



# EnviroEd

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PUBLISHED BY THE PUBLIC EDUCATION COMMITTEE OF THE NEW YORK WATER ENVIRONMENT ASSOCIATION, INC.

[www.nywea.org](http://www.nywea.org)



## FROM THE CHAIR...

The New York Water Environment Association, Inc. (NYWEA) was founded in

1929, by professionals in the field of water quality as a non-profit, educational organization. Today the Association has over 2,500 members of diverse backgrounds and specialties, all involved with protecting and enhancing our precious resources.

To accomplish these goals, we must get young people interested in careers in water quality -- as civil, design or environmental engineers; biologists, chemists, local and state government officials, treatment plant managers and operators, laboratory technicians or other professions.

The NYWEA Public Education Committee, which is responsible for increasing the academic community's awareness of career opportunities in our field, will publish this newsletter twice a year with information useful for students considering a career path -- primarily web site links that will provide valuable detailed information.

The NYWEA holds two large conferences a year, one in winter and another in spring. These conferences can be a tremendous resource for all the issues and concerns of water quality professionals in New York and nationwide. We encourage you to check our website for details -- <http://www.nywea.org>.

— **Joe Brilling, Chairman**

## Careers in Science Newsletter –

“Where are our Future Scientists?”

“Wanted: Young American Scientists”



Headlines from across the country echo the call of business leaders, politicians and science teachers who are legitimately concerned that students are not choosing careers in the fields of science and math. Recent hearings held by the House Education and the Workforce's 21st Century Competitiveness Subcommittee examined the competitiveness of science and math education in the United States. While some speculated that America is ripe for another Sputnik moment to reinvigorate the nation's efforts in science and math, others, such as Chair Howard McKeon (r-CA),

suggested that we are “facing a ‘pipeline’ issue, with too few students who are interested in science and math, too few K-13 teachers who are trained in those fields, and colleges and universities that are not doing enough to recruit and retains science and math majors.”

As your school year begins, consider ways that you could encourage your students, regardless of age, to become interested in the fascinating field of science. In this issue, we show you how the opportunities in the field are as varied as the individuals seeking them.



The Future City Competition is a national program sponsored by the engineering community to promote technical literacy and engineering to middle school students. The program fosters an interest in math, science and engineering through hands-on, real-world applications. The national finals of the Future City competition are a featured event during National Engineers Week with students from across the country competing in Washington, D.C.

Middle schools from New York City, New Jersey and Long Island compete in the regional competition. Each team consists

of three students of seventh and eighth graders, a teacher and a mentor (i.e., an Engineer). Competition Day is **January 28, 2006**.

The team creates a city simulation with Sim City Software, builds a scale 3-D model of a portion of the city, writes an abstract of the city and an essay on a topic selected by the Competition. For the day of the event, the team puts together a presentation board and then gives an oral presentation to team judges composed of local engineers.

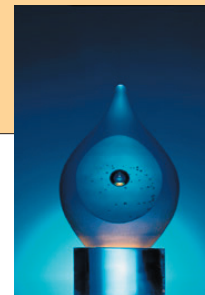
For further information, please visit [www.futurecity.org](http://www.futurecity.org).

This is our premiere issue. If you have any comments or suggestions, please contact Beth Petrillo at [bpetrillo@dep.nyc.gov](mailto:bpetrillo@dep.nyc.gov).



# 2006 U.S. Stockholm Junior Water Prize

## The World's Most Prestigious Youth Award for Water Science



The International Stockholm Junior Water Prize (SJWP) is the most prestigious youth award for a high school water science research project. Its purpose is to increase youth attention toward the water environment, and to sensitize them – as future leaders – to local and global water challenges. HRH Crown Princess Victoria is the patron of the prize. In a royal ceremony, during World Water Week, the international winner receives \$5,000 USD and a blue crystal sculpture.

The SJWP was founded by the Stockholm Water Foundation and is administered by the Stockholm International Water Institute (SIWI). ITT Industries is the global sponsor. In the United States, the Water Environment Federation (WEF), and its member associations, sponsor and organize the state and national competition with support from ITT Industries and The Coca-Cola Company.

### U.S. SJWP AWARDS:

State SJWP Winners receive:

- SJWP medal and one-year complimentary WEF student membership.
- Each state winner, and their science teacher, will be sponsored to attend the national competition in Atlanta, Georgia, June 22-24, 2006.
- The state winner's school receives a framed certificate recognizing the student and school's contribution to water environment research.
- An opportunity to be published in the U.S. SJWP Research Journal, published on-line annually.
- Plus other awards as presented by WEF member associations.

### U.S. SJWP Winner receives:

- \$3,000 and an award sculpture.
- A trip to Stockholm, Sweden, to compete for the international SJWP, August 20-26, 2006.
- The U.S. winner's school receives

\$1,000 toward the enhancement of water environment research in the classroom.

- A trip to Dallas, Texas, to showcase winner's research at the Water Environment Federation's Technical Exhibition and Conference (WEFTEC®) October 21-25, 2006.
- Up to three finalists receive \$1,000 each.

### SJWP Laureates are Leaders

Whether they win at the state, national, or international level, SJWP laureates are elevated - knowing their work is recognized and promoted by leading scientists in the water environment field. Even more importantly, students know that they have made a difference and can continue to do so throughout their careers.

### How Do I Win the U.S. SJWP?

High school students (grades 9-12) who enter water related science fair projects in a regional International Science and Engineering Fair (ISEF), or other designated science fairs, are eligible to compete. For more information about ISEF contact Science Service at [www.sciserv.org](http://www.sciserv.org) or call (202) 785-2255. Science fairs not affiliated with ISEF, email [SJWP@wef.org](mailto:SJWP@wef.org) to register.

**State Competition -  
Deadline April 3, 2006**

To be eligible for the state competition students must register on-line and electronically submit their research (no specific paper guidelines) by April 3, 2006. (Teams of up to three students may enter, however only one student representative is guaranteed sponsorship to attend the national competition.)

Based on the papers, or personal interviews at designated science fairs, WEF member associations will identify the best water-related science project in their state. Most state winners will be

announced May 1, 2006. Please check the website to determine deadlines for particular states.

WEF member associations sponsor the students, and their teachers' travel, to attend the national competition. They may also offer other special awards and incentives.

**U.S. National Competition  
June 22-24, 2006, in Atlanta, GA**

Prior to the competition, state SJWP winners must modify their written research paper to meet SJWP guidelines, and submit it electronically, no later than May 26, 2006. To be eligible state winners must attend the on-site competition in Atlanta, Georgia, June 22-24, 2006. In Atlanta, students will display and present their project to a panel of distinguished WEF judges. They will participate in a three-day, expense paid, social and educational program culminating in an awards program that is hosted by the Georgia Association of Water Professionals.

If you have questions, please email [SJWP@wef.org](mailto:SJWP@wef.org) or call 703-684-2487.

### Criteria

- Contestants must be in high school (grades 9-12), and no more than 19 years old.
- The SJWP is open to projects aimed at improving the quality of life through improvement of water quality, water resources management, water protection or water and wastewater treatment.
- The projects will be assessed on the basis of relevance of the project: on the originality, methodology, and approach used; and on subject matter knowledge, ingenuity, and practical skills of the candidate.
- The competition is open to theoretical and applied science-based projects as well as those focused on solving community water problems. The scope may be on local, regional, national, or global topics.
- It is essential that all projects use a research oriented approach, i.e. based on scientifically accepted methodologies for experimentation, monitoring, and reporting the results, including statistical analyses.