ANNUAL REPORT
ON THE
VIRGINIA WATER QUALITY IMPROVEMENT FUND

POINT SOURCE POLLUTION CONTROL

SUBMITTED BY
ROBERT G. BURNLEY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

JANUARY 2004

COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

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January 1, 2004

TO: Governor Mark R. Warner
Members of the Virginia General Assembly

FROM: Robert G. Burnley

SUBJECT: **WATER QUALITY IMPROVEMENT FUND ANNUAL REPORT**

Under '10.1-2134 of the Virginia Water Quality Improvement Act of 1997 (Chapter 21.1 of Title 10.1 of the Code of Virginia), the DEQ Director is responsible for providing an annual report on the point source component of the VA Water Quality Improvement Fund (WQIF).

This report, covering implementation of the VA WQIF through calendar year 2003, is complete and will soon be available at the following Internet website address:

http://www.deq.state.va.us/bay/wqifdown.html

To receive a printed copy of the report, please contact Robert Ehrhart at DEQ by phone (804-698-4466) or e-mail (rwehrhart@deq.state.va.us).

Table of Contents

List of Tables

I. EXECUTIVE SUMMARY

This is the seventh submission to the Governor and the General Assembly in response to the statutory requirement (see Appendix A) under '10.1-2134 of the Virginia Water Quality Improvement Act of 1997 (Virginia Code, Chapter 21.1 of Title 10.1) for an annual report on the implementation of the Virginia Water Quality Improvement Fund (WQIF). The DEQ Director is responsible for reporting annually on the point source component of the WQIF.

The report contains a review of program activities, which have continued implementation of the WQIF in Virginia, through calendar year 2003. This includes an update of ongoing projects from 1997 through the grant applications processed for FY 2000 funding, which was the last year that a request for proposals was issued.

As specifically required by '10.1-2134 of the Act, this report also lists the recipients and amounts of grants awarded from the WQIF, the specific and measurable reductions in nutrient loads to state waters anticipated once each funded project is constructed and placed into operation, and projections for the amount of continued funding required for the upcoming fiscal year under all fully executed grant agreements. Highlights contained in this report are:

1. In the six years since its inception, the WQIF has provided grant money for twenty-five projects, which (when fully implemented) will result in the estimated annual point source reduction of 13.7 million pounds of nitrogen and 240,000 pounds of phosphorus to the waters of the Commonwealth.
2. To date, approximately $98.8 million for point source projects has been obligated through signed grant agreements, while $92.8 million in funding has been made available through appropriations and interest earned. Thus, a shortfall of approximately $6 million exists for the current grant obligations.
3. The Commonwealth has been unable to solicit any new, cooperative point source projects since fiscal year 2000, due to a lack of appropriations for the WQIF. The amount of funds needed to fully implement the *current* Tributary Strategy Point Source Actions is approximately $119 million. Revisions to the Tributary Strategies, scheduled for completion in April 2004, are likely to result in much higher costs to meet Virginia's commitment for nutrient reduction in the Bay restoration effort.
4. Of the nineteen projects now operating their nutrient reduction systems, eighteen have met or are exceeding the performance requirements of their WQIF grant agreements.

This annual report, as well as the updated status of the WQIF, is available online from DEQ via the Chesapeake Bay Program link (http://www.deq.state.va.us/bay/wqifdown.html), and the General Assembly Reports link (http://www.deq.state.va.us/regulations/reports.html).

II. VIRGINIA WATER QUALITY IMPROVEMENT ACT OF 1997

A. Background

In 1997, the Virginia General Assembly passed the Water Quality Improvement Act (Act), which established the Water Quality Improvement Fund (WQIF). A primary objective of the WQIF is to reduce the flow of excess nutrients (nitrogen and phosphorus) into the Chesapeake Bay watershed. As part of the interstate Chesapeake Bay Program the Commonwealth has joined with other Bay states and the Federal government in committing to reduce the input of nutrients through the development and implementation of Tributary Strategies. The Code of Virginia (Title 2.2, Chapter 2, §218 and §219) also directs the development and implementation of tributary strategies to restore the water quality and living resources of the Bay and its tributaries.

No changes/amendments have been made to the Act, which affect the point source program, since the 1999 Virginia General Assembly. These 1999 amendments to '10.1-2129 of the Act require a thirty day public comment period and public hearing to precede the annual allocations of moneys in the WQIF by the Secretary of Natural Resources between the point and nonpoint source pollution programs.

Additionally, when developing grant guidelines, at a minimum the process has included: (i) the use of an advisory committee composed of interested parties; (ii) a sixty day public comment period on draft guidelines; (iii) written responses to all comments received; and (iv) notice of the availability of draft guidelines and final guidelines to all who request such notice.

Under amendments to '10.1-2131 of the Act, the DEQ Director may determine that sufficient monies exist in the WQIF for substantial and continuing progress in implementing the tributary plans. If this determination is made, grants may be authorized from the WQIF for projects other than the design and installation of nutrient reduction technology. To date, no such determination has been made and grants continue to be awarded solely for nutrient reduction projects, as part of the tributary strategy process.

B. Cooperative Point Source Pollution Control Program

The Act recognizes that the protection of the quality of state waters is a shared responsibility among state and local governments and individuals. In order to enhance the purposes of the State Water Control Law and other state laws related to the restoration, protection, and improvement of the quality of state waters, the Act establishes cooperative programs to reduce nutrients and other point and nonpoint sources of pollution.

Under the cooperative point source program, the DEQ is directed to assist local governments and individuals in the control of point source pollution, including nutrient reductions, through technical and financial assistance made available through grants provided from the WQIF. These cooperative programs do not limit in any way the other water quality restoration, protection and enhancement authorities of any agency or local government of the Commonwealth. The voluntary, cooperative approach envisioned by the Tributary Strategies is consistent with the cooperative program established under the Act. During the strategy development process, point source owners throughout the Chesapeake Bay drainage basin clearly stated their preference for a local-state cooperative partnership approach in developing and implementing the tributary strategy.

In 1999, point source owners expressed concern over the development of nutrient criteria by the Environmental Protection Agency (EPA), and the potential development of Total Maximum Daily Loads (TMDLs) for the Bay and each tributary, which were added by EPA to the 303(d) list of impaired waters. Virginia continues to use a cooperative approach in implementing the tributary strategies by, conceptually, offering 50% of the capital cost to install nutrient removal facilities (subject to additional appropriations) and working closely with EPA and other Bay Program partners to integrate the nutrient criteria/standards under development, TMDL requirements, and tributary strategy programs in the Bay restoration effort. Details on this integration process can be found in the *2003 Annual Report on Development and Implementation of the Tributary Strategies* (Office of the Secretary of Natural Resources).

Table 1 shows estimated costs for implementing the cooperative point source program in each existing Tributary Strategy, assuming that each WQIF cost-share grant will cover at least 50% of the eligible costs. The estimate for future WQIF funding needs accounts for existing signed agreements, pending grant increase requests, estimated costs for projects not yet in the WQIF program, and WQIF appropriations to date. The basis for the costs was determined using the WQIF amount of the signed grant agreements and, for those facilities not yet in the program, the estimated costs were obtained from the document, "Nutrient Reduction Technology Cost Estimations for Point Sources in the Chesapeake Bay Watershed" (NRT Report), prepared by a task force of Chesapeake Bay Program members. The dollar amounts presented in the NRT report, which was issued by the Bay Program in November 2002, replace estimates used in previous WQIF annual reports. The methodology used to calculate the cost estimates has been extensively updated and also directly involved many of the facility owners and their consulting engineers. For these reasons, the amounts presented in Table 1 are considered more accurate and replace previous estimates.

Table 1 – WQIF Grant Funding Needs to Fully Implement Current Tributary Strategy (TS) Point Source Actions

Shenandoah/Potomac	**Estimated 50% Grant Amount**
Signed Agreements:	$75,481,000
Pending Grant Increases	+$100,000
Additional Plants not yet in WQIF Program	+ $29,875,000
Subtotal	$105,456,000
WQIF Appropriations to date	- $69,038,000
Remaining Shenandoah/Potomac Grant Needs	**$36,418,000**
Lower Tributaries	
Signed Agreements:	$23,428,000
Additional Plants not yet in WQIF Program: Rappahannock	$5,591,000
York	$7,898,000
James	$67,863,000
Eastern Shore	$1,145,000
Subtotal	$105,925,000
FY 00 WQIF Appropriation	- $23,740,000
Remaining Lower Tributaries Grant Needs	**$82,185,000**

Total Current Needs (as based on existing TS)	**$118,603,000**

C. Virginia Water Quality Improvement Fund (WQIF)

The Act established the WQIF to provide grants to local governments, soil and water conservation districts, and individuals for point and nonpoint source pollution prevention and reduction programs. Under the Act, the DEQ Director is responsible for point source grants and the Director of the Department of Conservation and Recreation (DCR) is responsible for nonpoint source grants. In accordance with the Act, existing point source grants provide at least 50% of the cost of design and installation of biological nutrient removal (BNR) facilities or other nutrient removal technology at publicly owned treatment works (POTW). The only two exceptions to the requirement that the grantee be a POTW -- SIL Clean Water, Inc. and Dale Service Corporation -- share a special (one time) appropriation for private STP's serving residential areas that exceed 0.5 MGD in design capacity. In both cases, the grant amount did not equal 50% of the final grant eligible costs due to the limited amount of the special appropriation.

1. Appropriations to the WQIF

Table 2 provides the point source appropriations to the WQIF by the General Assembly for fiscal years 1998-2004. For FY 1998 and 1999, point source funds were targeted for projects in the Shenandoah/Potomac Tributary Strategy. In FY 2000, the point source allocation to the WQIF was for use in implementing nutrient reduction strategies for the lower Bay tributaries (Rappahannock, York, James, and Small Coastal basins).

No additional appropriations have been made to the WQIF point source program from FY 2001 thru FY 2004; however, accrued interest has been returned to the fund for use on existing grant agreements in the amount of approximately $10.15 million. At the time this report was prepared and for FY 2004 to date, about $480,000 in interest had been earned on the balance.

Table 2 – WQIF Appropriations

Point Source Program

FY 1998	$10.00 million
FY 1999	$37.10 million
FY 2000	$25.24 million
FY 2001	$10.30 million
Interest earned (thru '04 YTD)	$ 10.15 million
TOTAL:	$92.79 million

2. Multi-Year Projects

As with most capital outlay projects, the WQIF projects have taken several years to complete. Thus, it was anticipated that the grant monies needed to *fully* fund these multi-year projects would be spread out over several years. To implement the tributary strategies and ensure that monies allocated to the WQIF are put to use as soon as possible, DEQ and the point source owners took the approach of signing agreements for multi-year grants that may, in total, exceed the amount of grant funds currently in the WQIF. Under this approach, the grant agreement that each owner signs with DEQ specifies that the availability of monies in the Fund is subject to appropriation by the General Assembly and that at times there may not be sufficient monies in the Fund to permit prompt (or entire) disbursement of grant funds owed to the Grantees.

The agreements also contain provisions to minimize the potential for disruption in disbursements of the grant funds. The grantees and DEQ continue to work together to forecast the estimated disbursements from the WQIF and make this information publicly available for use in the State budgetary process. For the last 3 fiscal years ('02 – '04) grant fund requests were expected to exceed the availability of grant monies in the WQIF; thus, DEQ has had to manage allocation of available grant funds to ensure an equitable distribution among all impacted grantees for that fiscal year.

Additionally, the agreement contains language to ensure completion of the construction and start-up, regardless of the amount of grant funds reimbursed. However, it remains the Commonwealth's intention to fully meet its obligation of all signed agreements, when sufficient funds are appropriated.

III. PROGRAM ACTIVITIES

A. FY 1998 WQIF Grants

During the first year of the WQIF point source program (FY 1998), twelve grants, committing a total of $52,333,848 in state cost share, were signed in the Shenandoah and Potomac basins based on estimated costs. Since signing the original grants, inflation, changes in the scope of work, and the actual receipt of construction bids have increased the total grant commitment to $66,429,636. Except for one project, all grants were for 50% cost share in the design and construction of nutrient reduction systems at wastewater treatment facilities. These point source projects were designed to reduce annual loads of nitrogen by 6.4 million pounds, and phosphorus by 88,000 pounds at design flows. A technical assistance grant for $546,000 was provided to SIL Clean Water for the planning and design phases of a joint public-private venture for land application designed for an average flow of 1.923 MGD.

B. FY 1999 WQIF Grants

Five grant agreements were signed using funds appropriated for FY 1999; a total of $9,052,137 was attributed to eligible cost-share. These point source projects were also located in the Shenandoah/Potomac basin and were designed to reduce, respectively, annual loads of nitrogen and phosphorus 985,000 lbs/year and 157,200 lbs/year at design flows.

C. FY 2000 WQIF Grants

$25.24 million (see Table 2) was appropriated for FY 2000, to be used exclusively for financing the design and installation of nutrient removal facilities at POTWs in the lower Bay tributaries (Rappahannock, York, James, and Small Coastal basins). To offset the loss of available funds resulting from the transfer of interest to DCR, the DEQ Director has authorized using $1.5 million of unobligated FY 2000 funds for projects in the Shenandoah/Potomac basin.

Of the 15 eligible applications submitted for FY 2000 funds, 9 requests were targeted as priority projects for award of grant funds. Of those 9 priority projects, eight grant agreements were executed. Only the grant agreement prepared for the City of Richmond (in the amount of $1,015,261.00) was not executed, as the City was uncertain of their ability to achieve the performance standards for total nitrogen in conjunction with CSO control. These point source projects were designed to reduce, respectively, annual loads of nitrogen and phosphorus by 6,286,706 lbs/year and 1,381 lbs/year at design flows. A complete list of project descriptions can be found online at: **http://www.deq.state.va.us/bay/wqif.html**.

D. FY 2003-04 Activity/Notes

For the Shenandoah/Potomac projects, actual expenditures from the 2002 budget were less than expected. As a result, funds were available to continue prorating reimbursement payments for FY 2003. To the extent possible, emphasis was placed on closing out 5 projects (ACSA-Stuarts Draft, Leesburg, Purcellville, Dale Service Corp. #1, Dale Service Corp. #8) with relatively small balances, to minimize fiscal strain and reduce the need for State and local administrative oversight. As previously mentioned, to offset the loss of available funds resulting from the transfer of interest to DCR, in FY 2003 the DEQ Director authorized using $1.5 million of unobligated FY 2000 funds for projects in the Shenandoah/Potomac basin. Aside from the 5 projects identified above, FY 2003 reimbursements for the remaining projects were prorated to pay 55% of the eligible costs, with 45% of the costs deferred until additional funds become available. For FY 2004 (and after consultation with the grantees), it was decided that all costs previously deferred in 2002 and 2003 would be reimbursed in one lump sum amount in January 2005. In essence, this action will deplete the remaining funds, except for what has been set aside to close out the smaller project balances.

At the time that the DEQ Director authorized a transfer of funds, all lower tributary grant projects targeted under the 2000 appropriation had been executed for a total of approximately $24.43 million in cost-share. Since the FY 2000 appropriation for these projects was $25.24 million, an unobligated balance of about $1.8 million remained. Because it did not appear necessary to reserve all these funds in FY 2003, the decision was made to use a portion to aid in covering the immediate shortage in the Shenandoah/Potomac basin. About $300,000 still remains available for cost overruns on the grants executed for the lower tributary projects, if needed.

While disbursements for projects in the James, York, and Rappahannock Basins were not impacted in 2003, further solicitation for projects and additional nutrient reductions with cost-share cannot occur until additional State financial resources are available.

As previously mentioned, the NRT Report contains costs for all significant nutrient point sources and has been used to estimate costs to implement the existing Tributary Strategies. However, the Tributary Strategy revisions now being drafted are based on new load allocations agreed to by the Bay Program partners in April 2003. The nutrient reduction goals are much more challenging and will likely lead to significant increases in the cost of point source control actions under the revised strategies.

If additional appropriations are not made to the WQIF Point Source Program it is projected that the WQIF will not have sufficient funds available to cover any reimbursements for which the Shenandoah/Potomac Projects are eligible, beyond amounts deferred in 2003 ($3,294,880) and proposed for payment in January 2004. The following table summarizes the estimated funding shortfall.

Table 6 - Projection of WQIF Availability through FY2005

(Shenandoah/Potomac Agreements)

Appropriations for Shenandoah/Potomac Projects	$69,038,158
Actual Reimbursements through FY03 (ending 6/30/03)	- $64,806,207
Balance	$4,231,951
Projected Reimbursements for FY04 (7/01/03-6/02/04)	$4,231,951
Balance	$0
Remaining obligation (reimbursements deferred to FY 05)	($6,443,615)
Potential Return of Obligated (unused) Funds	$800,000
Potential/Pending Grant Increases	($100,143)
Balance due on existing commitments (shortfall)	($5,743,758)

E. Performance of Completed Projects

The annual average total nitrogen performance requirement of 8.0 mg/l is being achieved at all sixteen plants (see Table 4) that have been operating BNR for ten or more months; the annual performance requirement of 21.0 mg/l is also being achieved at the Hopewell WWTF.

Additionally, better performance than required has occurred at many of the plants, due to the fact the facilities are operating (on average) at 70% of their design capacity. Plants discharging the lowest nitrogen concentrations are generally operating at 65%-85% of the design capacity. The performance at several of these plants is highlighted in Table 5. As future wastewater flows to the plants increase, it is possible there will be a decline in the overall treatment efficiency, but the annual

performance requirements will still likely be met.

Table 4 – Implementation Status of WQIF Point Source Projects Operating BNR		
Facilities in Potomac/Shenandoah	*Size (MGD)*	*Status*
Stafford County – Aquia	6.0	BNR on-line ('03 YTD avg. TN = 7.41 mg/l)
Frederick–Winchester Opequon	8.4	BNR online 7/00 ('03 YTD avgs.: TN= 5.72 mg/l ; TP = 0.26 mg/l)
Harrisonburg-Rockingham SA-N. River	16.0	BNR online 9/00 ('03 YTD avgs.: TN= 6.86 mg/l; TP = 0.59mg/l)
SIL Clean Water (Tech Assistance)	N/A	Design completed
SIL Clean Water	1.92	Project online 10/00; see narrative
Fairfax-Blue Plains	31.0	Plant retrofit complete; upgrade for nitrification reliability pending. ('02 Yearly avg. TN = 6.52 mg/l)
Loudoun County SA-Blue Plains	13.8	Plant retrofit complete; upgrade for nitrification reliability pending. ('02 Yearly avg. TN = 6.52 mg/l)
Leesburg	4.85	BNR online 11/01('03 YTD avgs.: TN= 5.9 mg/l; TP = 1.1 mg/l)
Staunton-Middle River	6.8	BNR online 9/01 ('03 YTD avgs.: TN= 5.63 mg/l; TP = 1.08 mg/l)
Arlington County	40.0	BNR online 04/02 ('03 YTD avg. TN= 8.74 mg/l)
Fairfax Co.-Noman Cole	67.0	Partial BNR facilities online 9/02 ('03 YTD avg. TN= 7.83 mg/l)
Prince William Co. SA-Mooney	18.0	BNR partially online in 2002 ('03 YTD avg. TN = 7.53 mg/l)
Alexandria SA	54.0	BNR online in 4/03 ('03 YTD avg. TN = 7.63 mg/l)
Purcellville	1.0	BNR online 4/02 ('03 YTD avg.: TN= 8.6 mg/l; TP = 0.18 mg/l)
Dale Service Corp. #1	4.0	BNR online 7/02('03 YTD avg. TN= 3.63 mg/l)
Dale Service Corp. #8	4.3	BNR online 6/02('03 YTD avg. TN= 4.64 mg/l)
Augusta County SA-Stuart's Draft	2.5	BNR online 7/02('03 YTD avg.: TN= 4.52 mg/l; TP =1.33 mg/l)
Facilities in Southerly Tributary Basins	*Size (MGD)*	*Status*
Little Falls Run	4	BNR Online ('03 YTD avg.: TN = 4.61 mg/l)
Massaponax	8.4	BNR Online in 1/03 ('03 YTD avg.: TN =7.18 mg/l)
Proctor's Creek	21.5	BNR online ('03 YTD avg.: TN= 6.58 mg/l)

Table 5 – 2003 Point Source Nutrient Reduction Performance at Selected Plants			
Facility	2003 Avg. TN (mg/l)	% below 8.0 mg/l	% below design flow
Aquia (Stafford Co.)	7.41	7%	27%
Dale Service Corp. #1	3.63	55%	18%
Dale Service Corp. #8	4.65	42%	28%
Frederick–Winchester Opequon	5.72	28%	40%
H.L. Mooney (Prince William)	7.53	6%	25%
HRRSA-N. River	6.86	14%	13%
Leesburg	5.90	26%	14%
Little Falls Run (Stafford Co.)	4.61	42%	15%
Middle River	5.70	29%	26%
Proctors Creek (Chesterfield Co.)	6.58	18%	12%
Stuarts Draft (ACSA)	4.52	44%	33%

One project, the SIL Clean Water Modular Reclamation Reuse System (MRRS), has had difficulty meeting it's annual nutrient reduction requirements since the performance period began in 2001. The facility exceeded its annual nutrient load allowances in both 2001 and 2002, and monetary assessments (for repayment of a portion of the grant) were ordered. SIL failed to pay these assessments, so they have been referred to the Office of the Attorney General for collection. The MRRS has also exceeded the annual nutrient allowances for calendar year 2003 and an additional monetary assessment will be pursued. In August 2003, SIL was ordered to submit a Corrective Action Plan to ensure future compliance with the performance requirements of the WQIF agreement. The submitted Plan was deemed unacceptable and DEQ is now considering other authorities and legal options available to secure performance under the grant.

F. Other Activity (Swine Operations Study)

Item 428 from the 1999 Budget Appropriations Act required the DEQ, in cooperation with the Department of Agriculture and Consumer Services, the Department of Conservation and Recreation, and the Virginia Cooperative Extension Service, to create a pilot program to evaluate alternative approaches for operating intensive swine operations with particular focus on the effective reduction of odors and pollution without reducing profitability. The DEQ is required by the 1999 Act to report the results of the project on or before December 1, 2003 and is currently reviewing the final report in preparation for our report and project as required by the 1999 Appropriations Act.

IV. SUMMARY DATA FOR EXECUTED GRANT AGREEMENTS

As required by ' 10.1-2134 of the Act, this report lists the projections for the amount of continued funding required for the coming fiscal year under all fully executed grant agreements. This revised information is provided in Table 6.

Table 6 – Projected WQIF Grant Expenditures for Signed Agreements

Grantee / Plant	Grant Amount	Expenditures FY 1998 thru FY 2003 (7/1/97-6/30/02)	Expenditures to date in FY 2004 (7/1/03- to date)	Total Expenditures to Date	Projected Expenditures Remaining for FY 2004 (to 6/30/04)	Projected Expenditures for FY 2005 (7/1/03-6/30/05)	Projected Expenditures Past FY 2005	Expected Nutrient Load Reduction (lbs per year) Nitrogen	Phosphorus	WQIF Grant Effective Date	Operational Status
ACWSA-Stuarts Draft	$1,382,783[1]	$1,381,142	$1,641	$1,382,783	$0	$0	$0	134,000	12,200	11/12/00	BNR online
Alexandria S.A. STP	$20,147,914	$17,115,505	$0	$17,115,505	$984, 325*	$1,348,084	$0	2,055,000	N/A	03/16/98	Online: 4/03
Arlington Co. STP*	$10,816,973	$10,346,128	$0	$10,346,128	$470,845*	$0	$0	146,000	N/A	10/10/98	BNR online
Chesterfield Co.– Proctors Crk STP	$965,560	$965,560	$0	$965,560	$0	$0	$0	700,665	N/A	06/26/01	BNR Online
Dale Service Corp STP #1	$1,901,057	$1,806,004	$0	$1,806,004	$95,053	$0	$0	377,500	N/A	5/26/99	BNR online
Dale Service Corp STP #8	$2,115,053	$2,006,987	$0	$2,006,987	$108,066	$0	$0	328,800	N/A	5/26/99	BNR online
Fairfax Co. (Blue Plains STP)*	$1,387,500	$381,988	$0	$381,988	$0	$0	$1,005,512	751,000	N/A	12/22/97	BNR online
Fairfax Co. – Noman Cole STP*	$10,399,500	$7,931,056	$0	$7,931,056	$614,346*	$1,754,098	$0	1,632,000	N/A	5/20/98	07/04 (Est.)
Fauquier Co – Remington STP	$886,138	$615,000	$0	$615,000	$270,138	$0	$0	33,156	1,381	7/11/01	2004
Fred/Winchester S.A. – Opequon STP	$2,754,618	$2,754,618	$0	$2,754,618	$0	$0	$0	279,000	26,000	6/8/98	BNR online
Hanover Co. – Totopotomoy	$2,109,770	$1,493,435	$171,788	$1,665,223	$146,700	$297,847	$0	73,911	N/A	05/18/01	05/04 (Est.)
H'burg/Rckgham S.A. - North River STP	$2,850,937	$2,850,937	$0	$2,850,937	$0	$0	$0	521,000	49,000	4/27/98	BNR online
Henrico WWTF	$8,906,687	$7,656,360	$526,064	$8,182,424	$724,263	$300,000	$0	1,233,512	N/A	7/04/01	06/04 (Est.)
Hopewell WWTP	$2,418,647[2]	$2,414,671	$3,976	$2,418,647	$0	$0	$0	3, 957,000	N/A	11/6/00	BNR online
Leesburg STP	$6,477,734	$6,453,953	$0	$6,453,953	$0	$90,000	$0	81,000	N/A	7/16/98	BNR online

[1] Contract modification #2 has been signed and reflects final eligible costs; the grant decreased from $1,424,724

[2] Contract modification #2 has been signed and reflects final eligible costs; the grant decreased from $2,508,218

Table 6 – Projected WQIF Grant Expenditures for Signed Agreements

Grantee / Plant	Grant Amount	Expenditures FY 1998 thru FY 2003 (7/1/97-6/30/02)	Expenditures to date in FY 2004 (7/1/03- to date)	Total Expenditures to Date	Projected Expenditures Remaining for FY 2004 (to 6/30/04)	Projected Expenditures for FY 2005 (7/1/03-6/30/05)	Projected Expenditures Past FY 2005	Expected Nutrient Load Reduction (lbs per year) Nitrogen	Phosphorus	WQIF Grant Effective Date	Operational Status
Loudoun Co. S.A. (Blue Plains STP)	$365,500	$169,626	$0	$169,626	$0	$0	$195,874	213,000	N/A	12/1/97	BNR online: 01/00
PWCSA – Mooney STP	$9,094,338	$5,905,152	$0	$5,905,152	$1,042,965*	$2,146,221	$0	477,000	N/A	3/19/98	Partially online: 06/03
Purcellville STP	$1,604,413	$1,604,413	$0	$1,604,413	$10,143	$0	$0	32,600	3,100	8/19/99	BNR online
SIL Clean Water (Tech Ass't Grant)	$546,000	$546,000	$0	$546,000	$0	$0	$0	N/A	N/A	4/26/99	Complete: Sept. 1999
SIL Clean Water Spray System	$1,983,890	$1,983,890	$0	$1,983,890	$0	$0	$0	178,000	138,000	12/2/99	MRRS online
Spotsylvania Co. – FMC STP	$1,767,000	$48,936	$48,936	$48,936	$200,000	$1,518,064	$0	59,682	N/A	4/19/01	12/05 (Est.)
Spotsylvania Co. – Massaponax STP	$4,294,553	$3,743,395	$98,579	$3,841,974	$452,579	$0	$0	110,522	N/A	4/19/01	online: 01/03
Stafford Co. – Aquia STP	$351,962	$290,709	$13,533	$304,242	$0	$47,720	$0	110,000	N/A	6/8/98	BNR online
Stafford Co. – Lil' Falls Run STP	$1,962,833[3]	$1,962,833	$0	$1,962,833	$0	$0	$0	118,258	N/A	4/19/01	BNR online
Staunton Middle River STP	$1,236,660	$1,236,600	$0	$1,236,660	$0	$0	$0	91,000	13,000	6/8/98	BNR online
VT Swine Study	$64,941	$26,264	$0	$26,264	$38,677	$0	$0	N/A0	N/A	N/A	N/A
Totals:	$98,792,961	$83,691,162	$864,517	$84,506,803	$5,158,100	$7,502,034	$1,201,386	13,693,606	242,681		

*includes WQIF share of eligible costs deferred from FY 2002 & 2003

[3] Contract modification #2 has been signed and reflects final eligible costs; grant decreased from $1,989,991.