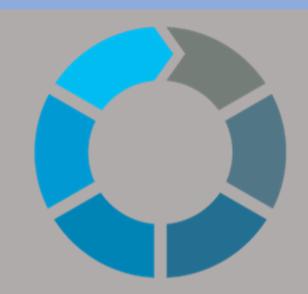
# Review: CBP Finance & Investment Forum





Laurel Abowd, Technical Lead

Budget & Finance Workgroup April 29, 2020

## **Forum Logistics**



- Date: March 11, 2020
- Location: STAMP Student Union, UMD
- Attendees: 78 Total Attendees
  - 60 members of Chesapeake Bay Program partnership (70 RSVP'd)
  - 13 finance coaches (17 invited and on retainer)
  - 5 speakers
  - 7 breakout tables

## **Key terms**



• **Financing:** capital is provided with the expectation of it being repaid, often with a percentage of interest. If you are purchasing a home, your mortgage is the financing mechanism.

• **Funding:** capital is provided, often without contractual requirements, *without* the expectation of it being repaid. In the house analogy, your job is what funds your mortgage payments.

# Forum Objective (As written on the March 11 agenda)



- **Today** is designed as a forum for constant engagement and discussion with finance coaches. We want you to walk out with an understanding of how the Bay Program can integrate itself better into the financing system; understand what our roles are; and identify who can lead the financing effort individually or collectively on conservation objects.
- Objectives: To learn about finance, to help finance people learn about the Bay restoration objectives, to understand your role, and evaluate whether finance can affect what you want to do. You don't need to be a finance expert, you simply need to know your area.

## Forum Agenda



#### **Morning: March 11**

#### 9:05 - Case Study

In search of cost-effective nutrient loss reductions from the ag sector The role of pay-for-performance conservation

Jon Winsten, speaker, Winrock International

#### 9:25 - Finance 301

A crash course in conservation finance (This is where you learn the concepts)

Definition of key terms, identification of enabling conditions, strategy framework

Ashley Allen Jones, finance coach, i2 Capital

#### 10:15 – Oyster Ignite Talks

Three short talks highlighting the potential oysters offer for innovative financing Restoration and Ecosystem Services: Sean Corson, Fish GIT, NOAA Oyster Aquaculture and Fishery: Jason Ruth, speaker, Harris Seafood Innovation: Erik Michelsen, speaker Anne Arundel County

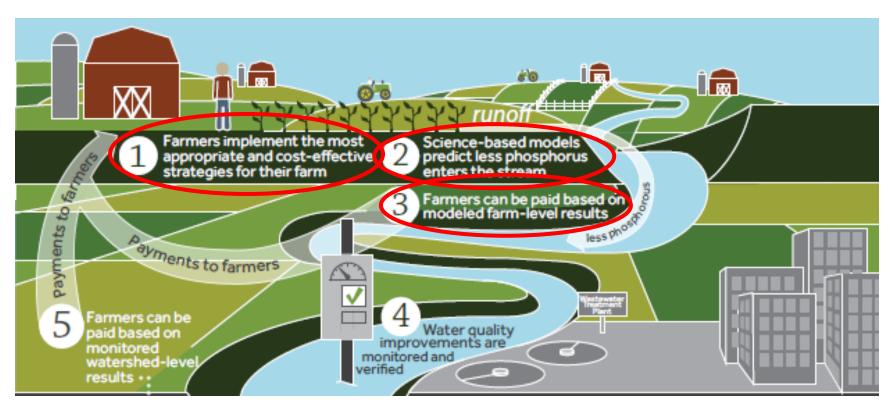
11:10 -Meet the Coaches and Application of learning



Jonathan Winsten, Ph.D. Winrock International March 11<sup>th</sup>, 2020

# New Approach:

## "Pay-for-Performance" Conservation



Payments based on estimated outcome



## Why Pay-for-Performance?

- Address market failure
- 2. Motivate farmers
  - A. Create specific goals
  - B. Increase farm profits
- 3. Quantify outcomes
- 4. Meet WQ goals given budget constraints



## Lessons Learned

- Low-hanging fruit remains
- Perf-based incentives inspire new ideas
- Farmer motivation varies
- Boots on the ground is essential
- Transaction Costs < Program Benefits</p>
- Models: a necessary evil??
- Policy change is slow



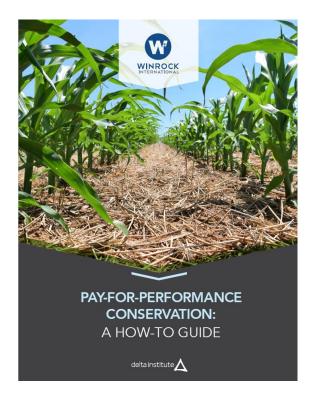
# Chesapeake Bay Watershed

- Agriculture contributes:
  - 38% N, 45% P, 60% sediment
- Practice-based approach 6x more costly the pay-for-performance.
  - Ribaudo et al. 2014
- How to achieve TMDL goals?
- Most cost-effective solutions from agriculture.



# Pay-for-Performance Conservation: A How-To Guide

- Describes steps and data needs
- > Goals:
  - Reduce transaction costs
  - Create opportunities for scale
- Funded by Great Lakes Protection Fund



https://www.winrock.org/project/running-off-pollution-paying-midwestern-farmers-to-improve-water-quality/



## Case Study take away messages



- Having the right policies in place can help advance finance investment opportunities
- Important to understand the nuances of each location for pay-for-performance financing
- For the pilot projects, it was critical to develop a relationship and provide specific data to each individual farmer
- "Model at the farm, measure at the watershed"

# CHESAPEAKE BAY PROGRAM FINANCE & INVESTMENT FORUM

#### **CONSERVATION FINANCE 301**

12 ROU



**Ashley Allen Jones** CEO and Founder, i2 Capital

University of Maryland March 11, 2020



Input Funding

#### Sources of Water Conservation Funding

#### **Federal**

Federal Agencies fund conservation through support for land conservation, technical assistance and implementation of agriculture, stormwater, and wastewater projects.

#### Foundation/ Corporate + State Grants

Local, regional and national grant-making efforts; emerging focus on watershed-wide planning and restoration.

#### **Grant Funded Solutions**

## Compliance Markets

EPA regulates TMDLs in waterbodies: MS4 regulations mandate reductions in sediment, nitrogen, phosphorous and bacteria; NEPA regulates Federal Projects.

# Beneficiary + Consumer Markets

Businesses that benefit from water quality and quantity may invest in green infrastructure to reduce operating costs and address catastrophic risks; consumers invest in environmentally friendly products and services.

**Market Based Solutions** 

- Conservation: How can I coalesce more money for conservation?
- Investment: How can I achieve financial returns and help the environment?
- Conservation Finance: How can I increase the pace and scale of conservation outcomes through capital market innovations? How can I address market gaps?





#### Market-Based Solutions: Definitions





#### **Major Terms**

- Capitalism
- Law of supply and demand
- Factors of production
- Capex; Opex
- Capital markets
- Equity; Debt
- Net present value (NPV)
- Cost of capital
- Externalities
- Natural Capital

#### **Pros & Cons**

- Largest expansion in GDP and standard of living known to humankind
- Does not take into full account external costs (externalities) such as air pollution, water pollution and loss of bio-diversity
- Over time system depletes natural resources (Tragedy of the Commons)



### **Enabling Conditions**







Consumer Demand

**Risk Reduction** 

Profit Enhancement







**ESG Alignment** 

Regulatory Compliance

Investment Analytics





Relevant Capital Pools

Aligned
Intellectual Capital



Who pays for the "Tragedy of the Commons?"





#### Conservation Finance Innovations

#### Finance Vehicles

State Revolving Funds

Ohio Turkey Creek Estuary Project

Wilmington Wetlands Project Collateralized Loan Funds

TNC Conservation Notes

TCF Green Bonds Corporate + Muni Green Bonds

PepsiCo Green Bond

Wastewater Infrastructure

Private Equity
Funds

Sustainable Food & Fiber

Wetlands
Mitigation
Banks

Blended Finance Funds

> TerraSilva Carbon Fund

Revolving Water Fund

#### **Risk Reduction Tools**

Loan Guarantee

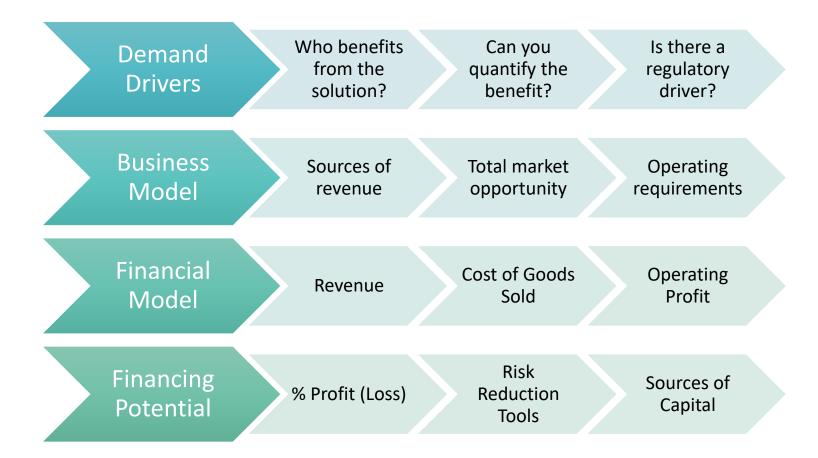
Pay-for-Success Contracts

First Loss Capital Guaranteed Purchase Pool

Insurance Products



#### Framework For Creating Financing Strategy



## Finance 301 take away messages



- Presentation provided a new perspective and strong grounding for the day's finance discussion
- "Conservation Finance: How can I increase the pace and scale of conservation outcomes through capital market innovations? How can I address market gaps?"
- The two morning presentations illustrated two components of finance: policy and investors

## **Oyster ignite talks**



- Format shifted gears from broad perspective to narrowing in on oysters as an example for conservation finance
- The three ignite talks provided background on oyster ecosystem services, oyster public fisheries, and areas for innovation.
- The ignite talks offered a launch point for the morning breakout table discussions

## Forum Agenda



#### **Afternoon: March 11**

#### 1:00 - "Oysters Etc." Panel

The panel will provide a report out on how the morning's learning and discussions could be applied to oysters, as well as other environmental outcomes.

**Moderator: Dan Nees (University of Maryland)** 

Panelists: Stephan Abel (Ferry Cove Shellfish), Mark Bryer (The Nature Conservancy)

**David Tepper (Forest Trends)** 

#### 2:00 - Breakout Sessions

GIT members and finance experts work together to identify where there may be opportunities for a financing strategy and what type of information would be needed to create such a strategy. A framework to guide the discussion provided

(This is where you understand your role, evaluate where finance can affect what you want to achieve, and engagement with the expert happens)

## 4:00 – Summary and End of Day Introduction of Conservation Mutual Fund and

Introduction of Conservation Mutual Fund and breakout table report outs

## "Oysters Etc." Panel



- Three tiers: sanctuary (conservation funds), public fishery (public goods and resources), aquaculture (commercial business)
- Factors influencing ability to attract investors
  - Efficiency, Risk (real and imagined), and Scale
- Projects with multiple ways of generating revenue reduce risk
- Provide as much certainty to investors as possible

### **Breakout Sessions**



- 7 groups: Fisheries, Wetlands/Habitat,
   Stormwater/Ag, Forestry, Land Conservation,
   Stewardship, Climate
  - Breakout tables worked through finance strategy questions and a template
    - Documents available on CBP Calendar page:
       <a href="https://www.chesapeakebay.net/what/event/chesapeake">https://www.chesapeakebay.net/what/event/chesapeake</a>
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## Sample breakout session questions



- Within your GIT, please list one to two outcomes which you believe could be ready for a financing strategy.
- Based on your answer, what marketable good or service would you promote with a financing strategy?
- Besides the conservation community, what other entities would be willing to invest in your good or service of interest?

## Finance Strategy Worksheet



Environmental Goods and Services	Who benefits from the goods and services?	Do beneficiaries currently invest or would they be willing to invest in the goods and services?	What would need to change to attract and enable investors and create favorable market conditions?

## **Breakout group report outs**



Fisheries: Govt. could release RFP to attract partnerships and new ideas to reduce risk.

Water Quality: Interested in engaging corporate beneficiaries, including development industry.

Habitat: Myriad of wetlands beneficiaries that could invest. What needs to change to attract their investment?

Forestry: Planting trees is profitable: credits, cost avoidance, and consumable products.

## **Breakout group report outs**



Climate: Interested in collaborating with projects that already have markets.

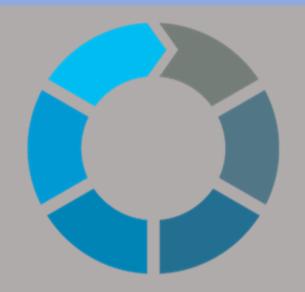
Stewardship: Tourism and insurance industry could be potential beneficiaries.

Land Conservation:
Discussed co-benefits,
regulatory boundaries,
and various finance
incentives available.

At end of day, we introduced the concept of a Conservation Mutual Fund

## Thank you!





Laurel Abowd, Technical Lead

April 29, 2020