

## June 20, 2023 | STAC Subcommittee Kickoff

Attendees: Mark Nardi (Subcommittee Chair, STAC Member, USGS MD-DE-DC Water Science Center), Bart Wilson (Geomorphologist, FWS), Lesley Baggett (Environmental Consultant, AKRF), David Krantz (Oceanographer and Coastal Geologist, University of Toledo), Taylor Krolik (EPA R3 Standards and Coordination, Delaware State Representative), Natalie Motley (EPA), Meghan Noe Fellows (Director of Science and Restoration, CIB)

Not in attendance: Kelly Somers (EPA Region 3), Doug Janiec (STAC Vice Chair/Restoration Ecologist, Sovereign Consulting)

Center Staff: Marina Feeser

Follow-up to US Wind meeting; Mark sent email

Can we address all topics? Prioritize?

Largest Impact associated: Sediment and methods to lay the cable

Sediment:

- Completed sediment modeling might be too rudimentary

- Not inclusive of muck overburden, contaminants

Limited Real Estate:

- Is there room for everyone?

During Construction and Post Water Quality Monitoring

- Is there any plan?

EMF, Temperature changes

Laying the cable impacts

- Timing

- Barge - Dredging - Is this in regular permitting disposal process

Limit Cumulative Impacts

David: Second company cabling same route - with no space; can they be incentivized to cooperate - initially lay more transmission than they need - for both companies

Bart: Can regulators force them to work together

Trigger points with recolonization, mobilization, sediment transport pathways? Maybe small impacts each - 120m x 2 can be significant

Upper Indian River - much more sensitive - can have feedback on fringing marsh

How to move our concerns forward:

Informal conversations with regulators? National Marine Fisheries Service -

Dredged Material - Is Beneficial reuse an option? Maybe too fine grained, marsh creation?

Marsh enhancement - regulatory hurdles. Expecting this to be a large volume.

Does this change the tidal prism? Does this allow more saltier water to go further up Indian River. Or does the marshes increase erosion.

Model does not seem to account for this.

Not many watershed sources to account for this.

Related Priority: Remobilizing heavy metals - thickness of contaminated layer? Recommended to test: Bart Wilson's bioaccumulation study- start here [https://www.inlandbays.org/wp-content/documents/Burton\\_Island\\_Accumulation\\_Final%20Report.pdf](https://www.inlandbays.org/wp-content/documents/Burton_Island_Accumulation_Final%20Report.pdf); should also add Mercury - need to collect samples outside of channel as well - some of these contaminants might be everywhere

Design time frame - 30 years - did not seem to account for SLR. Cable depth/connection vault - will connection vault be underwater in 30 years? David/Mark not concerned about it. Seems more important for offshore resources

What are mitigation plans? ½ way up river - fluid mud is mobile - they just said it was going to move, but the hydro plow would self fix. - Can not find any reference to water quality monitoring during or after? Can not find reference to monitoring marshes - mitigation plan if it does happen? who's going to rebuild marshes? Could be very expensive to create new marsh in this area - Bart will contact Allison to determine current cost estimates

How to come up on Burton's Island; aboveground options? Could have more complexities - risk of collision with birds/bats.

Priority is the possible damage to the Indian river marshes . . . a very anthropogenically influenced area.

What is impact on the oyster farms? No one is producing - bit of a nursery in Indian River. Oysters protected in RB, sediment from trenching will dissipate before getting to the oysters.

Benthic plan - dormant; smaller amount of yoy fish - 60 cm x 4 - as a fraction of Indian River Bay - that is nothing. No way of trenching across a crab if it is hibernating. Blue crabs are buried deep. Likely more destruction by clam dredging.

EMF field research - dissipate quickly. Anticipating no effect. Macro invertebrates don't respond to 60 HZ AC. Need to Specifically address sharks? Dwayne Fox - expert; [Ocean Wind](#); [Empire Wind](#) Draft EIS Benthic Resources discussion; Finfish discussion: Chapter 3. Impact reducing factors.

Heat - Unlikely to be impactful, shallow bays already warm in summer; ask Tom McKenna - groundwater discharge temperature differential? What is scale of change? Massive amount of thermal capacity in groundwater. Is this more impactful in winter. AC cables generate higher amounts of heat.

Fisheries fish should be offshore at the time of dredging.

HSC's bury themselves offshore.

What is with the two cable routes? Northern one looked more susceptible to scour - what was the reasoning? Clams live in dynamic areas and repopulate easily.

Mussels epibenthic - shouldn't care; adapted to suspended sediment.

Priority Conversation- Sediment modeling and alternative routes at Burton's Island; avoid super mucky stuff? Maybe 1 mile? And Cumulative Impacts to multiple.

Empire Wind has sediment transport model in their COP - more publicly available.  
Modeling offshore completely different than within the Bay

At power plant, eastern end is spent coal pile; substations on west end; aboveground high tension lines west-east; coming ashore on eastern tip - would be minimally impactful at plant itself. A lot of infrastructure already very tall on site. Could also open up more real estate so it could fit multiple runs of cable.

Next Step: Ask the experts?

Contacts: Volunteer:  
Alison Rogerson  
Dwayne Fox  
Tom McKenna  
Wendy Walsh (USFWS)/David Bigger (BOEM)

Question:  
Cost of Mitigation Marshes  
EMF effects on sharks  
Temperature on Groundwater  
Overland Birds and Bats, RTE  
Overland other issues?  
(Sediment/traffic, moderately mature hardwood forest)  
Sediment modeling

Marjorie Freidrichs (VIMS)?  
Larry Sanford (UMCES)?

Schedule quick summary with Doug - to tap into his mind/experts.

Next Meeting July 18, 2-3:30