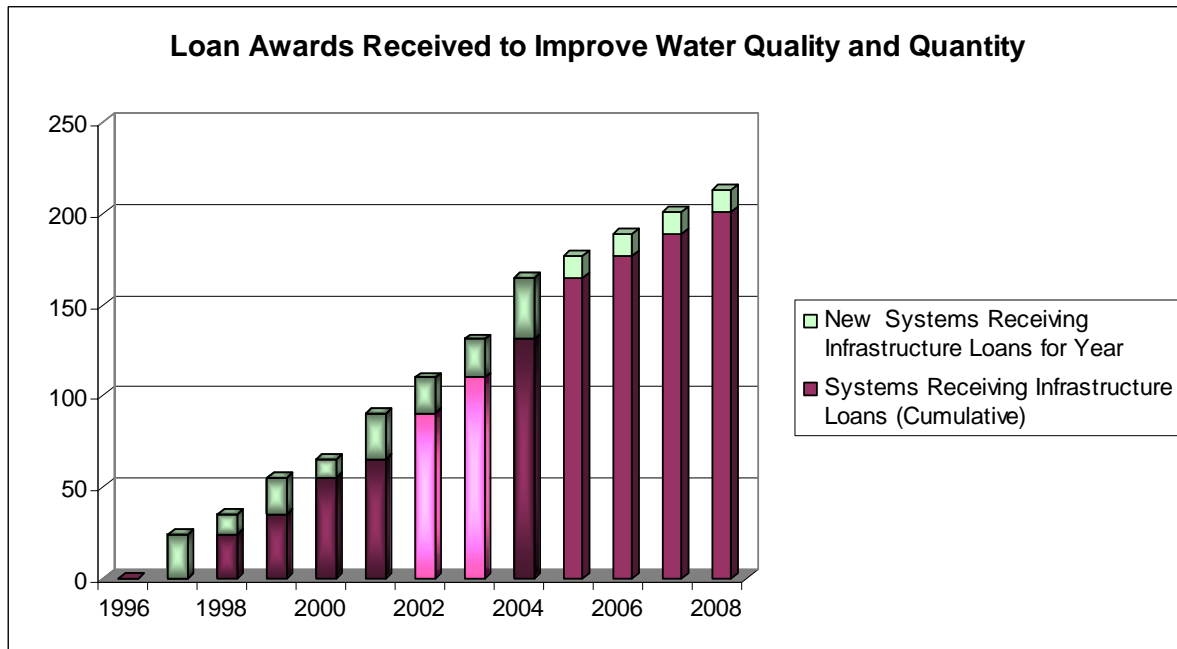


Results

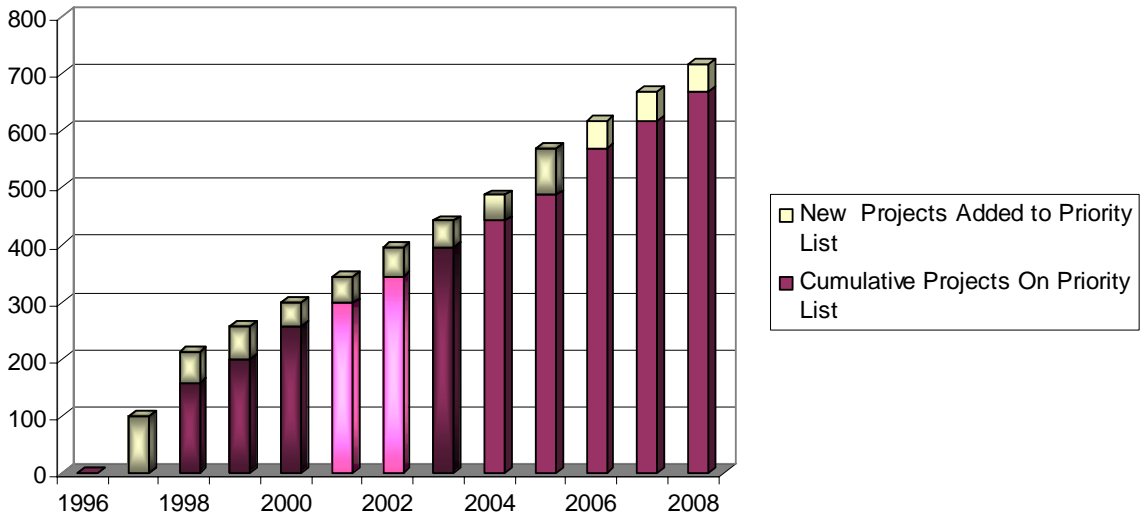
Increase the protection and development of safe drinking water through construction permit reviews, infrastructure loans, and capacity development assistance.

Key Indicators

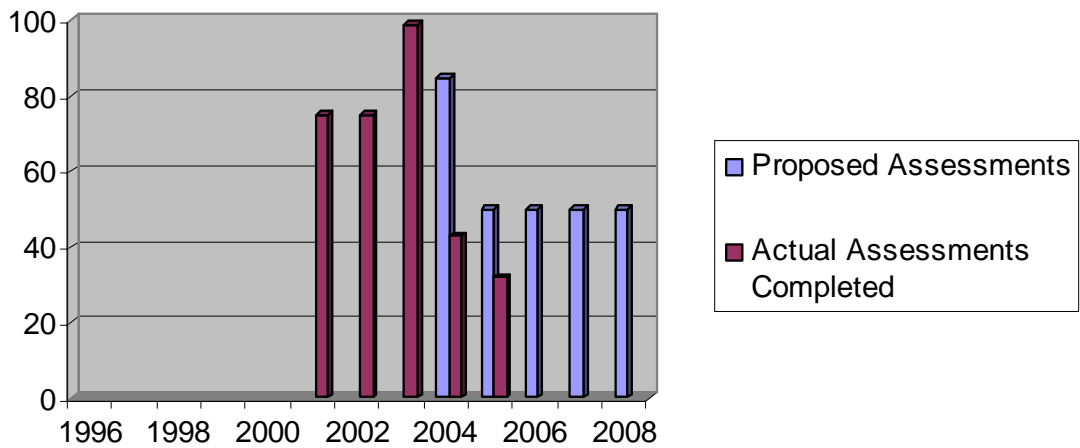
Number of systems receiving loans to improve their quality and quantity of drinking water



Number of Projects On Loan Priority List



Systems With Capacity Assessments Completed



Story Behind the Baseline Performance

The Financial and Engineering Services Section manages a construction permit program for public Community Water Systems (CWSs) and Non-transient Non-Community Water Systems (NTNCs), the Drinking Water State Revolving Fund (DWSRF) Loan Program for CWSs and certain NTNCs, and the Capacity Development Program for CWSs and NTNCs. These three programs are important elements in assisting public water systems to provide safe drinking water to their customers. The construction permit program has been in existence since before the enactment in 1974 of the Safe Drinking Water Act (SDWA). The DWSRF Loan and Capacity Development programs were authorized with the passage of the 1996 amendments to the SDWA. Since the inception of the loan program in 1997 (the end of State Fiscal Year 1995), the WSD has awarded 108 water system improvement loans totaling approximately \$56.8 million. The Capacity Development Program is designed to help water systems attain or maintain technical, financial and managerial capacity. There are currently a number of initiatives underway or completed to help water systems achieve capacity. Other related activities performed by the Section include comprehensive performance evaluations (CPE), sanitary surveys (SS) for surface water treatment facilities, providing troubleshooting assistance to resolve water treatment problems, such as high concentrations of disinfection by-products, corrosion control deficiencies, system hydraulic problems, etc.

Strategies

Education and Technical Assistance

2006-2007

Provide technical assistance to public water system owners, operators and consultants through on-site visits, attendance at meetings, phone inquiries, etc.

Assist in policy development, develop appropriate technical guidance documents, brochures, fact sheets, etc., and make them readily available to interested parties by adding new documents to the WSD's website as they are completed.

Continue the practice of allocating set-aside funds from annual federal DWSRF capitalization grants for financing contracts for small systems engineering evaluations and small systems engineering technical assistance. Manage the small systems engineering contracts in a manner that enables us to systematically offer this assistance to all small public water systems in need by 2007.

Grants and Loans

2006-2007

Manage the annual priority list and provide low interest loans to the highest priority water system improvement projects.

Award and manage contracts to technical services providers to assist water systems to develop or maintain financial, managerial, and technical capacity to enable water systems to provide safe drinking water.

Provide source protection loans to municipalities for purchase of land or conservation easements in order to improve protection of public water supplies from potential contaminants and ensure compliance with drinking water regulations.

Provide planning loans to municipalities serving populations under 10,000 people and to non-profit, privately-owned community water systems for preliminary engineering and final design preparatory to construction improvements.

Regulation, Compliance Assistance, and Enforcement

2006-2007

Administer the Water Supply Rule through management of the water supply construction permit program and through technical advice provided, primarily, to the Division’s Operations and Compliance Section. Engineering assistance will be provided to facilitate compliance with recently adopted new federal rules.

Participate in the review of federal and state rule revisions affecting public water systems.

Make referrals to the Division’s Compliance subsection for possible enforcement action as appropriate to safeguard public health.

Monitoring, Assessment, and Delivery of Direct Services

2006-2007

Conduct financial, managerial and technical capacity assessments of public water systems.

Conduct Comprehensive Performance Evaluations for at least two systems per year from 2006 through 2007.

Provide assistance to existing and new DWSRF loan applicants.

Complete environmental documentation for DWSRF loans.

Performance Measures (calendar year)

Performance Measures		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of Construction Permits Issued * Thru Nov. 18, 2005	P	100	100	150	200	200	200	200	200	120	120	120	120
	A	112	150	126	196	147	140	88	123	109*			
Number of Systems on the Priority List	P								45	69	50	50	50
	A	100	56	58	42	47	52	46	50				
Number of Construction Permits Meeting PEP	P							48	48	70	70	70	70
	A	63	39	57	70	72	49	48	70				

Number of DWSRF Loan Awards/Amendments (by priority list) * Additional Loans will/may be awarded	P	25	11	20	10	24	18	12	12	12	12	12	12
	A	24	11	20	10	25	20	21*	34*				
Number of Capacity Determinations Made	P							10	10	5	5	5	5
	A					2	3	3	6	5			
Systems with Capacity Assessments Completed	P								85	50	50	50	50
	A	0	0	0	0	75	75	99	43	32			

Proposed Accomplishments

Capacity Development Program – The program will continue to ensure that all new CWSs and NTNCs demonstrate the technical, managerial, and financial capacity to comply with the SWDA.

Drinking Water State Revolving Fund – This fund is capitalized with an annual grant from EPA and a 20% state match to be used to provide low interest loans for improvements to public water systems. The fund receives approximately \$8M annually of new funds plus loan repayments from previously closed out loans. This funding program is aimed primarily at high priority projects dealing with contamination problems that pose a significant risk to public health and helping to bring noncompliant systems into compliance with SDWA regulations. Every year, a specified number of systems are identified and ranked for financial assistance in the state’s annual projects priority list. In the most recently adopted list (Federal FY05), 81 projects are identified with the top 9 ranked projects anticipated to be funded. As project costs and readiness to proceed change during the year, the actual projects funded may also change.

Comprehensive Performance Evaluations (CPE) – The engineering unit along with the operations unit established a goal to conduct up to 2 CPEs throughout Vermont on an annual basis. The staff developed a strategy for identifying candidate systems, which takes into account water system staffing, performance and design. The Division is proposing to continue to perform up to 2 CPEs per year.

Recent Accomplishments

One of the most significant accomplishments this past year was the successful installation of a new surface water intake - pipe/well screen buried horizontally in the Lake Champlain bed - for one of the most challenged water systems in the state, Alburg Fire District #1. The water system has had a long history of problems with its Lake Champlain intake system. The intake pipe frequently dislodged by waves and ice and became air bound, causing damage to the raw water pumps, interrupting supply to the water system and forcing inconvenient manual operation of the water treatment plant. In addition, the raw water quality is among the worst in the state, with raw water turbidity levels as high as 40 NTU and with algae blooms at

certain times of the year clogging the filters and necessitating labor intensive removal and replacement of the filter media. The high raw water turbidity and algae contamination are likely causes of non-compliance filtered water turbidity and concentrations of disinfection byproducts in the finished water.

During 2004, the water system reported being without water for one to two days nearly every month and having to haul and purchase water from the Alburg Village water system and to issue do-no-drink notices to its customers. Since spring 2005 when the new intake was put online, measurements of the raw water turbidity are consistently in the 2-3 NTU range and the filtered water turbidity is consistently below the new stricter turbidity standard of 0.3 NTU. The new intake will hopefully also allow the return of automatic operation of the water filtration and disinfection equipment, reduce the potential for formation of disinfection byproducts, and prevent the impact of zebra mussels on the flow of raw water to the water treatment