

VPDES Permitting and Public Water Supply Protection

Potomac River Drinking Water
Source Protection Partnership
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




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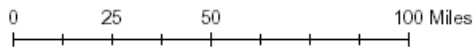
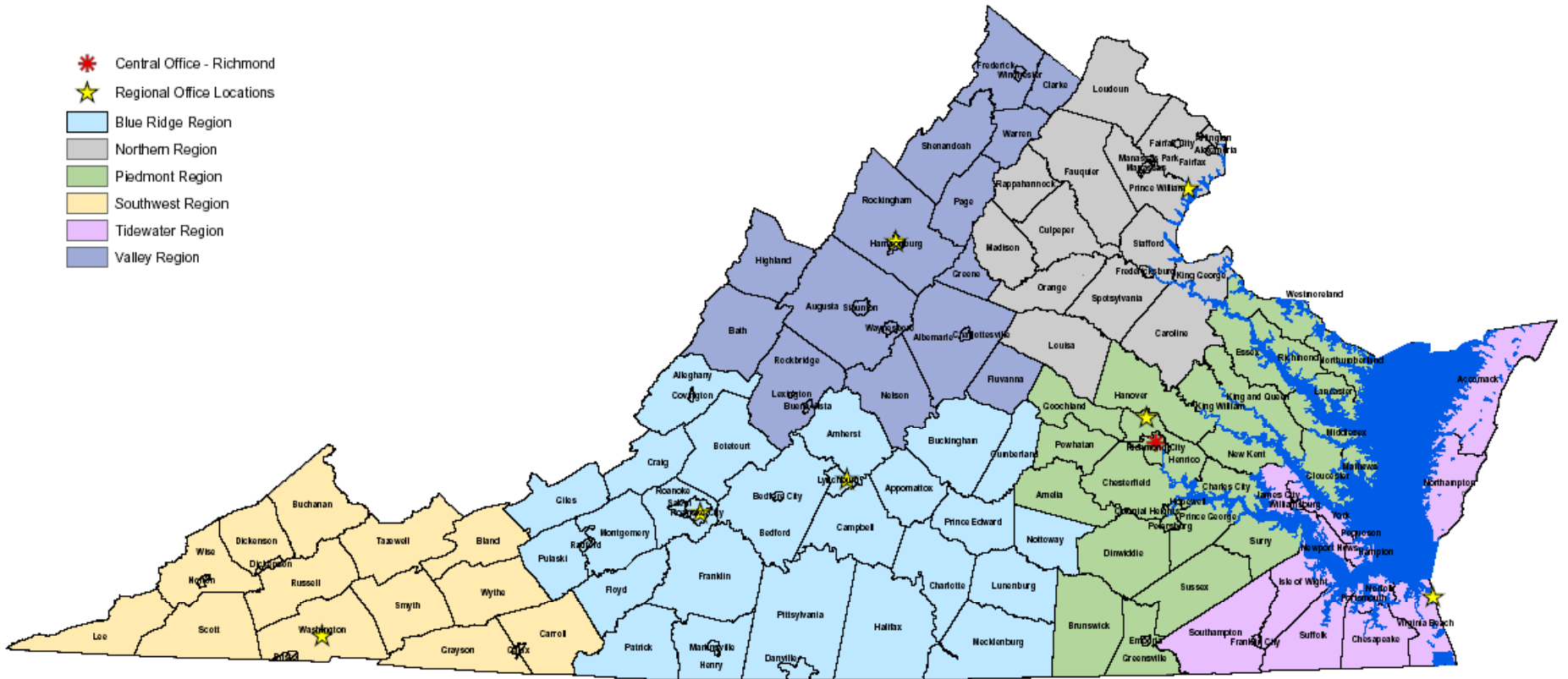
Presentation Overview

- Background – NRO, DEQ and VDH
- Statutory and Regulatory Drivers
- VPDES Permitting
- Notifications and Example Language

Virginia Department of Environmental Quality

Regional Offices

-  Central Office - Richmond
-  Regional Office Locations
-  Blue Ridge Region
-  Northern Region
-  Piedmont Region
-  Southwest Region
-  Tidewater Region
-  Valley Region



DEQ, NRO River Basins



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Background - Virginia

Department of Environmental Quality (DEQ)

It shall be the policy of the Department of Environmental Quality to protect the environment of Virginia in order to promote the health and well-being of the Commonwealth's citizens. (§ 10.1-1183. Creation of Department of Environmental Quality; statement of policy.)

Virginia Department of Health (VDH)

The General Assembly finds that the protection, improvement and preservation of the public health and of the environment are essential to the general welfare of the citizens of the Commonwealth. For this reason...administer and provide a comprehensive program of...environmental health services, educate the citizenry in health and environmental matters...and abate hazards and nuisances to the health and to the environment, both emergency and otherwise, thereby improving the quality of life in the Commonwealth. (§ 32.1-2. Finding and purpose)

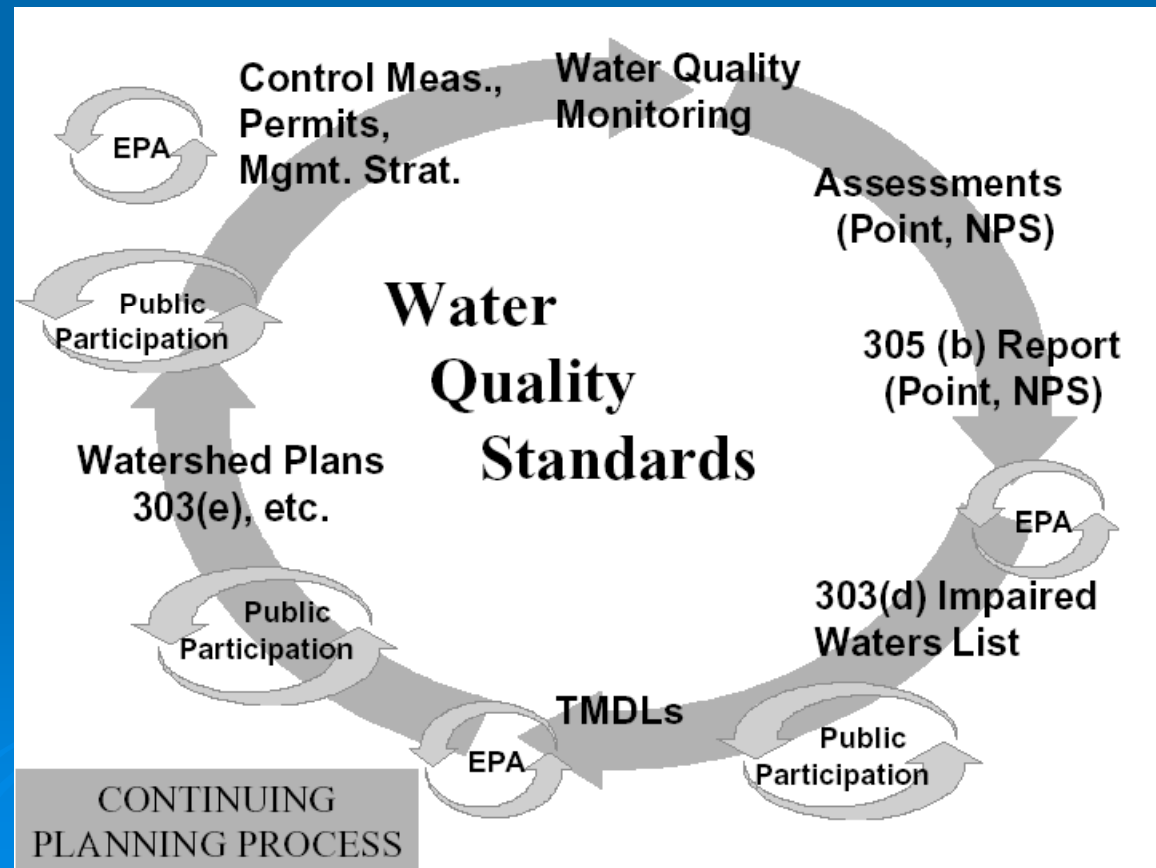
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Selected Statutes

- Federal Clean Water Act, Section 402
 - Delegated authority with established state law, comparable NPDES regulations and MOA.
- State Water Control Law
 - "Beneficial use"...Public water supply uses for human consumption shall be considered the highest priority. " (§ 62.1-10. Definitions)
 - "...When proposed uses of water are in mutually exclusive conflict or when available supplies of water are insufficient for all who desire to use them, preference shall be given to human consumption purposes over all other uses; " (§ 62.1-44.36.)
- Other Statutes
 - "The locality may also prevent the pollution of water and injury to waterworks for which purpose its jurisdiction shall extend to five miles..." (§ 15.2-2109)

Selected Regulations

- **Virginia Water Quality Standards (9 VAC-260)**
 - To protect public health or welfare, enhance water quality and serve purposes of SWCL
 - Consist of Designated Uses and Water Quality Criteria
 - May entail numeric and/or narrative criteria
 - Antidegradation Policy

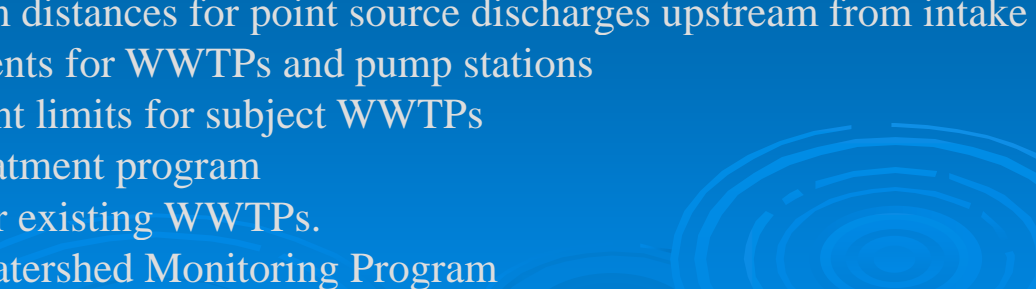


Selected Regulations, Continued

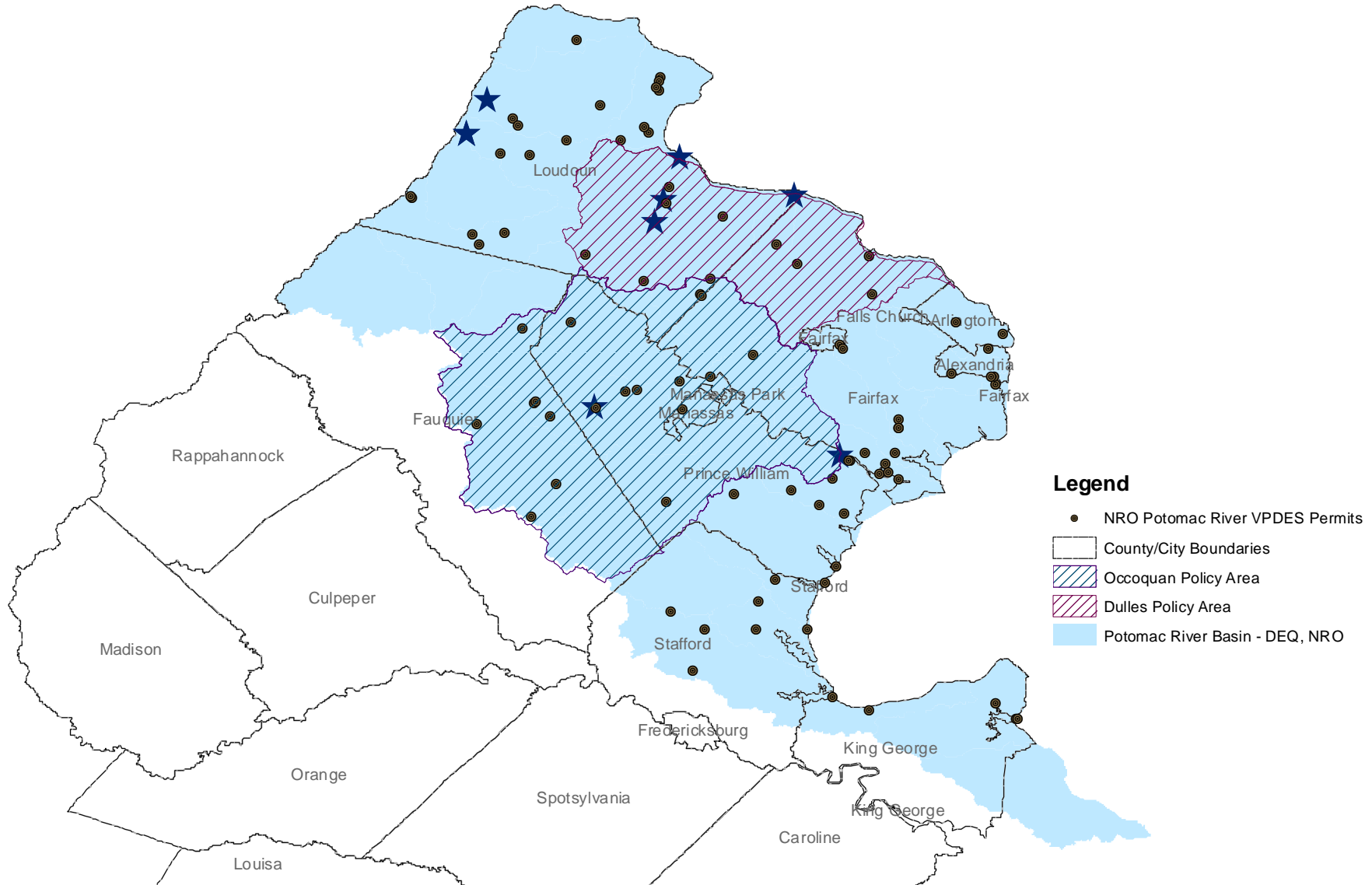
- **Sewage Treatment in the Dulles Area Watershed (9 VAC 25-401)**

- Regulates discharge of sewage treatment effluent to surface waters in affected area
- Restrictions on WWTPs
- Establishes maximum effluent limits for subject WWTPs
- Requires owners to track nitrate concentrations at intake, action if > 5 mg/L
- Additional design requirements for WWTP and pump stations
- Pollutant loadings capped for existing WWTPs.

- **Occoquan Policy (9 VAC 25-410)**

- Protects the Occoquan watershed from point source pollution.
 - Restrictions on WWTPs
 - Recommended and minimum distances for point source discharges upstream from intake
 - Establishes design requirements for WWTPs and pump stations
 - Establishes maximum effluent limits for subject WWTPs
 - Requires an approved pretreatment program
 - Pollutant loadings capped for existing WWTPs.
 - Establishes the Occoquan Watershed Monitoring Program
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The Potomac Basin in DEQ, NRO



VPDES Permitting & PWS

Summary of Permits

DEQ, NRO

Permit Type	No. of Permits
<i>Individual VPDES Permits</i>	180
<i>General VPDES Permits</i>	
Small Domestic STPs	285
Industrial Stormwater	222
Ready-Mix Concrete	49
Non-Metallic Mineral Mining	26
Cooling Water	8
Car Wash	7


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VDH Coordination in Permitting

- Permits developed to protect all designated uses
 - WQS Identify Designated PWS Waters
- VDH is provided copies of permit applications
- VDH can make site-specific recommendations

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Notification

- Notification of unauthorized, unusual, or extraordinary discharges, including bypass or upset is required within 24 hours.
 - Selected permits include additional requirements:
 - Arlington WPCP
 - Leesburg WPCF
 - Elysian Heights STP
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Example Permit Language, Cont'd.

- UOSA Operation of the nitrogen removal facilities is required when the ambient nitrate (as N) concentration is 5.0 mg/L or greater in the Occoquan Reservoir in the vicinity of the Fairfax Water intake point.
- Broad Run WRF shall evaluate measures they can take to minimize impacts their discharge has on nitrate concentrations and implement feasible actions if nitrates in the Potomac River near the intake > 5 mg/L.
- Dulles Airport permit is being drafted with conditions recognizing the concerns of Fairfax Water.

Questions ?

