

City of Alexandria, Virginia

Amendments to the Environmental Management Ordinance

Federation of Civic Associations

January 13, 2014



Presentation Overview



- * Review of Stormwater 101
- * Why change the Ordinance?
- * The Ordinance as it exists today.
- * What do we want to keep?
- * What do we want to change?
- * Next steps

Stormwater 101

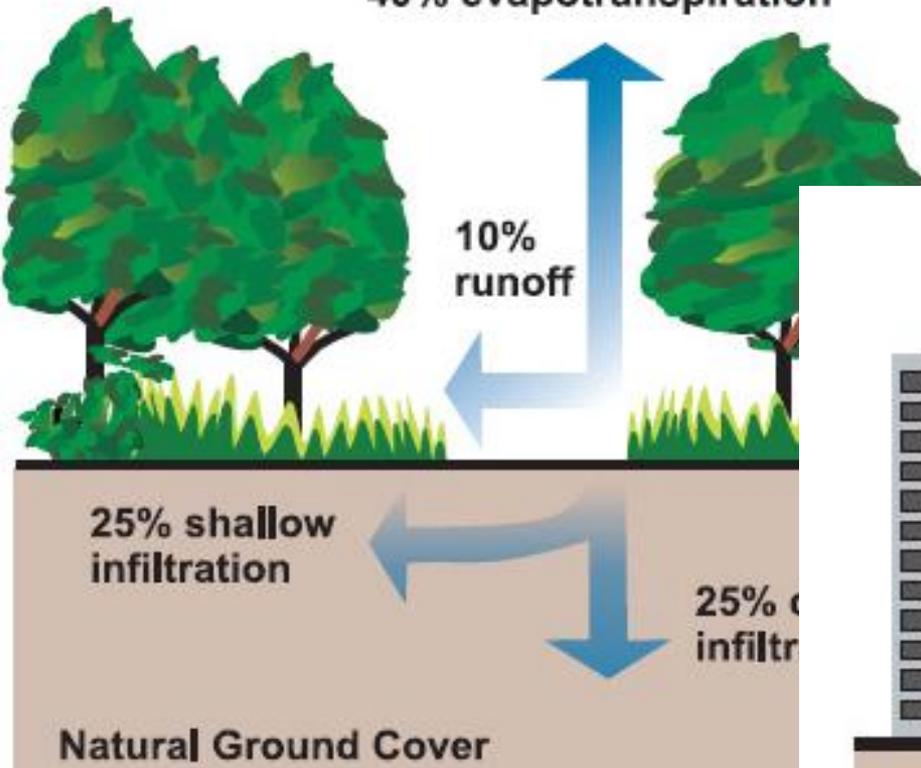


- * Stormwater is rainfall that runs off impervious and pervious areas carrying pollutants with it
 - Into stormdrain system
 - Into local streams
 - Into the Potomac River
 - Into the Chesapeake Bay

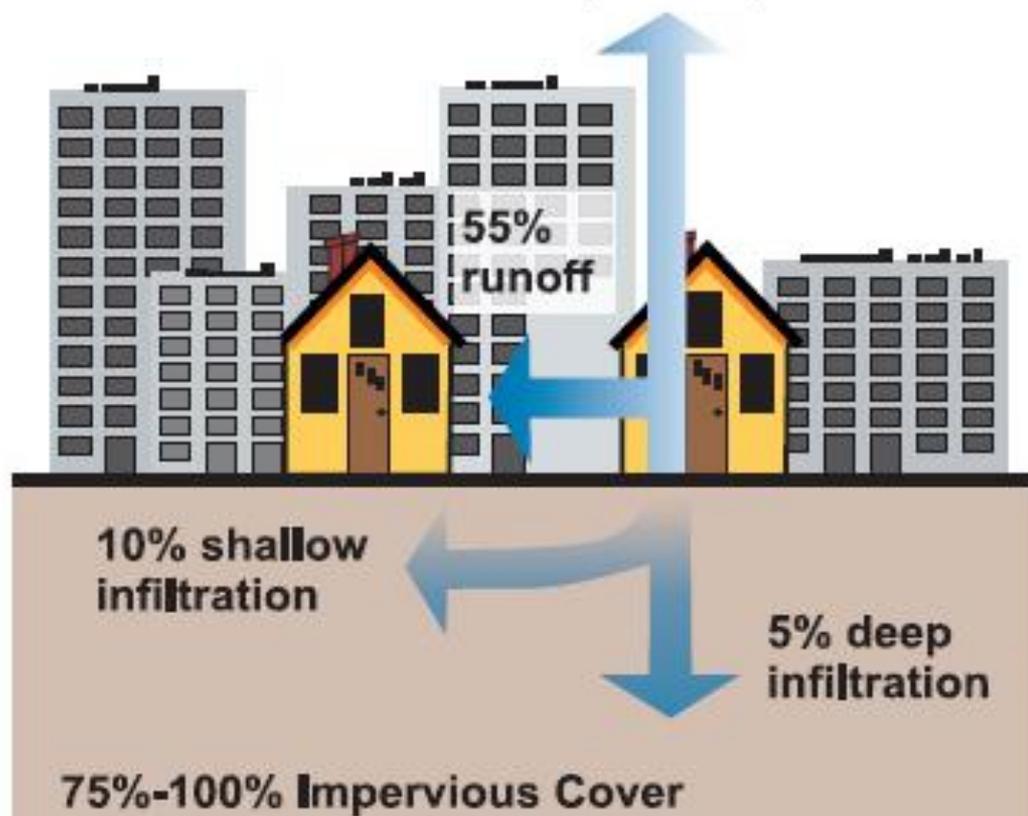
The Impact of Impervious Areas



40% evapotranspiration



30% evapotranspiration

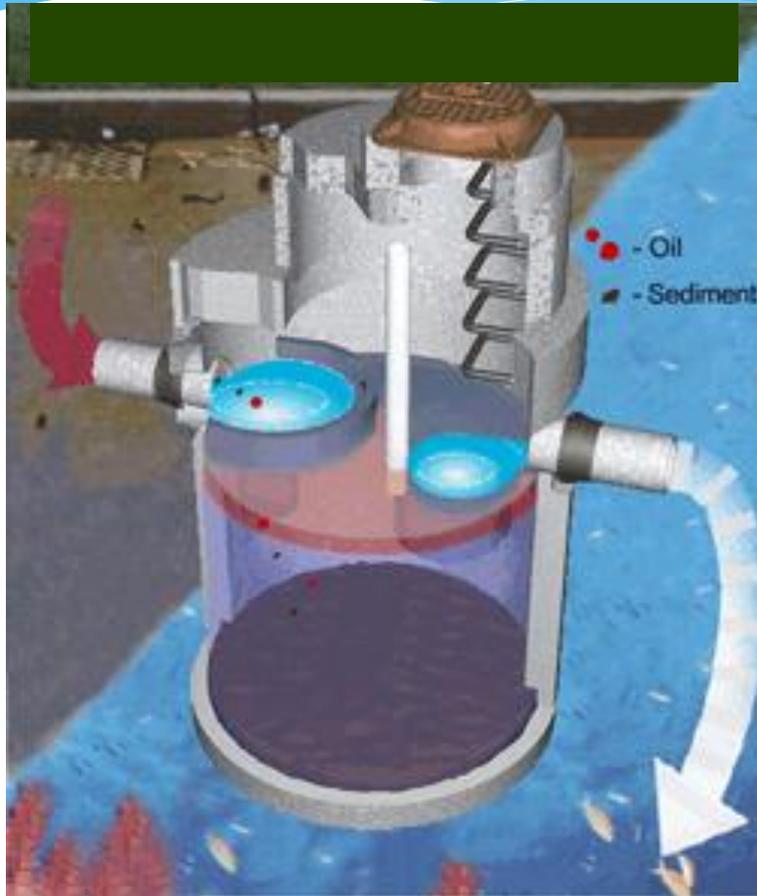


Reducing the Impacts via Best Management Practices (BMPs)



- * Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States.
- * BMP examples include:
 - Detention Ponds
 - Underground Facilities
 - Pervious Pavement

Example of Urban Underground BMP



History of Stormwater Regulation



- * Clean Water Act 1972
- * Chesapeake Bay Agreement in 1987
- * Alexandria's Ordinance set up performance criteria (required BMPs – water cleansing devices or water cleansing practices) in 1992, 2004, with minor changes in 2006

Ordinances Changes Required To:



- * Comply with the State VSMP regulations
- * Aide in reaching Chesapeake Bay TMDL objectives
- * Aide in complying with MS4 Permit
- * Aide in complying with CSS Permit

Urban Land Designations and Stormwater Requirements



- * City has Resource Protection Areas(RPA) and Resource Management Areas (RMA)
- * Development is constrained in RPA to water dependent uses
- * Water quality and quantity improvements are generally required in RMAs

RPA, RMA, Intermittent Stream



What is Presently Required?

Environmental Management Ordinance



- * Redevelopment within RPAs is permitted only in the existing impervious footprint
- * Some exceptions for developments platted and constructed before 1989
- * Water quality and quantity improvements are generally required in RMAs
- * Regulations triggered by 2,500 square feet of land disturbance
- * Intermittent stream protection (buffer of 50 feet)

What Triggers Stormwater Management Requirements?



- * Any project (development or redevelopment) disturbing greater than 2,500 square feet

What is the Present Performance Criteria?



- * 10% (P) phosphorus (keystone pollutant) reduction from existing condition
- * Peak flows shall be the same or less than the existing conditions
- * WQVD treated with BMP of choice

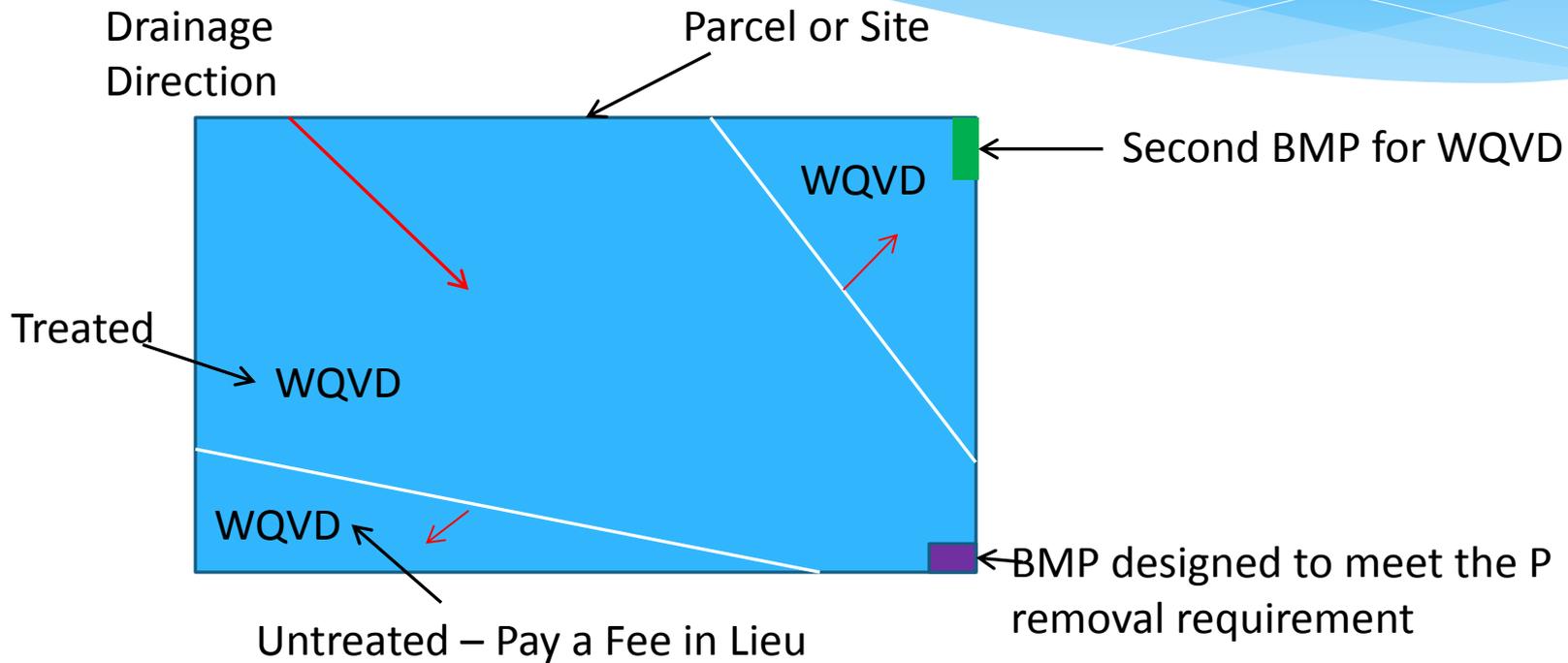
What is the Alexandria WQVD?

Environmental Management Ordinance



- * Alexandria Water Quality Volume Default (treat the first ½ inch of runoff from all impervious surfaces through a BMP – over and above meeting the P removal requirement)
- * Options for compliance including a Fee In Lieu

What is the Alexandria WQVD?



New Performance Criteria that the State Mandates



- * Redevelopment P reduction changes from 10 to 20% reduction (stays 10% for land disturbance less than 1 acre)
- * New development maintains no net loss (0.41 lb/ac/yr of P) – present requirement is 0.9 lbs/ac/yr.
- * Compliance methodologies encourage Runoff Reduction, LID techniques and treatment of 1 inch of rainfall (presently ½ inch)

Areas where the City would like to continue to be more stringent



- * Maintain Water Quality Volume Default requirement
 - Helps assure no backsliding
 - P removal credits will accrue to the City to meet the TMDL load reduction requirements
- * Continue protection of Natural Intermittent Streams

WQVD requirement maintained



- * No change from existing Ordinance.
- * Redevelopment without WQVD is a lost opportunity
- * WQVD narrows gap the City is ultimately responsible for
- * Provides additional revenue for other water quality improvements
- * Keeps trading revenue within the City

Natural Intermittent Stream

Already protected in the present ordinance



- * Any natural or engineered channel that has water flowing during certain times of the year (key is groundwater flow vs. Rainfall runoff)
- * Protect with a 50 foot buffer area
 - Development within 50 foot buffer is limited similarly to the 100 foot RPA but with more flexibility

Non-State Mandated Revisions to the Ordinance



- * Site (disturbed area) vs. Parcel
- * Single Family Residential

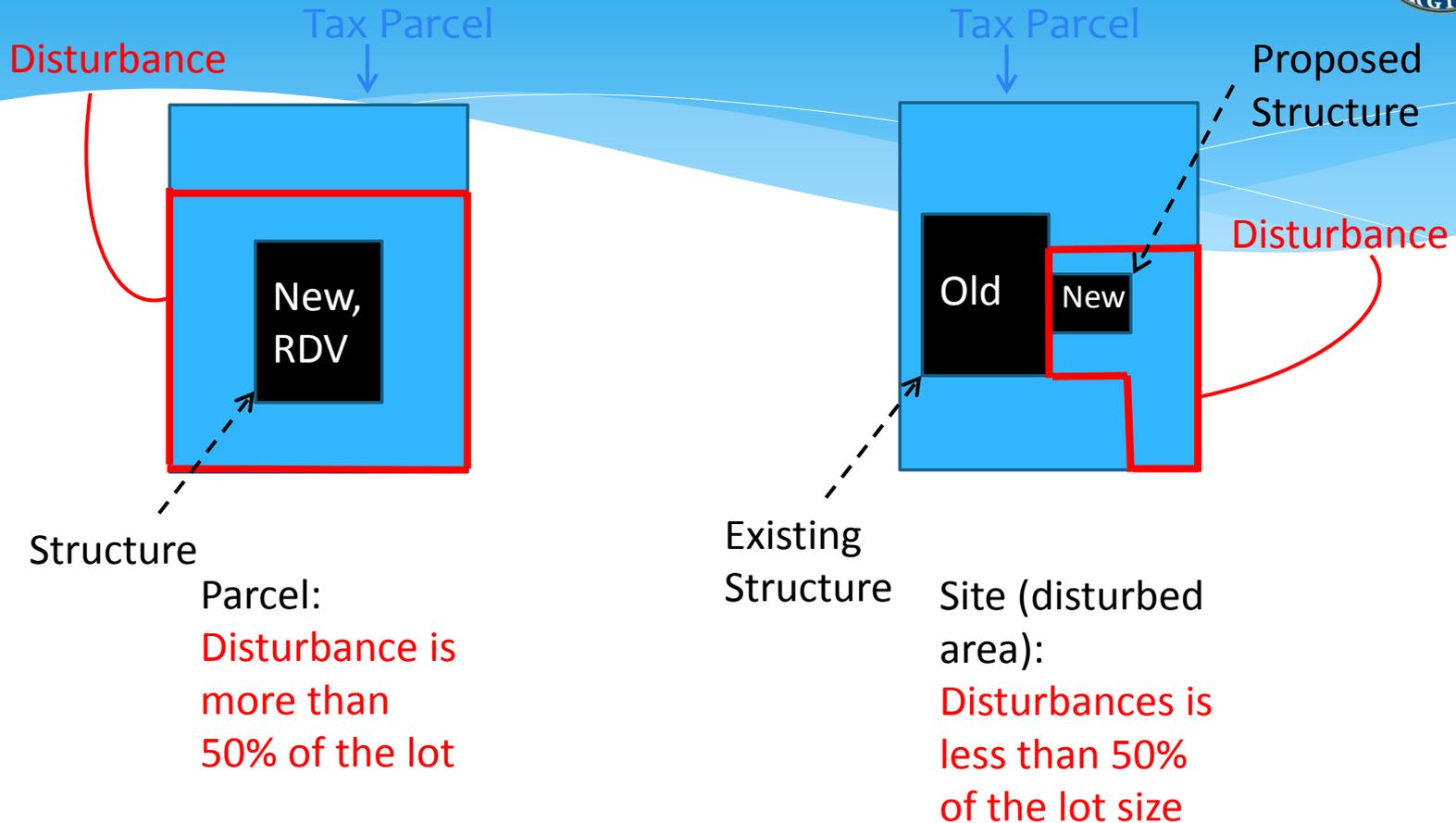
Site (Disturbed Area) vs. Parcel



For projects disturbing less than 50% of the tax parcel the disturbed area can be used to calculate stormwater requirements.

- * Addresses larger parcels with small areas of disturbance
- * Addresses SFR parcels
- * Slight relaxation of our existing rules (currently Parcel)
- * Easier to apply and more objective

Example of Tax Parcel vs. Site (disturbed area)



If several parcels make up a single development (zoning parcel) all the parcels together are considered the parcel.

Single Family Residential (SFR)



- * Single Family Residential (SFR) shall be exempt from BMP requirements yet subject to the WQVD requirement. If the applicant wishes to pay the full fee that is acceptable.

Single Family Residential (SFR)



* Homeowner Benefits

- Not quite as stringent for SF homeowners
- Challenging for homeowners to maintain BMPs
- Greater flexibility in compliance options

* City Benefits

- Inspection and enforcement less burdensome for City
- Additional revenue for BMP's elsewhere

Stormwater Quantity & Flooding



- * Quantity is essentially per the state requirements.
- * Some additional flexibility to allows the City to opt out of detention in areas where it is advisable
- * Capacity analysis whether the area is presently flooding or not.

Next Steps



- * Draft Ordinance submitted to VDEQ on January 15
- * Planning Commission - February
- * City Council - February

City of Alexandria, Virginia

Thank You

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