





# COMPLETED STUDIES:

- Topographic, Bathymetric & Biological Benchmark Surveys
- Phase 1 ESA
- Geophysical Survey of Parcels 1 and 2
- Geotechnical Assessment of Parcel 1
- Preliminary Engineering Assessment of existing piers and proposed breakwaters

Restoration Options Assessed				
Option	Type of restoration	Location	Acreage	Cost (million)
<b>Option A</b>				
	Restore wetlands	Parcels 1 and 2	12.3 acres	\$34
	Enhance wetlands	Parcel 2	3 acres	
<b>Option B</b>				
	Restore wetlands	Parcel 1	3 acres	\$9.8
	Enhance wetlands	Parcel 2	3 acres	
	Restore upland/riparian	Parcels 1 and 2	12.5 acres	
<b>Option C</b>				
	Enhance wetlands	Parcel 2	3 acres	\$3.3
	Restore upland/riparian	Parcels 1 and 2	12.5 acres	
<b>Option D</b>				
	Enhance wetlands	Parcel 2	3 acres	\$2.3
	Restore upland/riparian (50 feet Parcel 1)	Parcels 1 and 2	4 acres	

# Restoration Recommendations

Based on the results of the Feasibility Assessment, CRA recommended Option C:

1. Upland and riparian habitat improvements on Parcels 1 and 2
2. Enhancement of the unvegetated intertidal mud flats on Parcel 2
3. Public use enhancements





# Mitigation Credit Analysis

Based on these agency guidelines, Option C offers the following credits:

- 0.75 Wetland Enhancement Credit (3 acres / 1:4 Credit)
- 0.46 to 1.25 of Riparian Restoration Credits (12.5 acres at variable ratio between 1:10 and 27)
- Wetland Credit Values are market based; need to consider current and future demand for mitigation and negotiate **\$/credit value**.







# Next Steps for North Delaware Ecological Restoration

- Support Lardner's Point Park Construction (DRCC)
- Bridesburg Preliminary Design:
  - Deed restriction and access easement
  - funding strategy for final design and construction
- Define foot print of other projects:
  - Interface with East Coast Greenway trail design
  - Consider restoration prioritization scores
  - Consider linear feet and acreage of uplands, shoreline, and tidal restoration areas
  - Data collection and conceptual designs
- Funding Strategy:
  - Value of available credits/coordinate with mitigation interests
  - Federal appropriations (e.g. ACOE Programs)
  - Grants
  - NRDA



n	Min	Max	Avg	Total
44 parcels	0.03 acres	31.77 acres	3.59 acres	157.77 acres