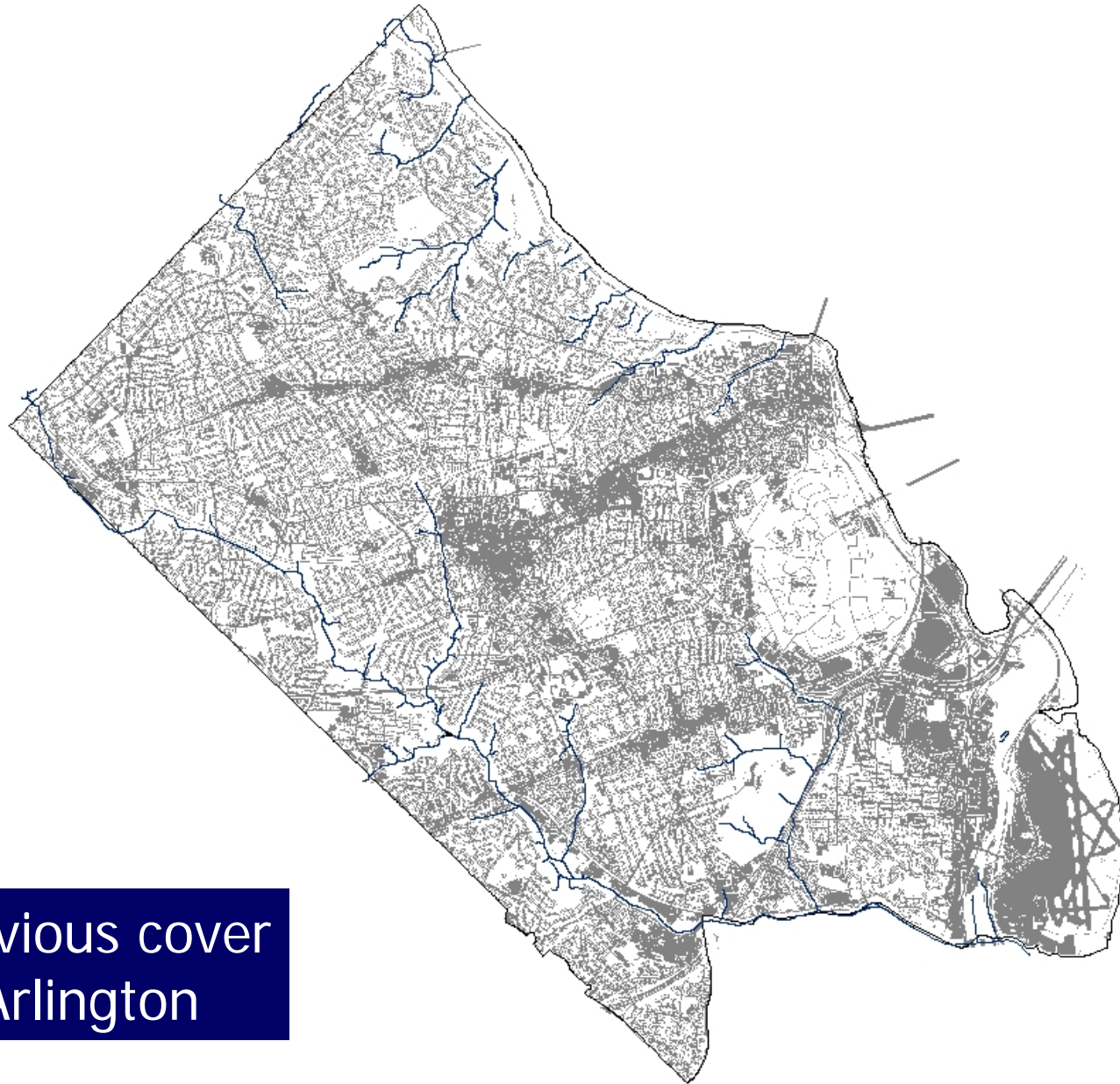


Introduction

- Overview of Arlington's Watersheds
- Watershed Management Strategy
- Overview of Retrofits

Arlington Stormwater Facts

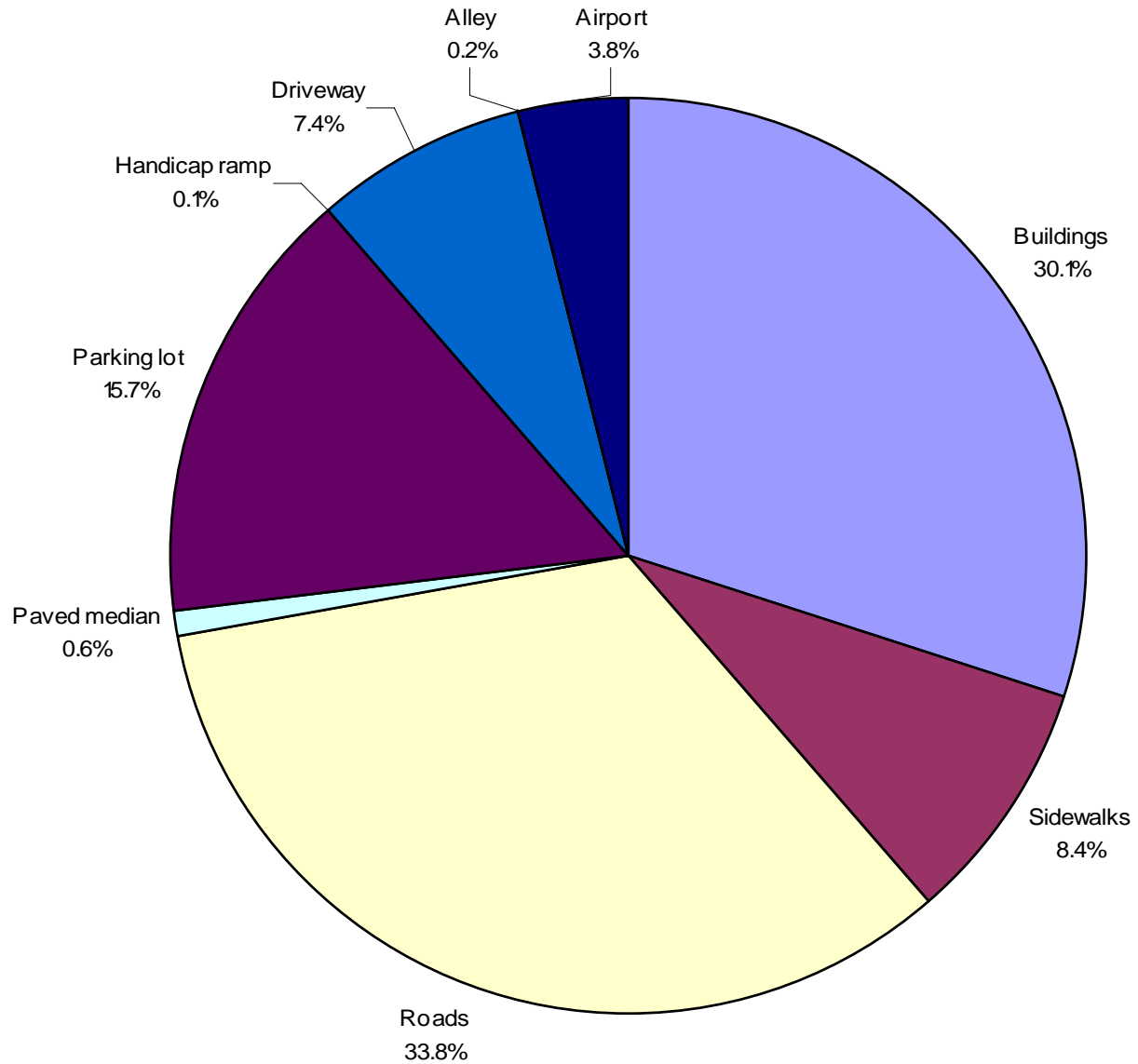
- 2006 Census estimate: 200,226 people
- 26.5 square miles
- 7,556 persons/square mile
- 40% impervious cover
- 360 miles of storm sewers
- 28.5 miles of perennial streams

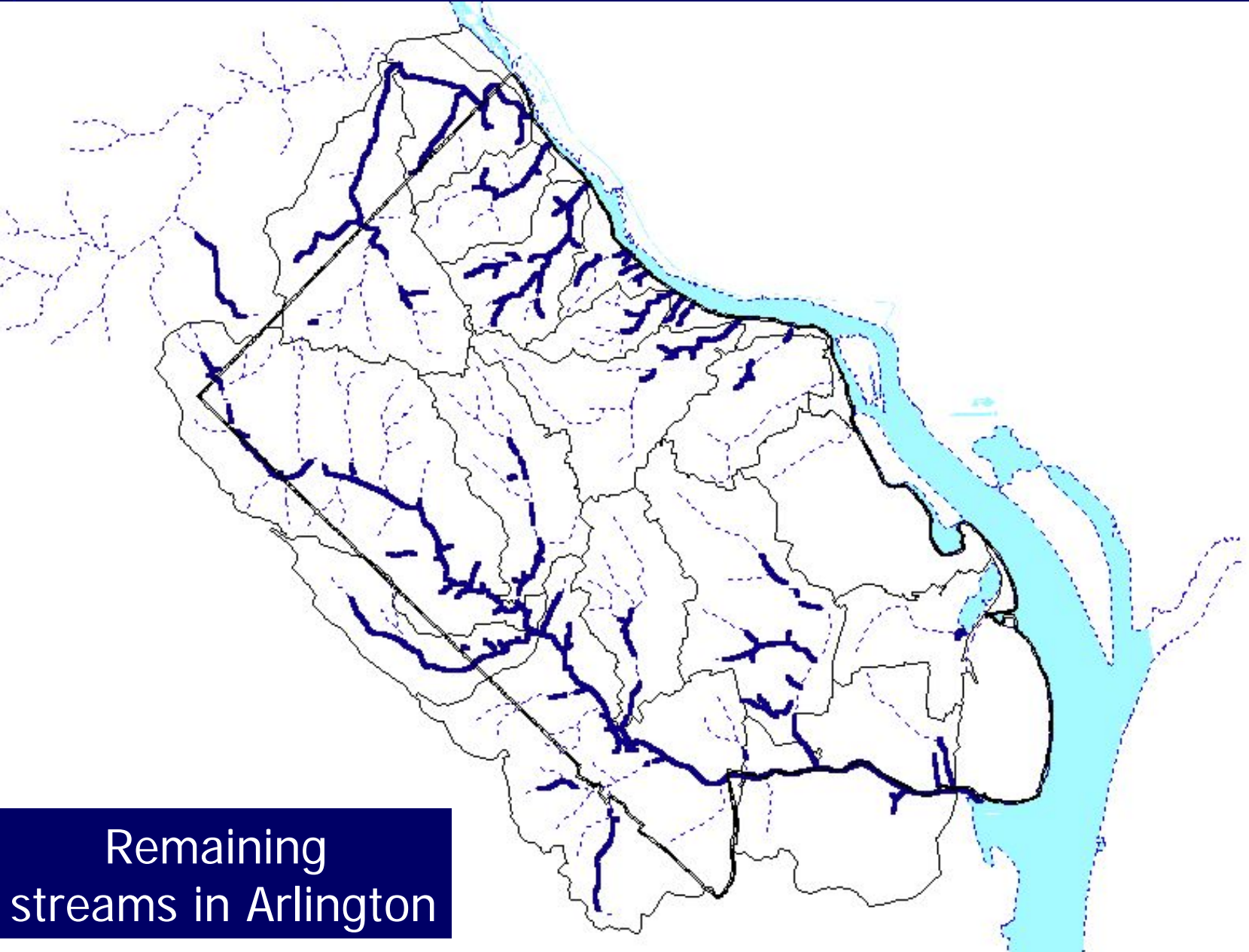


Impervious cover
in Arlington



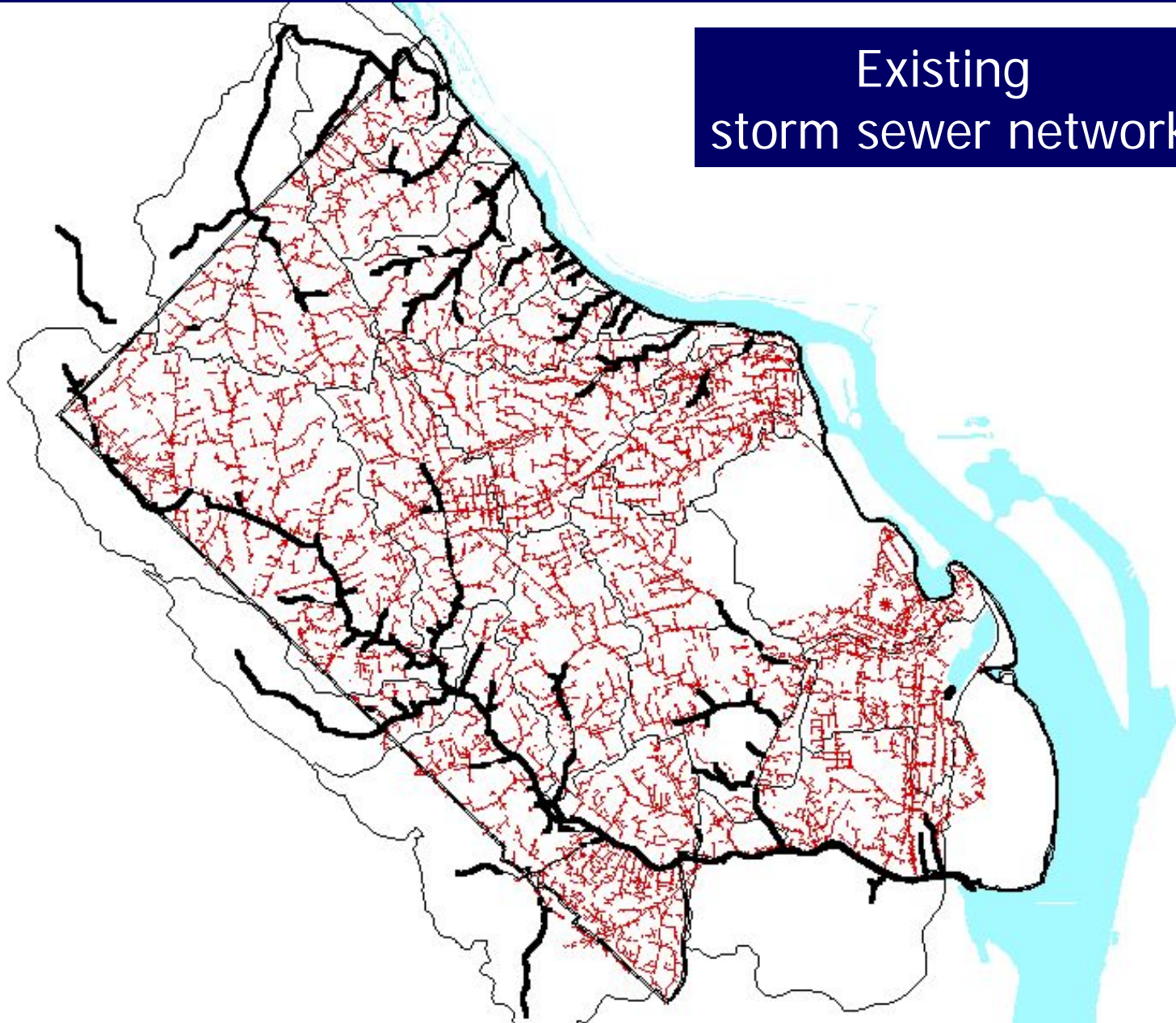
Impervious cover in Arlington County - 2007





Remaining streams in Arlington

Existing
storm sewer network



Arlington's Key Stormwater Challenges

- Arlington is mostly built-out
- Existing development has much greater impact on stream ecology and infrastructure than new development
- Most development occurred before regulations that protect water quality and streams
- County streams heavily impacted
- **Redevelopment/retrofitting provides opportunities to improve watershed health over long term** but will not quickly or fully repair damage to stream ecology and urban infrastructure

Watershed Management Strategy – in brief

- Driven by 'built-out' nature of Arlington
- Implement urban housekeeping 'best practices' (e.g., street sweeping, catch basin cleaning, pollution prevention, etc.)
- Restore stream corridors
- Protect public/private property from flooding
- Maintain stormwater infrastructure
- **Implement watershed retrofits over long-term**
- Deal with worst impacts of development with on-site stormwater controls
- Outreach and education
- Monitoring

A 'retrofit' is...


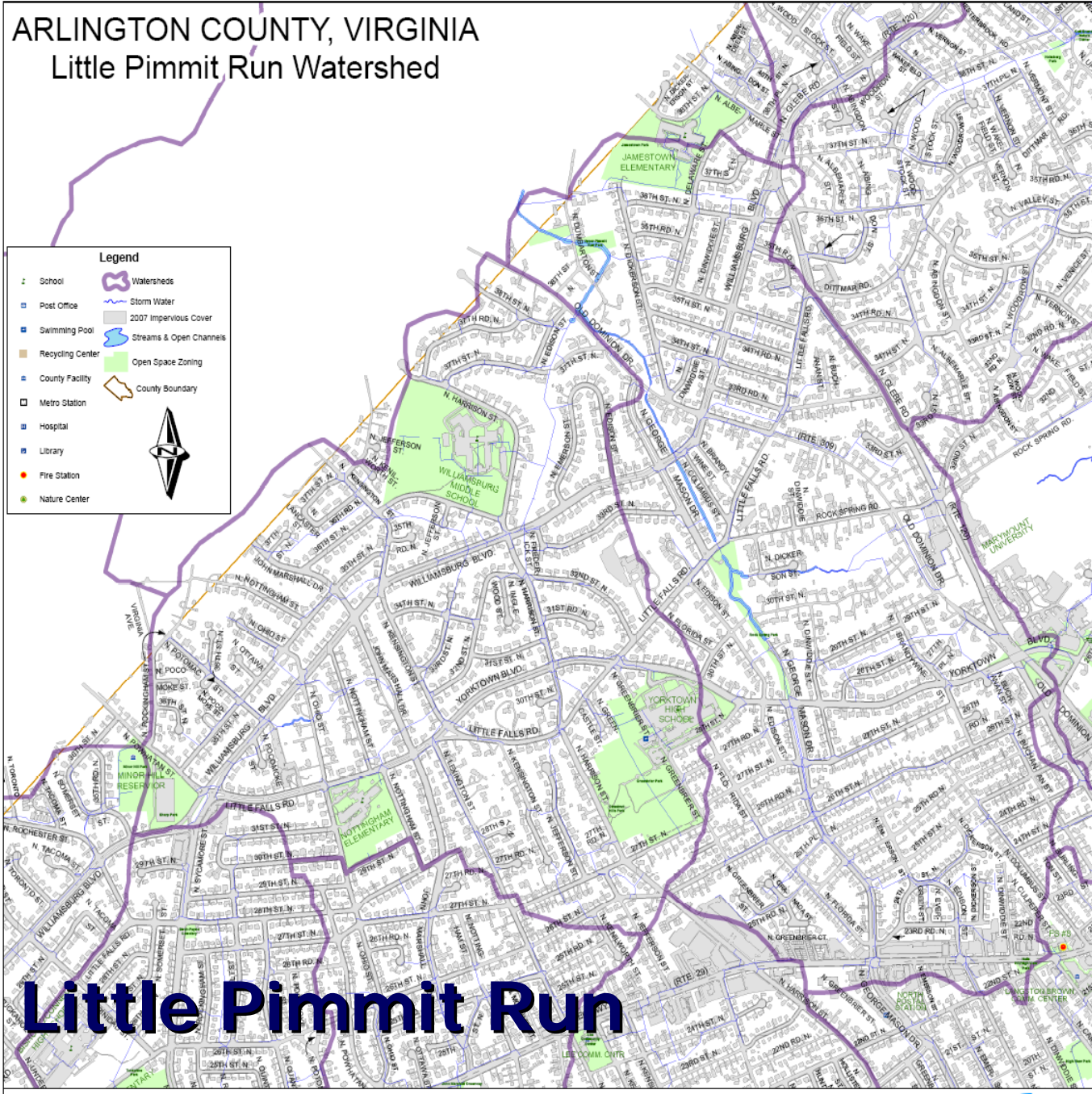
...a stormwater management facility designed to store, infiltrate, and/or filter stormwater runoff from a contributing drainage area for which a stormwater management facility currently does not exist.

ARLINGTON COUNTY, VIRGINIA

Little Pimmit Run Watershed

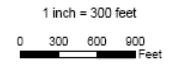
Legend

- School
- Post Office
- Swimming Pool
- Recycling Center
- County Facility
- Metro Station
- Hospital
- Library
- Fire Station
- Nature Center
- Watershed
- Storm Water
- Streams & Open Channels
- Open Space Zoning
- County Boundary
- 2007 Impervious Cover

Little Pimmit Run

Map prepared by Arlington County GIS Mapping Center
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 and shall not be construed as a legal document.
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 Printed November 2008



Key Little Pimmit Run Facts

■ East Branch

- 522 acres (w/in County)
- 1.2 mi stream/open channel
- 9.6 mi storm sewer
- 2007 impervious cover = 38.1%
- 2001 impervious cover = 37.1%

■ West Branch

- 469 acres (w/in County)
- 327 feet stream/open channel
- 8.6 mi storm sewer
- 2007 impervious cover = 35.7%
- 2001 impervious cover = 35.1%

■ County-wide average

- 2007 impervious cover = 42.1%
- 2001 impervious cover = 39.7%

Land Use

Source: 2001 Watershed Management Plan

- More than 80% single-family residential
- Approximately 13% public/semi-public (parks, schools, etc.)
- <3% commercial/industrial
- <3% 'vacant' land

- County-wide: 47% single-family residential; 13% medium/high density; 6% commercial/industrial; 29% public/semi-public; <4% 'vacant' land

Key Watershed Management Challenges for Little Pimmit Run

- Similar story to County-wide issues - More than 60 years of development without stormwater controls with degraded stream conditions and infrastructure problems.
- Relatively unique challenge - Extensive residential development adjacent to the stream—from Little Falls Road to the County line.
- Significant flooding and related problems for many private properties located near the stream.

Both Near-Term and Long-Term Efforts Are Needed

- Distributed **watershed retrofits** will accrue benefits incrementally over the long-term.
- However, retrofits cannot be implemented quickly or extensively enough to solve today's significant flooding, environmental, and infrastructure problems.
- And, cumulatively, retrofits in urban watersheds generally cannot provide enough storage to address flooding and stream erosion problems.
- Therefore, urban watersheds like Little Pimmit Run also require near-term efforts that directly address property flooding and stream damage.

With challenge comes opportunity....



Somewhere in the Little Pimmit Run watershed



Watershed assessment

- Next, let's hear the results of the Center for Watershed Protection's assessment of retrofit opportunities in Little Pimmit Run.

Next Steps

- Look more closely at potential retrofits, with specific focus on the John Marshall drive median and the Kensington St/34th St sites because co-located with planned drainage work;
- Modeling potential retrofit benefits as part of the VHB stream corridor study;
- Use the retrofit plan as a guide and will begin by focusing on a few specific high priority sites, with focus on syncing with other planned work (drainage/paving, etc.).

Questions

- Contact info:

- Phone (703) 228-3613
- Email: jpapacosma@arlingtonva.us
- Web: www.arlingtonva.us

- Click on 'watershed management'

