



# The Pioneer Grant Program

The 2016 Pioneer Grant Program aims to reduce nutrient and/or sediment contaminant loads to the Maryland portion of the Chesapeake Bay and Maryland Coastal Bays from any nonpoint source: agriculture, urban or suburban stormwater, air, and septic by seeking proposals that focus on new techniques, information, or programs that increase the rate at which load reductions can occur.



## Biophilia Foundation

### **Creating the Chesapeake Ecofinance Company LLC**

2010-2012

**Project Track:** New program/new information

**Research Question:** The Biophilia Foundation seeks to develop a multi-million dollar agricultural land restoration revolving fund, the Chesapeake Ecofinance Company LLC (operating as a low-profit L3C). The fund will purchase agricultural lands; implement environmental restoration through best management plans for nutrient reduction, wildlife habitat enhancement, and soil preservation; then resell the land with easements in place ensuring the continued conservation stewardship of the property.

**Research Results:** Due to policy changes made by the Maryland Department of Agriculture's Nutrient Trading Program, creating the Chesapeake Ecofinance Company was no longer feasible. Instead, the Biophilia Foundation conducted a survey among farmers concerning knowledge and opinions about ecosystem services.

**Notable Information:** The survey was designed with guidance from the University of Maryland's Wye Research Center.

## PROJECT PARTNERS



Chesapeake  
Ecofinance  
Company



Chesapeake Wildlife Heritage  
We Build Habitats for Wildlife!

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Biophilia Foundation

**Creating the Chesapeake Ecofinance Company LLC**

2010-2012

**Summary of Project**

<b>Activity</b>	<b>Project Output</b>	<b>Indicator(s)</b> (what has been measured. Include units.)	<b>Baseline</b> (Original condition- from grant application.)	<b>Projected Goal</b> (predicted from grant application.)	<b>Accomplished</b> (actual- what was achieved during grant period.)
Development of financial model	Draft Business Plan	Viability of an Eco-Finance investment company to produce effective nutrient reduction practices and wildlife habitat while buffering intensive row crop agricultural practices.	No other model on Maryland's Eastern Shore.	Creation of a \$20 million investment fund to purchase farms, restore habitats, create a saleable nutrient credit, and resale of farm consistent with a L3C corporation	Business plan completed. ROI estimated to be 3.7% and determined not able to attract investors.
Develop an Agricultural Ecosystem Services Credit Set	Completed	Market value and actual costs to create a credit.	No other model on Maryland's Eastern Shore.	Qualitative and quantitative description of nutrient credit.	Qualitative and quantitative description of nutrient credit.
Develop a restoration and practice improvement plan with targeted nutrient reduction criteria for Talisman Farm and begin implementation	Completed	No plan.	No conservation plan.	Creation of restoration plan.	Restoration plan implemented.
Write CEFC Business Case	Completed	No business case.		Business case written as part of Development of Financial Model (see #1).	Business plan completed. ROI estimated to be 3.7% and therefore determined not able to attract investors.
Develop and present an agriculture education series using Talisman Farm	Partially completed	No previous capability.	Limited knowledge of producers attitudes and willingness to implement practices to generate nutrient credits.	Statistically valid survey of producers attitudes and willingness to implement practices to generate nutrient credits.	Design, production, mailing, analysis and production of final report.

# The Pioneer Grant Program

## Final Report Narrative

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### **Project Evaluation**

In 2010 the Biophilia Foundation was awarded a grant titled Development of an Agricultural Land Restoration Revolving Fund that was to be developed by Chesapeake Ecofinance Company LLC (CEFC). The generation of a financial plan and business model was accomplished, and a qualitative and quantitative description of a nutrient credit was developed. However, in October of 2010 CEFC ceased operations after it was determined that the Restoration Revolving Fund was not viable for several reasons, one being the IRR of 3.9% and another being policy developed by the Maryland Department of Agriculture's Nutrient Trading Program, specifically the ineligibility of credits due to unspecified limits on the amount of agricultural land that could be used to generate nutrient credits.

In consultation with Dr. Allen Hance, it was then proposed to use part of the grant funds to at least partially satisfy deliverable #5: investigate agricultural producers' interest in various approaches to payments for ecosystem services. With Dr. Hance's encouragement, Biophilia Foundation then collaborated with Dr. Robert Tjaden at the University of Maryland's Wye Research and Education Center to Develop a survey. This survey has been completed.

### **Transferability and Sustainability**

Given the programmatic and policy approach being taken by the State of Maryland toward non-point source nutrient credit generation, certification, and stewardship the approach taken by the Biophilia Foundation and CEFC will not work.

### **Monitoring and Maintenance**

Implemented practices will be stewarded and maintained per NRCS specifications.

### **Community Involvement and Outreach Activities**

This was limited to the survey instrument.

#### **Partnerships**

Biophilia Foundation and CEFC: project development, fiancé, development of qualitative and quantitative nutrient credit description, creation of financial and business model.

Chesapeake Wildlife Heritage: Installation and stewardship of practices.

Water Stewardship Inc: Criteria development and measurement of nutrient remediation due to implemented practices of wetland restoration and stream buffering.

### **Accounting of Expenditures**

CBT Funds: \$7,500

University of Maryland Wye Research: \$5,000

**Total Funds: \$12,500**