

- Good Morning America
- World News
- 20/20
- Primetime
- Nightline
- This Week
- ABC News Now
- CAUGHT

- Home
- News Summary
- World
- U.S.

Technology & Science

[Home](#) > [Technology & Science](#)

Networking the Hudson River

The Hudson could become the world's largest environmental-monitoring system.



A view along the Hudson River where a former General Electric transmitter and capacitor factory discharged cancer linked polychlorinated biphenyls, or PCBs, on July 31, 2007 in Hudson Falls, New York. Over a 30-year period until 1976 more than 590 tons of PCBs were released into the river from two GE plants (Hudson Falls and Fort Edward) that used the heat resistant greasy yellowish goo to insulate electrical transformers and capacitors. (Getty Images)

By **Brittany Sauser**
Aug. 29



IBM and the Beacon Institute, a nonprofit scientific-research organization in Beacon, NY, have announced a collaboration with several other research institutions to create an environmental-monitoring system for New York's Hudson River. Their plan is to turn all 315 miles of the river into a distributed network of sensors that will collect biological, physical, and chemical information and transmit it to a central location, where it will be analyzed by IBM's new data acquisition and analysis system. According to John Cronin, CEO of the Beacon Institute, the project is now in its "design phase," which should be complete within a year and a half to two years.

Font Size

A A A

E-mail

Print

Share

[Top Technology & Science stories](#)

The network's sensors will be deployed in a variety of ways. Some

[Apple Seen Revamping](#)

will be mounted on a new robotic

Talk Back

- Tell us what you think
- Add new facts
- Talk straight to the newsmakers

Comment & Contribute

WHAT OTHERS ARE SAYING

Discuss & Debate

Discuss this topic with the ABC News Community

[Read All](#)

Join the Conversation on Technology

Post Video



Connect with Newsmakers



Capture video of a news event? Upload it now.

Most Viewed

Audience Favorites

[View All](#)

- Divorce Case Turns Deadly
- Craig's Remarks Slammed by

iPod Line

- Fairyland' Spider Web Blankets Texas Park
- Chimps and People Use Similar Gestures

Related Topics

- John Cronin
- Sandra Nierzwicki-Bauer
- Rensselaer Polytechnic Institute
- International Business Machines Corporation | IBM
- Intel Corp | INTC

underwater vehicle developed by Rensselaer Polytechnic Institute (RPI) and the Woods Hole Oceanographic Institute, both collaborators on the project; the vehicle will be powered by solar cells and can operate either autonomously or under human remote control. Other sensors will be suspended from buoys or fixed in place along the riverbed.

"In terms of having an integrated network of sensors, and given the magnitude of it for the Hudson River,

this project is without a doubt a huge advancement and on a much larger scale than anything that has been done before," says Sandra Nierzwicki-Bauer, director of the Darrin Fresh Water Institute at RPI and a member of the science-research committee at the Beacon Institute.

The scale of the network and the variety of its sensors will demand a massive new data-analysis system, which IBM will provide. Comprising both distributed-processing hardware and analytical software, the system is designed to take heterogeneous data from a variety of sources and make sense of it in real time. The software learns to recognize data patterns and trends and prioritizes useful data. If some data stream begins to exhibit even minor variations, the system automatically redirects resources toward it. The system will also be equipped with IBM's visualization technologies; fed with mapping data, they can create a virtual model of the river and simulate its ecosystem in real time.

Networking the Hudson River
123Next

[Comment on This Story](#)

Republicans

- VIDEO: Deadly Divorce
- VIDEO: Meet the Cheapest Family
- 'Dancing Stars': Meet the New Cast
- PHOTOS: The Lohans' War of Words

[Feedback](#)|[Wireless](#)|[E-mails & News Alerts](#)|[Message Boards](#)|[RSS Headlines](#)|[Podcasts](#)|[ABC News Store](#)

[Contact Us](#)|[ABC.com](#)|[Site Map](#)|[Advertising Info](#)|[Terms of Use](#)|[Privacy Policy](#)|[Your California Privacy Rights](#)

External links are provided for reference purposes. ABC News is not responsible for the content of external internet sites.

Copyright © 2007 ABCNews Internet Ventures