

# The Assateague Island Beach Restoration Project

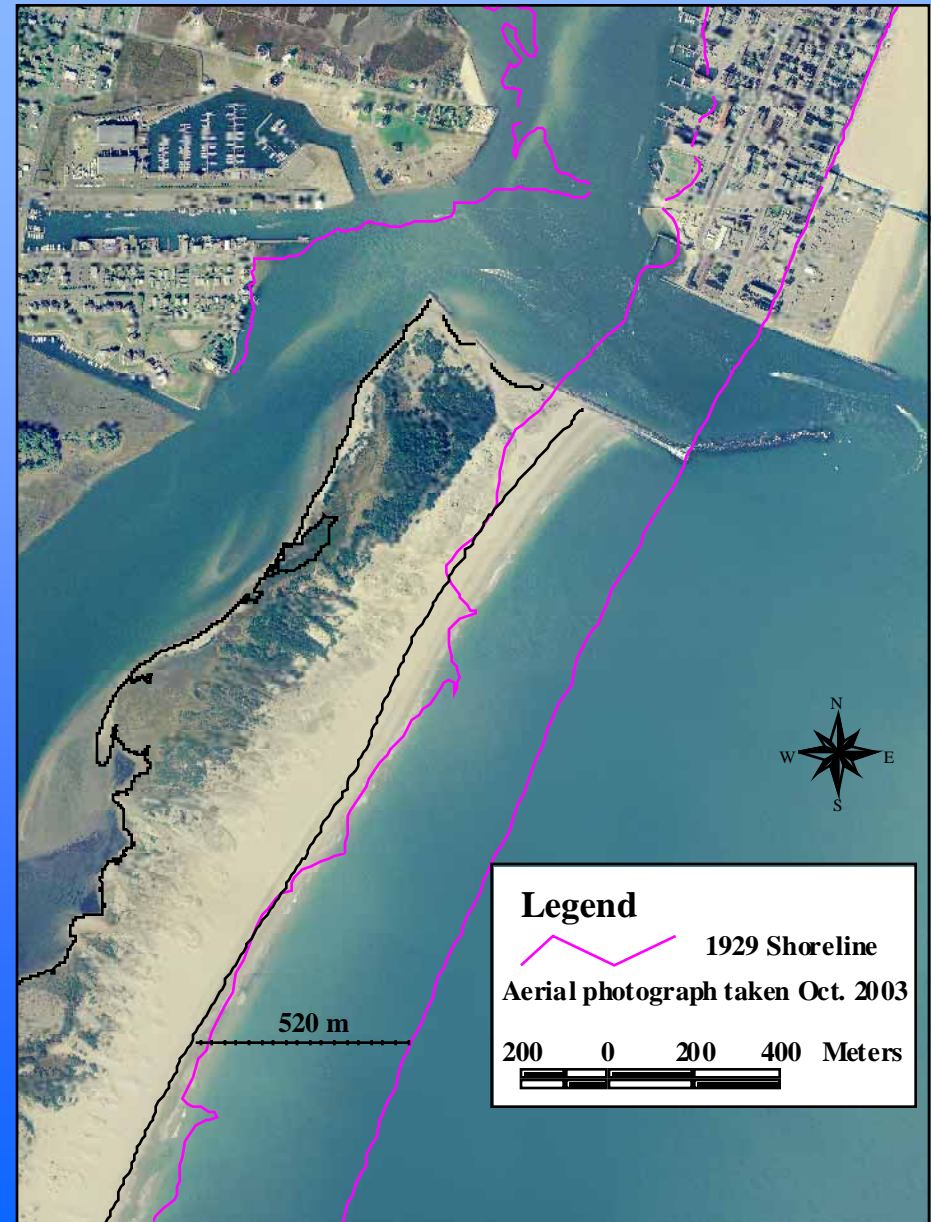
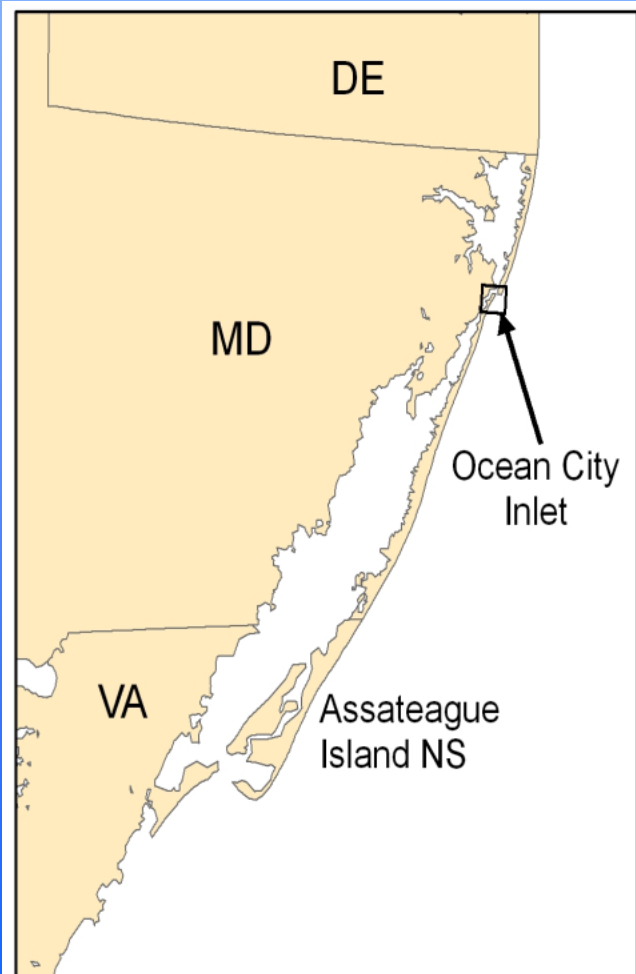


Jack Kumer

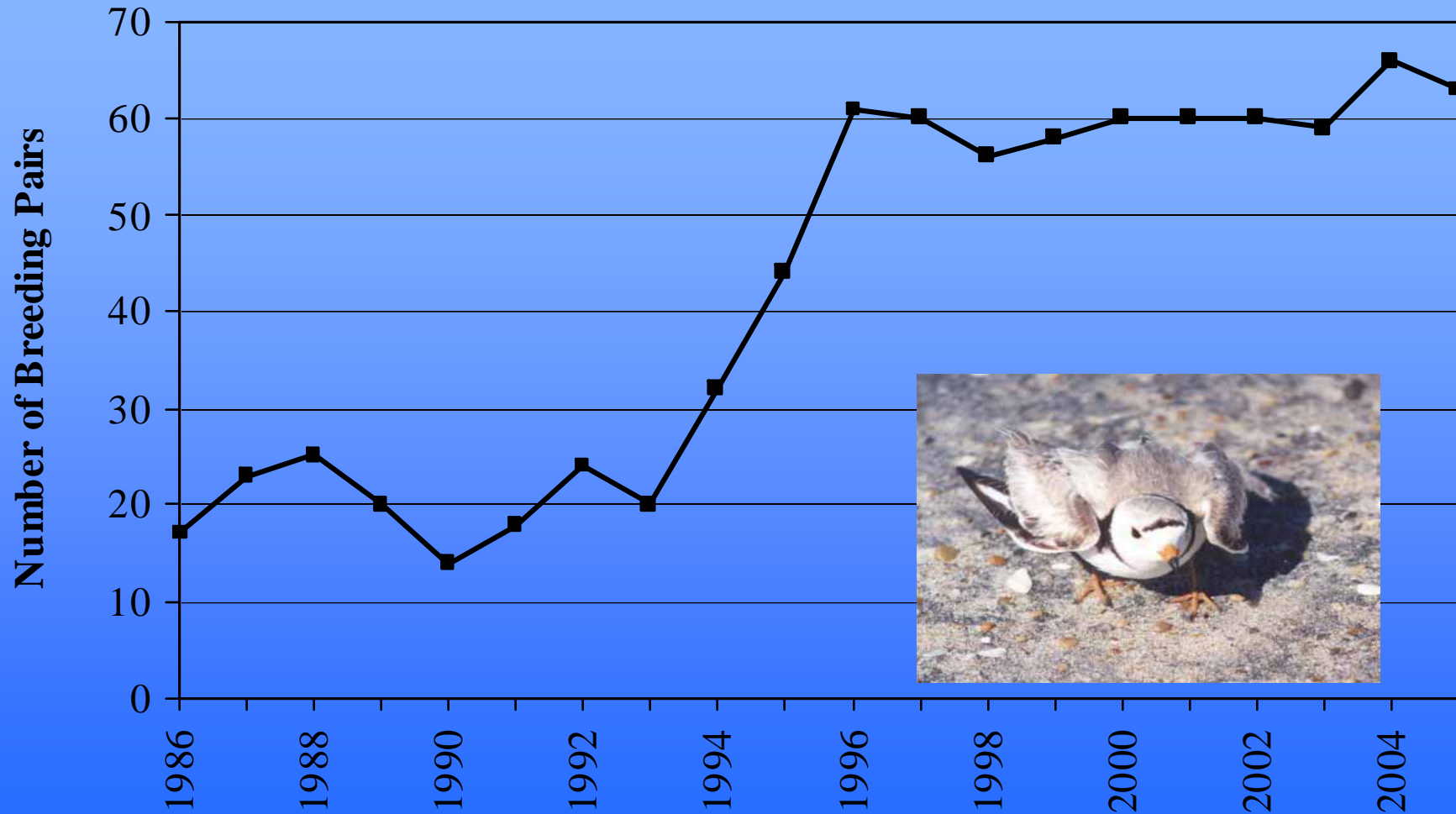
**Restoration: returning to an unimpaired or improved condition.**



# Regional Setting



# Overwash creates good things



Number of breeding pairs of piping plovers at ASIS each year, 1986-2005.

# NPS and COE partner on restoration plan

**Ocean City, Maryland, and Vicinity  
Water Resources Study**

**Final Integrated Feasibility Report  
and Environmental Impact Statement**

**Appendix D  
Restoration of Assateague Island**



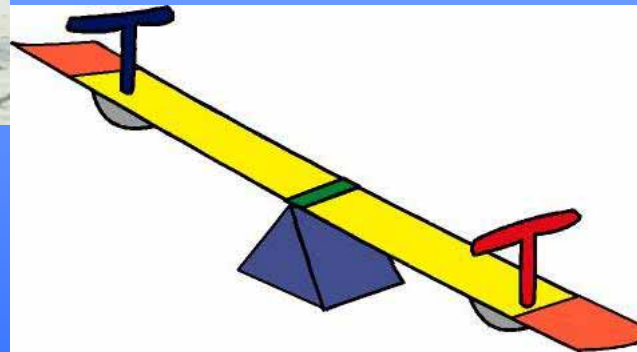
**US Army Corps  
of Engineers  
Baltimore District**

**June 1998**

# The balance between stability and fluidity

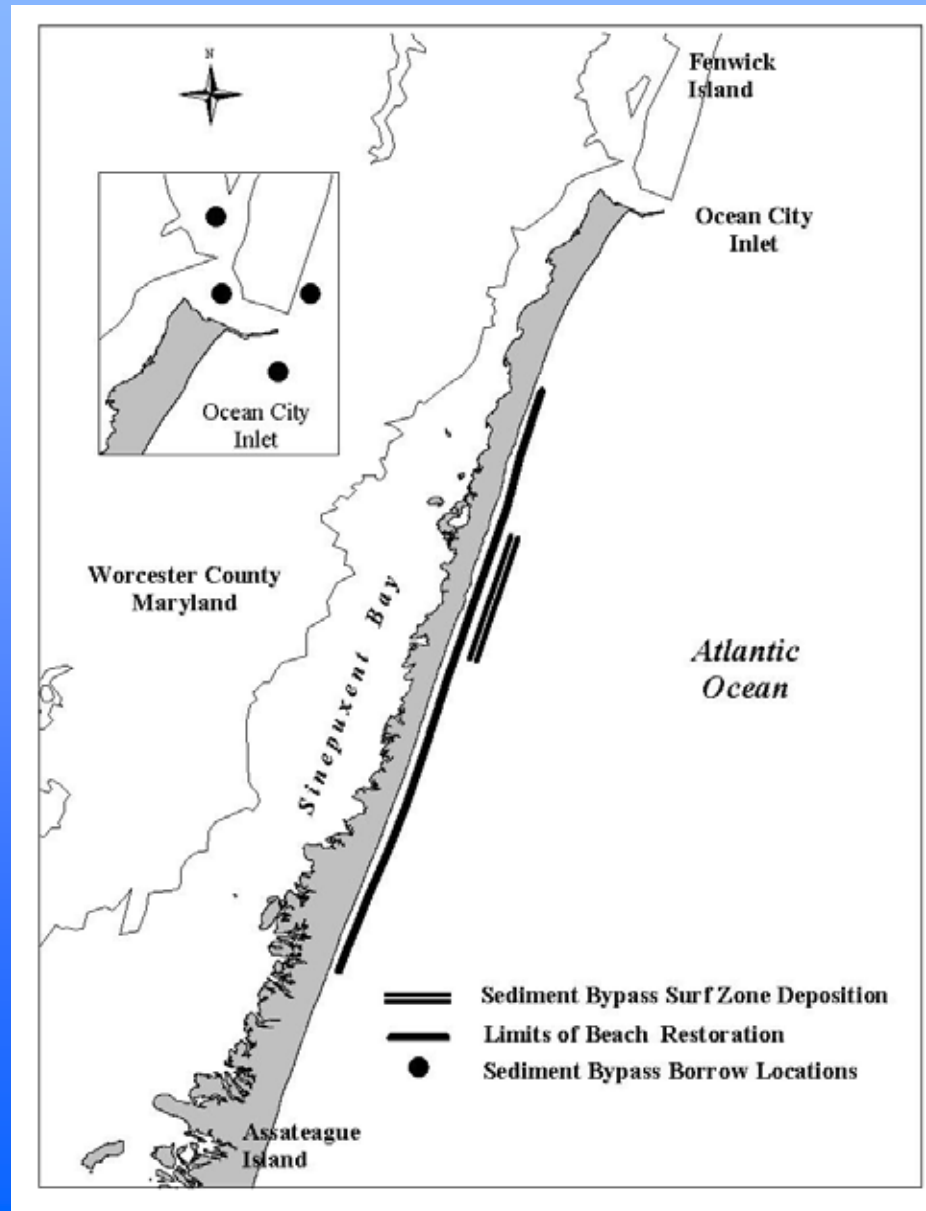


**Increase sediment supply and elevation to avoid breach**



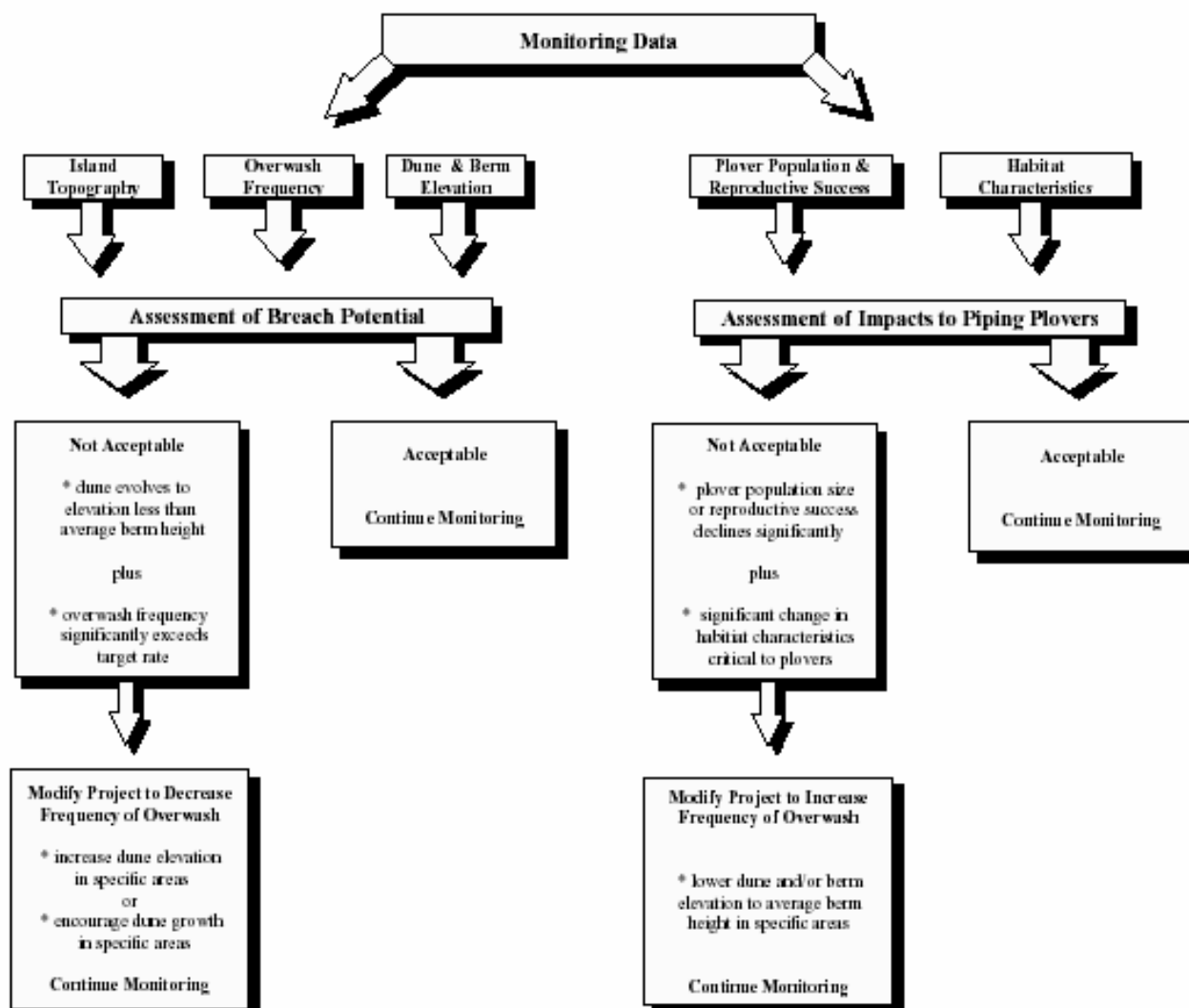
**Minimize elevation increase to avoid habitat degradation**

# A two-phased approach



# Short-term addresses island-based restoration activities

*Conceptual Model of Mitigation Decision Tree*





# Long-term restores along-shore sediment flow



## 5-year storm period used to model berm height



**That sinking feeling.**





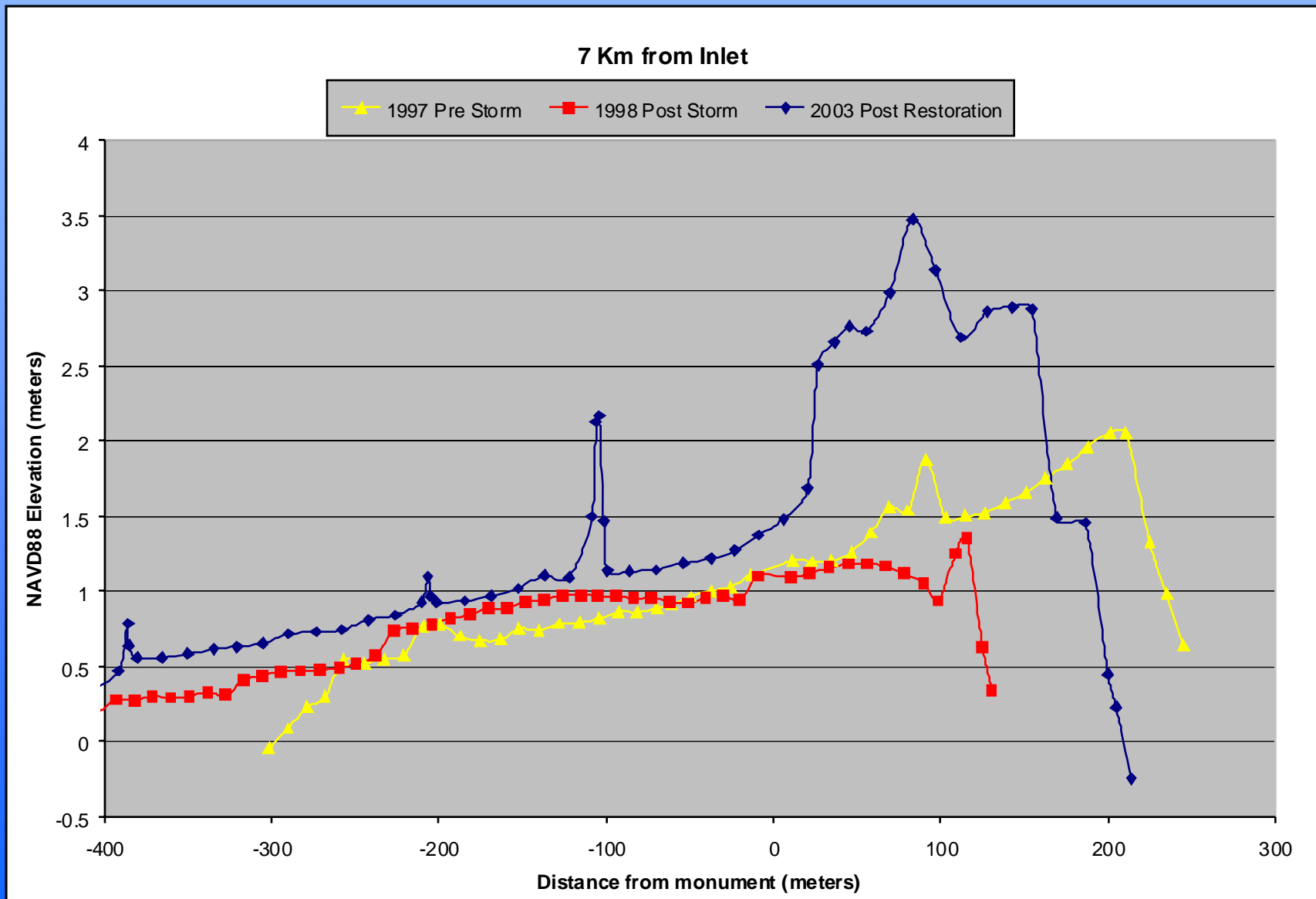
**Berm is constructed in area of overwash**



# Short-term phase installed in 2002



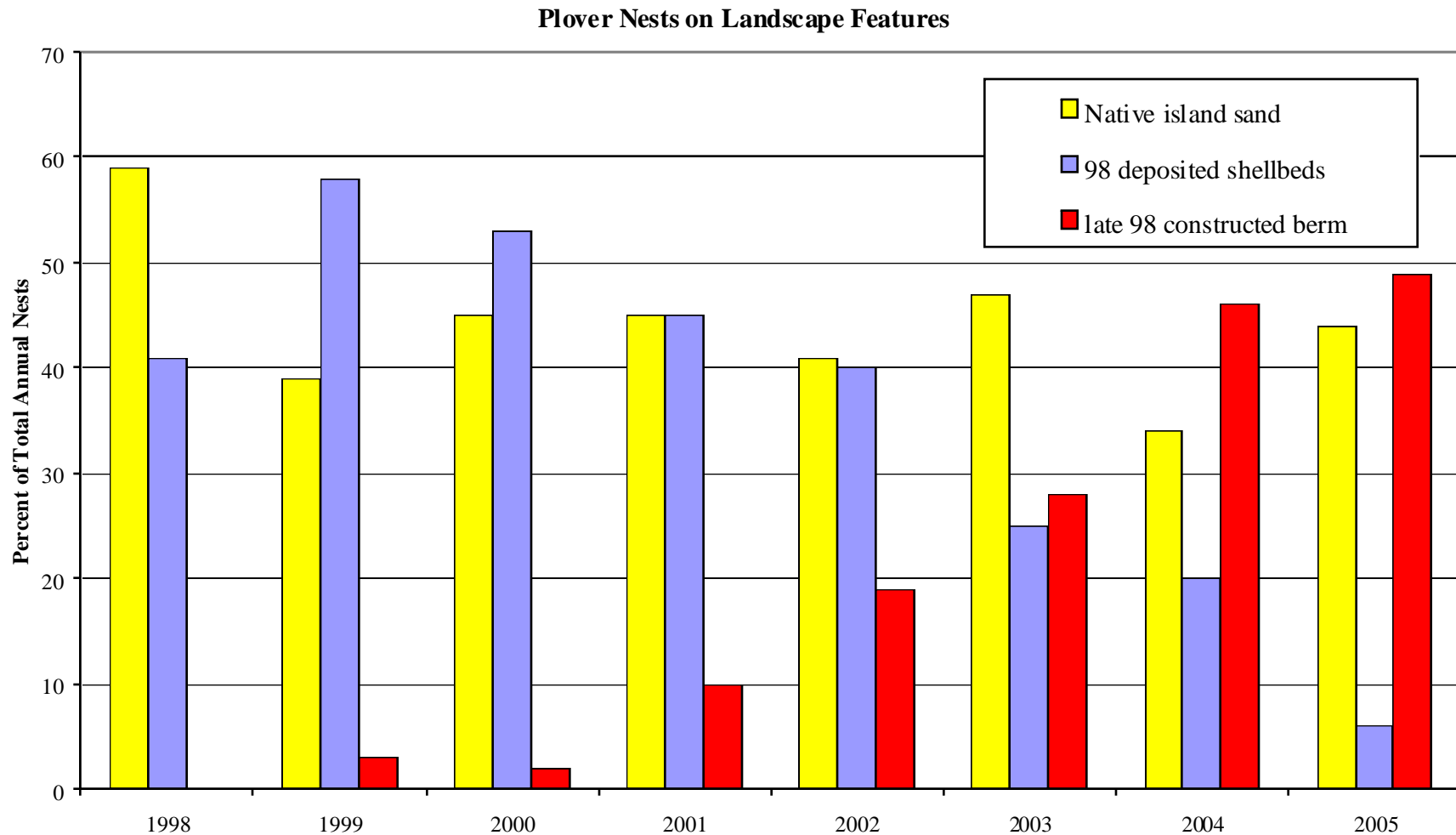
# Berm is constructed in area of overwash



# Performance: Is bigger better?



# Berm sucks up plover nests. Good or bad?

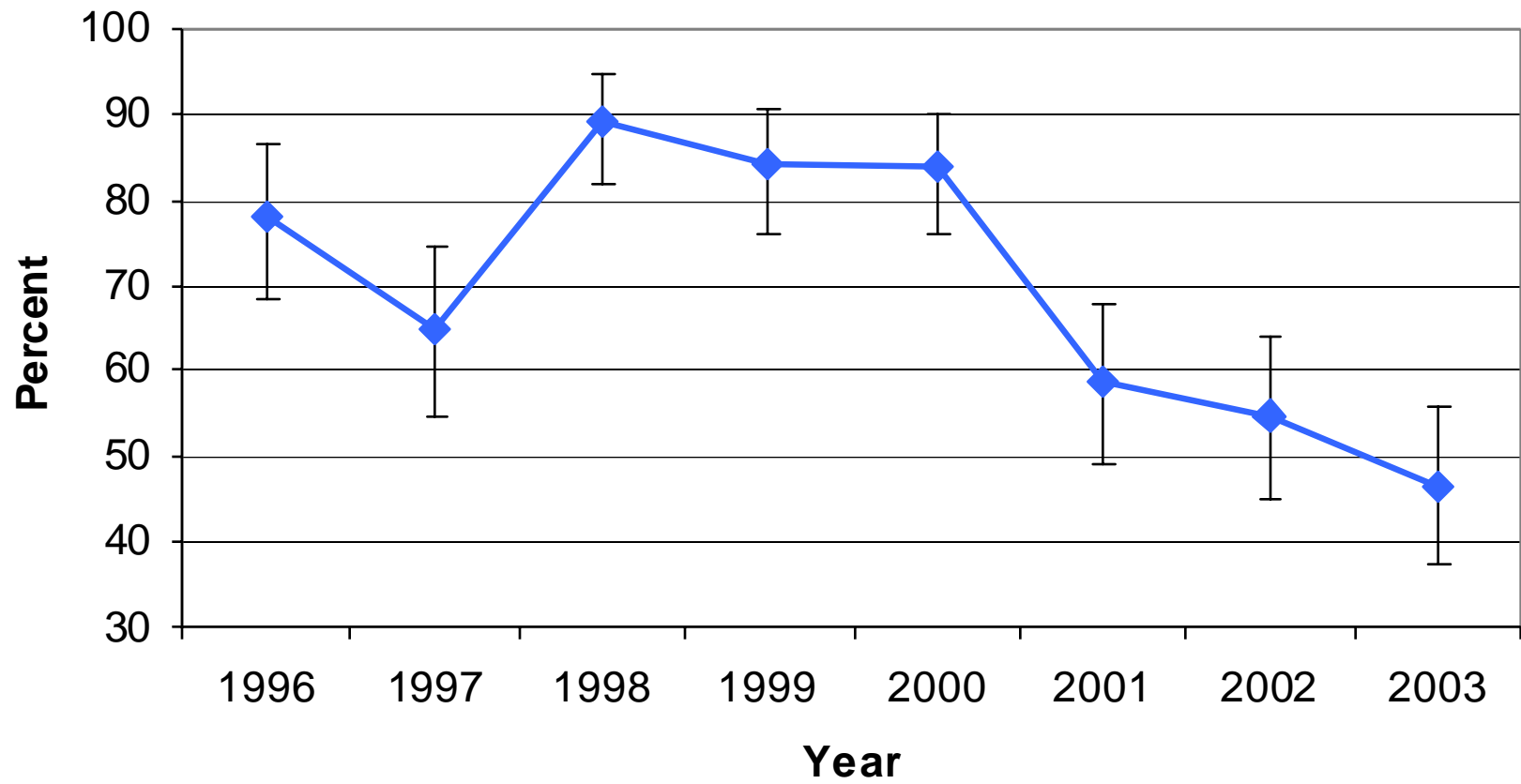


**North End is 424 hectares. Storm Berm footprint is 19 ha (5%).  
The 1998-deposited shellbeds have been effectively buried or vegetated.**

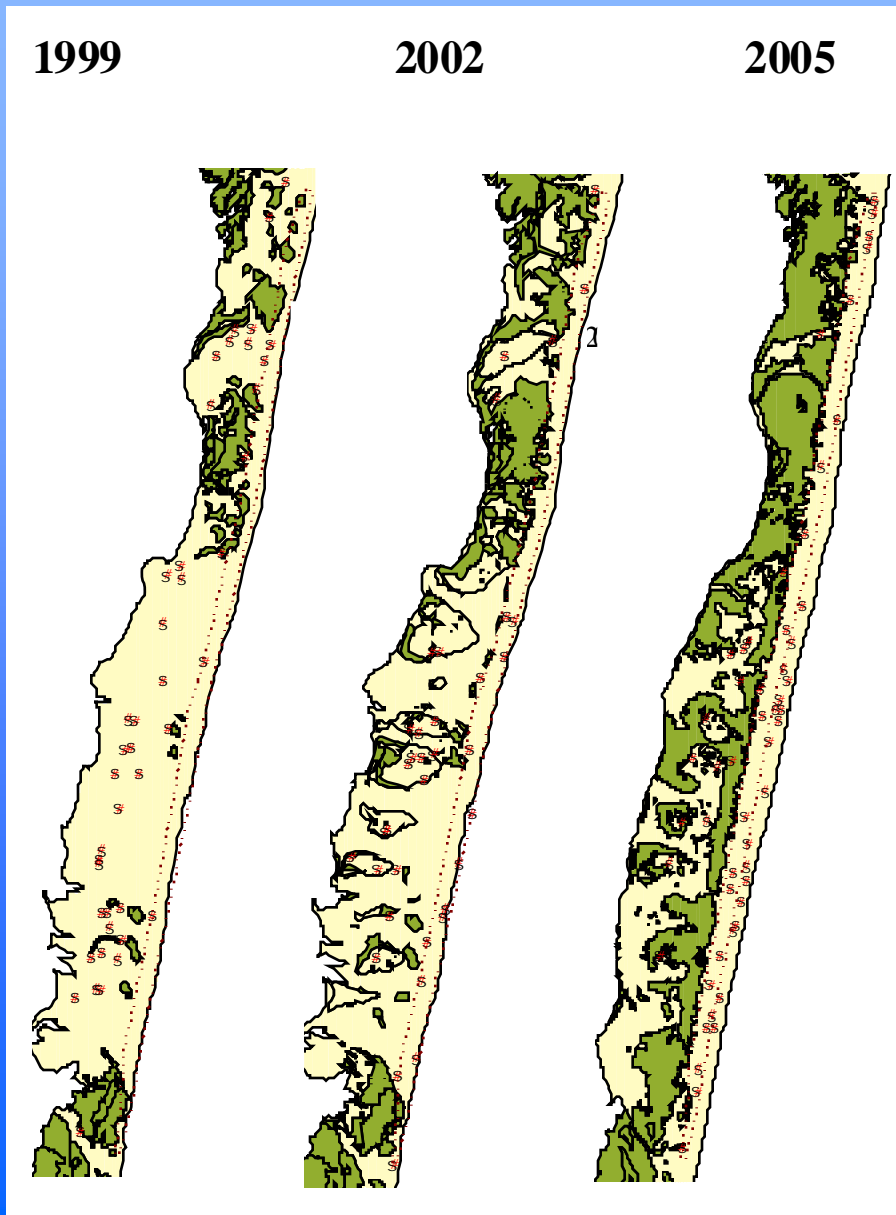


# Berm has promoted vegetation growth

**Average Percent Sparse Vegetation From KM 5 to KM 7.5 on Assateague Island's North End**



# Reduction of forage habitat & increased aggression



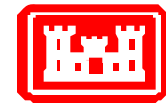
# Natural beach keeps rolling along



# A notch in the belt



# Thanks!



US Army Corps  
of Engineers



<http://www.nps.gov/asis>