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The Adopt-A-Wetland Program



NATURE, VIRGINIA'S ECONOMY, AND THE CLIMATE THREAT

Abstract

Wetlands are a "biological super system" hosting a vital reservoir of biodiversity potential. Conserving wetlands and protecting their biodiversity is instrumental in upholding the ecosystem services wetlands provide. These ecosystem services of flood control, food supply, clean water, recreational areas and more are major elements in Virginia's economy and cultural society. Current models projecting climate change impacts on the Virginian coastline predict sea-level rise to be incompatible with rate of migration and adaptation needed for wetlands. Existing wetland conservation efforts are lacking the required action to combat these imminent problems. Land acquisition is essential to accommodate wetland migration to ensure their health and survival. The implementation of an Adopt-A-Wetland Program would accomplish this goal while simultaneously increasing public awareness for wetland biodiversity. The proposed program would focus on marketing strategies persuading target parties (fisheries, academia, similarly minded non-profits, individuals, and major corporations) to "adopt" wetland areas. Coastal property is too expensive for the government to allocate budget towards such an endeavor. This program will overcome this obstacle by capitalizing on the persuasion tactics inherent to marketing schemes, the current trends of environmentally friendly consumer preferences, and target parties' individual stake in the health of local wetlands. The Adopt-A-Wetland program will combine efforts, financial and other, from a range of parties to pool the resources needed to acquire appropriate land to save the wetlands.

Wetland's Are Drowning Under The Stress

The rate of wetland loss is increasing rapidly in the last decade. Wetlands are being destroyed by the stresses of coastal farming, residential development, sea-level rise, and storm surges. Wetlands are home to a wealth of species and produce an array of critical ecosystem services for the environment and humans as well. We need to set aside nature to give these vulnerable ecosystems room to adapt.

- According to the EPA's Virginia Wetland State Profile wetlands originally covered 7% of the state and now they cover about 4%. There are 1 million acres of wetlands remaining
- Biodiversity is a direct indicator of the health of an ecosystem, wetlands in particular are a "biological super system"
- The effects of climate change are causing the sea to rise at a faster pace than wetlands are currently capable of handling
- There is a lack of insured/protected space for wetlands to migrate towards to decrease the stress of sea level rise



Figure 3: Prototype of possible logo. VDOT's license plate inspiration*

Virginia Needs A Market-Based Land Acquisition Program

The creation of an "Adopt-A-Wetland" program would facilitate direct land acquisition to combat the current rate of wetland loss. The program is imitative of the well-known and successful "Adopt-A-Highway" and "Adopt-A-Beach" programs. The central idea is to create a program that can capitalize on the persuasion tactics inherent to marketing schemes, the current trends of environmentally friendly consumer preferences, and target parties' individual stake in the health of local wetlands. The Adopt-A-Wetland program will combine efforts, financial and other, from a range of parties to pool the resources needed to acquire appropriate land to save the wetlands.

Structure of the Program:

- Placed under the supervision of Virginia Marine Resources Commission
- Three main divisions; environmental monitoring and assessment of wetland areas, marketing and new business, and administration

How it Works:

- Acquire land through third party volunteers. Suggested target parties include fisheries, academia, similarly minded non-profits, individuals, and major corporations. Each party has an individual stake in preserving the wetlands, therefore an interest in participating in the program (ex: Fisheries would want to preserve wetlands for the sake of their future profits because wetlands act as a breeding ground and nursery area for juvenile fish)
- The program is based on a public/private partnership. Successful partnerships require careful development, mutual respect, and sustained commitment



Figure 4. A photo of Dyke Marsh, Virginia from the Wetlands Board illustrating the aesthetic beauty wetlands offer the public

Similar Programs for Guidance:

- Delaware, Georgia and EPA all have established "Adopt-A-Wetland" programs.
- All three programs are restoration and protection based. These programs shed light on other public awareness and education campaigns that can be implemented to complement Virginia's program.



Triple-Threat Program for Success

Adopt-A-Wetland is tackling land conservation from a new angle, specific to current marketing trends and Virginia's history.

Virginia is Home to the Chesapeake Bay

- *Live Passionately* campaign, piggy packing on *Virginia is for Lovers*, calls on Virginias to care for their state and take care of it. This background sets up citizens to more easily influenced to participate in helping their home.

Current Trends of Environmentally Friendly Consumer Preferences

- Resource Advantage Theory (R-A theory) says that a firm can sustain a competitive advantage if it continually strives to meet and exceed customer expectations; today environmentally friendly projects are part of consumer's expectations

Target Parties' Individual Stakes in Wetland Health

- The parties that would be targeted are ones that have a particular "interest" or "stake" in the health of Virginia's wetlands. Examples include: Academia- offers interactive research location to attract new students and increase likelihood of being granted research grants

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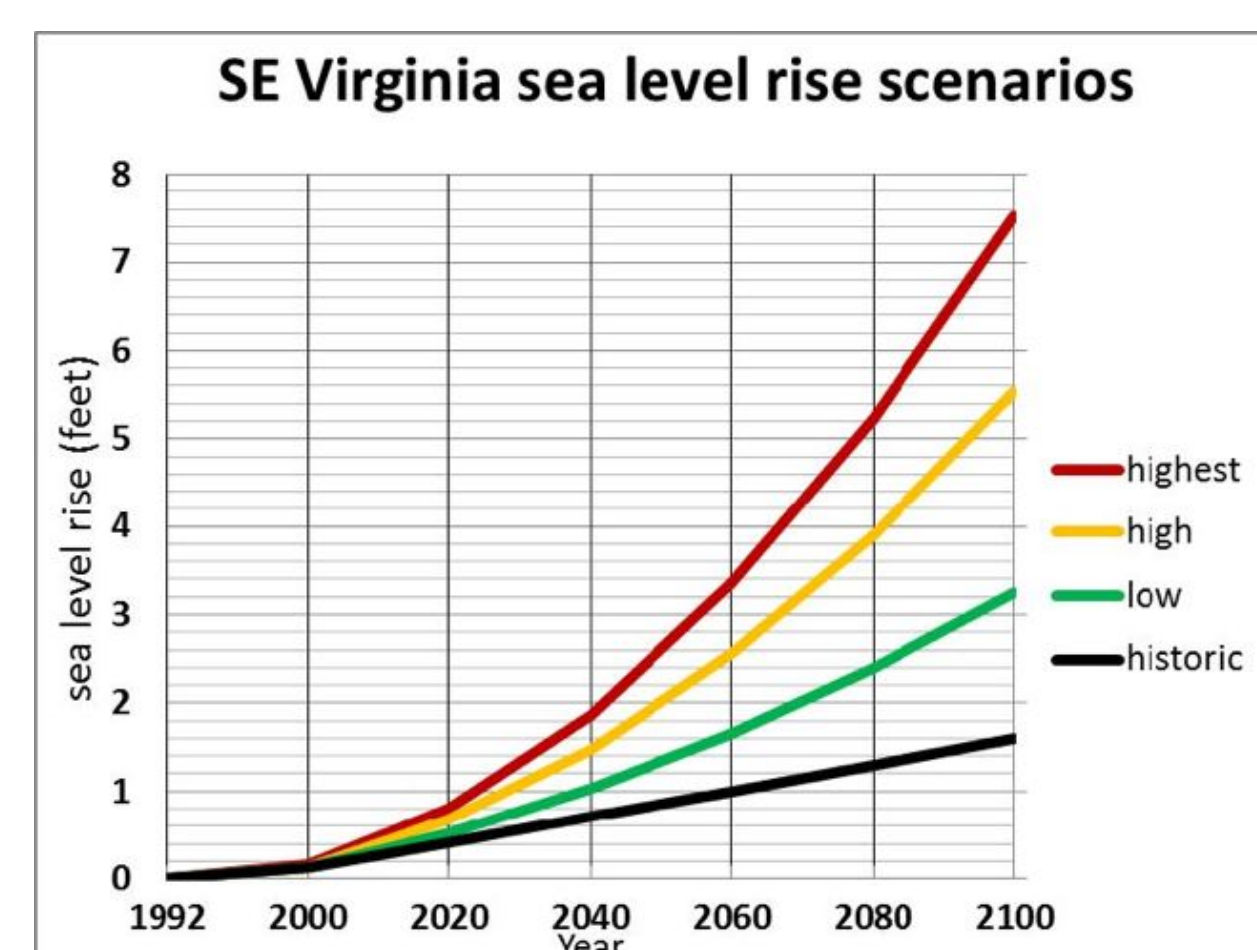


Figure 1. Virginia Institute of Marine Science Sea Level Rise Scenarios based off National Climate Assessment (2013)

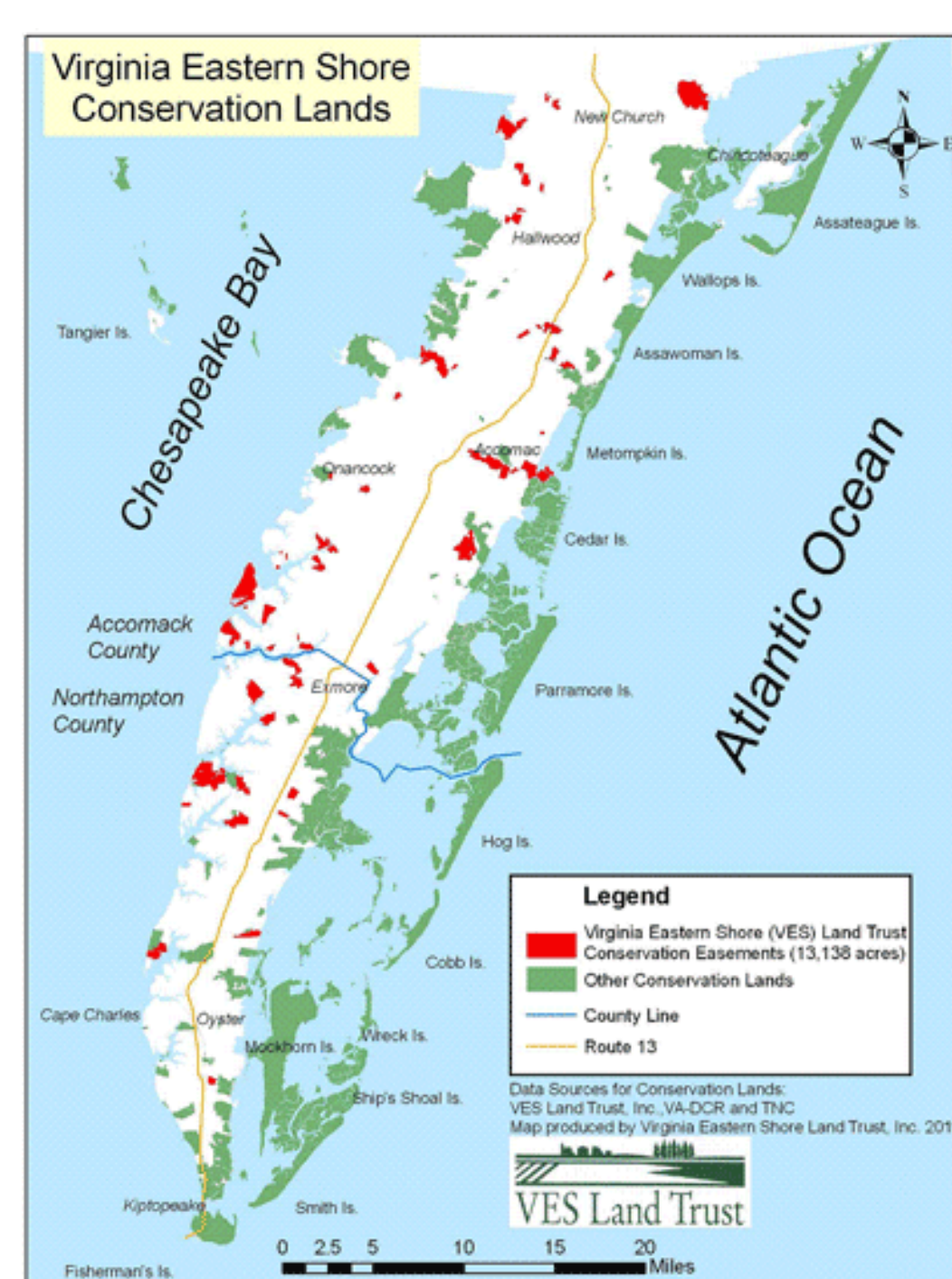


Figure 2. A Map of Virginia's Eastern shore from the VES Land Trust. An example of conserved land for wetlands to migrate back towards