

Are your fish dying for a better stormwater plan?

Are you hungry for a new food security policy?

Is your science curriculum less than AWEsome!?



**WE CAN HELP!**

Call us at 401-822-8832

Visit our website <http://www.sricd.org>

or just stop in at our friendly office at

60 Quaker Lane, Suite 46, Warwick, RI 02886

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**The Southern RI Conservation District**  
**We don't just sell seedlings anymore!**



## 2003 Annual Report

Southern Rhode Island Conservation District



**October 2003**

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## Alphabet Soup

You will find several acronyms used regularly throughout this report. Here is a handy guide to decoding them:



- AWESome!** SRICD’s Active Watershed Education curriculum for educators
- BMP** Best Management Practice
- CHARIHO** School District covering the Towns of Charlestown, Richmond and Hopkinton
- CRMC** Coastal Resources Management Council
- NPS** Non-Point Source (describes pollution that cannot be attributed to any particular point—e.g. stormwater)
- NRCS** USDA’s Natural Resources Conservation Service
- NRPA** Narrow River Preservation Association
- NRWAT** Narrow River Watershed Action Team
- RIDEM** Rhode Island Department of Environmental Management
- RISD** Rhode Island School of Design
- SRICD** Southern Rhode Island Conservation District
- SWMPP** Stormwater Management Program Plan (required for communities that have urbanized areas)
- TMDL** Total Maximum Daily Load—pollution studies developed by RIDEM for polluted water bodies
- URI** University of Rhode Island
- USDA** United States Department of Agriculture
- USEPA** United States Environmental Protection Agency
- WWAT** Warwick Watershed Action Team



### Staff:

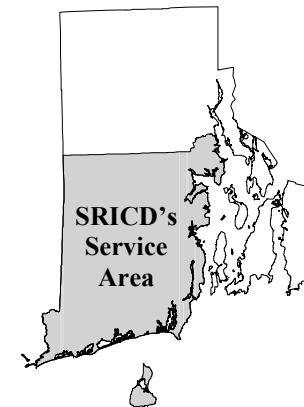
Alicia Lehrer—District Manager, Susan Letendre—Education and Outreach Director, Patricia Gambarini—Stormwater Planner/Designer, Kristine Stuart—Stormwater Management Specialist, Patricia Tanalski—Special Projects Coordinator, and Jean Lambert—Engineering Consultant.

### Directors:

Patricia Lenihan, Chair (*East Greenwich*), Edward Renehan, Jr., Vice-Chair (*North Kingstown*), Stephen DelPozzo, Treasurer (*Warwick*), Rudi Hempe, Secretary (*Narragansett*), Harriet Powell (*North Kingstown*).

### Associate Directors:

Richard Donnelly (*North Kingstown*), Stephen Donohue (*South Kingstown*), Paul Gardner (*Charlestown*), W. Michael Sullivan (*South Kingstown*), Robert Swanson (*Richmond*), Marjorie Weeden (*Hopkinton*), Bryan Wolfenden (*West Warwick*).



SRICD serves the communities of Kent and Washington Counties: *Coventry, West Warwick, Warwick, West Greenwich, East Greenwich, Exeter, North Kingstown, Hopkinton, Richmond, South Kingstown, Westerly, Charlestown, Narragansett and New Shoreham* (Block Island). In addition, we serve all of Rhode Island in stormwater assistance and food policy programs. If your community is not represented by our directors, perhaps you would be interested in joining us. Call us at 401-822-8832 or look us up on the web: [www.sricd.org](http://www.sricd.org).



## Promoting Agriculture Through Youth Education

### Kids Grow! Takes on a Life of Its Own

2003 was the final year of SRICD's seven year development of the Kids Grow! program, a service learning program in the Chariho School District (Charlestown, Richmond and Hopkinton) where students (and teachers) work together to recycle and to plan, plant and harvest organic gardens and donate the produce to those who are hungry. Kids Grow! now incorporates a cascading learning process, with older students teaching younger students what they have learned, and a greenhouse learning center at the Richmond School that extends the growing season, and is the current site for exploration into year-round, low-heat growing.



Kids Grow! is now sustainable. Teachers are committed to the project, and procedures are in place to continue the program. Only a small infusion of funds to pay for buses from the middle school to the greenhouse are needed annually. This year, Dan Potts of Chariho Middle School and Kids Grow! won first place in the National Gardening Association's Hunger

Relief category, an award that brings national recognition, funds and gardening supplies to the program. The recycling project also won an award from the RI Schools Recycling Club for their exemplary school-wide paper recycling.

### Next Step: Growing A Future

Kids Grow! is now a feeder program for a new iteration: *Growing A Future*. Growing A Future is a project in both Chariho High School and the Met School in Providence. Students will form a team that will learn about and tackle issues of food security—insuring that all people have access to enough nutritious food to sustain health without resorting to charity, begging, or stealing. Over the next three years these students, and their mentors at Brown, RISD, Johnson & Wales, and URI will: get to know the local food system, people, and their issues; study national and international issues; rebuild the RI Community Food Security Coalition with all stakeholders; and work with the legislature to form RI's first Food Policy Council. If you want to be involved in this exciting project, call us!



### Expenses

Rent	\$ 18,736.00
Electric	\$ 1,291.40
Professional Development	\$ 1,249.30
Annual Meeting Expenses	\$ 1,437.37
Advertising Expense	\$ 320.75
Conferences or Meetings	\$ 36.00
Educational Materials	\$ 705.89
Sales Expenses	\$ 436.63
Bank Service Charges	\$ 2.50
Contributions	
Shared Big E 2002 Expenses	\$ 41.75
NACD 2003 quota contribution	\$ 775.00
Contribution to 2003 Envirothon	\$ 100.00
Shared Big E 2003 Expenses	\$ 41.75
Dues and Subscriptions	
Chamber of Commerce Membership	\$ 295.00
Sam's Club Membership renewal	\$ 30.00
SRICD portion RIACD's annual dues	\$ 275.00
RIACD 501(c)3 Filing Expense	\$ 435.00
ECRI Dues 2002 & 2003	\$ 90.00
RI Ag Council 2003 Membership Dues	\$ 56.00
Insurance	
Business Owner's Policy	\$ 652.75
Workers' Compensation & Employers Liability	\$ 607.60
Bonding Insurance	\$ 150.00
Meeting Expenses	\$ 1,383.74
Postage and Delivery	\$ 1,476.73
Printing and Reproduction	\$ 2,435.19
Accounting Services	\$ 192.50
Telephone	\$ 174.74
Non-Grant Travel Expenses	\$ 1,667.15
Contract Labor	\$ 15,670.00
Office Supplies	\$ 2,831.92
Payroll Expenses	
State Unemployment	\$ 1,445.45
Employer Soc. Sec.	\$ 7,734.52
Employer Medicare	\$ 1,808.87
Employee Salary	\$ 130,430.94
Payroll Expenses - Other	\$ 1,356.95
Benefit Expenses	\$ 18,274.82
Web Expenses	\$ 180.00
<b>Total Expenses</b>	<b>\$ 218,097.76</b>

## Financial Statement

### Income

Annual Meeting Income	\$	471.00
AWEsome Curriculum Sales	\$	240.00
Town Funding		
Charlestown 02-03 allocation	\$	500.00
Coventry 02-03 allocation	\$	1,103.00
Exeter's \$500 02-03 allocation received in FY 01-02		
Narragansett 02-03 allocation	\$	1,500.00
North Kingstown 02-03 allocation	\$	1,500.00
Richmond 02-03 allocation	\$	500.00
South Kingstown 01-02 allocation	\$	1,000.00
Warwick 01-02 and 02-03 allocations	\$	2,000.00
West Greenwich 01-02 and 02-03 allocations	\$	600.00
Westerly 02-03 allocation	\$	900.00
Schartner Farms Donation	\$	1,000.00
Legislative Funding	\$	72,000.00
Grants Income		
RI AquaFund		
Duck Cove Monitoring	\$	6,093.97
Narrow River - Reducing NPS	\$	15,505.76
Kids Grow Grant Year 01-02	\$	10,896.82
Kids Grow Grant Year 02-03	\$	10,141.96
Food Project	\$	600.00
Section 319 Funding		
Greenwich Bay Stormwater	\$	18,617.89
Stormwater Management Program Planning Grants		
Cumberland	\$	26,030.52
Narragansett	\$	23,463.32
Warwick Watershed Action Team	\$	500.00
Contracts Income		
Clerical Asst NRCS	\$	185.00
Engineering Services		
Aquidneck Island Land Trust		
Greenway Design	\$	7,294.55
Site Plan Review	\$	4,612.50
Assisting ERICD on Allin's Cove Project	\$	3,071.94
Soil Limitations for Tax Assessment Mapping	\$	8,750.00
Fees paid for SRICD programs	\$	3,185.00
Interest Income	\$	135.73
<b>Total Income</b>	<b>\$</b>	<b>222,398.96</b>

Plus volunteer citizen involvement

**PRICELESS!!!**

## Managing Stormwater in RI Communities



SRICD's Stormwater Service Center recently applied its expertise to help towns implement Phase II of the Clean Water Act. SRICD's specialized team organized resources and prepared stormwater management program plans (SWMPs) for the Towns of Cumberland and Narragansett in compliance with the US Environmental Protection Agency's (USEPA) Phase II Final Rule (Phase II) and RI Department of Environmental Management (RIDEM) "Phase II" regulations.

### About Phase II

Phase II requires urbanized areas, those with a population density of at least 1,000 people per square mile, to develop and implement storm water management programs. This program must include at a minimum, the following **six control measures**:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

### Clean Water: What's The Point?

The Clean Water Act has been in effect since 1972. In that time, tremendous progress has been made in improving the quality of natural waters. Until now, much of the work to clean our waters has been directed at *point sources* of pollution. These are large sources of pollution that one can point to such as municipal sewage and industrial wastewater. Wastewater treatment has come a very long way toward cleaning our country's precious water resources.

The water pollution problems that now remain, and keep our water resources from meeting their intended uses, are *nonpoint sources* (NPS). For the most part, these are the pollution sources that wash into our waters off of our land and streets with stormwater. Common NPS pollutants include sand and salt from roads, pet waste, soil from construction sites, and metals and petroleum products from cars. Although this does not seem like much, it adds up in many cases, like the Narrow River in Narragansett, to being the difference between water that can be used for swimming and shellfishing, and water that cannot. The goal of USEPA's program is to make our waters clean enough to meet their intended uses such as swimming, fishing and recreational activities.



## Watershed Action Teams—Local Folks

SRICD was lucky enough to work with two teams of dedicated citizens this year. One team calls itself the Warwick Watershed Action Team (WWAT) and the other the Narrow River Watershed Action Team (NRWAT). SRICD was funded to work with the WWAT through a grant from Section 319 of the Clean Water Act and the NRWAT through a grant from RI Aqua Fund.

### WWAT 2002-2003 Highlights

- Outreach to 7 schools and individual teachers
- Veterinarian outreach program to educate pet owners about pet waste
- Very creative Pet waste signs on the beach walk at Oakland Beach
- Convinced the City of Warwick to install doggie-mitt dispensers at City Park
- Inspired CRMC and the Army Corp of Engineers to obtain funding for a feasibility study for the restoration of Brush Neck Cove
- Goals of WWAT are institutionalized into Warwick's Five Year Plan
- Informational booths at fairs and festivals
- Green Car Wash Day educated people on Bay-friendly carwash practices

### NRWAT 2002-2003 Highlights

- Volunteers conducted stormwater surveys
- "Don't Feed" Signs at the Narragansett Town Boat Ramp and other strategic places where people feed the wildlife (with NRPA)
- Received W.E.R. LaFarge Friend of the River Award
- Wrote and distributed a brochure of easy river-friendly practices
- Planning Narrow River educational series with Coastal Resources Center at URI



SRICD's Kris Stuart (right) trains NRWAT volunteer Elizabeth Donovan in surveying stormwater systems.



## Habitat Restoration

### Duck Cove Salt Marsh in North Kingstown—Then and Now

SRICD got involved with the restoration of the Upper Duck Cove Salt Marsh in 1997 when the Duck Cove Bluff Association and the Lone Tree Point Neighborhood Association needed a project manager for an Aqua Fund Grant to restore the marsh. Healthy salt marshes are among the most productive known ecosystems.

The marsh began to degrade when a culvert between the Upper and Lower Duck Cove collapsed, preventing free flow of salt water into the marsh. Then *Phragmites*, or giant reed, overgrew the natural marsh vegetation.

Thanks to the many partners that worked on this project, particularly Gidget Loomis, a neighbor of the marsh, a new culvert was installed in December of 2001. SRICD monitors the effectiveness of this restoration and will continue to do so through 2006 with funding provided by an Aqua Fund grant.

Monitoring consists of:

- Measuring the salinity of the soil water at 15 points throughout the marsh
- Measuring the percent cover and height of plant species in over 90 plots throughout the marsh
- Measuring the height of the spring tides
- Photo documenting the height of the *Phragmites* in three locations



The results of the restoration are quite dramatic in every aspect of monitoring as shown by the photos above. Both photos are the same monitoring location but the photo on the left was taken before the culvert was replaced and the one on the right was taken in June of 2003. The *Phragmites*, dense and more than 12 feet tall on the left are sparse and less than 6 feet tall in 2003. Habitat has markedly improved for fish and shellfish nurseries and birds. Great work, everyone!!!



### Developing Stormwater Management Program Plans

For SRICD, the planning *process* is more than half the battle. We believe that without public involvement and support, NPS pollution can never be effectively addressed. Therefore, we invest strongly in forming a partnership between the municipal staff and the public to develop the plan.

For example, development of the Narragansett Storm Water Management Program Plan involved regular meetings of a full steering committee and its 4 subcommittees—composed of 10 citizens appointed by the Town Council and Town engineering and planning staff. The 4 subcommittees, devoted to each of the minimum control measures, helped to articulate the details of this plan.

The process of community-partnered plan development was similar in our work with the Town of Cumberland.

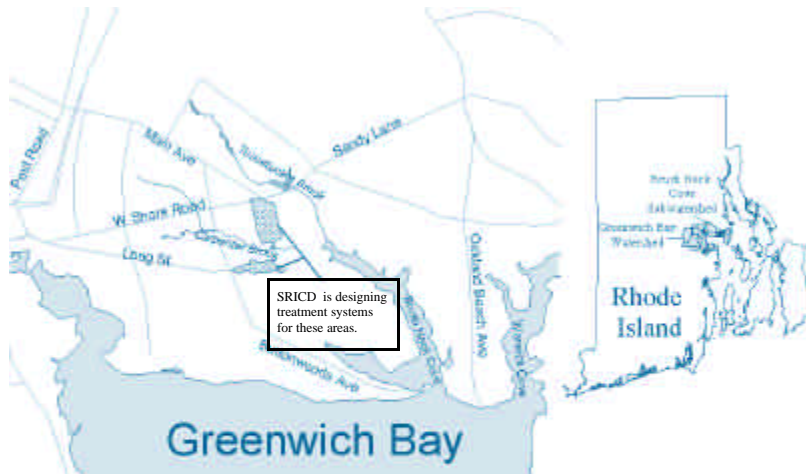
As a result, both towns' SWMPPs include recommendations that address each control measure and also enjoy full support from the community, support that will clear the way for *and* fuel implementation.



## Designing Stormwater Solutions

### Greenwich Bay—Brush Neck and Warwick Coves

Since 1997, SRICD has partnered with the City of Warwick to identify the greatest potential sources of stormwater pollution to Greenwich Bay and to develop solutions to those problems. During the past year, SRICD, through our partners at the Natural Resources Conservation Service (NRCS) has been designing systems to treat stormwater for parts of the Brush Neck Cove Watershed, one of the areas of Warwick that contributes water to Greenwich Bay (see figure below). Because the areas that need treatment are densely populated and there is little space to put in structures such as detention ponds, stormwater will be directed to areas where it will filter slowly through the ground rather than entering directly into Carpenter Brook as it does now. This work is being funded by a grant from Section 319 of the Clean Water Act through RIDEM.



SRICD expects the designs for this project to be completed by the end of 2003 and implemented by the end of 2005. Meanwhile, the City of Warwick has installed some sediment reducing practices and SRICD is evaluating the storm drain systems that outlet to Warwick Cove.

Because of its diffuse nature and multiple sources, pollution from stormwater must be addressed one neighborhood at a time and it all adds up to great gains for Greenwich Bay.

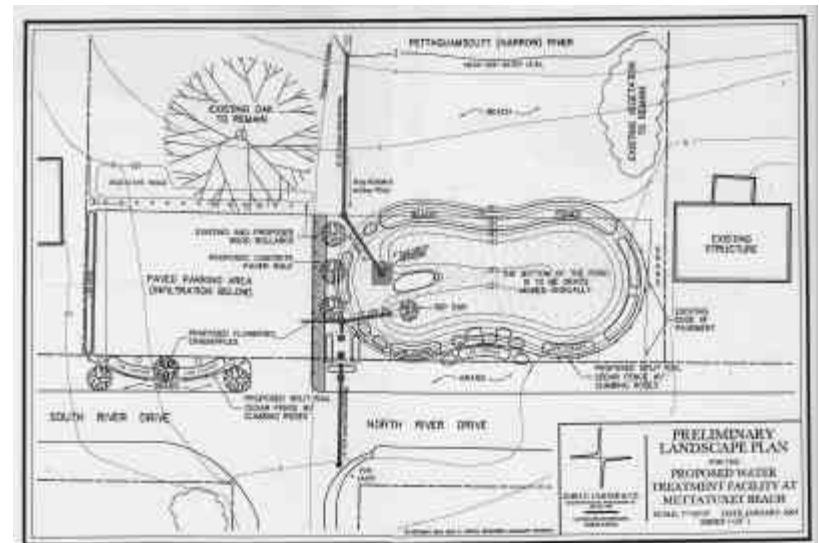


### Narrow River—Mettatuxet Beach

To reduce the amount of polluted stormwater entering the Narrow River, SRICD, in partnership with the Town of Narragansett, the Mettatuxet Improvement Association, the Narrow River Preservation Association (NRPA), RIDEM and Coastal Resources Management Council (CRMC), developed an innovative plan to pre-treat stormwater at the Mettatuxet Beach outfall, one of the 12 priority outfalls identified by RIDEM's total maximum daily load (TMDL) pollution study.

The plan involves a three-part treatment system with stormwater first entering 1) a swirl-separator unit to settle out solids such as sand, soil and leaves, and then traveling into either 2) infiltrators buried beneath the beach parking lot or 3) a detention pond. The system is designed to treat the stormwater from a typical one-inch storm.

This project is funded by a grant from Rhode Island Aqua Fund. The Town of Narragansett plans to install it in the spring of 2004 through a grant from the USEPA Watershed Initiative. URI will monitor the effectiveness of each part of the system through funding from CRMC.



SRICD developed the design for the stormwater treatment system with help from the Town of Narragansett. John Carter of John Carter & Company, Design & Build in Narragansett produced and donated this landscape design.