



January 7, 2003

Dear Peconic River Working Group:

This letter recalls some highlights from our December 04 meeting.

HIGHLIGHTS FROM OUR DECEMBER 04, 2002 MEETING

Present: Tom Talbot, Bob Conklin, Nick Gibbons, Jim Lister, Ken White, Jen Clodius, John Carter, Lloyd Nelson, William Medeiros, Kevin Shaw, Terry Sullivan, Doug Warren, Siva Kumar, Andy Rapiejko, Keith Grigoletto.

Ken White, Community Relations, welcomed the working group and called attention to the original charter of the working group. He asked the members if it still served their needs and requested that before the next meeting members review the charter to see if it is still appropriate or if modifications should be considered. To line up our path forward, Ken noted that the early input process would soon begin followed by the public comment period.

Next, three presentations were delivered to update the working group.

The first presentation was delivered by Kevin Shaw. He covered the preliminary results of six months of post-restoration monitoring of the wetlands associated with the Area D pilot study.

- Among the key observations, Kevin noted that the survivability of the new wetland plants exceeded the recommendation of the New York State Department of Environmental Conservation. Herbaceous planting plus seed planting gave us 100% coverage in the first season thereby helping to reduce the likelihood of invasive species.
- Another component of the study was measuring plant height. Here again, significant growth was observed, particularly with the soft rushes.
- Hydrology, a third component, influences species composition and planting. The saturated soil in July provided good support for colonization. Bur reed, a local wetland species found upstream and downstream of Area D, emerged on its own, probably from seed in the remaining sediment.
- Some of the plants, known as volunteer species, were introduced through airborne transmission or through seeds in the topsoil that had been used as a clean fill. Upland plant species that were considered undesirable were removed through weeding.
- The wetland monitoring report will be made available to working group members upon request after it is issued to the regulators.
- One of the working-group members questioned whether the coconut mats would be used in future wetland restoration areas. Coconut mats were used primarily for erosion control, a condition of minimal concern to Area D. The mats probably would only be used where appropriate for erosion control or possibly seed protection. Other questions focused on the duration for weeding and whether a similar re-vegetation plan would be pursued next spring. The weeding required approximately two person-days. Further plans for re-vegetation will be developed based upon the final remedy and will use the information gained from the pilot studies to help guide the planning.

Skip Medeiros, Group Manager for Peconic River cleanup, next introduced Terry Sullivan. Terry is providing assistance to the project team by working on evaluations about the Peconic River fish habitat, mercury methylation and fish productivity for the upstream stretches of the river. Terry delivered the second presentation. He gave an overview of fish biomass study undertaken by Cornell University.

- Researchers from the Cornell University Fish and Wildlife Research Unit have characterized the Peconic according to the categories of pool, glide, and run. One objective of the researchers was to predict the number, species, and size distribution at three different water levels in the Peconic.
- Terry noted that researchers identified rivers that were similar to the Peconic and that had available fish data. The Peconic is classified as an Atlantic coastal stream. The rivers, Ipswich and Cold Spring Brook (MA), and Folwix Brook and Hunts Brook (CT), were found to be comparable in many aspects.
- Focusing on the stretch of river between the BNL Sewage Treatment Plant and Shultz Road, the Cornell University researchers will examine the fish-producing potential with regard to number, distribution, and weight of fish that could reasonably exist under varying water level conditions.

As the third presentation, Skip spoke about the phytoextraction screening summary that was conducted based on plant and sediment samples taken last year.

- In determining whether phytoextraction was a viable cleanup technology, the project team used the data to model how many harvests would be required of various plants to reduce contaminant levels.
- The contamination absorbed by the above-ground portion of the plants was considered most significant because accumulation and removal of below-ground portions of the plants would equate to excavation.
- A report on the findings of this evaluation will soon go to the regulators and be shared with community members. Among the findings:
 - Not all contaminants of concern were absorbed by the plants and for those contaminants that were absorbed, decades or even centuries would be required to reduce the concentrations by one half.
 - For example, Skip cited that the native plant, cattail - the best equipped native plant for removing mercury - would require nearly 4,000 harvests to reduce the contaminant level by one half.
- An earlier recommendation from one of the working-group members was followed in obtaining a peer review of the phytoextraction study. The Regulatory Science Institute based in Maryland provided the peer review committee. Its members consisted of industry and academic professionals. The peer review committee reviewed the report and information as it would a typical science research effort. As expected, this led to some criticisms since the project was only intended as a screening process to see if further work was warranted. More importantly, the peer review pointed out that cleanup of the metals by plants existing in the Peconic River was not likely to be achievable. They also provided additional recommendations for further research such as the use of chelating agents, introduction of engineered and non-native plants, and moisture controls. These issues have been considered with previous technologies, or in prior discussions with community members and are inappropriate for use in the Peconic River.
- As a result of the collective studies, the remarks from the peer review, and input from the community, the U.S. DOE and the Laboratory no longer intend to consider phytoremediation as a viable cleanup technology for Peconic River sediment.

Next, Skip gave a status on other regulatory documents out for review:

- He acknowledged the working group as an indirect, though significant contributor of the Risk Assessment. He noted that a couple of issues are still being reviewed with the various agencies

and once they are resolved, the project team will make the Risk Assessment available to the community members.

- Regarding the Feasibility Study and Proposed Cleanup Plan, the project team is currently receiving initial comments from the regulatory agencies and will soon begin sharing the information with community members.
- One of the working-group members asked about the status of the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) study that was discussed at the last working group meeting. Lloyd Nelson, representing the U.S. Department of Energy, spoke on the subject saying that CRESP has done work at a number of DOE complexes; CRESP looked at how the Risk Assessment process was used at the Laboratory to better understand how people conduct risk assessments. The full scope of their activities relative to the Peconic River is still being defined.

As a closing thought, Skip and Ken asked the working group to consider whether the methodology of the Laboratory in developing cleanup plan alternatives for specified areas of Peconic River sediment seemed appropriate to the working group. Further, Ken noted that discussions of the working group have been leading toward the early input roundtables at which proposed cleanup plans will be discussed among a broader audience.

OUR NEXT STANDING MEETING

There was discussion of holding our next meeting on January 7, 2003. With the holidays, little has changed since our December meeting. Accordingly, we will plan to hold our next meeting at the regularly scheduled date of January 28, 2003. We hope that between now and that meeting we will begin forwarding information to you to help facilitate discussions with the project team. At present, it looks like the early input roundtables will be deferred into the February time frame. Our next meeting of the Peconic River Working Group will take place on Tuesday, January 28 from 6:30-8:30 pm. On the 28th, we will meet in our new preferred meeting place, the Building 51 Conference Room. As you pass through the front gate, make a left turn at the traffic light; then make a second left turn at the second traffic light. Building 51 is the last building on the right.

PRELIMINARY AGENDA ITEMS FOR THE NEXT MEETING

Our tentative agenda includes the following:

- Fish biomass study
- Phytoremediation Report
- Risk Assessment
- Detailed overview of the Proposed Remedial Action Plan
- Set tentative date and agenda for next meeting

VISIT YOUR WEBSITE

The Peconic River Working Group Website can be accessed over the Internet at:

<http://www.bnl.gov/erd/peconic/WorkingGroup/peconicgroup.html>

Thank you for your continued interest and participation in the Peconic River cleanup project. We look forward to seeing you on the 28th.

Keith Grigoletto

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