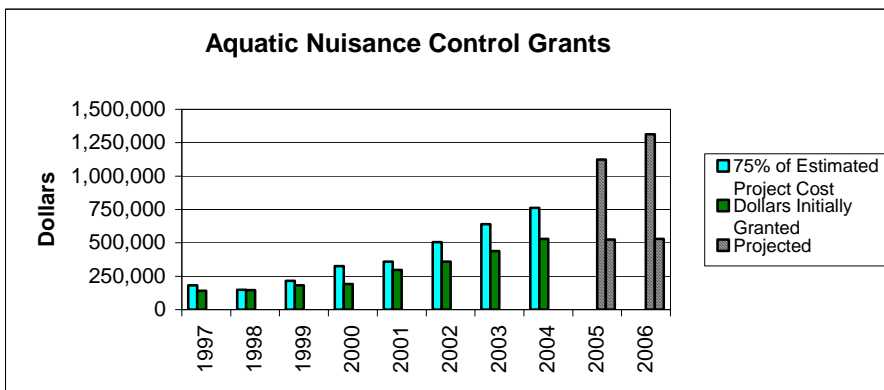
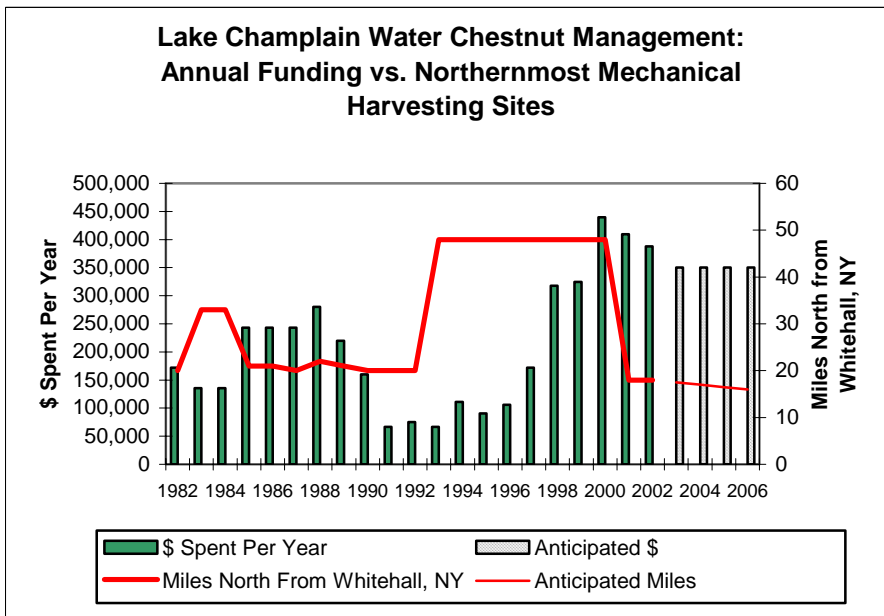
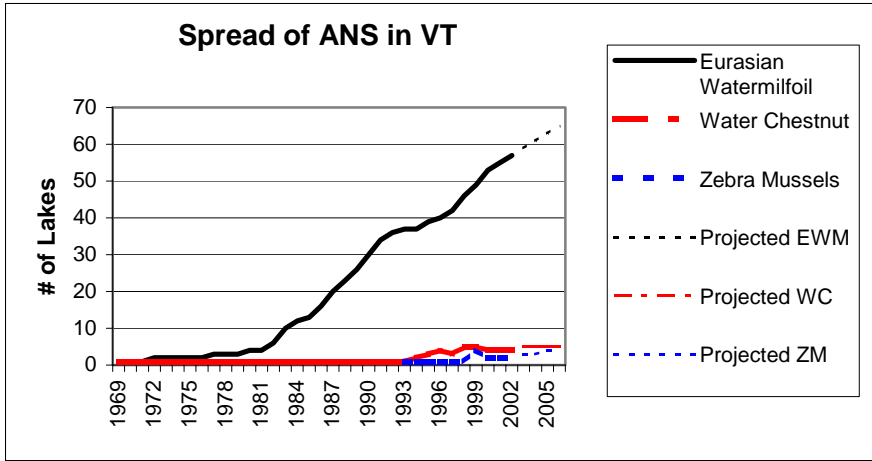


Results

Prevent or reduce the environmental and socio-economic impacts of nuisance (primarily nonnative) aquatic plant and animal species.

Key Indicators



Story behind the base line performance

The Program seeks to slow or stop the spread of aquatic nuisance species (ANS) to new waterbodies and reduce the density of nuisance populations in infested waterbodies. By their very nature, nonnative ANS tend to be easily spread between waterbodies. An ounce of prevention is truly worth a pound of cure, as the cost of preventing an infestation in an uninfested waterbody is significantly less than the annual cost of managing an infestation once it occurs. Eurasian watermilfoil, currently Vermont's most problematic nuisance nonnative aquatic species, was first discovered in Vermont in St. Albans Bay in Lake Champlain in 1962. In the next two decades, it only spread to three additional lakes. However, watermilfoil began to quickly spread to new lakes in the early 1980s, after it infested a few of the larger, heavily used recreational lakes. Water chestnut has been in Lake Champlain since at least the 1940s, but it was not found elsewhere until 1994. Early detection of new infestations of watermilfoil and water chestnut is critical if there is to be any opportunity to successfully prevent lakewide spread and the resulting impairment to the ecology and recreational uses of the infested lake. Water chestnut has actually been successfully eradicated from two lakes where small populations were found in the mid-1990s. Zebra mussels were first found in Vermont in 1993 in Lake Champlain. Currently there are no effective control methods to reduce or eliminate zebra mussel populations. Zebra mussel veligers found in two lakes in 1999 apparently were unsuccessful in establishing viable populations, as none have been found in those lakes since. Vermont is fortunate to have relatively few problematic species in the state, but many more nuisance species are found in neighboring states, so constant vigilance and a quick response to the introduction of a new species are imperative to protect our water resources from new invaders.

Water chestnut is particularly problematic in southern Lake Champlain. Fortunately, it is an annual plant that can be effectively controlled through harvesting and handpulling if mature plants are harvested prior to dropping their chestnuts. Since chestnuts can remain viable in the sediment for up to ten years before germinating, areas must be harvested or handpulled annually for many years before total control is achieved. After control is achieved, vigilance is needed to assure reinfestation does not occur. In the late 1960s, a two-person handpulling crew was effectively managing the water chestnut population in Lake Champlain, with only eight bushels of chestnut plants handpulled in 1967. However, the annual control program was stopped in 1971, and over the next ten years, the population in the lake exploded to the point where dense plant beds covered 270 acres in 1980. One chestnut seed can produce 10 to 15 rosettes, each of which can produce 15 to 20 seeds, resulting in up to 300 chestnut seeds from a single seed in one year. Missing just one year of control means the chestnuts produced that year are available to continue the infestation for years to come. On Lake Champlain, the impact of inadequate funding for water chestnut control for even one year can dramatically expand the range of dense water chestnut populations. Many years of sustained funding levels are then needed to regain the lost ground. The Program seeks to maintain a sustained level of funding that supports a water chestnut control program in Lake Champlain that annually reduces the extent of water chestnut in the lake and ultimately results in the population in the lake again being manageable by handpulling only.

Aquatic nuisance control grants are provided annually to municipalities, and to lake associations via municipalities, to assist with the cost of local programs to manage ANS populations in infested lakes or prevent their spread into uninfested lakes. Grant funds come from 25% of the state's motorboat registration revenue and all of a motorboat registration surcharge added in FY2003. In years when the state is successful in obtaining aquatic plant control funds from the U.S. Army Corps of Engineers, these funds supplement the state funds for non-chemical projects on lakes in the Lake Champlain Basin. Since FY1997, all aquatic nuisance control projects have been eligible for grants for up to 75% of the total project cost. Every year since then, requested funds have exceeded the available grant funds, and the gap is getting larger each year despite support from additional funding sources. In 2001, federal funds were once again available after a 3-year hiatus, and a one-time influx of surplus state funds added even further to the pot of available funds. In 2003, the new surcharge on motorboat registrations provided more funds. In 2004, additional federal funds became available due to the availability of more state and local matching funds for projects within the Lake Champlain Basin. Unfortunately, while project costs are expected to continue to increase significantly over the next two years due to several potential chemical treatment projects, available grant funds are not expected to increase substantially, and no new funding sources have been identified. To alter the picture presented by the graph, the Program is searching for new potential funding sources, with a desire to find sufficient funds to provide full 75% grants to all eligible projects.

Strategies/ Performance Measures / Proposed Accomplishments

Regulation, Compliance Assistance, and Enforcement

1. Develop general permits for aquatic nuisance control activities where the environmental and public health risk is small, to enable the Program to a) provide timely permitting decisions, and b) focus personnel resources on other program areas involving greater environmental or public health risk.
2. Increase the PEP time for chemical permits to realistically reflect the time needed for technical and public health review of these complex projects. Projected values in the table below for meeting the Individual Permit PEP Standard assume this.
3. Work with Vermont enforcement officers to assure effective enforcement of Vermont’s ANS Transport Law.
4. To the extent feasible, assist the Department of Agriculture, Foods and Markets with compliance activities related to their “noxious weed” Quarantine Rule.
5. Assist the Department of Fish and Wildlife with the development and enforcement of regulations to prevent the introduction and spread of nonnative fish and other nuisance organisms.

Performance Measure	P = Projected Values A = Actual Values	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Number of ANC Individual Permit Cases Completed*	P								12	10	12	15
	A		18	33	14	21	18	9				
Percent of ANC Permit Decisions Meeting PEP Standards*	P								40	90	95	95
	A		67	85	79	91	39	89				
Percent of Required Reports/Forms Submitted on Time*	P									70	80	90
	A		--	--	--	--	--	--	--			
Number of ANC General Permit Coverage Authorizations Completed*	P									30	50	30
	A		NA	NA	NA	NA	NA	NA	NA			

* PPA funded, at least in part

Grants/Loans/Contracts

1. Continue to obtain U.S. Army Corps of Engineers funding to support aquatic nuisance control grants to municipalities.
2. Seek new funding sources to provide the full 75% funding to eligible aquatic nuisance control grant-in-aid projects.
3. Encourage local organizations to undertake spread prevention projects to protect uninfested waterbodies.
4. Continue to obtain U.S. Army Corps of Engineers funding and Vermont General Funds to fully support an effective water chestnut control program in Lake Champlain.
5. Use a small portion of Motorboat Registration Funds annually to support high priority statewide spread prevention initiatives.
6. Continue to obtain U.S. Fish and Wildlife Service funding to support implementation of the Lake Champlain Basin ANS Management Plan.

Performance Measure	P = Projected Values A = Actual Values	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Percent of ANC Grants with 75% Funding	P									0	0	0
	A	NA	92	100	15	12	20	0	0			
Number of ANC Spread Prevention Grants (for uninfested waterbodies)	P										10	13
	A	--	--	--	--	--	--	--	--	7		

Education and Technical Assistance

1. Assure that every public boat access area in Vermont has an ANS sign posted in a prominent place.
2. Continue to provide technical assistance to organizations conducting aquatic nuisance control projects.
3. Increase the Program’s information/education efforts, especially in the area of spread prevention.
4. Develop educational materials for aquatic nuisance species whose introduction into Vermont is imminent.
5. Continue to collaborate with groups within the Agency, the state, regionally, and nationally to assist the development of environmentally sound methods to control nuisance invasive aquatic species and to further other Program objectives.

Performance Measure	P = Projected Values A = Actual Values	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No. of Projects Provided Tech Assistance*	P									39	44	49
	A	15	13	15	19	23	29	34	35			
Number of Hits on Main ANC Web Page*	P									750	850	1000
	A	--	--	--	--	--	--	--	--			

* PPA funded, at least in part

Monitoring, Assessment, and Direct Services

1. Increase the number of waterbodies being monitored for new ANS populations by volunteer ANS Watchers.
2. Develop a Rapid Response Plan to implement in the event of the introduction of a new aquatic nuisance species into Vermont.
3. Increase the number of ANS surveys conducted to determine the status of populations in infested lakes.
4. Increase the number of highly threatened uninfested lakes searched for ANS populations.

Performance Measure	P = Projected Values A = Actual Values	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No. of Waterbodies with ANS Watchers*	P									61	66	77
	A		55	55	55	55	56	56	56			
Rapid Response Plan Completed*	P									0	0	1
	A	NA	NA	NA	NA	NA	NA	NA	NA			
Number of ANS Surveys Conducted*	P								10	10	15	20
	A	7	13	24	12	13	11	18				
Number of ANS Searches Conducted*	P								30	30	30	30
	A	2	2	7	6	18	9	9				

* PPA funded, at least in part