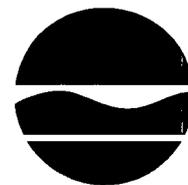


**From:** "Timothy Rice" <tbrice@gw.dec.state.ny.us>  
**To:** "Gary Hinrichs" <ghinric@entergy.com>, "Joseph J. Adler" <jadler@entergy.com>, <PDonahu@entergy.com>, "Larry Wilson" <lrwilson@gw.dec.state.ny.us>, "Larry Skinner" <lxskinne@gw.dec.state.ny.us>, "Tony Forti" <ajf01@health.state.ny.us>, "Edward G. Horn" <egh01@health.state.ny.us>, "Robert P. Snyder" <rps02@health.state.ny.us>, "James Noggle" <JDN@nrc.gov>, "James Kottan" <JK@nrc.gov>, "John White" <JRW1@nrc.gov>  
**Date:** 02/22/2007 1:22:28 PM  
**Subject:** Draft summary 2/21 IP Fish conf call

Attached is the draft fish conf call summary for yesterdays meeting.  
Please provide any comments by COB Friday.  
Thanks,  
Tim

**CC:** "Alex Czuhanich" <agczuhan@gw.dec.state.ny.us>, "Barbara Youngberg" <bayoungb@gw.dec.state.ny.us>, "Edwin Dassatti" <eedassat@gw.dec.state.ny.us>, "Larry Rosenmann" <larosenm@gw.dec.state.ny.us>

B/44



**Summary of 2/21/07 Indian Point  
Hudson River Fish Sampling Conference Call**

**PARTICIPANTS**

<p><b><u>DEC</u></b> Tim Rice, Radiation Larry Skinner, Fish &amp; Wildlife</p> <p><b><u>DOH</u></b> Robert Snyder, Ed Horn, Steve Gavitt,</p> <p><b><u>NRC</u></b> John White, Branch Chief, Plant Support Branch No. 2 Jim Noggle, Senior Health Physicist Jim Kottan, Senior Health Physicist</p>	<p><b><u>Entergy</u></b> Jay Adler, Groundwater Project Pat Donahue, Groundwater Project Gary Hinrichs, Groundwater Project Dara Gray, Environmental Program</p> <p><b><u>Normandeau Associates</u></b> Mike Richie,</p>
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**BACKGROUND**

This call was a followup to one that took place on 1/31/07 regarding the need for a one-time enhancement of the routine IPEC REMP sampling program. The purpose of this enhanced program is to address questions about additional data needs raised by the 2006 REMP Sr-90 in fish results from the Hudson River. The basic agreement reached at the 1/31 call was to collect samples from an additional location further upstream to validate the IPEC control location, and to perform three-way splits of those samples by Entergy, NYS, and the NRC. The samples are to consist of an agreed upon set of species from each of three locations, all members of a species collected in a given section of the river to be composited as a single sample to be split three ways for edible portions and between the State and NRC for the bone and other non-edible portion. State representatives will observe as much of the sampling and initial sample preparation and sample splitting process as staff availability permit.

**DISCUSSION**

This call focused on five basic topics:

1. Confirming/finalizing the additional upstream sampling area. This area is being established for this enhanced sampling effort only and is not intended to be an addition to the routine REMP sampling for IPEC. The group agreed that the area of the river known as the Catskill Region in the Longitudinal River Survey program is far enough upriver to ensure that it can not be questioned as a non-impacted reference point. This section is between river miles 107 and 125 of the river, with IPEC being located approx. at river mile 40.

2. Reaching consensus on the list of fish and invertebrate species to be included in this enhanced sampling program. There were two goals that needed to be met in this selection process.

First was to ensure that the sampling met the REMP requirements for the plant and included species normally sampled by the REMP.

Second was to select species with characteristics that met the study needs. Those characteristics included:

- Have a reasonable expectation of being present at all three sampling areas.

- Have a non-transitory presence in that section of the river. That is, not being a migratory species that is only present in the areas of the river to be sampled for a short time span during migration. This focuses efforts on species most likely to have accumulated radionuclides present in that portion of the river. It also helps to ensure that the samples collected in each portion of the river are separate and distinct populations for comparison purposes.
- They are species caught for human consumption, either commercially or recreationally.

The species selected include:

- Striped Bass (Migratory, but of importance as a recreational fish species in the river.)
- White Perch
- American Eel
- Catfish (includes Channel and White Catfish and Bullhead)
- Pumpkin Seed
- Carp
- Blue Crab (Migratory, and not often present this early in the year, but will be included as a sample if caught due to commercial importance.)

3. Reach an agreement on how to handle instances where not all species are collected at all three sample areas. It was agreed that every reasonable effort will be made to collect all species at each sample area, and that it was reasonable to expect that this goal could be reached. However, it was acknowledged that nothing can be guaranteed when it comes to the content of a fish catch, and it is conceivable that not all desired samples will be collected. In instances where only enough edible portion sample mass is collected for a single lab's needs, it will go to Entergy to fulfill their REMF requirements. If only enough mass is available for two lab's needs, the State and NRC will make a decision at that point on which entity would analyze the second portion. If a species is collected only at one or two locations, it will still be analyzed.

4. Reach consensus on sample homogenization and splitting protocol. There was general consensus of a need to thoroughly homogenize all fish of a species collected from a sampling location or region prior to performing the sample split to minimize to the extent possible any variability in the 3-way split samples. There was considerable discussion on how the homogenization and splitting would occur and who would perform that function. It was agreed that the non-edible portion of each fish would be retained as a bagged, frozen sample and that all such samples would be turned over to the State for preparation and splitting with the NRC for analysis.

NRC expressed a concern that whoever performs the initial sample preparation needs to have a carefully developed protocol in place that is acceptable to all parties to minimize the potential for sample cross-contamination. Normandeau Associates routinely collects and fillets fish samples prior to sending them to Entergy or a lab. They do not routinely do sample homogenization. However this level of sample prep is also not routinely performed by Entergy's NEN lab. It was agreed that Entergy and Normandeau will develop a sample collection and preparation protocol for this enhanced sampling effort and share it with the agencies for review and comment. Additionally, the State biologists agreed to develop protocols for preparation and analysis of the non-edible portion of the fish carcass.

5. Plan for a conference call between the three labs to reach consensus on sample prep and analysis protocols in order to minimize potential variability between the three sets of results. It was agreed to schedule this call as soon as possible in order to detail lab needs for the Normandeau and Entergy staff developing the sample collection and preparation protocols. The goal was to hold this call either late this week or early next week.

In response to concerns expressed by Normandeau regarding a looming deadline to finalizing REMF program protocols, Entergy stated that they will consider this effort separately from the REMF and any sampling efforts or needed protocols will be supported as a separate effort, though the actual sampling will take place in conjunction with the routine REMF sample collection.