Pre-Summit 101 on Environmental Markets & Finance

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ENVIRONMENTAL MARKETS and FINANCE SUMMIT

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Spectrum of Demand

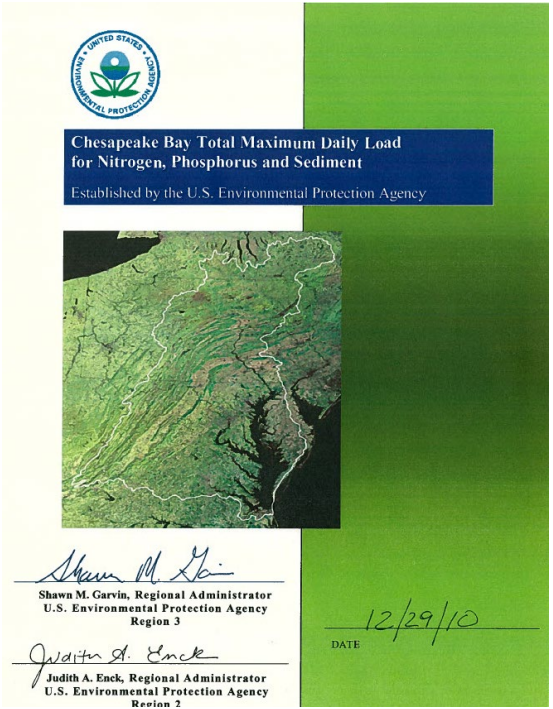
Traditional "Big Project" Mitigation Markets

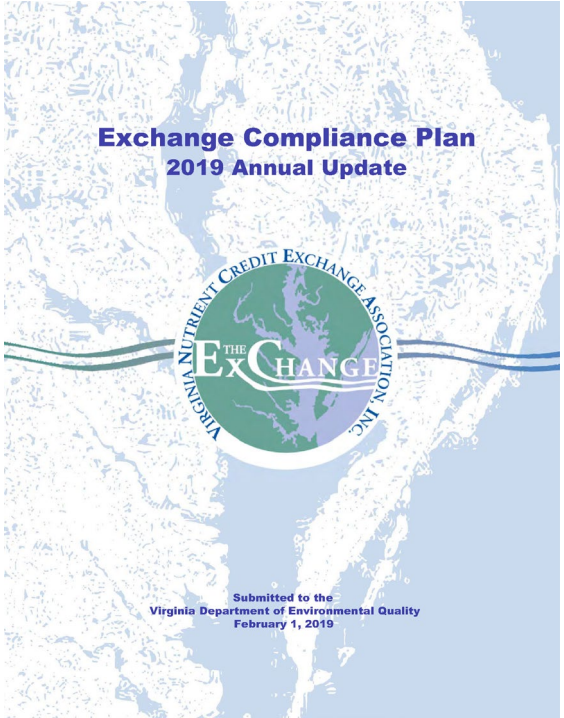
- National Environmental Policy Act
- Endangered Species Act
- Clean Water Act
  - (Sections 401, 404 and RHA 10)
- National Historic Preservation Act
- Federal Land Policy

Evolving "Operational" Mitigation Markets

- NPDES Permits
- TBELs
- WQBELs
- TMDLs
- State Reduction Targets

Fully Regulated Programs — Chesapeake Bay Examples





Virginia Administrative Code
Title 9. Environment
Agency 25. State Water Control Board
Chapter 870. Chapter 870 Virginia Stormwater Management Program (VSMP) Regulation

9VAC25-870-63. Water Quality Design Criteria Requirements.

A. In order to protect the quality of state waters and to control the discharge of stormwater pollutants from regulated activities, the following minimum design criteria and statewide standards for stormwater management shall be applied to the site.

1. New development. The total phosphorus load of new development projectsshall not exceed 0.41 pounds per acre per year, as calculated pursuant to 9VAC25-870-65.

2. Development on prior developed lands.

a. For land-disturbing activities disturbing greater than or equal to one acre that result in no net increase in impervious cover from the predevelopment condition, the total phosphorus load shall be reduced at least 20% below the predevelopment total phosphorus load.

b. For regulated land-disturbing activities disturbing less than one acre that result in no net increase in impervious cover from the predevelopment condition, the total phosphorus load shall be reduced at least 10% below the predevelopment total phosphorus load.

c. For land-disturbing activities that result in a net increase in impervious cover over the predevelopment condition, the design criteria for new development shall be applied to the increased impervious area. Depending on the area of disturbance, the criteria of subdivisions a or b above, shall be applied to the remainder of the site.

d. In lieu of subdivision c of this subsection, the total phosphorus load of a linear development project occurring on prior developed lands shall be reduced 20% below the predevelopment total phosphorus load.

e. The total phosphorus load shall not be required to be reduced to below the applicable standard for new development unless a more stringent standard has been established by a locality.

B. Compliance with subsection A of this section shall be determined in accordance with 9VAC25-870-65.

C. Upon completion of the 2017 Chesapeake Bay Phase III Watershed Implementation Plan, the department shall review the water quality design criteria standards.

D. Nothing in this section shall prohibit a locality's VSMP authority from establishing more stringent water quality design criteria requirements in accordance with § 62.1-44.15:33 of the Code of Virginia.

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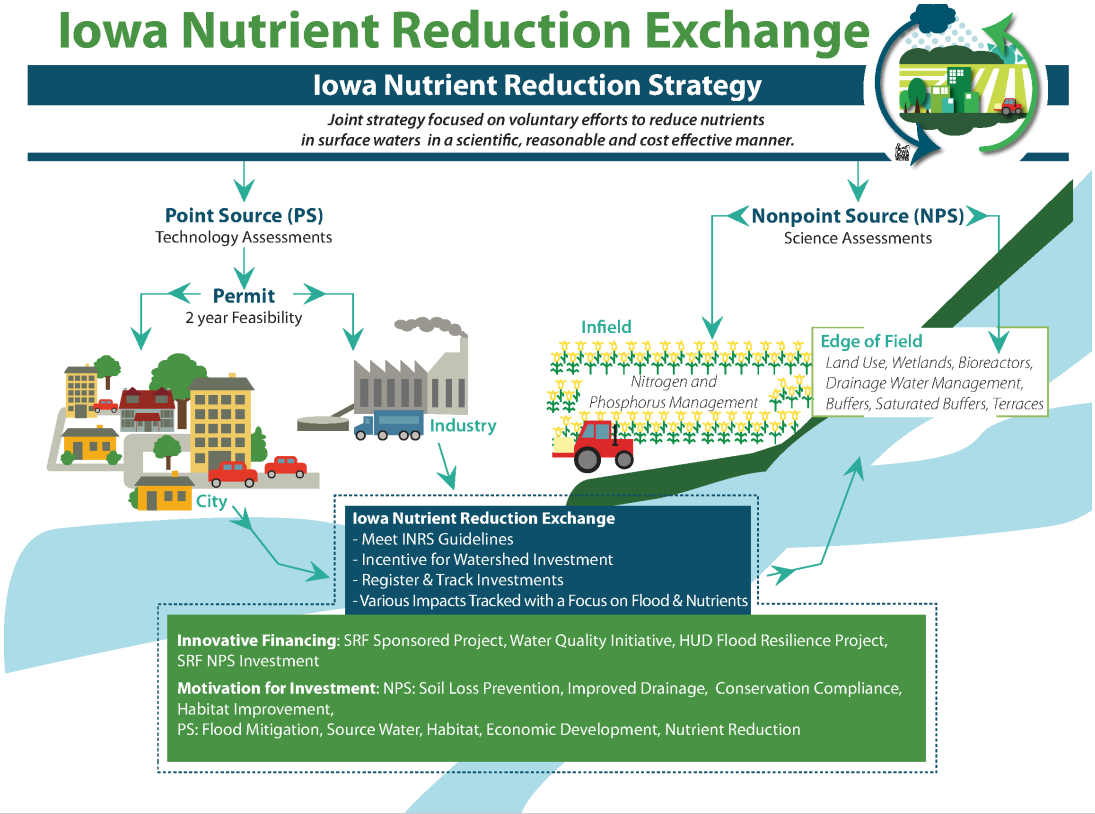
Partially Regulated Programs — Iowa Example



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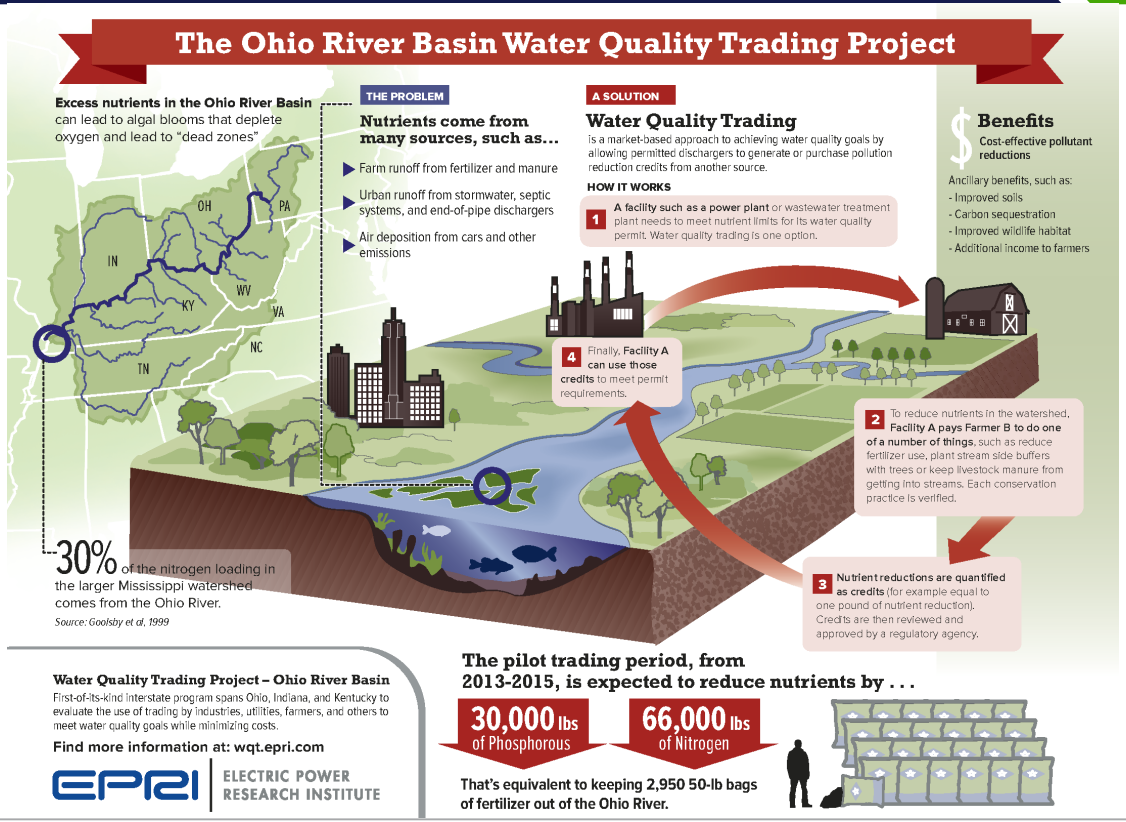
Pre-Compliance Programs — ORB Example



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Next Gen Drivers

- Command-and-control
- Avoidance of command-and-control
- Corporate social responsibility / sustainability
- Public “shaming”
- Co-benefits (flood control, ag yield, habitat, community, etc.)

But none is as direct or immediate as big project mitigation drivers…

Thank you!

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