

TAPPAN ZEE BRIDGE/I-287  
ENVIRONMENTAL REVIEW

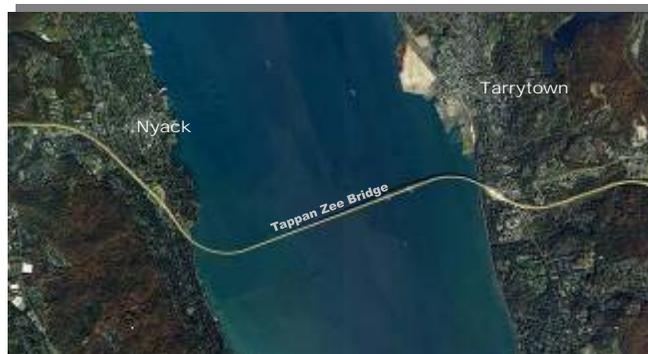
**New York State Department of Transportation  
Metropolitan Transportation Authority Metro-North Railroad  
New York State Thruway Authority**

**Meeting Minutes**

***Stakeholders' Advisory Working Group  
Joint Meeting of the  
Bridge and Environmental SAWGs  
Bridge SAWG 16  
Environmental SAWG 14***

***Tappan Zee Bridge/I-287 Corridor  
Environmental Review***

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**January 21, 2010**

<b>Attendance at Joint Bridge/Environmental Stakeholders’ Advisory Working Groups Meeting January 21, 2010 Bridge SAWG 16, Environmental SAWG 13</b>	
<b><u>Stakeholders’ Advisory Working Group Members</u></b>	
James Hartwick Gilbert Hawkins Robert Hintersteiner Milton Hoffman	Marilan Lund Jon Marshall John Messina Gregory Price Paul Richards
<b><u>Project Team Members</u></b>	
Kristine Edwards, NYSDOT Robert Laravie, NYSDOT Angel Medina, NYSTA Peter Casper, NYSTA Tom McGuinness, NYSTA Joe Pasanello, MNR	Mark Roche, Arup Helga Gregory-Chmielowski, Arup John Szeligowski, AECOM John Rollino, AECOM Rita Campon, Parsons George Paschalis, HSH

**INTRODUCTION**

The following pages outline the material presented at the joint meeting of the Bridge and Environmental Stakeholders’ Advisory Working Groups (SAWGs) focusing on bridge construction and potential ecological/environmental impacts to the Hudson River, such as the resuspension of river sediments, that could occur from construction activities. The summary of the presentation is followed by a record of discussions including the questions and answers that occurred throughout the meeting.

Robert Laravie, NYSDOT, welcomed all members to the meeting.

The presentation is broken down into seven parts:

- Part 1 Introduction
- Part 2 Bridge Options Development Status
- Part 3 Description of Bridge Construction Activities
- Part 4 Evaluation of Major Total Suspended Solids (TSS) Sources
- Part 5 Dispersion and Deposition Models
- Part 6 Identification of Ecological Impact Methodology
- Part 7 Summary of the Principal Elements of TSS Methodology

The venue: Warner Library, Tarrytown

**1. Slide Presentation**

**2. Comments, Questions and Answers included:**

C: Concerning construction activities: Any boat that is large enough to have a prop wash can have an impact. Tugs may cause significant resuspension.

C: Geologically, after dredging occurs, re-sedimentation will naturally occur.

C: In the footprint of bridge, fish tend to hang out in the areas with heavier sediment. They will go out onto the flats and sunbathe and root around for clams, etc. This is a wonderful illustration of the significance of the study.

Q: Painting occurred at the GM plant. Could the soil be contaminated from that operation?

A: There may be - and we may find it.

Q: Based on the graph (slide 32), won't you have scour in the main channel by construction vessels for this project?

A: In depths greater than 20 feet, field experiments have shown that vessels of the size we expect (e.g., tug boats) have markedly less impact at depths over 20 feet.

Q: Does the current commercial shipping in the river impact the river bottom?

A: Unknown; although, very large vessels (drafts greater than 24 feet, likely affect the bottom.

Q: Have stability studies been done of the armoring?

A: The armoring system will be designed so that it remains stable over the period of construction activity. We are working with our geotechnical engineering consultant Mueser -Rutledge on the specifics.

Q: How is this thing going to behave during construction and in the long run?

A: Once the dredging has occurred and the armor has been placed, there is not expected to be much sedimentation occurring due to continuing activity of work boats moving through the dredged basin. Essentially, solids that are naturally in the water column that would tend to settle in the basin will be prevented from doing so by the action of various work boats. After the bridge construction is completed, it is anticipated that the dredged basin will naturally fill in.

Q: We have never thought about the impact of the bridge over the long term. A geo-fabric / non-natural substance may cause environmental disruption. Try to think sustainably. How can we get the bridge in and protect the river in 10-15 years down the line? Habitats can be created. Elevations can be changed, developed, etc. Other projects have had to re-plant. Shouldn't that be part of this project?

A: The bridge design process will include sustainable considerations. Many of the suggestions you make will be addressed as possible mitigation measures.

Q: Will there ever be plans to remove the armoring -- what you put down?

A: We are still collaborating with the Cooperating Agencies on this matter. At this time, we don't believe there is a reason to remove it. There may be impacts associated with the removal – it may resuspend sediments. There may be benefits to leaving it in place. It may create a different kind of substrate.

**Slide 38**

Q: Where is the habitat of the Atlantic Tomcod?

A: Likely all over the river, but more so in the shallows.

C: There are 128 different fish species in the Hudson River.

Q: Do you have to put a trench from the staging area to the bridge?

A: Platforms are integral to the work. Adequate water depth is needed to allow access for boats, barges, and similar vessels.

Q: Are oysters safe to eat?

A: Oysters and scallops inhabit areas of higher water quality; it is unknown if there are any concerns regarding Hudson River oysters. In terms of pollution, the presence of oysters is a good indicator of clean waters. Historic oyster beds provide key information about pollution. It is worth noting that the beds are areas in which fish congregate to feed.

- C: Oysters are good indicators of clean waters. The Hudson has had large historic oyster beds and oyster reefs. These are areas where fish congregate to feed.
- Q: What happens in the middle of the construction process when a substantial Nor'easter occurs?  
A: It is anticipated that the basin would fill partially in, and would probably have to be re-dredged. It is also possible that all work would cease.
- Q: Whose job is it to inspect best management practices? What agency would be in charge?  
A: It is expected that an environmental compliance manager will be retained by the agency that contracts the construction. Also, a federally certified inspector may be required.
- C: It is likely that monitoring stations and systems will need to be set up to monitor construction activities to ensure compliance with the thresholds that will be established. This will likely be a condition of the permit required for construction.
- Q: I'm amazed by the description of the armor. Will the river bottom be compromised?  
A: Rock and perhaps sand will be employed to construct the armor layer. These clean materials will not comprise the river bottom. Once work is complete the river will tend to restore itself.
- Q: Where will you (project sponsors) construct a yard for materials storage, equipment, etc?  
A: Although plans for laydown areas have not yet been finalized, it is envisioned that there will be a need for the construction of temporary platforms.
- C: The Hudson River is a Heritage River – you (the project sponsors) do not want to get the locals' backs up. You do not want to get rumors going –especially those false ones. You need to keep the public informed.  
A: We have had a robust public outreach program. The minutes and contents of SAWG meetings such as this one are on the website.
- Q: What are the ducks in winter feeding on? SAV?  
A: It would depend on the species. It is likely that in winter, ducks are feeding on fish and benthic invertebrates (oysters, etc.)