



**Route 1 Tidal Restriction Removal Demonstration
Update Meeting
Wednesday, February 8, 2006**

Comments, Questions & Answers Following Presentation

Q. *Paula Ledgett:* How can clams age to be 20 years old buried in the mud with no exposure to air? Don't they need to be in inter-tidal conditions?

A. *Jon Kachmar, Sean McDermott:* Some clams, e.g. quahogs and razor clams, actually require continual water coverage. Clams also do not typically have a life span of more than a few years. Perhaps the clam beds are 20+ years old.

Q. *John Mason:* Do we have any ideas of what to expect [in the coming months] in terms of bird patterns, etc.?

A. *Jon K.:* There is a methodical way to observe birds [to determine exact changes] which involves establishing a circular area and closely observing bird patterns within that specific area. This is best done by an expert on birds who can identify species and activities. As for vegetation the current freshwater grass that is now there might gradually be replaced by *Spartina* (low marsh grass) that provides a good habitat for shore birds. "Ponded" water is more conducive to ducks so with the absence of deeper water, there may be fewer ducks at low tide.

Comment *Marty Rea.* Historically many geese do visit by swimming up the Creek. Has also spotted a Bald Eagle that she thinks has to do with open, flowing water. Other birds (Bonaparte Gulls) are following the moving water to that locale. Great Blue Heron also is more into the center of the flowing water and walking up the channel with the in-coming water, not just swimming or standing.

Q. *Jon Carter.* Anyone experiencing any smells?

A. *Audience.* No smells.

Comment *Sean M.:* Starting in the spring *spartina* will probably not creep too far into the mud flat.

Comment *Jon K.:* Salt marsh plants depend on/are affected by elevation.

Comment *John M.:* Was opposed to removal. He and wife, Wendy find “visual value” has actually increased much to their surprise. They are enjoying watching the changing of the tides. He is “almost ready” to say he’s been won over. May be changing is prior viewpoint by 180°. He hopes that more work is done at river bend and ponded area above Picott Road to encourage higher water levels and that rocks in the channel upstream from the culvert could be moved.

Comment *Paula L.:* Will try to get Don Kale (DEP) to drive over to give idea of whether DEP will support any modification on culverts or other structures.

Comment *Jon K., Sean M.:* Good to think about clearing obstacles to hydrology and flow. That was apparently impeded so it’s worth investigating rather than replacing culvert. DEP does have a permitting program that allows clearing impediments. Requires sponsorship by an agency so that a full permit is not then needed.

Q. *Marty R.:* Have any residents below the tidal restriction had observations?

A. *Paula L.:* Marilyn Ecker lives on the downstream side and says she hasn’t seen much change except for observing large numbers of Canada Geese which may have more to do with the recent warm weather. Others also have seen little change. (Paula email M. Landgarten, Robert’s Grill owner and asked him if they had seen anything unusual on the other side of Rt. One. He reported nothing but the astronomical high tides we had been having along with a storm event.)

Q. *Steve Hall:* Are there any plans to do another tidal curve study reflecting post-removal character?

A. *Phyllis Merikallio:* We didn’t plan or budget for one but we can, if we decide we need it, prepare another proposal.

Q. *Steve H.:* Are the high tides [in the impounded area] higher?

A. *Marty R.:* Yes. Has seen dramatic level changes, especially during super-high [astronomical plus] tides. But all tides are higher.

Comment *Sean M.:* Flow study chart shows that there was a clear delay in elevations indicating that there was a lag time before the in-coming tide was able to start into this portion of the creek. If the tidal flow meters were installed again, the four stations above the restriction would likely look more like that one downstream from Route 1 and show a greater variation (or height of the curves) of the more natural higher highs and lower lows.

Q. *Paula L.:* We’re having higher tides so salt water is getting farther into this area. Will there be more of a [plant] die-off? Will trees die?

A. *Jon K.:* How visible the die-off is remains to be seen. There may be a swapping of plant species as one dies and is replaced by another. Judging from present photos this may be less [visually imposing] than feared. Some trees may die that are now getting more salt water in their root systems, but not too sure that will happen.

Q. Stephen: What are the benchmarks that will be used to determine success [of the demonstration]?

A. Phyllis M.: That's what these meetings with stakeholders are meant to determine – now and in three future meetings.

Q. John M.: Why are the tides higher and lower?

A. Sean M.: More time=more water moving in both directions. If the normal tide has 6 hours to come in, it has that much more time to push all the way through. If it has only 2 hours, there's less volume of water reaching the area.

Comment John M.: He believes the water is now fresher and cleaner than it was before. Not necessarily observed it as such, but believes with the twice daily flushing it certainly must be.

Comment Phyllis M.: Next meeting will be in May 2006.