



Progress Report on Virginia Water Quality Improvement Fund

Point Source Nutrient Reductions in Chesapeake Bay Watershed

January 22, 2009



Items in Presentation

- Funds appropriated to the VA Water Quality Improvement Fund
- Status of WQIF point source applications
- Lists of WQIF Agreements - signed and in process
- Timeline for using bond proceeds
- Funds needed to meet and maintain nutrient caps
- Progress in reducing nutrient loads from point source

Deposits to VA Water Quality Improvement Fund – Point Sources

- WQIF established in 1997 to provide grants for nutrient removal and other water quality projects.
- DEQ - point sources
- DCR – non-point sources
- 2007 General Assembly authorized up to an additional \$250 million in bonds for PS nutrient projects.

Period	WQIF Funds for Bay Point Source Projects (Million Dollars)
FY 1998	\$10.00
FY 1999	\$37.10
FY 2000	\$27.64
FY 2001	\$10.30
FY 2005	\$12.57
Interest earned (through FY05)	\$8.16
FY 2006	\$80.28
Interest earned (FY06)	\$1.57
FY 2007	\$197.33
Interest earned (FY07)	\$8.46
FY 2008	\$5.00
TOTAL DEPOSIT =	\$398.40

WQIF Grant Agreements

Phase 1 (FY1998 - 2000) – BNR Retrofits

Fairfax Co-Blue Plains	\$635,018	Alexandria S.A.	\$19,702,869	Remington	\$755,561
Loudoun Co-Blue Plains	\$282,265	Staunton-Middle River	\$1,236,660	Hanover Co.	\$2,109,770
Pr. Wm. Co-Mooney	\$8,672,193	SIL-Clean Water	\$2,529,890	Stafford Co-L. Falls	\$1,962,833
HRRSA-North River	\$2,850,937	Dale Serv Corp #1	\$1,901,057	Massaponax	\$4,294,553
Fairfax Co-Noman Cole	\$10,203,288	Dale Serv Corp #8	\$2,115,053	Chesterfield Co.	\$965,560
Leesburg	\$6,568,389	Purcellville	\$1,614,556	Henrico Co.	\$9,127,255
Arlington Co.	\$10,816,930	ACSA-Stuarts Draft	\$1,382,783	Spotsylvania-FMC	\$48,936
FWSA-Opequon	\$2,754,618	Stafford Co-Aquia	\$304,242	Hopewell RWTF	\$2,418,647

24 Projects

Total Grant Funds Expended = \$95.25 million

WQIF Grant Agreements

Technical Assistance Grants (FY1998 - present)

- 33 grants to POTWs, totaling \$2.55 million, for *Basis of Design* and *Interim Optimization Plans*.
- 6 grants, totaling \$1.46 million, for technical studies supporting nutrient reduction and start-up of Nutrient Credit Exchange Association.

39 Grant Agreements

Total Grant Funds Awarded = \$4.01 million

WQIF Grant Agreements

Phase 2 (FY2007 – Present)

- 80 grant applications received by DEQ for construction of enhanced nutrient removal facilities
 - About \$815 million requested
 - 74 applications from significant dischargers for projects to reduce nutrients
 - 6 applications from smaller dischargers to hold the line on nutrient load
- Have signed grant agreements for 41 of these projects
 - \$525 million commitment
- Another 17 applications under active processing
 - \$128 million requested
- Remaining facilities to finalize applications or request \$ later as upgrades are needed

WQIF Grant Agreements 41 Signed

ACSA- Fishersville	King Geo. Co -Dahlgren	Warrenton STP
ACSA -Middle River Reg STP	King Geo. Co.-Fairview Beach	Warsaw
Alexandria S.A. WWTP	LCSA - Broad Run	HRSD-York River
Arlington Co. WPCF	Luray WWTP	Chesterfield-Falling Creek
Berryville	Middletown	Chesterfield-Proctors Creek
Broadway (was SIL-Clean Water)	Mt. Jackson STP	Craigsville
Clarke Co SA-Boyce STP	Purcellville-Basham Simms	Farmville WWTP
Colonial Beach	PWCSA- H.L. Mooney	HRSD-Army Base
Dale Serv. Corp #1	Stafford Co. -Aquia; Phase I	HRSD-Nansemond
Dale Serv. Corp #8	Waynesboro STP	MSA-Lex/Rockbridge Regional
FCW&SA-Vint Hill WWTF	Woodstock STP	Richmond
FWSA-Opequon	Culpeper WWTP	RWSA-Moores Creek
FWSA-Parkins Mill	Orange STP	Onancock WWTP
HRRSA-North River	Tappahannock WWTP	

WQIF Grant Agreements 17 in Active Processing

ACSA-Stuarts Draft	HRSD-King William
Fairfax Co. - Noman Cole	Louisa Co-Regional STP
FCW&SA-Vint Hill; Phase 2	Louisa Co-Zion Cross Roads
Front Royal	Alleghany Co.-Lower Jackson
Stafford Co. -Aquia; Phase 2	Henrico Co. WWTP
Strasburg WWTP	HRSD-James River
FCW&SA-Remington WWTP	So. Central Wastewater Auth.
Rapidan -Wilderness Shores	Cape Charles WWTP
Stafford - Little Falls Run	

Timeline For Bond Proceeds

• WQIF deposits through 6/30/08	\$398 M
• Expenditures through 6/30/08	<u>(\$170 M)</u>
• WQIF balance as of 6/30/08	\$228 M
• Mandatory FY09 Deposit	+ \$ 0.5 M
• Expected FY09 expenditures	<u>(\$212.5 M)</u>
• Projected balance as of 6/30/09	~ \$ 16.0 M
• Expected FY10 expenditures	<u>(\$193.3 M)</u>
• Anticipated Bond Funds Needed FY10	\$177.3 M
• Expected FY11 expenditures	(\$110.3 M)
• Anticipated Bond Funds FY11	<u>\$ 72.7 M</u>
• Shortfall FY11	(\$ 37.6 M)
• Cumulative Shortfall by FY2014	(\$103 M)

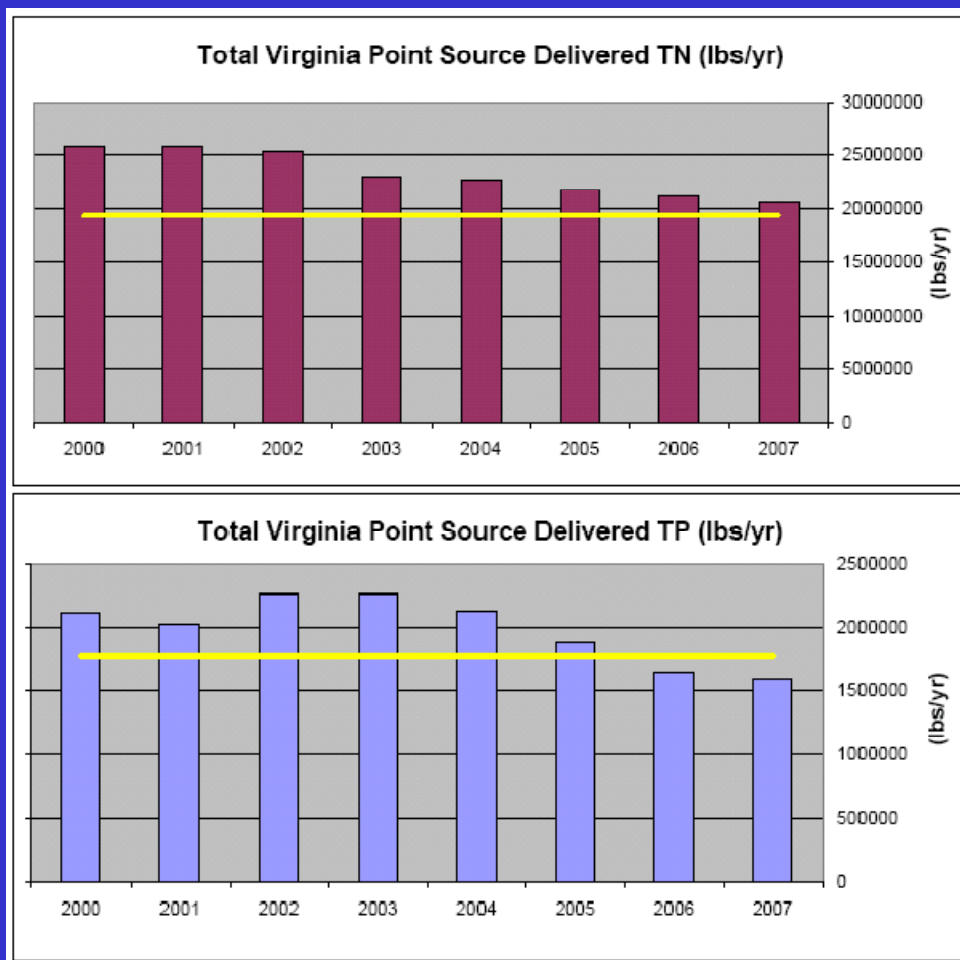
WQIF Funds Needed To Meet and Maintain Nutrient Caps

- Projects operating by 2011 to meet cap
 - 44 projects - \$458 M
- Projects operating 2012 or later to maintain cap
 - 36 projects - \$351 M
 - 24 projects - \$144 M [est. - not yet applied]

Progress in Point Source Nutrient Reduction - 2007

- Virginia PS nitrogen loads are less than 6% over loading cap
- All five river basins still over their caps
- Most of reduction to date in the Potomac basin

- Virginia PS phosphorus loads below total cap
- Two river basins have met their cap [York and James] and three still over



Progress in Point Source Nutrient Reduction by River Basin - 2007

[Million Pounds/Year]

River Basin	Number of Significant Dischargers	Total Nitrogen Delivered Load		Total Phosphorus Delivered Load	
		2007	CAP	2007	CAP
Shenandoah-Potomac*	44	3.62	3.41	0.269	0.188
Rappahannock	25	0.52	0.50	0.057	0.042
York	11	1.41	0.96	0.140	0.162
James	39	14.13	13.90	1.115	1.352
Eastern Shore	5	0.18	0.03	0.004	0.002
TOTALS =	124	19.87	18.80	1.585	1.745

*Note: figures do not include VA Portion of Blue Plains.