Watersheds, wetlands, and water quality. (S10-whigham092022-Oral)

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Abstract:

Wetlands are known to influence water quality but most wetlands and water quality studies have focused on one relatively few wetlands within watersheds that typically contain many wetlands. We have been studying wetlands and water quality issues from a slightly different context. The Nanticoke River watershed (Maryland and Delaware) is rich in wetlands and it has been identified as a bioreserve and a Last Great Place by the Nature Conservancy. The watershed is important because it harbors state and globally rare plant and animal species. At the same time, water quality problems have been recognized. We have been evaluating the conditions of nontidal wetlands at the scale of the entire watershed. In this paper we describe the approaches that we have been using to scale up from assessments of individual wetlands to the entire watershed. We also describe approaches that we have used to link wetland assessments with direct measurement of nitrogen cycling.

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