

EGU2020-10960

<https://doi.org/10.5194/egusphere-egu2020-10960>

EGU General Assembly 2020

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Coastal Hazards & Targeted Acquisitions: A Reasonable Shoreline Management Alternative

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Buyouts of vulnerable properties have become an increasingly popular tool for reducing future exposure in flood-prone communities across the U.S. However, proactive, targeted buyouts have not been common with oceanfront, investment properties despite the fact that these properties represent the “first line” of tropical storm exposure on the U.S. East and Gulf Coasts.

Our approach is to first examine the exposure of properties on North Topsail Beach, North Carolina to coastal hazards using a Vulnerability Assessment Protocol developed for examining infrastructure vulnerability in the National Park Service. The most exposed properties are identified and a coherent, contiguous group are selected for a fiscal analysis regarding a buyout's costs and impacts. The analysis of costs includes purchasing the properties, removal costs, and lost tax revenues. The quantifiable benefits include reduced expenditures for coastal protection, engineering design/permitting, and maintenance.

For North Topsail Beach, North Carolina, the costs (54.8 million USD with inflation) and benefits (\$57.6 million USD) represent a savings of at least 2.8 million USD over 30 years. We have used a very conservative approach to estimating the costs. We assume that owners will receive full, assessed value for their property and that all properties will be fully viable for 30 years (given the exposure to storms and hazards of the target area, this is highly unlikely even with coastal protection). Finally, we assume that the properties will appreciate in value over the time period, again, a generous assumption.

The fiscal analysis does not include many unquantifiable benefits from the proposed targeted acquisition. These include the transfer of amenity value to other properties, reduced emergency management costs for the municipality, reduced need for consulting engineering fees, improved beach access for all residents and renters, and return of a recreational beach that all residents and guests can enjoy.

The best argument for the proposal may be this: wouldn't it be nice if a municipality like NTB could stop spending all of their time, energy, administrative hours, and money on 7% of the tax base

(the at-risk properties examined in this report) and turn all of those resources loose on the 93% of the tax base that will be much more sustainable over the next 30 years? This proposal is a plan for strengthening the vast majority of the tax base for the long run.

Our goal for this series of reports is philosophical as much as practical. Invariably, buyout plans in oceanfront communities are viewed as too costly or impractical to be seriously considered. It is typical for the alternatives analysis in a storm protection EIS to dismiss the idea of targeted acquisitions in a paragraph or two. We hope that coastal communities will give more serious consideration to these buyouts as a beneficial management tool, and we hope that these case studies will spur meaningful discussions.