

**Commonwealth of Virginia  
Drinking Water State Revolving Fund Program  
Draft Intended Use Plan  
For the DWSRF FY2011 Capitalization Grant**

**June 27, 2011**



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 Intended Use Plan for FY 2011 Capitalization Grant**

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## **I. Introduction**

In accordance with the federal Safe Drinking Water Act Amendments (SDWA) of 1996 (P.L.104-182), which established a Drinking Water State Revolving Fund (DWSRF) Program to eligible states through a capitalization grant, the Virginia Department of Health (VDH) Office of Drinking Water (ODW) is making application for federal funding in the amount of \$15,711,000 in FY 2011 DWSRF grant funds.

The VDH has primary enforcement responsibility, or primacy, for the Commonwealth of Virginia's drinking water programs, and as such, is the designated agency to apply for and administer the capitalization grant for the DWSRF Program and related state funds. The FY 2011 grant application consists of the Intended Use Plan (IUP), the 2011 Preliminary Project Priority List (Attachment 1), the Comprehensive Project List (Attachment 2), The Set-aside Suggestions (Attachment 3) and the IUP Summary and Set-aside Budget (Attachment 4). The *Virginia Drinking Water State Revolving Fund Program - Program Design Manual*, dated January 5, 2010, is part of the IUP and outlines the Program's overall goal, the set-aside and construction aspects of the Program, entities eligible for funding, interest rates and terms, and criteria used to establish a Project Priority List. In compliance with the requirement in SDWA sec. 1452(b)(1), the IUP undergoes public review and comment through a combination of mailings, internet postings, and a public meeting that will be held in Richmond at a later date. The IUP cover letter is also placed in the General Notices section of the Virginia Register.

## **II. DWSRF Program Goals**

The VDH is committed to using the capitalization grant for which it is applying to provide assistance to water systems through set-asides and for capital improvement projects that will further the public health protection objectives of the Safe Drinking Water Act. VDH's goal is to enter into binding commitments for projects which will proceed to construction or award of construction contracts within twelve months of initial offers of assistance. The VDH intends to award all assistance available under this capitalization grant in full conformance with the DWSRF program and the terms and conditions of the capitalization grant award.

The Virginia DWSRF Program activity incorporates the federal, state match, program revenue and repayments, and miscellaneous additional funds to implement the statewide programs to insure adequate and safe drinking water to citizens. The construction loan and grant funds, in conjunction with the set-aside funds, provide funding sources for infrastructure projects, planning projects, sample testing, capacity development initiatives, state administrative costs, training, technical assistance, wellhead and source water protection, and other activities designed to enhance the state's water programs.

The 2011 Preliminary Project Priority List (PPL) (Attachment 1) details the construction projects to be funded, in priority order, and other relevant project information. The Comprehensive Project List (Attachment 2) details all eligible projects submitted during this state application process, and provides additional projects to be funded in priority order, should funding become available.

The set-aside funds will be used to maintain and advance waterworks support initiatives that contribute to the sustainability of safe drinking water. The set-asides funds are made available to assist waterworks owners in preparing for future waterworks challenges. Although the waterworks and their consumers will be the direct benefactors of these funding efforts, the initiatives may originate with any number of concerned parties and may be used in cooperative efforts with other entities to maximize the outcome.

VDH is requesting twenty-four percent (24.39%), or \$3,831,725, of the thirty-one percent (31%) available for current year set-asides, and ODW will allocate all eligible pre-award costs to the grant, retroactively upon award.

In addition to funding the technical support activities for waterworks, the current year set-asides will provide funding for critical activities such as additional training and development for staff and waterworks operators, procuring new office and technical equipment for field offices, expanding the Enterprise Content Management (ECM) program, obtaining critically needed database upgrades, and program operation support costs.

#### **A. Long Term and Short Term Goals**

The Virginia Department of Health is committed to promoting and protecting the health of Virginians. That mission is supported by a number of critical functions including activities implemented by the ODW. ODW supports the mission through regulatory, technical, and financial programs designed to enhance the quality of water provided to the citizens of the Commonwealth. The DWSRF program provides VDH with the means to achieve these goals.

VDH has a goal to utilize the DWSRF resources to implement a long-term, sustainable program focused on providing technical, financial, and managerial resources to waterworks owners. VDH will accomplish this through an integrated assistance program to provide technical and financial resources targeted to waterworks that exhibit a specific need for assistance. VDH has established the following priorities for the DWSRF program:

#### **Long Term**

- Ensure the sustainability of the DWSRF program and related funding to benefit Virginians over the greatest number of years.
- Protect the public health and welfare by supporting activities that ensure adequate water quantity and quality are provided to users of waterworks.
- Assist waterworks owners in complying with federal and state mandated drinking water regulations through programmatic, technical, and construction assistance.
- Assist waterworks owners to develop long term strategies for sustainable infrastructure (managerial, technical, and financial capability) to provide safe drinking water.
- Assist waterworks owners in the protection of their source waters by supporting source water protection programs.

- Make technical and financial assistance available to waterworks owners and consumers through effective outreach programs.

### Short Term

- Allocate DWSRF Program funds efficiently so Virginians may realize a prompt benefit.
- Assist waterworks owners through innovative technical assistance programs.
- Promote consolidation and regionalization of water supplies and waterworks through both programmatic and construction assistance.
- Provide a source of low cost financing for drinking water needs.
- Require that all new Community and Nontransient Noncommunity water systems beginning operation after October 1, 1999, demonstrate the technical, financial, and managerial capacity required to operate a waterworks.
- Ensure that state operator certification regulations meeting EPA national requirements are applied. Ensure that training courses are provided that meet the needs of the lower classifications of licensed operators at the smaller waterworks.

### **B. Demonstration Project for the Commonwealth of Virginia**

The SDWA authorizes Virginia to establish a special demonstration project to loan funds to a regional endowment for “...financing new drinking water facilities...” in an area of Southwest Virginia encompassing Planning Districts 1 and 2. This endowment was established to assist in meeting the special needs of Southwest Virginia. In prior years, VDH elected to provide a total of \$10 million from its capitalization grants as loans to the endowment. That goal has been reached and no additional funding is provided.

### **C. Transfer of Funds**

Subject to the maximums allowed under the SDWA, set-aside funds may be transferred between another set-aside or between the State Loan Fund, but no grant payments (per the DWSRF Program Rule) for the State Loan Fund may be transferred to a set-aside. No transfers are expected.

No Department of Environmental Quality (DEQ), Clean Water State Revolving Fund (CWSRF) repayment revenue is planned for transfer into the DWSRF Program under Section 302 of the Safe Drinking Water Act Amendments of 1996. Such transfer funds can only be used as loan funds not grants. VDH has not requested funds from DEQ.

### **D. Financial Health**

The DWSRF Program will be managed to maximize benefits available to waterworks owners and Virginians. The financial health of the program is reflected in both the active non-construction activities and in funding opportunities. Both areas are integrated and affect the other's success, i.e. activities promoting or enhancing delivery of a safe drinking water reduce the

demand on the loan area by insuring the long-term well being of the waterworks. The DWSRF (the Fund) will be maintained in perpetuity for providing financial assistance as authorized and limited by the SDWA. The Fund will be maintained in accordance with the SDWA and will be credited with all payments, repayments of principal and interest on loans, interest on loan accounts and any other source of income accruing to the Fund. By coordinating the two areas of non-construction and project loans, the overall long-term financial health of the program will be maintained for the maximum benefit of Virginians. This coordination will be done by the strategic coupling of programmatic considerations with the results of a planning model that examines the aggregate effects of altering financial parameters of the program. Procedures will be revised or implemented, as needed, based on the results of the annual assessment.

In the Disadvantaged Program as described in VDH's *Program Design Manual*, loan subsidies in the form of principal forgiveness will decrease the loan funds available; however, principal forgiveness coupled with a waterworks business operations plan will reduce the demand on the loan fund by insuring the long term well-being of the waterworks. The waterworks business operations plan is used to ensure a new (or struggling) owner has the managerial, technical, and financial capacity to provide for the long-term operation of the waterworks. These initiatives allow waterworks to undertake projects they could not otherwise construct and, therefore, protect the public health. This strategy is one of the strong themes encouraged by Congress.

A unique feature of the Virginia DWSRF Program is the federal statutory language allowing a pilot demonstration project in Southwest Virginia. The Commonwealth has made loans to a regional endowment, and such loans will be repaid with terms and conditions in the same manner as all other project loans. These loan funds will be invested; investment proceeds can be for uses other than normally specified by Congress to assist communities in Southwest Virginia in correcting water problems.

### **III. Sources and Uses of Funds**

The VDH is applying for a capitalization grant in the amount of \$15,711,000. This represents the amount EPA informed VDH that it is eligible to receive under the DWSRF FY2011 appropriation.

#### **A. Sources of Funds**

The IUP Summary (Attachment 4) details the cumulative funding available for FY11 and the projected distribution between construction and set-aside funds.

Virginia's 20% state match for the capitalization grant is deposited into a dedicated state loan fund, the *Virginia Water Supply Revolving Fund* (§62.1-233 et seq.), established under the *Code of Virginia*. Also specified in the *Code of Virginia*, and in conjunction a VDH Memorandum of Understanding, are roles and responsibilities for the Virginia Resources Authority (VRA) pertaining to individual construction loans and processes.

In order to meet the established goal of providing 15% of the amounts credited to the state loan fund as loan assistance to waterworks that regularly serve fewer than 10,000 persons, VDH will bypass higher ranked projects if necessary to meet this goal.

## **B. Construction Projects**

The VDH intends to provide approximately \$20,185,183 in 2011 DWSRF funds (from the 2011 cap grant, state match, and repaid interest and principal). The PPL (Attachment 1) identifies the construction projects VDH targets to receive dollars for funding in priority order, with a funding breakdown and other relevant project information. The PPL represents approximately \$20.2 million in requested assistance funds; however, this total will be adjusted by VDH based on applicant responses, project readiness in accordance with DWSRF criteria, changes in project scope, or actual construction bid results. VDH will utilize available SRF funds from prior year grant awards should any additional funds be required. The VDH does not intend to fund any 2011 projects beyond those listed in the 2011 PPL. The Comprehensive Project List (Attachment 2) details all projects submitted during this state application process.

The EPA established certain requirements and goals for use of the 2011 DWSRF funds for water infrastructure construction. This includes a requirement that not less than 30% of the funds are to be used for additional subsidization in the form of principal forgiveness, negative interest loan, grants or combination. In addition, the EPA established a goal of not less than 20% of the funds to be used for projects to address green infrastructure (Green Project Reserve or GPR). In order to meet the established goals and requirements of the 2011 DWSRF capitalization grant, VDH reserves the right to bypass higher ranked projects if necessary, to achieve the 30% additional subsidization requirement or the 20% GPR goal.

EPA requests that states set a pace target in each IUP. VDH's pace for FY10 was 85%. VDH will use 85% for a pace target for FY2011.

### **1. Loan Terms and Fees**

Under the DWSRF Program, the repayment period for loans is 20 years at an interest rate equal to one percent below the prevailing "AA" market rate at loan closing.

Principal forgiveness, lower interest rates, and 30-year term loans may also be provided for those recipients whose projects qualify as "disadvantaged". See the DWSRF Program Design Manual for details.

### **2. Additional Subsidization**

The 2011 DWSRF requires that 30% of assistance provided be in the form of additional subsidies. These may be negative interest rates, principal forgiveness, grants, or any combination of these. The VDH does not intend to provide any funding as negative interest rates or grants; however, principal forgiveness will be provided for eligible projects. The fundable range of the attached PPL demonstrates that at least 30% of the capitalization grant will be provided via principal forgiveness. Any subsequent revision to this PPL will likewise demonstrate that at least 30% of the capitalization grant will be provided via principal forgiveness.

### **3. Green Infrastructure**

The 2011 DWSRF requires that, to the extent there are sufficient eligible project applications, not less than 20% of the funds provided for projects be used for water efficiency, energy efficiency, green infrastructure, or other environmentally innovative

activities. The VDH has requested that all projects awarded assistance under the 2011 DWSRF submit business cases in support of a Green Project Reserve (GPR). Every GPR business case that is submitted will be made available in accordance with EPA's guidance.

#### 4. Assistance to Small Communities

All states are required to provide, to the extent possible, a minimum of fifteen percent (15%) of funds available annually for loans to small systems. Small systems are those that serve fewer than 10,000 persons. Based on the projects in the fundable range of the PPL, VDH may be able to provide approximately 92% of the funds available to small systems.

### C. SET-ASIDES:

The set-asides are four categories of non-project funds that will be used for specified purposes up to a maximum amount allowable by federal statute and available through the current year grant award. Attachment 3 lists the suggested uses of set-aside funds proposed during the solicitation or public input phase of IUP development. An overview of major funding initiatives for the set-aside funds is given below.

#### 1. Administration and Technical Assistance:

\$628,440 is the entire 4% available and allowed for the current year, is being requested.

a. Administration – These funds will support the administrative functions of the Program, including one (1) Project Engineer and the Financial and Construction Assistance Program (FCAP) Division Director positions supported in prior years by this funding source, a newly-established DWSRF fiscal technician position, , and applicable hours submitted by the Program Support Technician, Business Manager, FCAP Project Officer, and the Grants Accountant. The four (4) latter positions are charged to another funding source, but actual time applied to DWSRF administrative activities will be charged to these funds. The estimated cost of these positions and applicable hours is \$329,709. Other administrative costs pertain to the review of applications and selected projects, application workshops, environmental reviews, analysis of applicants' ability to repay loans, and VDH travel to EPA/CIFA meeting.

From this grant, VDH has budgeted \$260,000 to the Virginia Resources Authority (VRA) for credit analysis summaries for each project, project loan closings, funding disbursements, accounting tasks, compliance review of closed loans, annual audit of the construction loan fund, and participation with VDH in EPA's annual onsite program review.

Funds are also provided for legal assistance in contract renewals/commitments and audit services in the amounts of \$1,400 and \$1,600 respectively.

b. Technical Assistance – No activity.

## 2. Small System Technical Assistance:

\$314,220 is the entire 2% available and allowed. Virginia is requesting the full amount of Small System Technical Assistance funding.

- a. Funding is provided to support five (5) part-time inspector positions to cover transient non-community waterworks. Funding is provided in the amount of \$131,558.
- b. Training - Provide specialty seminars and training events for waterworks owners/operators on various topics. Virginia Tech was awarded contracts in the amount of \$159,600 to conduct training and to provide scholarships to training courses for disadvantaged operators/owners.

## 3. State Program Management:

\$1,571,100 is the entire 10% available and allowed for the current year. Virginia is requesting the full amount of set-aside funding available.

### a. Public Water System Supervision

- Continue the consolidation of regulatory oversight of the transient noncommunity waterworks within the Office of Drinking Water by supporting six (6) full-time positions, and one (1) part-time regulation developer.
- Improve the process to implement new federal rules and enforcement actions. Funds will pay for one (1) full-time paralegal position to assist in developing and processing the adoption of any necessary regulations, and strengthening enforcement actions.
- Continue funding (1) environmental engineer/geologist position to assist with project management, planning grants, and environmental reviews.
- Continue funding for the Personnel Analyst to address ODW hiring, retention, continuity planning, and supervisory development.
- Additionally, staff hours for time applied to PWSS support will be charged to this grant based on actual hours reported.
- Fund the Employee Training and Development Coordinator to facilitate technical and administrative training, and address continuity development.
- Fund the Database Administrator that is currently funded under another grant that is due to expire in July 2011.
- Fund the (Central Office) technical services engineer as a liaison with field offices, waterworks, labs, and other state agencies, and EPA. No new funding is requested.

- Continue funds to support a courier system to deliver required samples to Division of Consolidated Laboratory Services (DCLS).
- Continue funding for technical training, web casts, travel, conferences, on-line training, and meetings for staff.
- Continue vehicle maintenance for field work.
- Continue funding for replacement copy machines, fax machines, printers, GPS', cell phones, pressure recorders, test gauges, and colorimeters.
- Continue lease payments for field offices.
- Continue funding for digitizing archived files and implementation of enterprise content management (ECM).
- Continue funding for database development.

b. Source Water

- Funding for a part-time wage position to assist in Source Water Protection activities.
- Travel and training for water protection activities.

c. Capacity Development

- No activity under the 10% capacity development; funded under 15% set-aside.

d. Operator Programs

Activities now funded under 15% set-aside.

4. Local Assistance and other State Programs:

\$1,317,965 which is 8.39% instead of the entire 15% available and allowed, with no more than 10% in a category.

a. Loan and Protection Measures – No new money is added this year.

b. Capacity Development

- Funding for one (1) full-time and one (1) part-time position to develop and oversee all capacity development programs, data collection, and reporting. Expenditures also include travel related to program development and data collection. No new funding is requested for the part-time position.

- Technical Assistance - continue funds for capacity development/project planning technical assistance grants.
- Receivership Program - The Virginia Department of Health has statutory authority to petition a circuit court to place a waterworks into receivership. Receivership is a stop-gap measure to fund a receiver to operate and maintain a waterworks for a limited time (generally no more than one year) until a long-term solution can be achieved. Receivership, however, is a limited tool in VDH's enforcement arsenal and there has not been a situation where it could be used effectively since it was enacted in 2003. It is extremely difficult to project potential funding needs for possible receivership cases in the future. VDH cannot anticipate when a waterworks may be referred from a field office that will fit the criteria for receivership, nor the size of such waterworks--both factors having a direct correlation to the amount of money needed to hire a receiver to operate and maintain the waterworks for approximately one year while the waterworks is in receivership.
- Leak detection program grant – this activity is now combined with project planning and water audit activities (II-F2 and F4). This activity is anticipated as continuing into the foreseeable future.
- Water audit program - to assist waterworks in loss detection and prevention.
- DWSRF database upgrades and integration funding.
- Short course entitled “Establishing a Successful and Sustainable Waterworks: Revenues, Rates, and Funding Short Course” will assist waterworks owners in full-cost pricing, staffing, and business plan development.
- Short course entitled “Hands-on Training at a Full Scale Water Plant” - a hands-on training will be offered in Salem at a full-scale water plant. The goal of the short course is to provide hands-on activities related to the full-scale, conventional water treatment plant and operator water quality control. The participants will backwash filters, perform filter drop and rise tests, feed chemicals, disassemble and reassemble equipment such as pumps and meters, measure the concentration of contaminants in the wastewater, etc.
- Outreach training for Drinking Water Fluoridation will also be offered and conducted by VDH staff.
- Distance learning website funding to support the Mountain Empire Community College program.
- Outreach materials, training supplies, and digital cameras continued funding.
- Funding for software and database upgrades.

c. Source Water – No new money is added this year.

d. Wellhead Protection

- Funds are proposed for use in supplementing existing state efforts to further protect source water. Collaboration has been established between Virginia Department of Environmental Quality (DEQ) and ODW to further initiatives begun in 2005. While DEQ assumes the lead in funding and coordination with waterworks, ODW provides funding and project approval input.

Over the past year, increased funding coordination and collaboration has occurred between DEQ and ODW in an effort to optimize the state's program and resources.

- Contractual – a new contract with Olver Inc./CHA has been issued to continue the Source Water Protection Program services that were being provided under a previous contract.

#### **IV. Public Review and Comment**

In compliance with the requirement in SDWA sec. 1452(b)(1) to provide for public review and comment, the IUP undergoes public comment via mailings, internet, and a public meeting. The IUP cover letter is also placed in the General Notices section of the Virginia Register.

The VDH will post this Intended Use Plan by July 7, 2011 in draft form at <http://www.vdh.virginia.gov/drinkingwater/financial/IntendedUsePlan.htm> The VDH also provided notice of the availability of this IUP to all organizations and individuals on its distribution list by email.

**ATTACHMENT 1  
2011 Preliminary Project Priority List**

**Designation Codes:**

H - Health  
O - Other  
I - Incomplete  
N -Not Eligible

**NOTES:**

1 = Project Bypassed due to financial concerns.  
2 = Additional funds required for project to be funded from available SRF funds from prior year grant awards.  
3 = Owner declined funding offer or withdrew project.  
All projects receiving principal forgiveness shall have the remainder of the project funded with a 30 year 3% loan.

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Population	Point Total	Designation Code	Prgrm Type Code	Principal Forgiveness	Project Cost	Amount Eligible for FY2011	Cummulative	Grant Remaining	Notes	Amount Eligible
														20,185,183		
1	2530125	Buena Vista City 6	City of Buena Vista	<u>Dickinson Well Filtration System</u>	The project consists of two membrane filtration units to filter the Dickinson well discharge and the Hall Spring discharge, the replacement of an existing sanitary sewer lift station, and the installation of approximately 5,650 ft of 3 inch forcemain to carry the filter backwash.	6550	39	H	VWSRF	N/A	\$2,463,566	Project bypassed	\$0	\$20,185,183	1	\$2,463,566
2	1167900	Russell 2	Russell County Public Service Authority (RCPSA)	<u>Long Branch/Strouth Creek/Fuller Mt WL Extension</u>	The proposed project consists of the installation of approximately 10,300 LF of 6 inch water line, 29,400 LF of 4 inch water line, 5,840 LF of 2 inch water line, 28 gate valves of varying sizes, three fire hydrants, 77 service connections, one hydropneumatic water pumping station with tank, and five branch leak detection meters. The system will interconnect to the existing Swords Creek water system and the water will come from the Richlands WTP through a purchase agreement with Tazewell County PSA.	185	36	H	VWSRF	70%	\$345,943	\$345,943	\$345,943	\$19,839,240		\$345,943
3	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Nordyke Road Water Project</u>	The project would construct approximately 7,830 ft of 8 inch and small water line and associated appurtenances along Nordyke Rd, Sunbird Dr, New Castle Dr and Argonne Dr. and approximately 2,810 ft of new water line will replace an existing 2 inch galvanized line and provide service to 15 customers.	90	27	H	VWSRF	0%	\$414,829	\$387,829	\$733,772	\$19,451,411		\$387,829
4	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Tumbling Creek South Water Line Extension</u>	The project would connect to an existing 4 inch water line along the southern portion of Tumbling Creek Rd (Rt 747) and extend it 2,540 ft to the south to the intersection of North Fork River Rd (Rt 611).	19	30	H	VWSRF	0%	\$83,411	\$72,911	\$806,683	\$19,378,500		\$72,911
5	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Rich Valley Road/Whites Mill Road WL Extension</u>	The project would construct approximately 31,250 ft of 8 inch water line and associated appurtenances along Whites Mill Road and Rich Valley Road and connect the Rt 19 corridor to the Whites Mill pressure zone.	138	19	H	VWSRF	0%	\$1,472,102	\$1,394,102	\$2,200,785	\$17,984,398		\$1,394,102
6	1169200	Scott 1	Scott County Public Service Authority (SCPSA)	<u>Clinchport Water Sys Interconnection &amp; Ft Blackmore to Dungannon Water Ext</u>	The proposed project include installations of 1,500 LF of 24" water service line, 7,300 LF of 12" water service line, 39,100 LF of 8" water service line, 10,100 LF of 6" water service line, 1,100 LF of 4" water service line, 5,800 LF of 2" water service line, 118 3/4" x 5/6" water meter settings, 30 fire hydrants, and new water service to approximately 68 households and improve water service to approximately 40 households in the Town of Clinchport.	250	19	H	VWSRF	60%	\$3,139,849	\$3,139,849	\$5,340,634	\$14,844,549		\$3,139,849
7	5011	Appomattox 11	County of Appomattox	<u>Concord to Appomattox Water Line</u>	The project will consist of approximately 40,250 LF of 12" diameter water line, a 900 GPM booster pump station, a 100,000 gallon elevated storage tank, and the inclusion of fire hydrants.	250	16	H	VWSRF	0%	\$3,000,000	\$3,000,000	\$8,340,634	\$11,844,549	2	\$4,000,000

**ATTACHMENT 1  
2011 Preliminary Project Priority List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Population	Point Total	Designation Code	Prgrm Type Code	Principal Forgiveness	Project Cost	Amount Eligible for FY2011	Cummulative	Grant Remaining	Notes	Amount Eligible
8	1167050	Russell 2	Castlewood Water & Sewage Authority (CWSA)	<u>Greystone/US 58 Line Replacement</u>	The proposed project for the Greystone Area will replace the existing mains with 6 inch CL 200 PVC water line, replacement of the existing service lines with either 4 inch or 2 inch high pressure service lines, the installation of approximately 8,300 LF of 6 inch water line, 1,100 LF of 4 inch service line, 1,600 LF of 2 inch service line, approximately 125 LF of road crossing, replace existing meter boxes, settlers and prvs on each service connection, and reconnect the existing 67 customers to the new system. For Route 58 Area: the proposed project will replace existing DIP mains with 6 inch CL 200 PVC water line, extend lines along US 58 right-of-ways at depths of 3.5 to 4.0 feet that will extend from the chlorine monitoring vault to the Banner's Corner intersection, new road bores to connect the new Blue Devil tank and the mains along Route 683 (Memorial Drive), and to assure that 6 inch lines connect all these areas.	4818	46	H	VWSRF	N/A	\$953,923	Project was withdrawn and funded under FY2010	\$8,340,634	\$11,844,549	3	\$953,923
9	1720076	Norton 1	Norton, City of	<u>System Wide Water Improvements Project Phase 1</u>	The proposed project provides for Phase II of three problematic areas. The project addresses Area II and will replace approximately 6,050 LF of 6 inch, 1,350 LF of 4 inch, 500 LF of 2 inch and 4,000 LF of 3/4 inch waterline; numerous valves; 100 water service reconnections with new meters; associated appurtenances; and existing waterlines will be abandoned in-place upon completion of service connections.	4389	45	H	VWSRF	30%	\$852,004	\$852,004	\$9,192,638	\$10,992,545		\$852,004
10	5037300	Charlotte 14	Keysville, Town of	<u>Water System Improvements</u>	The project consists of installing water meter, equipment conversion for the chlorination system at Wastewater Treatment Plant, installing new compressors and repair and clean air distribution system, and repair/replace/upgrade filter rate of flow controllers, filter head loss systems, exhaust fans, and replace chemical feeders.	817	45	H	VWSRF	75%	\$920,300	\$920,300	\$10,112,938	\$10,072,245		\$920,300
11	1105900	Lee 1	Woodway Water Authority	<u>System Wide Water Improvements Project - Phase 1</u>	The proposed project will replace approximately 21,350 LF of 4-inch through 8-inch waterline, 3,450 LF of associated 3/4 inch waterline, 100 water service reconnections with new meter, associated appurtenances, the addition of four hydropneumatic pump stations, and existing waterlines will be abandoned in place upon completion of service reconnections.	3141	42	H	VWSRF	65%	\$1,482,991	\$1,482,991	\$11,595,929	\$8,589,254		\$1,482,991
12	1169225	Scott 1	Dungannon, Town of	<u>Water System Hydraulic &amp; Energy Efficiency Enhancements</u>	The proposed project consists of construction of water meter replacement consisting of 240 AMR water meters, one AMR reader unit (mobile), one AMR software (mobile) and one AMR system training, water line replacement consists of mobilization, 2,500 feet of waterline (8 inch diameter), 5 gate valve and box (8 inch diameter), two fire hydrant assembly, reconnecting of two waterlines 5 water meters, two fire hydrant assemblies, 80 road crossing (bore); and non-construction costs for basic engineering, additional engineering, administration (legal) and contingency.	600	41	H	VWSRF	55%	\$391,153	\$391,153	\$11,987,082	\$8,198,101		\$391,153
13	1169725	Scott 1	Nickelsville, Town of	<u>Water Treatment Plant &amp; Source Wells Improvement Project</u>	The project consists of replacing the raw and finished water meters, replacing particle counter laser turbidimeter, installing a chlorine monitor at the beginning of the contact tank to allow for the plant alarm and shutdown, replacing six membrane modules, drill and develop a new well with estimated depth of 750 ft will the ability to chlorinate the raw water, and provide emergency generators at the WTP, the new well and four existing wells.	762	39	H	VWSRF	80%	\$327,145	\$327,131	\$12,314,213	\$7,870,970		\$327,131

**ATTACHMENT 1  
2011 Preliminary Project Priority List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Population	Point Total	Designation Code	Prgrm Type Code	Principal Forgiveness	Project Cost	Amount Eligible for FY2011	Cummulative	Grant Remaining	Notes	Amount Eligible
14	1169405	Scott 1	Gate City, Town of	<u>Water System Hydraulics &amp; Energy Efficiency Enhancements</u>	The proposed project consists of construction of distribution system with AMR water meters (1221 units), two AMR reader units (mobile), two units AMR software (mobile), one unit AMR system training; for construction of treatment plant with mobilization, filter media exchange, sediment basin upgrades, building energy conservation improvements, and chemical handling enhancements; and non-construction costs for basic engineering, additional engineering, and administration.	2159	34	H	VWSRF	30%	\$1,213,010	\$1,213,010	\$13,527,223	\$6,657,960		\$1,213,010
15	1195050	Wise 1	Appalachia, Town of	<u>System Wide Water Improvements Project - Phase II</u>	The project consists of replacing the Roda Tank (70,000 gallons), replacing the Osaka Tank (80,000), complete the Crossbrook waterline with 890 LF of 8 inch ductile iron, replacing Redwood Lane with 950 LF of 2 inch with 4 inch, and replace two altitude valves.	2719	33	H	VWSRF	N/A	\$685,469	Funding Offer Declined by Owner	\$13,527,223	\$6,657,960	3	\$685,469
16	1077240	Grayson 3	Fries, Town of	<u>System-Wide Water Improvements Project Phase 1</u>	The project will include the replacement of approximately 2,687 LF of 8 inch water line, replacement of 6,147 LF of 6 inch waterline, replacement of 529 LF of 4 inch waterline, replacement of 184 LF of 2 inch waterline, 73 service meters, associated appurtenances, construction of one new 250,000 gallon water storage tank, two finished water pumps at the WTP, and replacement of two emergency raw water pumps at a permitted intake existing on the New River.	738	31	H	VWSRF	N/A	\$1,620,361	Funding Offer Declined by Owner	\$13,527,223	\$6,657,960	3	\$1,620,361
17	1173481	Smyth 3	Marion, Town of	<u>High Level Tank Repairs</u>	Removal of the existing paint coatings and rusty steel surfaces through sand blast SSPC-SP-10 cleaning for all interior steel surfaces and repainting of the interior surface area with two coats of an NSF approved epoxy paint system.	7960	30	H	SRF	100%	\$49,900	\$49,900	\$13,577,123	\$6,608,060		\$49,900
18	1021043	Bland 3	Bland County Service Authority (BCSA)	<u>Bland C Water System Rehabilitation Project</u>	The proposed project consists of two 3-HP Pitless Booster Pump Stations and all related appurtenances; two 4-gallon Hydropneumatic Tank and Vault, 115 LF of 1 inch water line and 335 LF of 2 inch water line.	492	30	H	VWSRF	60%	\$321,895	\$321,895	\$13,899,018	\$6,286,165		\$321,895
19	5009050	Amherst 11	Town of Amherst	<u>Water and Energy Conservation Project</u>	The project will replace chemical feed systems at the Town's water plant with a more efficient arrangement, enable the abandonment of an old and probably leaking water main, and install new water meters throughout the system.	2251	29	H	VWSRF	N/A	\$686,155	Funding Offer Declined by Owner	\$13,899,018	\$6,286,165	3	\$696,155
20	5117310	Mecklenburg 13	Clarksville, Town of	<u>Water System Improvements</u>	The project includes 4,400 LF of 12 inch, 4,750 LF of 8 inch, 410 LF of 6 inch and associated valves, the addition of flow circulation at Buffalo Road from one pressure system to the other, pumping station meter and gauge, and finished meter at WTP.	1276	29	H	VWSRF	60%	\$1,356,435	\$1,356,435	\$15,255,453	\$4,929,730		\$1,356,435
21	6099250	King George 16	King George County Service Authority (KGSA)	<u>Fairview Beach Water System Improvements</u>	The installation of a 250,000 gallon ground storage tank, a high capacity pump and control building, treatment filters, a new standby generator, an investigation of the existing well to determine if the well should be replaced, and replacement of an 8" distribution line to increase pressure in the system.	687	18	H	VWSRF	0%	\$1,598,450	\$1,598,450	\$16,853,903	\$3,331,280		\$1,598,450
22	2187812	Warren 7	Shenandoah Shores Cooperative Water Assoc. Inc. (SSCWA)	<u>SSCWA Water Improvement Project</u>	Engineering and replacement of approximately 13,200 LF of 3/4 inch to 2 inch water pipes with 4" C-900 mains plus air relief and pressure reducing vaults as described in the PER funded in 2005 by Planning Grant.	1064	23	H	VWSRF	N/A	\$731,800	Project was withdrawn and funded under FY2010	\$16,853,903	\$3,331,280	3	\$731,800

**ATTACHMENT 1  
2011 Preliminary Project Priority List**

Priority	PWSID	Cny/Cty/ District	Owner	Project Name	Project Description	Population	Point Total	Designation Code	Prgrm Type Code	Principal Forgiveness	Project Cost	Amount Eligible for FY2011	Cummulative	Grant Remaining	Notes	Amount Eligible
23	3181400	Surry 19	Dendron, Town of	<u>Town of Dendron Water Upgrade</u>	The proposed project will consists of 15,500 LF of pipe, one 40,000 gallon storage tank, one 5000 gallon hydropneumatic tank, one pump station, and 15 fire hydrants.	350	13	H	VWSRF	N/A	\$1,688,750	Funding Offer Declined by Owner	\$16,853,903	\$3,331,280	3	\$1,688,750
24	2770900	Roanoke City 5	Western Virginia Water Authority (WVWA)	<u>Salem Turnpike Water Line Replacement</u>	The project will replace approximately 4,648 feet of existing 12 inch 1950s era cast iron water main between 30th Street and Peters Creek Road with new 12 inch water main.	3227	41	H	VWSRF	0%	\$590,000	\$590,000	\$17,443,903	\$2,741,280		\$590,000
25	5147170	Prince Edward 14	Farmville, Town of	<u>Water Distribution System Improvements Phases I &amp; II, Treatment Plant Improvements Phase III</u>	Provide a 1,000,000 gallon elevated tank, install 15,200 LF of 18 inch water main to replace the bottleneck section; replace the water plant finish water pumps with one 700 gpm pump; one 1,400 gpm pump and one 2,100 gpm pump VFD drive; a new booster station within system to deliver water to the existing Route 15 elevated tank; install generators at the intake, water plant, and booster stations; and modify the SCADA for the water system.	6945	36	H	VWSRF	N/A	\$4,283,687	Funding Offer Declined by Owner	\$17,443,903	\$2,741,280	3	\$4,283,687
26	1720076	Norton 1	Norton, City of	<u>Big Stone Gap Interconnect Tank &amp; Rt. 621 Line Extension</u>	The project includes construction of a 220,000 gallon glass-coated, bolted steel tank at the proposed location with an overflow elevation that matches the City's existing Million Gallon Tank at its WTP (2,435 ft). In addition, approximately 1,800 LF of 8" waterline will be constructed from the existing 8" water line on Powell Valley Road along Route 621 (Junction Road) to Route 58A (Kent Junction Road).	4350	36	H	VWSRF	N/A	\$580,500	Funding Offer Declined by Owner	\$17,443,903	\$2,741,280	3	\$580,500
27	1169405	Scott 1	Gate City, Town of	<u>Water System Improvements Phase 3 (Moccasin Hills)</u>	The proposed project consists of construction with mobilization, 4,825 LF of 8 inch diameter waterline, 4,130 LF of 6 inch diameter waterline, 1,200 LF of 3/4 inch diameter of water service line, 10 gate valve and box (8 inch diameter), 10 gate valve (6 inch diameter), six fire hydrant assembly; reconnecting existing facilities with waterlines, 40 water meters, fire hydrant assemblies, road crossing (open cut), 80 LF of road crossing (bore), one 250,000 gallon water storage facility, and one pump station; and non-construction costs for basic engineering, additional engineering, administration, and land acquisition.	2159	25	H	VWSRF	30%	\$1,191,117	\$1,191,117	\$18,635,020	\$1,550,163		\$1,919,117
28	1195900	Wise 1	Wise County Public Service Authority (WCPSA)	<u>Coeburn Mountain Water System Improvements</u>	The project includes a 150,000 gallon storage tank at the Wise County Fairgrounds along with a re-chlorination station and telemetry; a booster pump at the base of the Coeburn Mountain tank with a portable generator; and line improvements in four areas: Pole Bridge connector, Red Wine connector, Fairground connector, and Green Hollow upgrade.	12200	24	H	VWSRF	75%	\$1,599,300	\$1,599,300	\$20,234,320	-\$49,137		\$1,599,300
29	2125380	Nelson 10	Nelson County Service Authority (NCSA)	<u>Tye River Raw Water Intake</u>	The project would construct a raw water intake structure and pump station designed for approximately one million MGD and 4.3 miles of 10" raw water piping at Lane Ford Bridge on the Tye River.	1374	18	H	VWSRF	N/A	\$2,191,335	Funding Offer Declined by Owner	\$20,234,320	-\$49,137	3	\$2,191,335

**ATTACHMENT 1  
2011 Preliminary Project Priority List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Population	Point Total	Designation Code	Prgm Type Code	Principal Forgiveness	Project Cost	Amount Eligible for FY2011	Cummulative	Grant Remaining	Notes	Amount Eligible
30	1027061	Buchanan 2	Buchanan County Public Service Authority (BCPSA)	<u>Hurley Regional Water - Phase 1</u>	The proposed project consists of 44,500 LF of 8 inch water line, 26,200 LF of 4 inch water line, 22 8 inch gate valves, 17 4-inch gate valves, 43 fire hydrants, 14 air release valves, 14 blow-off valves, 272 water meters, 14,300 LF of 3/4 inch water line, 20,000 LF of 3/4 inch LMI service line, 1,260 LF 1 inch water line, 3,620 LF of 2 inch water line, 3,760 LF water line of road crossing, 3,360 LF of water line stream crossing, 1,220 LF of water line railroad/gas crossing, 680 tons of miscellaneous concrete, 2 pump station upgrade (Home Creek system), one 150,000 gallon water storage tank, two pressure reducing valve and vault, and one 100,000 gallon water storage tank.	272	33	H	VWSRF	N/A	\$3,093,404	Funding Offer Declined by Owner	\$20,234,320	-\$49,137	3	\$3,090,404

**ATTACHMENT 2  
2011 Comprehensive Project List**

Owner Type Codes  
P-O PUBLIC OWNED  
I-O INVESTOR OWNED  
NPNC NONPROFIT

Designation Codes:  
H - Health  
N -Not Eligible  
O - Other

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
1	2530125	Buena Vista City 6	City of Buena Vista	<u>Dickinson Well Filtration System</u>	The project consists of two membrane filtration units to filter the Dickinson well discharge and the Hall Spring discharge, the replacement of an existing sanitary sewer lift station, and the installation of approximately 5,650 ft of 3 inch forcemain to carry the filter backwash.	The well is determined to be under the influence of surface water.	The project will restore two reliable water sources and provide an adequate water supply.	6550	39	H	\$2,463,566
2	1167900	Russell 2	Russell County Public Service Authority (RCPSA)	<u>Long Branch/Strouth Creek/Fuller Mt WL Extension</u>	The proposed project consists of the installation of approximately 10,300 LF of 6 inch water line, 29,400 LF of 4 inch water line, 5,840 LF of 2 inch water line, 28 gate valves of varying sizes, three fire hydrants, 77 service connections, one hydropneumatic water pumping station with tank, and five branch leak detection meters. The system will interconnect to the existing Swords Creek water system and the water will come from the Richlands WTP through a purchase agreement with Tazewell County PSA.	Intermittent water supplies and poor water quality.	The project will provide a safe and dependable water supply to as many as 77 new residential customers.	185	36	H	\$345,943
3	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Nordyke Road Water Project</u>	The project would construct approximately 7,830 ft of 8 inch and small water line and associated appurtenances along Nordyke Rd, Sunbird Dr, New Castle Dr and Argonne Dr. and approximately 2,810 ft of new water line will replace an existing 2 inch galvanized line and provide service to 15 customers.	Private wells, springs, and cisterns with dwindling quantities of water and bacteriologically contaminated.	The project will provide an ample supply of safe drinking water to residents in the area.	90	27	H	\$414,829
4	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Tumbling Creek South Water Line Extension</u>	The project would connect to an existing 4 inch water line along the southern portion of Tumbling Creek Rd (Rt 747) and extend it 2,540 ft to the south to the intersection of North Fork River Rd (Rt 611).	Private wells, springs, and cisterns with dwindling quantities of water and bacteriologically contaminated.	The project would provide an ample supply of safe drinking water to residents along the southern part of Tumbling Creek Road.	19	30	H	\$83,411
5	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Rich Valley Road/Whites Mill Road WL Extension</u>	The project would construct approximately 31,250 ft of 8 inch water line and associated appurtenances along Whites Mill Road and Rich Valley Road and connect the Rt 19 corridor to the Whites Mill pressure zone.	Bacteriological contamination in private wells, springs and cisterns with dwindling water quantities.	The project will provide a safe and dependable supply of drinking water.	138	19	H	\$1,472,102
6	1169200	Scott 1	Scott County Public Service Authority (SCPSA)	<u>Clinchport Water Sys Interconnection &amp; Ft Blackmore to Dungannon Water Ext</u>	The proposed project include installations of 1,500 LF of 24" water service line, 7,300 LF of 12" water service line, 39,100 LF of 8" water service line, 10,100 LF of 6" water service line, 1,100 LF of 4" water service line, 5,800 LF of 2" water service line, 118 3/4" x 5/6" water meter settings, 30 fire hydrants, and new water service to approximately 68 households and improve water service to approximately 40 households in the Town of Clinchport.	Problems with quality and quantity of available water sources.	The project will provide a safe and reliable drinking water source for the residents in the rural portion of Scott County.	250	19	H	\$3,139,849

**ATTACHMENT 2  
2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
7	5011	Appomattox 11	County of Appomattox	<u>Concord to Appomattox Water Line</u>	The project will consist of approximately 40,250 LF of 12" diameter water line, a 900 GPM booster pump station, a 100,000 gallon elevated storage tank, and the inclusion of fire hydrants.	Water quality and quantity problems due to individual residential wells failing as a result of a lack of groundwater .	The project will provide a reliable source of potable water to residential customers.	250	16	H	\$4,000,000
8	1167050	Russell 2	Castlewood Water & Sewage Authority (CWSA)	<u>Greystone/US 58 Line Replacement</u>	The proposed project for the Greystone Area will replace the existing mains with 6 inch CL 200 PVC water line, replacement of the existing service lines with either 4 inch or 2 inch high pressure service lines, the installation of approximately 8,300 LF of 6 inch water line, 1,100 LF of 4 inch service line, 1,600 LF of 2 inch service line, approximately 125 LF of road crossing, replace existing meter boxes, setters and prvs on each service connection, and reconnect the existing 67 customers to the new system. For Route 58 Area: the proposed project will replace existing DIP mains with 6 inch CL 200 PVC water line, extend lines along US 58 right-of-ways at depths of 3.5 to 4.0 feet that will extend from the chlorine monitoring vault to the Banner's Corner intersection, new road bores to connect the new Blue Devil tank and the mains along Route 683 (Memorial Drive), and to assure that 6 inch lines connect all these areas.	Galvanized lines with breakage, water loss and low pressure.	The project will improve the overall pressure, flow, and accountability within the water system.	4818	46	H	\$953,923
9	1720076	Norton 1	Norton, City of	<u>System Wide Water Improvements Project Phase 1</u>	The proposed project provides for Phase II of three problematic areas. The project addresses Area II and will replace approximately 6,050 LF of 6 inch, 1,350 LF of 4 inch, 500 LF of 2 inch and 4,000 LF of 3/4 inch waterline; numerous valves; 100 water service reconnections with new meters; associated appurtenances; and existing waterlines will be abandoned in-place upon completion of service connections.	Breaks and leaks due to high pressure, age and other condition of the existing waterline.	The project will continue to provide safe and reliable potable drinking water to area residents and businesses.	4389	45	H	\$852,004
10	5037300	Charlotte 14	Keysville, Town of	<u>Water System Improvements</u>	The project consists of installing water meter, equipment conversion for the chlorination system at Wastewater Treatment Plant, installing new compressors and repair and clean air distribution system, and repair/replace/upgrade filter rate of flow controllers, filter head loss systems, exhaust fans, and replace chemical feeders.	Large amount of unaccounted for water, reservoir pretreatment not performing properly and WTP has failing or failed equipment or process elements.	The project will improve accountability, provide more capacity and better pretreated raw water with better energy efficiency.	817	45	H	\$920,300
11	1105900	Lee 1	Woodway Water Authority	<u>System Wide Water Improvements Project - Phase 1</u>	The proposed project will replace approximately 21,350 LF of 4-inch through 8-inch waterline, 3,450 LF of associated 3/4 inch waterline, 100 water service reconnections with new meter, associated appurtenances, the addition of four hydropneumatic pump stations, and existing waterlines will be abandoned in place upon completion of service reconnections.	Undersized and leaking water lines with inadequate pressure.	The project will provide safe and reliable potable drinking water.	3141	42	H	\$1,482,991

**ATTACHMENT 2  
2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
12	1169225	Scott 1	Dungannon, Town of	<u>Water System Hydraulic &amp; Energy Efficiency Enhancements</u>	The proposed project consists of construction of water meter replacement consisting of 240 AMR water meters, one AMR reader unit (mobile), one AMR software (mobile) and one AMR system training, water line replacement consists of mobilization, 2,500 feet of waterline (8 inch diameter), 5 gate valve and box (8 inch diameter), two fire hydrant assembly, reconnecting of two waterlines 5 water meters, two fire hydrant assemblies, 80 road crossing (bore); and non-construction costs for basic engineering, additional engineering, administration (legal) and contingency.	A number of breaks in the waterline due to the presence of rock , failure of pipe joints, and aging water meters.	The project will result in improved water accountability, decrease water loss, and future line breakage.	600	41	H	\$391,153
13	1169725	Scott 1	Nickelsville, Town of	<u>Water Treatment Plant &amp; Source Wells Improvement Project</u>	The project consists of replacing the raw and finished water meters, replacing particle counter laser turbidimeter, installing a chlorine monitor at the beginning of the contact tank to allow for the plant alarm and shutdown, replacing six membrane modules, drill and develop a new well with estimated depth of 750 ft will the ability to chlorinate the raw water, and provide emergency generators at the WTP, the new well and four existing wells.	Treatment components, testing equipment and meters are in need of replacement or repair and individual raw water wells have exceeded their permitted capacity for continued periods of operation.	The project will provide a safe and reliable potable drinking water and provide for source water and treatment during power outages.	762	39	H	\$327,145
14	1169405	Scott 1	Gate City, Town of	<u>Water System Hydraulics &amp; Energy Efficiency Enhancements</u>	The proposed project consists of construction of distribution system with AMR water meters (1221 units), two AMR reader units (mobile), two units AMR software (mobile), one unit AMR system training; for construction of treatment plant with mobilization, filter media exchange, sediment basin upgrades, building energy conservation improvements, and chemical handling enhancements; and non-construction costs for basic engineering, additional engineering, and administration.	Problems with distribution system consisting of diminished media performance, very high maintenance required for sedimentation basins, risk exposure concerns at chemical storage/application area, and aging water meters.	The project will result in reducing hydraulic and energy deficiencies at the water treatment plant thereby improving water treatment performance.	2159	34	H	\$1,213,010
15	1195050	Wise 1	Appalachia, Town of	<u>System Wide Water Improvements Project - Phase II</u>	The project consists of replacing the Roda Tank (70,000 gallons), replacing the Osaka Tank (80,000), complete the Crossbrook waterline with 890 LF of 8 inch ductile iron, replacing Redwood Lane with 950 Lf of 2 inch with 4 inch, and replace two altitude valves.	Old leaking water tanks and waterline with continuous leaks and breaks.	The project will provide safe and reliable potable drinking water to area residents and businesses.	2719	33	H	\$685,469
16	1077240	Grayson 3	Fries, Town of	<u>System-Wide Water Improvements Project Phase 1</u>	The project will include the replacement of approximately 2,687 LF of 8 inch water line, replacement of 6,147 LF of 6 inch waterline, replacement of 529 LF of 4 inch waterline, replacement of 184 LF of 2 inch waterline, 73 service meters, associated appurtenances, construction of one new 250,000 gallon water storage tank, two finished water pumps at the WTP, and replacement of two emergency raw water pumps at a permitted intake existing on the New River.	Water system with frequent leaks, flow distribution and inadequate water pressure.	The project will provide safe and reliable potable drinking water.	738	31	H	\$1,620,361

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2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
17	1173481	Smyth 3	Marion, Town of	<u>High Level Tank Repairs</u>	Removal of the existing paint coatings and rusty steel surfaces through sand blast SSPC-SP-10 cleaning for all interior steel surfaces and repainting of the interior surface area with two coats of an NSF approved epoxy paint system.	Deteriorated interior tank coating and corrosion of the steel surfaces.	The project will provide a clean water storage tank.	7960	30	H	\$49,900
18	1021043	Bland 3	Bland County Service Authority (BCSA)	<u>Bland C Water System Rehabilitation Project</u>	The proposed project consists of two 3-HP Pitless Booster Pump Stations and all related appurtenances; two 4-gallon Hydropneumatic Tank and Vault, 115 LF of 1 inch water line and 335 LF of 2 inch water line.	Leaks in water system resulting in low pressure.	The project will provide for adequate pressures within the existing water system and as well as accountability issues within the overall system.	492	30	H	\$321,895
19	5009050	Amherst 11	Town of Amherst	<u>Water and Energy Conservation Project</u>	The project will replace chemical feed systems at the Town's water plant with a more efficient arrangement, enable the abandonment of an old and probably leaking water main, and install new water meters throughout the system.	An old feed system and water pipes that have a history of leakage and breakage.	The project will result in quality treated water, and improve water loss accountability.	2251	29	H	\$686,155
20	5117310	Mecklenburg 13	Clarksville, Town of	<u>Water System Improvements</u>	The project includes 4,400 LF of 12 inch, 4,750 LF of 8 inch, 410 LF of 6 inch and associated valves, the addition of flow circulation at Buffalo Road from one pressure system to the other, pumping station meter and gauge, and finished meter at WTP.	Water quality regarding TTHMs, water age issues and low pressure and flow.	The project will improve water quality, flows and pressure.	1276	29	H	\$1,356,435
21	6099250	King George 16	King George County Service Authority (KGSA)	<u>Fairview Beach Water System Improvements</u>	The installation of a 250,000 gallon ground storage tank, a high capacity pump and control building, treatment filters, a new standby generator, an investigation of the existing well to determine if the well should be replaced, and replacement of an 8" distribution line to increase pressure in the system.	Water quantity, pressure, and storage problems.	The project will increase the quantity of water available, improve pressure during peak usage periods, improve system reliability, treatment, and increase storage.	687	18	H	\$1,598,450
22	2187812	Warren 7	Shenandoah Shores Cooperative Water Assoc. Inc. (SSCWA)	<u>SSCWA Water Improvement Project</u>	Engineering and replacement of approximately 13,200 LF of 3/4 inch to 2 inch water pipes with 4" C-900 mains plus air relief and pressure reducing vaults as described in the PER funded in 2005 by Planning Grant.	Undersized water mains that do not provide adequate pressure to residents; low water pressure and high risk of contamination by septic.	The project will protect the water supply from surface and septic infiltration, increase system reliability, and improve pressure during peak demand periods.	1064	23	H	\$731,800
23	3181400	Surry 19	Dendron, Town of	<u>Town of Dendron Water Upgrade</u>	The proposed project will consists of 15,500 LF of pipe, one 40,000 gallon storage tank, one 5000 gallon hydropneumatic tank, one pump station, and 15 fire hydrants.	Water loss due to system being corroded, deteriorated and insufficient to supply water.	The project will provide the citizens with adequate and healthy water.	350	13	H	\$1,688,750
24	2770900	Roanoke City 5	Western Virginia Water Authority (WVWA)	<u>Salem Turnpike Water Line Replacement</u>	The project will replace approximately 4,648 feet of existing 12 inch 1950s era cast iron water main between 30th Street and Peters Creek Road with new 12 inch water main.	Pipelines experiencing frequent catastrophic breaks leading to service disruption, significant water loss, and traffic problems.	The project will provide a safe, reliable drinking water service.	3227	41	H	\$590,000

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2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
25	5147170	Prince Edward 14	Farmville, Town of	<u>Water Distribution System Improvements Phases I &amp; II, Treatment Plant Improvements Phase III</u>	Provide a 1,000,000 gallon elevated tank, install 15,200 LF of 18 inch water main to replace the bottleneck section; replace the water plant finish water pumps with one 700 gpm pump; one 1,400 gpm pump and one 2,100 gpm pump VFD drive; a new booster station within system to deliver water to the existing Route 15 elevated tank; install generators at the intake, water plant, and booster stations; and modify the SCADA for the water system.	Water main that conveys water from the water plant to the Town's system consists of bottleneck sections of 6 inch pipe.	The project will provide adequate fire protection and storage capacity.	6945	36	H	\$4,283,687
26	1720076	Norton 1	Norton, City of	<u>Big Stone Gap Interconnect Tank &amp; Rt 621 Line Extension</u>	The project includes construction of a 220,000 gallon glass-coated, bolted steel tank at the proposed location with an overflow elevation that matches the City's existing Million Gallon Tank at its WTP (2,435 ft). In addition, approximately 1,800 LF of 8" waterline will be constructed from the existing 8" water line on Powell Valley Road along Route 621 (Junction Road) to Route 58A (Kent Junction Road).	Dramatic flow reversals in the supply pipe and a drop in water pressure when fire flow occur.	The project will increase water storage volume, maintain water pressure at service connections, and decrease the likelihood of substantial flow reversals.	4350	36	H	\$580,500
27	1169405	Scott 1	Gate City, Town of	<u>Water System Improvements Phase 3 (Moccasin Hills)</u>	The proposed project consists of construction with mobilization, 4,825 LF of 8 inch diameter waterline, 4,130 LF of 6 inch diameter waterline, 1,200 LF of 3/4 inch diameter of water service line, 10 gate valve and box (8 inch diameter) , 10 gate valve (6 inch diameter), six fire hydrant assembly; reconnecting existing facilities with waterlines, 40 water meters, fire hydrant assemblies, road crossing (open cut), 80 LF of road crossing (bore), one 250,000 gallon water storage facility, and one pump station; and non-construction costs for basic engineering, additional engineering, administration, and land acquisition.	Water demand exceeds operation capacity, no effective storage and high energy frictional loss.	The proposed project will stabilize water pressure, provide effective water storage and maximize energy efficiency and enhance the Town water distribution operation.	2159	25	H	\$1,191,117
28	1195900	Wise 1	Wise County Public Service Authority (WCPSA)	<u>Coeburn Mountain Water System Improvements</u>	The project includes a 150,000 gallon storage tank at the Wise County Fairgrounds along with a re-chlorination station and telemetry; a booster pump at the base of the Coeburn Mountain tank with a portable generator; and line improvements in four areas: Pole Bridge connector, Red Wine connector, Fairground connector, and Green Hollow upgrade.	Storage capacity is not being met and system cannot provide fire flow and maximum daily domestic flow while maintaining the required minimum of 20 psi.	The project will provide a safe water system for customers.	12200	24	H	\$1,599,300
29	2125380	Nelson 10	Nelson County Service Authority (NCSA)	<u>Tye River Raw Water Intake</u>	The project would construct a raw water intake structure and pump station designed for approximately one million MGD and 4.3 miles of 10" raw water piping at Lane Ford Bridge on the Tye River.	Turbidity issues from erosion in the drainage basin after heavy rainfall.	The project would provide an increased water supply as well as a cleaner water supply.	1374	18	H	\$2,191,335

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2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
30	1027061	Buchanan 2	Buchanan County Public Service Authority (BCPSA)	<u>Hurley Regional Water - Phase 1</u>	The proposed project consists of 44,500 LF of 8 inch water line, 26,200 LF of 4 inch water line, 22 8 inch gate valves, 17 4-inch gate valves, 43 fire hydrants, 14 air release valves, 14 blow-off valves, 272 water meters, 14,300 LF of 3/4 inch water line, 20,000 LF of 3/4 inch LMI service line, 1,260 LF 1 inch water line, 3,620 LF of 2 inch water line, 3,760 LF water line of road crossing, 3,360 LF of water line stream crossing, 1,220 LF of water line railroad/gas crossing, 680 tons of miscellaneous concrete, 2 pump station upgrade (Home Creek system), one 150,000 gallon water storage tank, two pressure reducing valve and vault, and one 100,000 gallon water storage tank.	Private water supply affected due to coal mining and gas well installation and positive results for total and fecal coliforms as well as health harming agents.	The project will provide an adequate quality and quantity of drinking water to 1,000 residences in the Hurley community.	669	33	H	\$3,093,404
31	1195700	Wise 1	Town of St. Paul	<u>Water Storage Tank Rehabilitation</u>	The project will repaint water storage tanks in the Town, replace tank panels on the Grey Hills water tank that were damaged by vandalism, and a real time radio telemetry system will be installed at each tank to provide information to the WTP SCADA system.	Water storage tanks aging and in need of repair or replacement.	The project will allow the Town to maintain its water storage tanks in good repair for the future.	860	31	H	\$386,396
32	1191883	Washington 3	Washington County Service Authority (WCSA)	<u>Red Fox Lane Water Line Extension</u>	The project would connect to an existing 4 inch water line paralleling Clinchburg Road in northern Washington County and extend to 2,775 ft to the south along Red Fox Lane and then Raccoon Drive.	Coliform bacteria contamination in private wells and springs with poor and insufficient in quantity.	The project would provide an ample supply of safe drinking water to residents along Red Fox Lane and Raccoon Drive.	11	29	H	\$77,437
33	5143246	Pittsylvania 12	Town of Hurt	<u>Water Booster Pump Station Control Upgrades</u>	The proposed project is to replace the existing control system with a more modern touch screen control system, and an updated dialer to relay the tank levels and pump status to the Altavista WTP and also used to relay emergency alarms to the Town of Hurt operator and other responsible parties.	Controls in the water booster pump station are outdated and inadequate with low pressure and inadequate storage.	The project will allow the system to be more reliable.	1275	27	H	\$50,000
34	2171575	Shenandoah 7	Mount Jackson, Town of	<u>Water Line Replacement Under Shenandoah River</u>	Replace broken 6" water main with 12" ductile iron approximately 300 feet length and 100 feet of that length is encased river crossing. Construction and bidding engineering services are proposed for inclusion in the project.	Broken pipe under the river poses a threat of river water leaking into the water system if a valve should fail.	The repair/replacement of the damaged main will be essential in preventing contaminants from entering the public water system.	1870	20	H	\$235,000
35	5067348	Franklin 12	Westlake Water Company	<u>Westlake WL Interconnection and System Upgrade</u>	The project will extend and provide interconnection with the Western VA Water Authority. Approximately 2,000 ft of 6-inch waterline will be installed to deliver water from the meter to an existing line that supplies Westlake Water Company two existing storage tanks, one fire hydrant will be installed on the new line and provide a measure of fire protection, replacement of one of the two storage tanks, replacement of several failed valves in the Chestnut Subdivision portion of the system, and the installation of 244 radio read meters at each connection.	Water supply shortage and problems with water quality and quantity.	The project will provide a permanent, reliable water source, improve water quality and provide a level of fire protection.	610	20	H	\$359,625

**ATTACHMENT 2  
2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
36	1185685	Tazewell 2	Tazewell County Public Service Authority (TCPSA)	<u>Burnette Street Pump Station Evaluation/Upgrade</u>	The proposed improvements consists of 2,700 LF of 10 inch water line and one new pump station with two pumps each capable of pumping 900 gallons per minute. The new pump station has been sized to deliver a total flow of 650,000 gallons over a 12 hour period to the Raven-Doran waterworks.	Pump station with limited pumping capacity.	The project will provide a pump station that has adequate capacity to meet the waterworks demands.	3320	20	H	\$483,414
37	3175400	Southampton 23	Town of Ivor	<u>Ivor Well Improvements</u>	The project consists of drilling one new well (well #5), abandoning old well #3 and fencing the elevated storage tank.	Marginal well capacity due to failure of one of three wells.	The project will provide adequate capacity and reliability.	505	18	H	\$201,000
38	3131554	Northampton 22	County of Northampton	<u>Wells 2 &amp; 3 Northampton County Government Complex</u>	Installation of three green sand filters with a flow rate of 30 gpm each with inlet and outlet size of 2", skid mounted inside a proposed extension to the existing meter house, filters will be installed downstream of the location where well discharges combine to a single pipe, and upstream of the elevated storage tank so that discharge from all wells can be treated.	Wells 2 and 3 have iron and manganese concentrations over the MCL.	The project will allow full development of wells 2 and 3 by reducing iron and manganese levels and allow the necessary redundancy for proper operation of the system.	220	16	H	\$257,000
39	2015725	Augusta 6	Augusta County Service Authority (ACSA)	<u>Verona Water and Energy Efficiency Project</u>	Solar panels for the Berry Farm WTP and the booster stations for lighting and heating and air and at the Mt. Sidney Tank for full electrical use will be utilized. Replacement of 6,351 LF of 8" galvanized water line with 8" ductile iron water line.	Leaking galvanized water line loss and energy dependence	The project will improve water efficiency and reduce energy efficiency by an average of 50% per month.	3666	19	H	\$579,126
40	2015800	Augusta 6	Augusta County Service Authority (ACSA)	<u>Weyers Cave Water Treatment Plant Upgrades</u>	The project will consist of replacing the two existing raw water pumps and addition of VFDs for each replacement of the two existing finished water pumps, two pump control valves, and some miscellaneous piping; solar panels at the Weyers Cave tank for full electrical use; and replacement of 447 LF of 8" galvanized water line with 8" ductile iron water line.	Permitted capacity of spring exceeds compliance, energy dependence and leaking galvanized water lines.	The project will bring the water system into compliance with the permitted capacity and the improvement of energy and water efficiency.	1246	11	H	\$205,185
41	1185755	Tazewell 2	Tazewell County Public Service Authority (TCPSA)	<u>St. Clair Heights Water Line Extension</u>	The proposed project consists of the installation of approximately 5,300 LF of 8 inch water line; 16,200 LF of 6 inch water line; one 100,000 gallon water storage tank; one pitless booster pump station; 12,310 LF of 3/4 inch service line, 141 residential water meters and associated appurtenances.	Community not served by a public water supply.	The project will provide a safe reliable source of water.	369	20	O	\$1,548,390
42	1195900	Wise 1	Wise County Public Service Authority (WCPA)	<u>Bull Run to Banner Water Project</u>	The project includes a 1,390 gpm Pump Station at Bull Run, a 400,000 gallon storage tank at Banner, Dry Dork Pump Station improvements, Bond Gap Tank improvements, and approximately 8,700 ft of 12" water line from Bull Run to Banner.	Unreliable water system.	The project will provide a more reliable water system for consumers.	12200	15	O	\$1,615,325
43	5143840	Pittsylvania 12	Pittsylvania County Schools	<u>Union Hall Elementary School Water System</u>	The proposed system will consists of one 6,000 gallon atmospheric tank, one 1,500 gallon hydropneumatic tanks and booster pumps to feed the building.	Existing system operating at minimum capacity and major deficiencies makes the system unreliable and unsafe.	The project will increase the capacity of the system and make it safer and more reliable.	325	14	O	\$188,955

**ATTACHMENT 2  
2011 Comprehensive Project List**

Priority	PWSID	CnyCty/ District	Owner	Project Name	Project Description	Project Problem	Project Benefit	Population	Point Total	Designation Code	Project Cost
44	1169650	Scott 1	Scott County Public Service Authority (SCPSA)	<u>Manville Water Project Phase III</u>	The proposed project consists of installations of 4,300 LF of 8" water service line, 52,500 LF of 6" water service line, 5,600 LF of 4" water service line, 5,600 LF of 2" water service line, 8,050 LF of 3/4" water service line, 125 3/4" x 5/6" water meter settings, 57 fire hydrants and new water service offered to approximately 125 households.	Inadequate water quality and quantity problems.	The project will provide a safe and reliable drinking water source.	290	14	0	\$2,713,379
45	2015575	Augusta 6	Augusta County Service Authority (ACSA)	<u>South River Water Supply Improvements/Coles Run</u>	The project includes installation of a Pall membrane filtration system to replace the Memcor units, installation of 2,300 LF of 10" ductile iron water main for the raw water supply from the 36" Low Level Outlet (LLO) pipe to the WTP, replacement of the 60" LLO with a new 36" LLO, and installation of hydraulic intake gate controls to replace the existing manual controls.	The water source is a 60 years old dam with water intake/buffer works and old raw water lines that are showing their age.	The project will benefit the South River system by allowing the Authority to utilize this source in a manner that is safe, more efficient and cost effective.	18724	5	0	\$2,962,500

### ATTACHMENT 3

#### Virginia Department of Health, Office of Drinking Water FY2010 DWSRF Set-Aside Suggested Use Schedule

The Virginia Department of Health received these suggestions during the solicitation / public input phase of developing the Intended Use Plan, and considered them in the development of the set-aside portion of the Intended Use Plan.

Name	Suggested Amount	Activity Description	Funded Yes/No	Amount
Jim Spencer	\$50,000.00	Requesting that at least \$50,000 be made available for leak detection either in stand alone projects or part of planning projects.	Yes	\$50,000.00
Virginia Tech	\$50,000.00	To develop a 12 hour program offered over the course of two days that is entirely dedicated to hands-on activities related to the maintenance and operations of a full scale plant.	Yes	\$50,000.00
Virginia Tech	\$42,000.00	A short course that assists Class V and VI small system operators prepare for their licensure exam.	Yes	\$42,000.00
Virginia Tech	\$60,000.00	A short course to assist operators with refining their math and science skills to better prepare them for the licensure exam and their daily job duties.	Yes	\$60,000.00
Virginia Tech	\$62,000.00	A short course for waterworks management personnel dedicated to the financial side of maintaining a waterworks.	Yes	\$62,000.00
Virginia Tech	\$153,000.00	Nine televised workshops broadcasted to 13 sites around the state designed for all licensure classes of operators for general training purposes and a means for waterworks operators to meet their continuing education requirements.	Yes	\$153,000.00
Virginia Tech	\$40,000.00	To provide ongoing communication to waterworks operators regarding training, licensure, and professional development; administer on-line surveys for ODW; organize and orchestrate committee meetings for VDH operator certification program stakeholders; create marketing and outreach materials; and provide operator certification program documents.	Yes	\$40,000.00
Virginia Tech	\$16,000.00	To deliver a 14-hour program offered over the course of two days dedicated to drinking water fluoridation at the Salem WTP. Funding would cover course manual, supplies, programmatic expenses and all participation expenses.	Yes	\$16,000.00
Virginia Tech	\$6,000.00	Six scholarships to cover all costs of participants in one of three week-long short courses from introductory to advanced at the annual Short School for Operators. Candidates will be identified by VDH-ODW field offices.	Yes	\$6,000.00
Virginia Tech	\$84,000.00	A three-day workshop emphasizing applied math, electricity, hydraulics, chemical feeders and disinfection targeted at small system operators in Classes V and VI.	Yes	\$84,000.00
Mountain Empire Community College	\$69,368.00	To continue development of the on-line Applied Science Water Degree Program by hiring a full time Information Technology Specialist and a part-time Technical Assistant to gather technical information, work with math concepts, develop additional concepts, help revise the three undeveloped courses, and purchase magazine advertisements in AWWA and VRWA.	Yes	\$69,368.00
<b>TOTALS</b>	<b>\$632,368.00</b>			<b>\$632,368.00</b>

Attachment 4  
 Virginia Department of Health  
 Office of Drinking Water  
 Summary  
 Virginia Drinking Water State Revolving Fund Program  
 FY2011 Intended Use Plan - Funding Summary with Set-Aside

I. SOURCES

Federal FY 2011	Allocation =	\$15,711,000	based on a national appropriation of \$963,070,000
			\$15,711,000
State's General Fund	20% match required =	\$3,142,200	
SUBTOTAL 1			\$18,853,200
Other state funds =		\$0	
Total state funds this year	\$3,142,200		\$18,853,200
SUBTOTAL 2			\$18,853,200
Other sources =			
interest earned (0945)		1,622.00	from the 6-30-2010 Commonwealth Accounting & Report System
interest earned (VWSRF)		113,755.00	from VRA June 2010 (interest earnings through 6/30/10)
repaid principal to 6-30-2009		4,299,619.00	from VRA June 2010 P & I repayments report
repaid interest to 6-30-2009		748,712.00	from VRA June 2010 P & I repayments report
	\$5,163,708		
SUBTOTAL 3			\$24,016,908
TRANSFER from DEQ's CWSRF		\$0	
Grand Total Funds Available =		\$24,016,908	

II. USE for Set-asides

Category	Maximum % and Name	Percent chosen	Amount
1	4% Administration and Technical Assistance	4.00%	628,440
2	2% Small System Technical Assistance	2.00%	314,220
3	10% State Program Management	10.00%	1,571,100
4	15% Local Assistance and other State Programs	8.39%	1,317,965
Sub-total		24.39%	\$3,831,725

III.

USE for Loan funds			
Federal Allocation =	\$15,711,000		
minus set asides	\$3,831,725		
Federal loan funds	\$11,879,275	75.61% of federal grant	
plus 20% match required =	\$3,142,200		
SUBTOTAL		\$15,021,475	
plus Other state funds =	\$0		
SUBTOTAL		\$15,021,475	
plus other sources =	\$5,163,708		
SUBTOTAL		\$20,185,183	
plus Transfer from DEQ's CWSRF	\$0		
TOTAL Amount available	\$20,185,183		
Amount available after subtracting Set-asides =			\$20,185,183
Amount loaned to Demonstration Project for Southwest Virginia Endowment =			\$0
Balance available for individual project loan and subsidies =			\$20,185,183
Subsidies -- min. of 30% of grant to be used =		30.00%	\$4,713,300
Loans (max) =			\$15,471,883
Total =			\$20,185,183