

Final Report to the New England Interstate Water Pollution
Control Commission - 7/1/05-6/1/06
Council on the Environment of New York City
Training Student Organizers
To Preserve Local Waters/Lands

I. Narrative

Special Project Grant

A. Project Description

The project involved training students from 7 high schools to preserve land areas and significant coastal water bodies in New York City. In the process students were educated about the coastal waters around the city. The project actualizes CENYC's mission of helping New Yorkers become more aware of environmental issues and making the city a better place to live, work and play.

B. Project Goals/Population Served/Stakeholders Affected/Problems and Resolutions

Project goals, which will be addressed specifically below, were generally met. There was little change in overall goals, only a few changes in specific project sites and times for logistical reasons. Below is our proposed Work Plan/Outcomes/Timeline with accomplishments recorded and significant changes noted.

Work Plan/Outcomes/Timeline

School/Neighborhood	Improvement Project/Accomplishments	Timeline/Schedule
<p><i>DeWitt Clinton HS-NW Bronx</i></p> <p>TSO staff member trains 3 classes of ninth grade Earth Science students on a weekly basis to learn about watersheds, NYC coastal waters, water testing. Bronx River Alliance visits classrooms to educate students about the river. Result: All done except Alliance did not visit class in fall semester but CENYC staff covered subject matter.</p>	<p>Remove 5,000 square feet of invasive species and possibly plant 100 trees and shrubs along the Northern section of Bronx River to prevent erosion and preserve water quality.</p> <p>Accomplished: 15,000 square feet of invasives removed and 300 trees/shrubs planted.</p>	<p>9/1/05-1/31/06</p>
<p>Same staff member works with an ROTC student volunteer group-gives an</p>	<p>Remove 2,000 square feet of invasive species in Pelham Bay Park along</p>	<p>9/1/05-1/31/06</p>

<p>orientation session prior to field projects. Results: ROTC project cancelled due to bad weather. DeWitt Clinton Earth Science classes did substitute project at Pelham Bay Park.</p>	<p>Long Island Sound. Accomplishments: Removed 1,500 square feet of invasives and planted 10 large Oak trees.</p>	
<p><i>High School for Environmental Studies (HSES)-Westside, Manhattan</i></p> <p>TSO staff members train 6 classes of ninth graders in the Introduction to the Environment course on a weekly basis. Similar class content as above.</p> <p>Friends of HSES helps set up projects with NYC Dept. of Ed.</p>	<p>Plant 250 trees in Inwood Hill Park near Hudson River in northern Manhattan to stem erosion and preserve water quality.</p> <p>Accomplishments: Planted 1378 ground cover plants in Spring 2006 to establish upland wooded habitat and control runoff; This project replaced Fall project which was ultimately covered by another grant.</p>	<p>9/1/05-1/31/06</p>
<p>Results: Training done on a weekly basis.</p>	<p>Remove invasive species from 10,000 square feet of Riverside Park, adjacent to Hudson River-west side Manhattan.</p> <p>Accomplishments: Instead of invasives removed, picked up 500 pounds of litter and planted 450 bulbs. Project chosen by Riverside Park Fund (RPF)</p>	<p>9/1/05-1/31/06</p>
	<p>Plant 100 trees along Hudson in Riverside Park.</p> <p>Accomplishments: Instead of planting, removed invasives from 4,200 square foot area in park. Project selection by RPF</p>	<p>2/1/06-6/30/06</p>

	<p>Remove invasive species from 3,000 square feet of land area in Morningside Park near catch basins which drain to the Hudson, to protect water quality- Westside, Manhattan.</p> <p>Accomplishments: Removed 11,000 square feet of invasives. In the spring planted 1,350 ground cover plants to stem erosion.</p>	<p>9/1/05-1/31/06 2/1/06-6/30/06</p>
<p><i>Bronx Regional HS-South Bronx</i></p> <p>TSO staff works with one class for one semester. Similar work with the Bronx River Alliance as above.</p> <p>Results: Did program with two classes.</p>	<p>Plant 125 trees along southern section of Bronx River; remove 500 square feet of invasive species.</p> <p>Accomplishments: Planted 350 trees in northern section; site switched due to shoreline restoration needs. Planting in both semesters.</p>	<p>9/1/05-6/30/06</p>
<p><i>Satellite Academy/South Bronx</i></p> <p>TSO staff works with one class for one semester.</p> <p>Results: This school not included due to project overload; an extra class at Bronx Regional participated</p>	<p>Plant 125 trees along the Bronx River.</p> <p>Accomplishments: See Bronx Regional HS above.</p>	<p>2/1/06-6/30/06</p>
<p><i>Bronx Academy School-Soundview, Southeast Bronx</i></p> <p>TSO staff member trains 3 classes of 11th-12th graders in three Living Environment classes for part of a semester.</p>	<p>Remove 1,000 square feet of invasive species from Soundview Park along Bronx River.</p> <p>Accomplishments: Planted 160 trees in Pelham Bay Park along Long Island Sound in Fall semester.</p>	<p>9/1/05-1/31/06 2/1/06-6/30/06</p>

Results: Training accomplished; project switched to Pelham Bay Park due to hazardous conditions at Soundview.	Planted an additional 100 trees with new classes in spring.	
<i>Madison HS-Midwood- Kings Highway, South Brooklyn</i> TSO staff works with two classes for one semester.	Plant 50 trees and shrubs; remove 500 square feet of weeds, clean up plastic floatables along Gerritsen Creek in Marine Park. Accomplishments: In Fall built 50 foot fence to control erosion and removed 300 pounds of litter. Additional work may be done in June 2006.	9/1/05-1/31/06 2/1/06-6/30/06
<i>Beach Channel HS- Rockaway, Queens</i> TSO staff works with one class for one semester Results: Staff worked with two classes for two semesters.	Plant 25 shrubs in wildlife habitat on campus along Jamaica Bay; maintain trail and upgrade bird houses to attract more area birds. Accomplishments: Planted 12 shrubs and removed 1,200 pounds of litter in fall. Planted 15 pitch pine trees and removed 2 bags of weeds and 40 pounds of litter from wildlife habitat in spring.	9/1/05-1/31/06 2/1/06-6/30/06

Total:

21 classes; 475 students; 13 projects; 1,007 trees; 32,200 square feet of invasive plants removed; affecting the shoreline of 5 bodies of water in or near 6 NYC parks. Over 3,100 ground cover plants installed, a 50 foot fence built and one-half ton of litter removed.

TSO students also did some water conservation projects which help the waters around the city through CSO abatement:

- The HSES and DeWitt Clinton classes described above and youth from the Center for Math and Science, saved approximately 50,000 gallons of water in one week conservation projects with their families.
- The Madison Computer Research classes created water conservation bookmarks that were distributed to other students.

- TSO classes at HSES, Clinton, Bronx Academy H.S. and the Center for Math and Science created pamphlets on water conservation which are currently being revised and made ready for local and possibly citywide distribution.

C. Evaluation

The more than 400 students involved developed an awareness of water related issues, the coastal estuary around the city and ways to impact water quality in a positive manner. Below are quotes from student evaluations from the fall semester which are indicative of student response to the program. The various stakeholders-Bronx River Alliance, Friends of HSES, the NYC Department of Parks and Recreation and the participating schools all expressed satisfaction with services provided by students and felt the educational process benefited those involved. There is a desire on the part of the schools and the participating agencies to continue this work.

The following are some quotes from student evaluations in the Fall semester of the projects accomplished under this grant. Comments were approximately 90-95% positive concerning the classroom and field components of those projects: Spring semester evaluations are currently being disseminated results will not be available for several weeks but informal feedback seems very positive.

One Student Said:

- “My overall feeling about the projects I’ve participated in was enjoyment and surprise. I had fun planting trees and learning how to do water tests. I was surprised at how much I learned, and how fun this was.”
- “This semester, I learned how to perform tests to discover how clean and healthy our water was. I also learned why and how water gets polluted, how to prevent that (e.g. planting trees). I also learned how to conserve it, and why doing so is important.”
- “Looking back on this semester I can’t think of any lesson particularly unworthy while-they all served a purpose important to the course. My least favorite, however, was the lessons where we made flyers-while that served a purpose, it wasn’t the same as actually planting trees or picking up litter.”
- “I don’t have any suggestions for this program. I thought it was well-put together and served the purpose of high school very well. The only thing I would have liked is more trips to plant trees/plants and pick up litter.”

Statements from Individual Students

“I learned that water is very precious in our lives and that we need to conserve water in order to stay alive by doing the simplest things like turning off the water when brushing teeth.”

“I thought that this class was full of interesting activities. I liked the trip we went on the most. This class taught me a lot of things about nature.....”

“The environment classes were a good idea. They made me see the environment more and differently. The best part was the trip to the salt marsh.”

“The weekly environmental classes were very interesting. I got to learn about biodiversity and wildlife organizations. I liked planting bulbs outside. The trip to the salt marsh was fun.”

“We got to think about things we never really thought about or noticed. I like that we can learn something new.”

“I don’t think there could have been any changes or improvements because the lessons were organized and fun. The field trips were good also.”

“I feel that this class and our participation have effected the environment for the better. Our results have proven how well we’ve done.”

“My overall feeling about this project we did is good. I had fun; I got to explore places in Manhattan that I had never seen.”

“I believe that the projects we participated in this semester were very helpful to understanding the environmental problems of New York. It taught us a valuable lesson on how to conserve water and toss garbage into the garbage container instead of the floor.”

“The only thing I would probably change is the amount of walking trips we go on because we only went on 2 and 1 don’t think that was enough.”

“I think the projects I participated in were very fun. Doing something that is fun but educational at the same time. Also, I met new people by working in groups.”

“My suggestion is for Mr. Zamm to come twice a week. That way we can do more outdoor activities.”

“After I learned about water conservation, I learned to save a considerable amount of water and so did the class.”

D. Organizational Changes during Project

These were no changes in staffing patterns for the project. However a new Executive Director did begin work during the grant period. Lys McLaughlin, longtime ED retired and was replaced by Marcel Van Ooyen, formally Deputy Chief of Staff for City Council Speaker Gifford Miller and Legislative Director of the body. He provided administrative support for the project.