Community Advisory Group (CAG) Meeting
Hudson River PCBs Superfund Site
Meeting Summary
Thursday December 5, 2013
1:00 PM - 3:00 PM

Saratoga State Park
Saratoga Springs, NY

CAG Members and Alternates Attending: Rich Elder, Manna Jo Greene, Abigail Jones, Roland Mann, David Mathis, Althea Mullarkey, Andrew Squire, Lois Squire, Julie Stokes.

CAG Liaisons Attending: Danielle Adams (Ecology & Environment), John Callaghan (NYS Canal Corps), John Davis (NYSOAG), Kevin Farrar (NYSDEC), David King (USEPA), Gary Klawinski (USEPA), Tim Kruppenbacher (General Electric Company), Joe Moloughney (NYS Canal Corp), Deanna Ripstein (NYSDOH), Larisa Romanowski (USEPA).

Others Attending: Sharon Burkes (NYS), Margaret Byrne (Hudson River Natural Resource Trustees), Michael Cheplowitz (Ecology and Environment), Joe Finan (Saratoga NHP), Kathryn Jahn (Hudson River Natural Resource Trustees), Regina Keenan (NYSDOH), Jamie Munks (Post-Star), Brian Nearing (Albany Times Union), Ashley Pastor (Clearwater), Paul Post (Saratogian), Audrey Van Genechten (NYSDOH).

Facilitators: Patrick Field, Eric Roberts

Members Absent: David Adams, Cecil Corbin-Mark, Laura DeGaetano, Darlene DeVoe, Richard Fuller, Mark Fitzsimmons, Richard Fuller, Brian Gilchrist, Robert Goldman, Robert Goldstein, Gil Hawkins, Christine Hoffer, Jeffrey Kellog, Richard Kidwell, Edward Kinowski, Bill Koebbman, Aaron Mair, Merrilyn Pulver-Moulthrop, Thomas Richardson, Sharon Ruggi.

Next Meeting: The next meeting will be scheduled to take place prior to the start of 2014 dredging.

Action Items:
- Administrative team - plan the next CAG meeting.

Welcome, Introductions, Review September 2013 Meeting Summary

The facilitators welcomed everyone to the meeting and reviewed the agenda. The CAG approved the draft September meeting summary with the revisions noted by the facilitators. All CAG handouts and presentation slides are available within one week of CAG meetings on the project website: http://www.hudsoncag.ene.com/documents.htm.

Project Update: Review of 2013 Dredging Season and Plan for 2014

Tim Kruppenbacher, General Electric, presented on 2013 dredging work. Key points from his presentation included:

Schedule, Scope, and General Update – 2013 dredging occurred from April 29 to November 6. More than 628,000 cubic yards, or approximately 100 acres, of sediment were removed in 28 Certification Units (CUs) including Thompson Island Pool, the area between Locks 5 and 6, the area south of Schuylerville, and the Green Island/Schaghticoke area. Twenty-six of the 28 CUs were fully completed. Backfilling was ongoing and expected to be completed by mid-December. GE backfilled or capped 127 acres in

2013. This includes portions of west Griffin Island that were dredged in 2012. Overall total capping percentage for the project is 6.09%, which is below the total allowable 11%. Total capping in 2012 was approximately 4%. GE also completed the 2013 downstream deposition study.

Habitat Reconstruction – GE has been replanting habitat for three years. In 2013, GE planted 10.5 acres of submerged aquatic vegetation (SAV) in 12 CUs, which they had harvested from the feeder canal and had purchased from the NYS Canal Corp. Planting in CU 10, which was not planted in 2012 due to the backfill operation, was completed, and planting was initiated in the CUs near west Griffin Island. GE planned to seed seven acres of wild rice, a riverine fringe wetland (RFW) plant by the end of 2013. GE's habitat design for 2013 dredge areas has been submitted to EPA for review. Project plans specify frequency of monitoring and density of plants to be attained. GE reviews the caps one year after placement, then at five year intervals, with additional monitoring completed based on the frequency of flood events. GE submits cap monitoring reports to EPA annually.

Performance and Quality of Life Standards – There were no exceedances of the 500 ppt water quality standard. Initial samples showed total PCBs rose above 500 ppt on two non-consecutive days in June at the Stillwater monitoring station, but a re-sample did not confirm either exceedance. There were no exceedances of the Tri+ PCB daily net load standard. Regarding air quality, 97.5% of 2,500 samples were below the standard. The remaining 2.5% was forty-one samples above the standard in the river and 21 samples above the standard at the processing facility. Regarding noise, odor, and light, two one-hour noise exceedances of the residential standard were reported at a home close to a CU. Operations were adjusted after the exceedances and the remaining dredging was completed during daytime hours. GE did continuous outreach to those neighborhoods most affected by dredging along the river and near the processing facility. GE began outreach in March to those near the landlocked area to explain why that area was being skipped, then returned in June with door-to-door updates to describe discussions with EPA and the approach for dredging and backfilling. GE will be holding a public meeting in the coming weeks. GE received 54 complaints over the course of the 2013 dredging season (versus 65 in 2012); half of the complaints were related to noise. Not all of the complaints were project-related. Other common complaints included vessel speed or wake concerns.

Processing – GE unloaded 1,127 barges, completed 9,124 filter press drops, and shipped more than 662,000 tons of material offsite on 66 trains. 86% of the dredged sediment required shipment to Clean Harbors, a TSCA-approved landfill in Waynoka, Oklahoma, and 14% were shipped to a non-TSCA landfill in New Lexington, Ohio. The high number of filter press drops is due to the increasing presence of fine clay and silt particles in the lower reaches of the river and because dredging occurred near shorelines where the fine particles tend to settle. More than 264 million gallons of water were treated during the season.

Off Season Activities - GE has begun its off-season activities, including cleaning the processing site, doing maintenance inspections and demobilizing and storing equipment for the winter, and updating documents such as the Remedial Action Work Plan, the 2014 dredge design documents, and the Community Health and Safety Plan (CHASP).

2014 Dredge Season - GE anticipates resuming operations south of Schuylerville on May 1, 2014, pending weather. GE is evaluating CU 60 and how to work with this area as well as in the landlocked area between the Thompson Island Dam and the Fort Miller Dam. GE anticipates completing all 440 acres of the Phase 2 project area in the next three years if all goes well. Approximately 310 acres have been dredged to date.

CAG members had the following questions and comments after General Electric's update. Responses from Mr. Kruppenbacher or others are *italicized*:

- Overall Project Accomplishments – Several CAG members congratulated GE for keeping exceedances low and for a job largely well done. One noted the skill with which project staff move the barges through tight locks.
- Performance Standards and Backfilling – One CAG member noted the importance of dredging with care during high flows, when one of the exceedances occurred. Another shared complaints he had heard of fast boats and about backfilling, and noted that fishermen are concerned about the water chestnuts taking root in shallow waters. Just north of Lock 5 is an area of particular concern, which the member was told was silted in and GE was placing rock material. He suggested that GE could leave the dredging depth in some places to reduce water chestnuts. *An EPA representative responded that clean material must be put down (as backfill) in certain places and that designated habitat areas get restored. Some capping was done near Lock 5 and some areas were filled to a lower elevation than the elevation that existed prior to dredging to make better bass habitat near west Griffin Island. Some bigger rock piles were also placed for habitat to make for better fish habitat.*
- Sheens – A CAG member noted that she saw an oil sheen on the water on one occasion.
- Routing and Traffic – Will GE use West River Road or Route 32. *This is to be determined in early 2014 based on discussions with EPA.* A CAG member noted that it would be nice to see fewer trucks on Route 4.
- Habitat Replacement – Someone noted that the Feeder Canal Alliance said that the use of wild celery from the feeder canal made a substantial difference in the canal itself, and that the Alliance is pleased about GE's use of local resources.

Natural Resources Damage Assessment (NRDA) Update

Kathryn Jahn and Margaret Byrne of U.S. Fish and Wildlife Service (FWS) presented on the NRDA process. In addition to the US Department of the Interior (DOI) (represented by FWS), the Department of Commerce (represented by the National Oceanic and Atmospheric Administration (NOAA)) and New York State (NYS) are the other trustees. The following is a summary of their main points.

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, a.k.a Superfund), Congress made polluters responsible for cleaning up substances to protect against further harm to human health and the environment. The EPA conducts remediation of Superfund sites under CERCLA. Related, but separate, is the NRDA process to assess injuries to natural resources, then replace or restore those natural resources that have been adversely affected by the contamination and/or by the remediation of that contamination.

DOI regulations describe the NRDA process and define terms such as "injury" or "damage." Injury can be defined in a number of ways, including: exceedances of state and federal standards or criteria for natural resources (such as the existence of fish consumption advisories that are an injury); biological resource injuries such as death, disease, or reproductive problems in birds, fish, mammals or other wildlife; navigational service loss; remedy caused injuries (how remediation adversely impacts the resources); and pathway injuries that occur when a natural resource contains concentrations of a hazardous substance sufficient to cause injury to another natural resource. To date, the Trustees have published injury determination reports for three categories of the Hudson River's Natural Resources: the fishery, surface water, and waterfowl. Other injury determinations are in progress and include studies to address injury to mink and to birds.

The Hudson River Trustees have already started natural resource damage assessment work in the Hudson River. The complicated task of injury assessment began in the 1990s. This is an iterative process guided by the best available scientific literature to determine the nature, scope and magnitude of the injuries, and the extent to which remedial actions will return the natural resources to "baseline," the condition the resources would have been absent the PCB contamination. In 2002, the Hudson River Trustees published

a Natural Resource Damage Assessment Plan for the Hudson River. Now underway, the assessment determines the magnitude of injuries, but the full extent of injury may not be known until after the project clean up is complete.

Damage claims compensate for the cost of restoration, loss of use of natural resources by the public, and money spent to assess injuries to natural resources. The Trustees resolve damage claims through settlement or litigation; most claims are settled without lawsuits. After resolving the claim, the Trustees will develop a restoration plan and implement restoration projects (either by spending monetary damages, or by overseeing restoration conducted by the responsible party). The Trustees monitor restoration projects to ensure their long-term success and effectiveness.

Restrictions in CERCLA stipulate when the Trustees can file a claim. They cannot file a claim until the remedy is determined, after which they have three years from completion of the remedy to file. CAG members asked whether navigation dredging could be settled now while other portions are left for litigation. Ms. Jahn said it could pending the decision by the responsible party to talk with the Trustees about their liabilities.

The Trustees recently issued several publications related to injury assessment:

- PCB Contamination of the Hudson River Ecosystem (January 2013): This report synthesizes data to 2008 and documents widespread PCB contamination in the Hudson River ecosystem.
- A restoration planning fact sheet: Publication of List of Restoration Project Proposals Submitted by the Public (September 2013).
- Two Mink Injury publications from January 2013 that provide study results of mink fed a diet containing PCB-contaminated fish from the Hudson River. The results show adverse effects on reproduction and development.
- Upper Hudson Freshwater Mussel Restoration Planning Pilot Study Fact Sheet (September 2013): This study relates to remedial injury (injuries related dredging) of mussel beds and mussel habitat, which are not addressed as part of the proposed remedy. The pilot study will inform restoration planning.

A Report of Assessment will be produced at a later date to summarize the entire assessment.

Restoration planning includes several steps, some of which cannot be completed until the injury assessment is complete. Generally, the steps are to identify categories for projects; develop restoration ideas; solicit ideas from the public; scale the restoration; review and select preferred options; then develop and implement the restoration plan. These plans, in draft, will be open to public comment. Everyone is welcome to continue submitting restoration project proposal ideas or to update projects already submitted. Detailed execution plans are not required at this point and the proposer is not required to execute the project. Public agencies may submit project ideas separate from the public process.

Project selection criteria include: a clear link to the injury; legality; efficacy; feasibility; cost-effectiveness; ecological leverage or the ability to achieve multiple ecological goals; and a nexus to existing plans and projects. Projects that might be a good fit in this case include: dam removal or fish passage; wetland or floodplain restoration; creation of grasslands; public access to projects; ground water protection; restoration dredging of sediments not slated for recovery; or navigational dredging. The number of people and communities collaborating on a project could factor into the decision about whether to select a project, but so will other criteria. Restoration will be considered in the Lower Hudson River as well as the Upper Hudson River, and their watersheds, because natural resource injuries have occurred throughout the River.

When the dredging is completed, the points of contact at EPA and NRDA will remain the same and the Trustees will be able to more fully measure remedial injuries such as those resulting from habitat

reconstruction issues, interim loss of services in areas affected by dredging, the loss of freshwater mussels, and other remedy-caused injuries. Damages from injuries caused by the remedy can be recovered by the Trustees and used for restoration.

The Trustees' next steps are to complete the injury assessment and to lay the groundwork for draft restoration planning. Members of the public, including CAG members, are invited to comment on draft study plans, attend public meetings, propose restoration project ideas, comment on draft restoration planning documents, and review the documents already produced by the Trustees.

CAG members had an extensive discussion with the representatives from the NRDA Trustees. The themes of this discussion are captured here. Responses from FWS or others are *italicized*.

- CAG member hopes and recommendations for the NRDA process and remediation include:
    - A clear timetable for the steps in the NRDA process so it doesn't drag. *FWS: There is currently no timetable for publication of the Report of Assessment, but the Trustees' goal is to implement restoration as soon as possible.*
    - A substantial focus on completing navigational dredging, as many communities and stakeholder groups feel its lack is one of the greatest harms of PCB contamination to the region. *A member of the audience said that several proposals addressing navigational dredging have been submitted, but none of them are comprehensive.*
    - Projects that attempt to reestablish mink. *Some of the proposed shoreline restoration projects would help mink.*
    - A process that can move forward including floodplain projects and not be delayed by the fact that the floodplain RI/FS is still underway and the location of PCBs in the floodplain and how they will be remedied is unknown.
    - A CAG-specific opportunity to discuss proposed projects and give feedback on proposed projects and sequencing. *FWS: The Trustees value the public's involvement and input.*
    - Strong GE cooperation. *FWS: The Federal Trustees recommended that General Electric expand the dredging effort to remove additional PCB-contaminated sediments, and provided suggestions to improve in-river habitat to reduce injury. These recommendations to GE are part of the Trustees' responsibility to protect our natural resources and provide technical input to the EPA.*
    - Integration of the NRDA restoration process with the clean up (rather than delaying NRDA work until the dredging is complete). *FWS*: *It can be beneficial for responsible parties to address their NRDA liabilities in coordination with remediation. Integration like this occurs at some Superfund sites (example: Batavia Landfill in NY).*
    - Using all available funds for restoration.
    - Adding rising waters and flooding of Hudson-cities to the list of criteria. *FWS: Climate change would be considered in restoration planning.*
- CAG members also asked
    - Whether studies of minks and mussels identified a distinction between upper and lower rivers. *FWS: Most mink and avian injury assessment work is currently focused on the upper portion of the river.*
    - Whether NRDA representatives could present the proposed projects to the CAG so CAG members can learn about them, help identify gaps, and discuss project sequencing. *FWS: We welcome the continued involvement of the CAG in the restoration planning process.*
    - Whether NRDA Trustees execute the selected projects themselves. *FWS: The Trustees determine how the projects will happen, including hiring contractors and working with sponsors when necessary on a case-by-case basis. The Trustees have a number of tools to implement projects and select the most appropriate means to get work done when it is appropriate to do so.*
    - For technical support or grants for communities and stakeholders that would enable them to effectively review and give feedback on proposed projects.

At the end of the discussion, a CAG member suggested that those communities and stakeholder groups along the river who are interested in the NRDA should work together to develop and or propose projects to execute, possibly starting the discussion in the context of the Hudson-Hoosic partnership.

Brief Updates and CAG Business

Hudson-Hoosic Partnership – Julie Stokes described the on-going work of the Hudson-Hoosic Partnership, which is scheduled to meet again at the end of January. The Partnership is developing a map of potential projects and wants feedback.

Technical Assistance Grant (TAG) – Manna Jo Greene provided a brief update on the TAG and asked CAG members notify her of any concerns with the work to date under that contract and with suggestions of other topics to be addressed. One member asked for a review of the downstream deposition study.

Speed of Dredging - A member noted that many environmental groups, a mayor and the Saratoga Chamber published a press release on the pace of the cleanup, noting that GE is getting out of the water earlier, which is great news but also illustrates that GE has the capacity and capability to address the NRDA concerns the CAG has discussed. The member urged GE to meet with the Trustees to talk about settlements, citing the importance of seeing GE's willingness to do the job right.

Future CAG Agenda Topics – CAG members asked to discuss the following at their next meeting, (a) an update on the status and work on the floodplains including timing, the administrative process, data collected to date, (b) an update on the 2014 dredging plan, and (c) a presentation on the Hudson-Hoosic's projects proposed along the Waterford to Whitehall portions of the river.

The meeting adjourned at approximately 3:30 pm.