Cost-Benefit Analysis of Navigational Dredging in the Delaware and Hudson Estuaries

This presentation will provide an overview of an interdisciplinary research endeavor that investigates the physical, biological, and societal impacts of sediment transport in the Delaware and Hudson estuaries. This NSF funded work includes researchers from various disciplines representing both the natural and physical sciences. In particular, we have identified navigational dredging as a main driver of sediment transport in these estuaries. The social scientists on this project aim to identify ecosystem services that will be impacted (either directly or indirectly) under different navigational dredging scenarios. We aim to quantify the change in value of these ecosystem services under the different dredging scenarios, and compare these values to the benefits from increased seaborne trade that dredging allows. Although little hard data has yet been obtained, the various economic instruments to be employed will be outlined.

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