2021 Strategy Review System (SRS) Biennial Meeting

Please stay muted with your camera off unless you are scheduled to present

Virtual Meeting
DAY 2: May 13, 2021
10am – 3pm

Recording Disclaimer

- This meeting will be recorded for internal distribution. By joining this meeting, you are consenting to such recordings. If you do not consent to being recorded, please do not join this meeting.

Admin & Logistics

- Be mindful of the **meeting housekeeping notes**:
  - Stay muted with your camera off unless you are presenting or are asking a question
  - Use the chat box for questions and brief comments, or use the Raise Hand icon to be called on during the discussion or Q&A sessions
  - For technical questions/problems, email shirley@greenfinstudio.com
- For the **breakout sessions** (no recording):
  - Introduce yourselves!
  - Participate actively and webcams on
  - Follow broadcast message directions
  - Stay in your assigned breakout group
  - Determine your break time
- For **presenters**:
  - Share copy of your slides: sherry.witt@gdit.com
  - Turn webcam on when presenting and responding to questions
  - Share your slides via zoom, stop sharing when done
  - Facilitator will queue you to wrap up via private chat or by turning on her webcam
- Engage in our **meeting tools**: Jamboard, Mentimeter, post-meeting survey

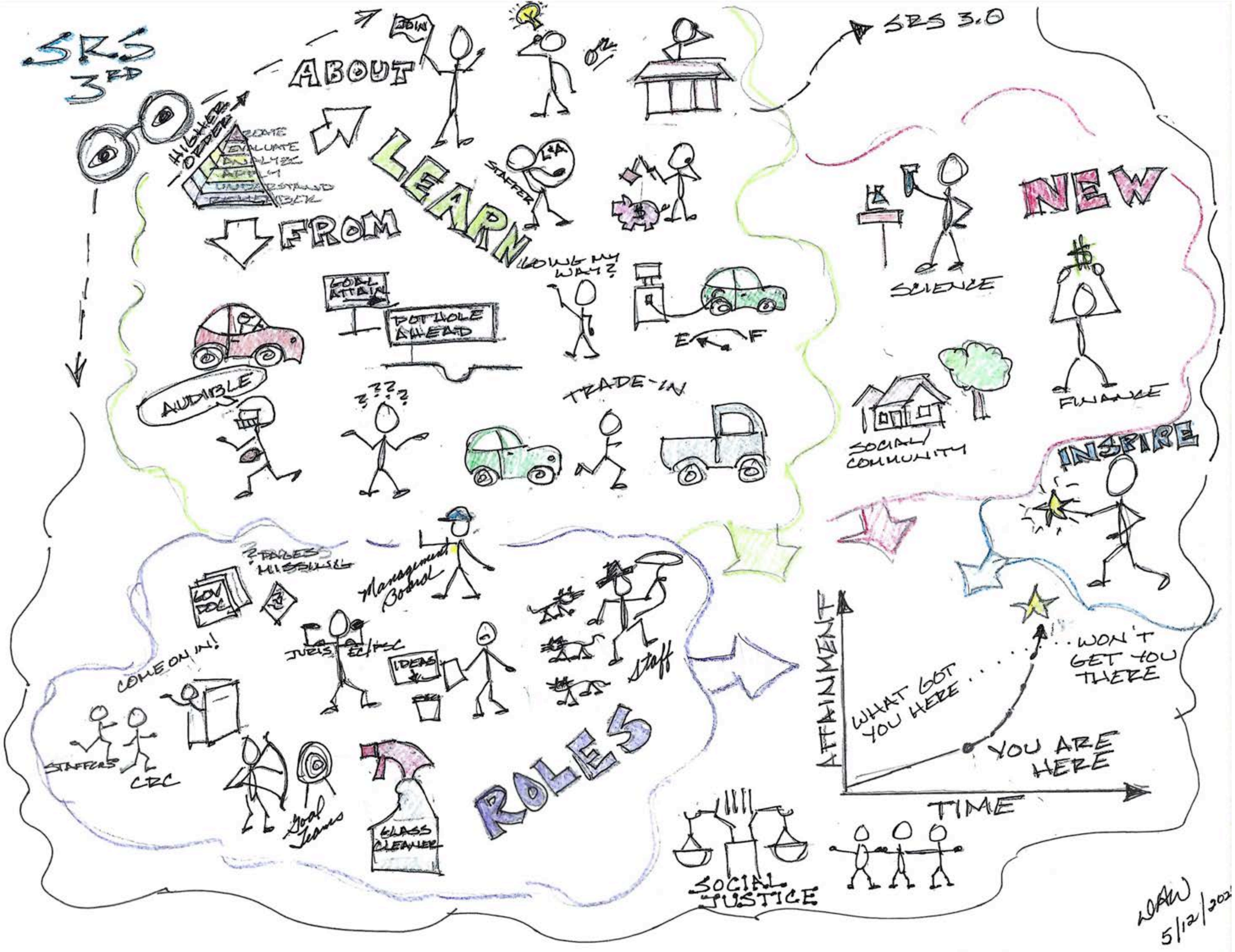
Day 2 Agenda

Schedule	Topic
10:00-10:15 am	**VI. Opening Logistics & Opening Remarks**
10:15-12:00 pm	**VII. What's on the Horizon: Lightening Rounds on Future Trends in Science, Policy & Economics** • Policy: Jurisdiction Policy; Tribal Engagement • Science: STAC's CESR Initiative; Social Science • Economics: Innovative Finance; USDA Funding Programs
12:00-12:30 pm	**Lunch Break**
12:30-2:15 pm	**VIII. Opportunities for Accelerating Progress in Outcomes** • Adaptive Management Successes and Challenges: Land Conservation; Oyster Restoration; Forest Buffers; Wetlands • Breakout Group Session • Breakout Group Report-outs
2:15-2:35 pm	**IX. The Journey Forward, *Nainoa Thompson***
2:35-2:50 pm	**X. Renewed Commitment & Collective Call to Action**
2:50-3:00 pm	**V. Wrap-up & Closing Remarks**

Day 2 Opening Remarks

Denice Wardrop

CRC Executive Director, Biennial Meeting Co-Chair



SRS 3RD
ABOUT
JOIN
HIGHER ORDER
EVALUATE
LEARN
FROM
STAFFER
GOING MY WAY?
GOAL ATTAIN
POTHOLE AHEAD
E
F
AUDIBLE
TRADE-IN
SRS 3.0
NEW
SCIENCE
FINANCE
SOCIAL/COMMUNITY
INSPIRE
Management Board
GOV DOC
COME ON IN!
IDEAS
Staff
STAFFERS
CRC
Goal Teams
GLASS CLEANER
ROLES
ATTAINMENT
WHAT GOT YOU HERE . . . . . .
WON'T GET YOU THERE
YOU ARE HERE
TIME
SOCIAL JUSTICE
5/12/202

DEIJ

Just as natural ecosystems depend on biodiversity to thrive, the long-term success of the Chesapeake Bay restoration effort depends on the equitable, just and inclusive engagement of all communities living throughout the watershed

What's on the Horizon: Lightening Rounds on Future Trends in Science, Policy & Economics

Presentations
Policy: **Jurisdiction Policy**, *Greg Barranco, CBP Partnerships Team Lead, Biennial Meeting Co-Chair*
Policy: **Tribal Engagement**, *Brian Hamilton, Tribal Program Coordinator, EPA Region 3*
Science: **STAC's CESR Initiative**, *Kurt Stephenson, STAC, Virginia Tech*
Science: **Social Science**, *Amy Handen, Local Implementation Programs Coordinator*
Economics: **Innovative Finance**, *Tim Male, Environmental Policy Innovation Center*
Economics: **USDA Funding Programs**, *Jackie Byam, USDA*

- Each presentation is ~10 min. The facilitator will monitor if time allows to take 1-2 questions from the chat following each presentation, otherwise Q&A will be reserved following the conclusion of all presentations.
- Presenters: Turn your webcam on during your presentation and Q&A. If the facilitator turns her webcam on, that is a signal to wrap up. You can share your own slides, unless we have a copy and you prefer for tech support to drive.

Jurisdiction Policy

Tribal Engagement

STAC’s CESR Initiative

Social Science

Innovative Finance

USDA Funding Programs

STAC Initiative:

Achieving Water Quality Goals in the Chesapeake Bay:
An Evaluation of System Response

("CESR: Comprehensive Evaluation of System Response")

Kurt Stephenson
STAC Member

Department of Ag & Applied Economics
Virginia Tech

Report Objectives

- Identify response gaps and uncertainties in the system response (physical, chemical, biological, & socioeconomic) that impact efforts to attain Bay water quality standards (WQS), and identify recent scientific developments that can inform gaps & uncertainties

- Recommend strategies for improving understanding of system response and facilitating decision-making under uncertainty to attain WQS.

Public Policy

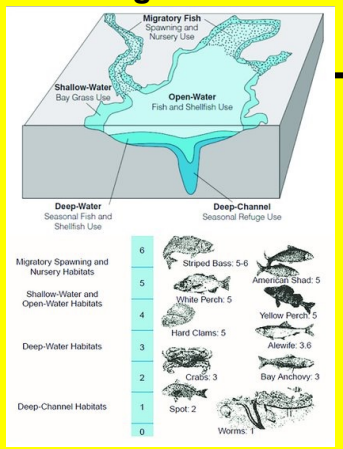
Chesapeake Bay Agreement: Restoration Goals

Sustainable Fisheries
Vital Habitat
Water Quality
Toxic Contaminants
Heathy Watershed
Climate Resiliency
Land Conservation
Stewardship
Public Access
Environmental Literacy

Enforceable Goal

Water Quality Standards

Designated



Water Quality Criteria
Dissolved Oxygen,
Water clarity/SAV,
& Chl-a
across 5 habitats

TMDL: Stressor Reduction Goals

Targets: Nitrogen, phosphorus, sediment loads to achieve water quality criteria

TN: 214.6 m/lbs/yr
TP: 13.4m lb/yr
TSS: 18,587m lb/yr

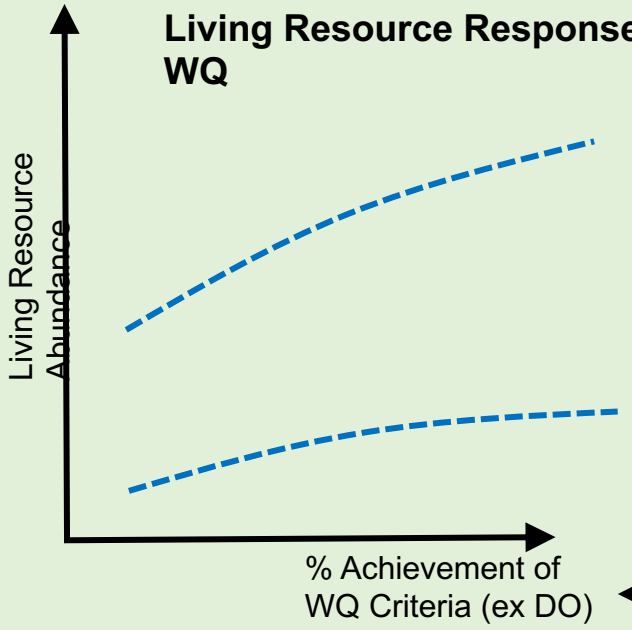
Implementation Policy

Policies designed to reduce stressors to achieve WQS.

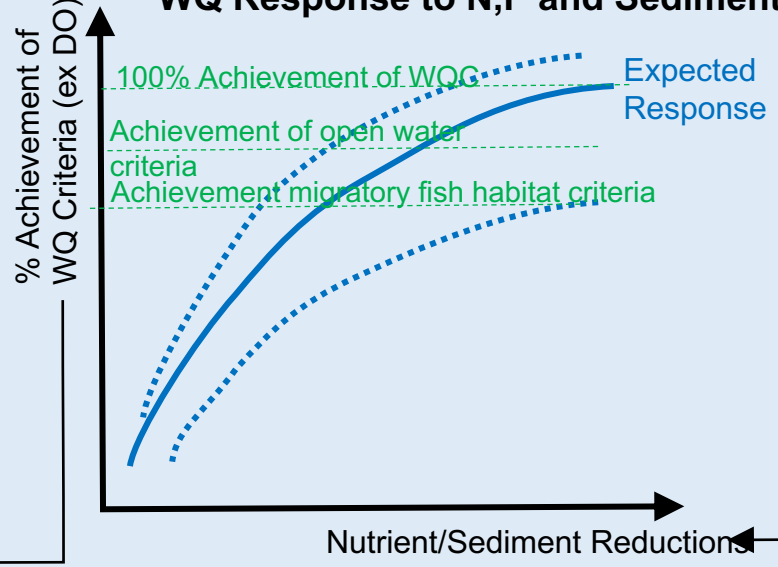
Point source
Urban nonpoint source
Ag nonpoint source
Budgets

Biological, Physical, and Social System Response

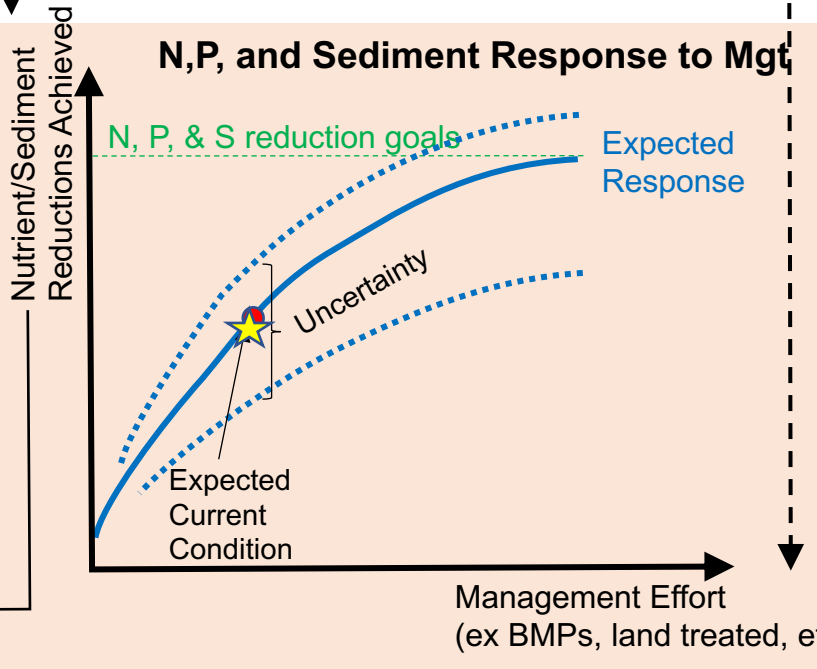
Living Resource Response to WQ



WQ Response to N,P and Sediment

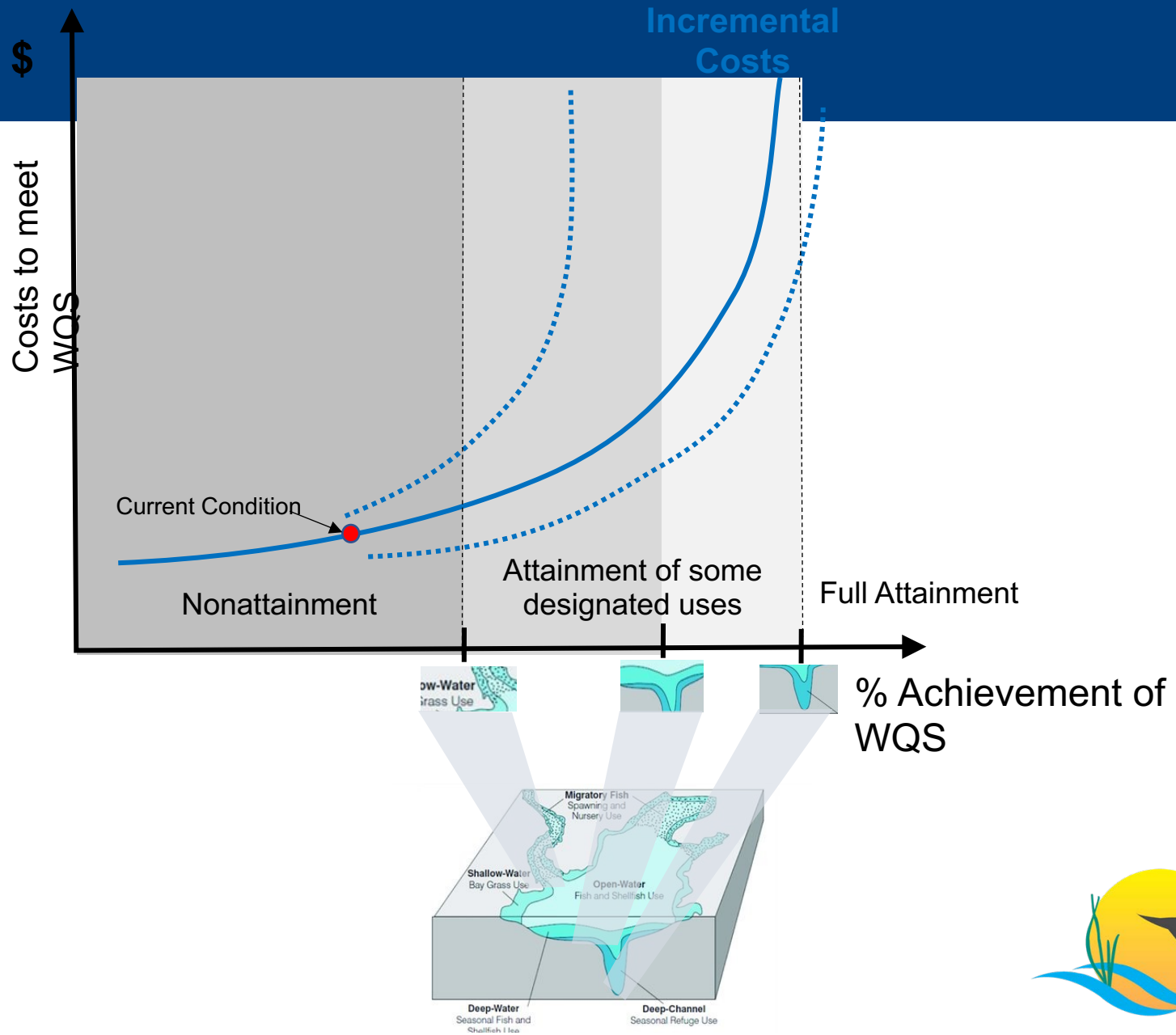


N,P, and Sediment Response to Mgt

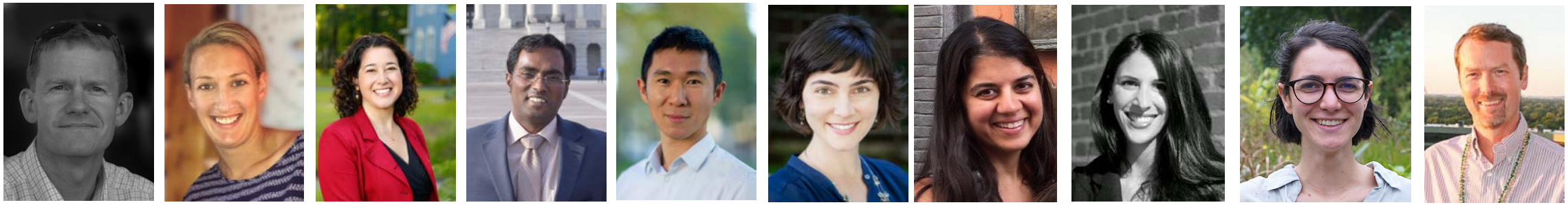


Attainability and Costs of WQS

Implications



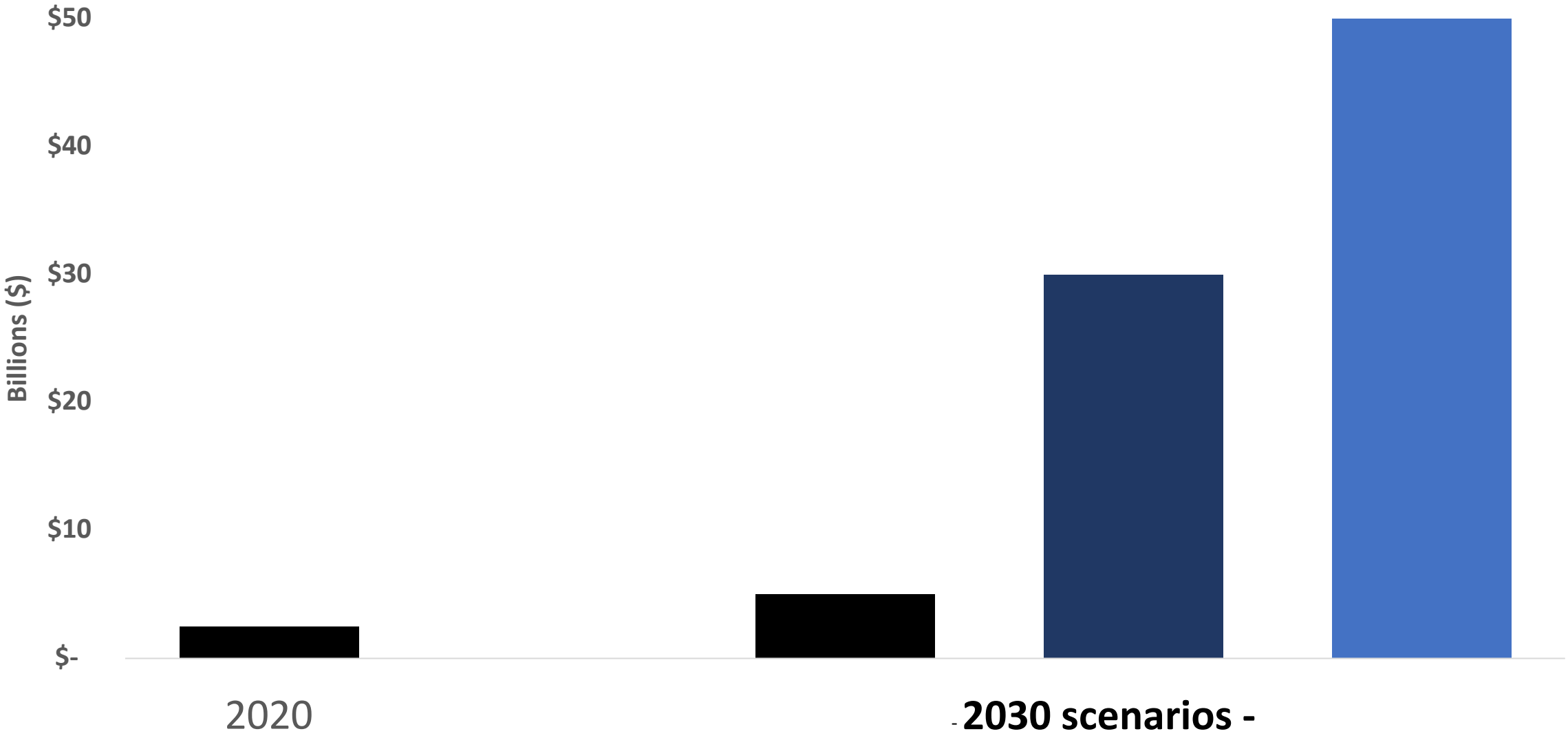
ENVIRONMENTAL POLICY
INNOVATION
CENTER



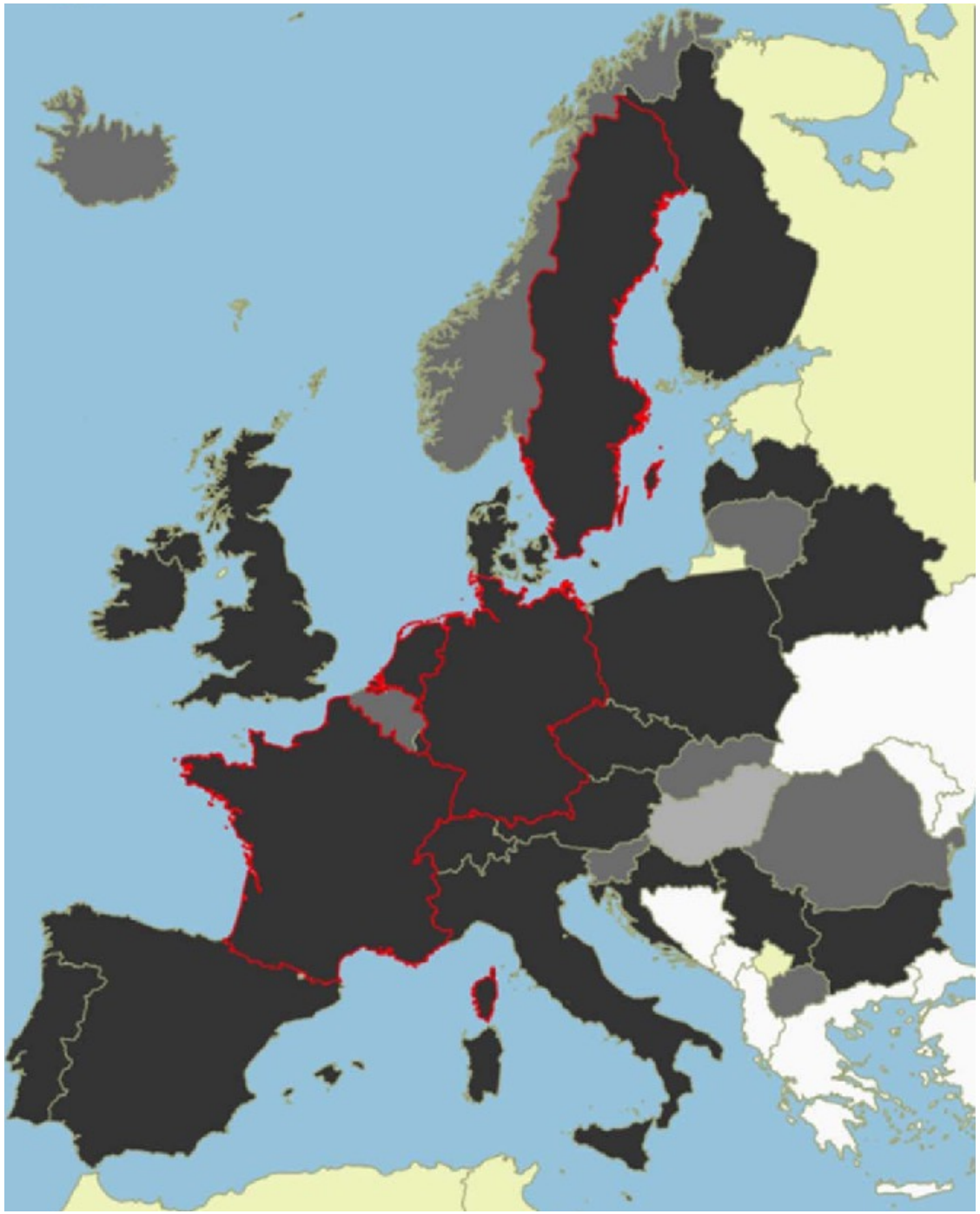
Our mission is to build policies that deliver spectacular improvement in the speed and scale of conservation.

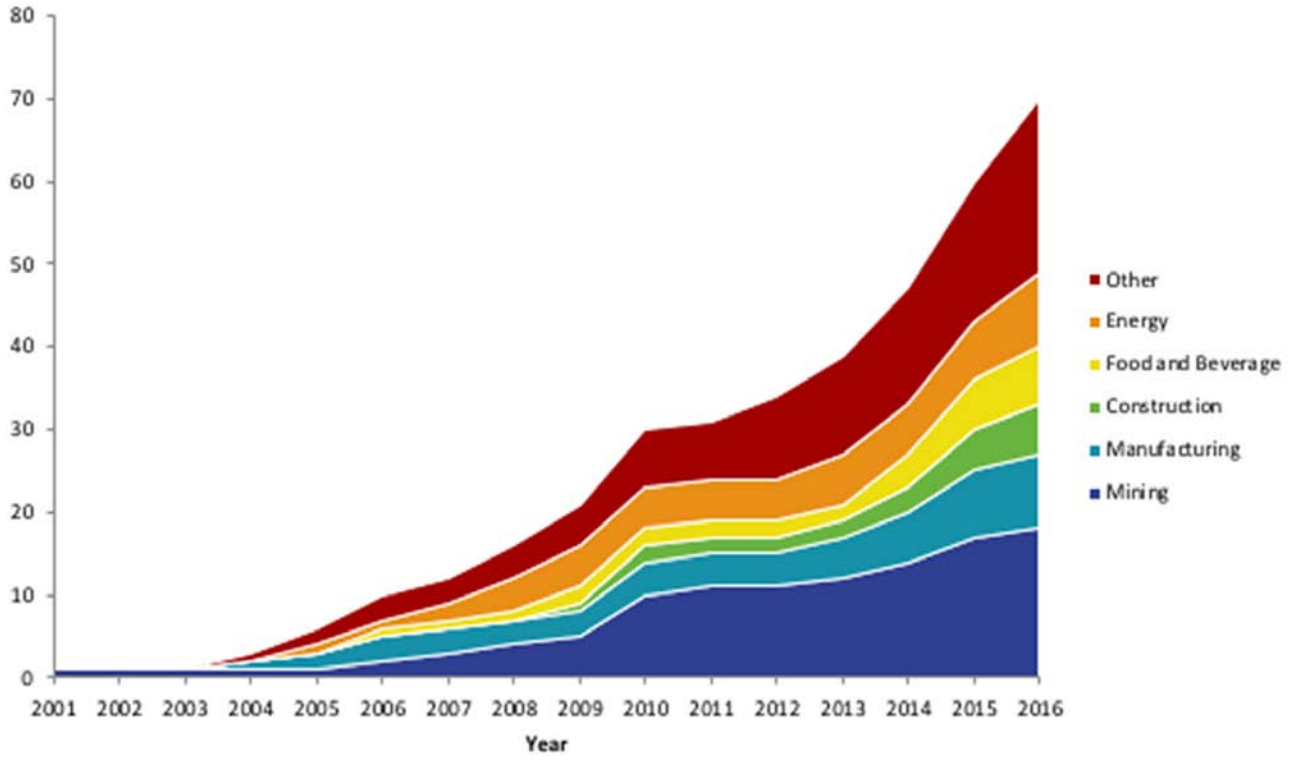
Wetland and stream mitigation banking - $4 billion /year

Likely Scenarios for Voluntary Demand for Carbon Credits



Corporate Net Zero Goals for Biodiversity

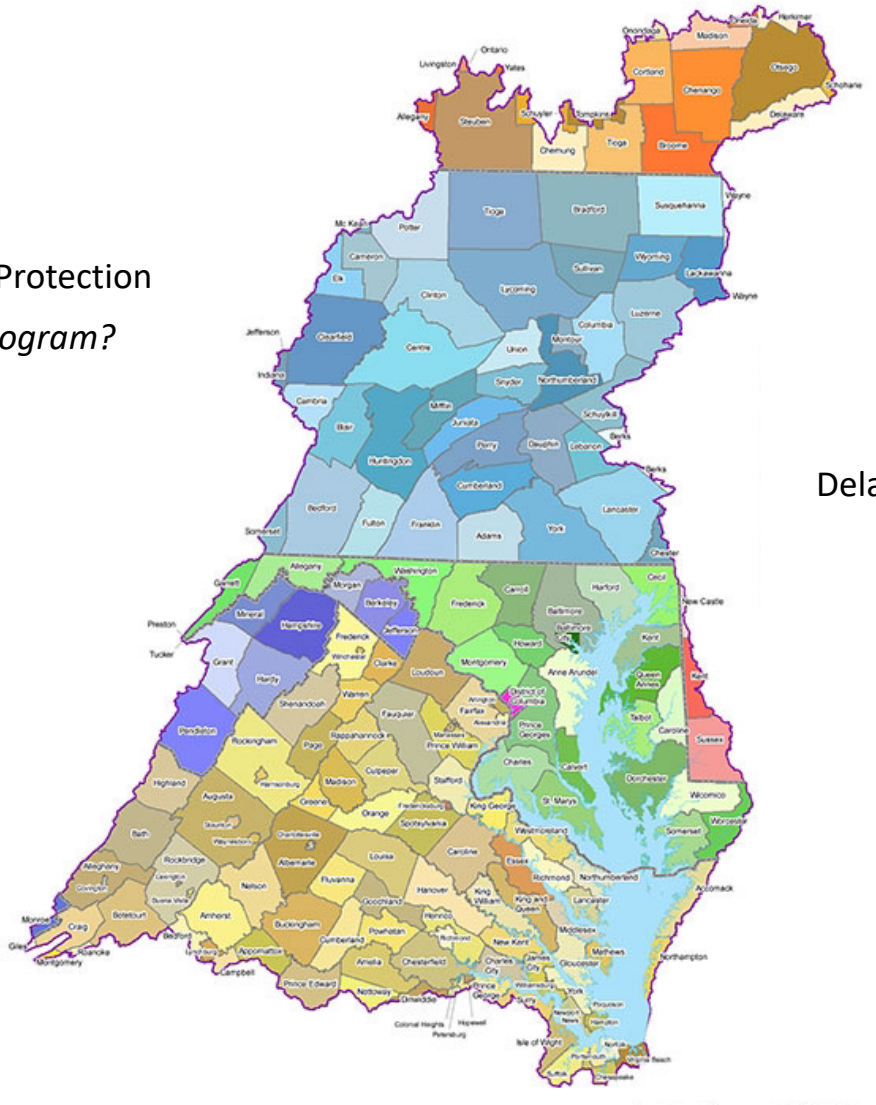




Finance Innovation Chesapeake Bay

PA (SRF) Revolving Fund Forest Protection

PA Clean Water Procurement Program?



Delaware Revolving Water Fund

MDOT Advance Stream Credit Procurement
MDOT Smart Ponds

MD Clean Water Commerce Act

MD Forest Banking

Prince Georges P3 – biggest environmental P3 in US

Anne Arundel Full Delivery Credits

VA Wetlands Banking

VA DEQ Nonpoint Source Nutrient Trading (160 banks)

DC Stormwater Credit Price Floor

DC Stormwater Retention Credits

DC Green Bank

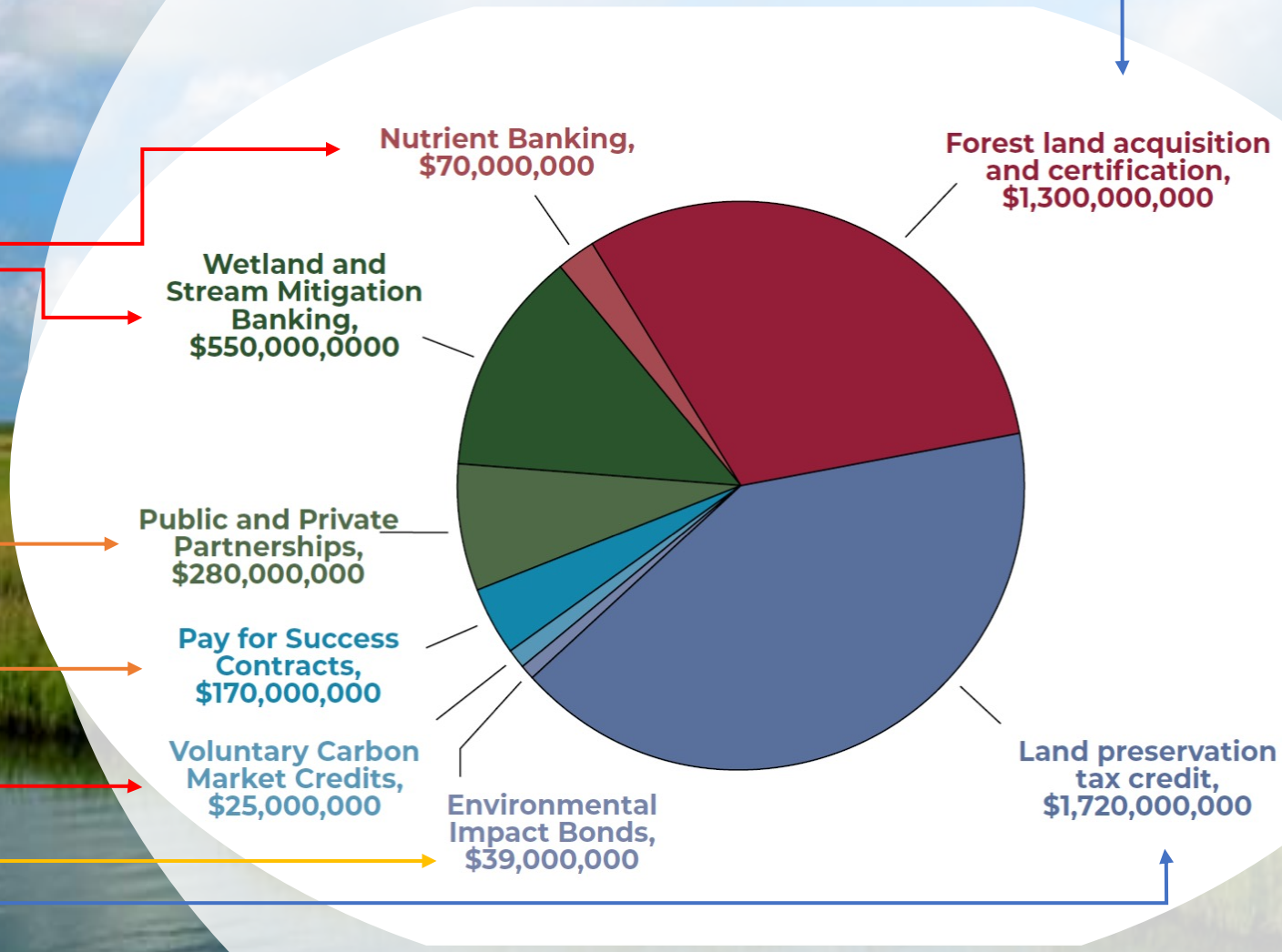
Market demand for sustainable products

Offset/net zero policies

Procurement & contracting

Bonds & borrowing

Tax policy




MARYLAND FORESTS ASSOCIATION
Forests Forever


ALLIANCE
for the Chesapeake Bay


ENVIRONMENTAL POLICY
INNOVATION
CENTER


Grain
Maryland Grain
Producers Association


HANNON
ARMSTRONG
INVESTING IN THE FUTURE OF ENERGY


EDF
ENVIRONMENTAL
DEFENSE FUND
Finding the ways that work


Ecosystem
Investment
Partners


THE
LYME TIMBER
COMPANY


THE
CONSERVATION FUND


Chesapeake
Conservancy
EXPLORE. CONSERVE. INNOVATE.


!2


GreenVest
VISION • PERFORMANCE • RESULTS


The Nature
Conservancy


MARYLAND LEAGUE
OF CONSERVATION VOTERS


RS
RESTORATION
SYSTEMS


Quantified
Ventures


the earth partners


Ecological Restoration Business Association
ERBA


TFG
THE FORESTLAND GROUP

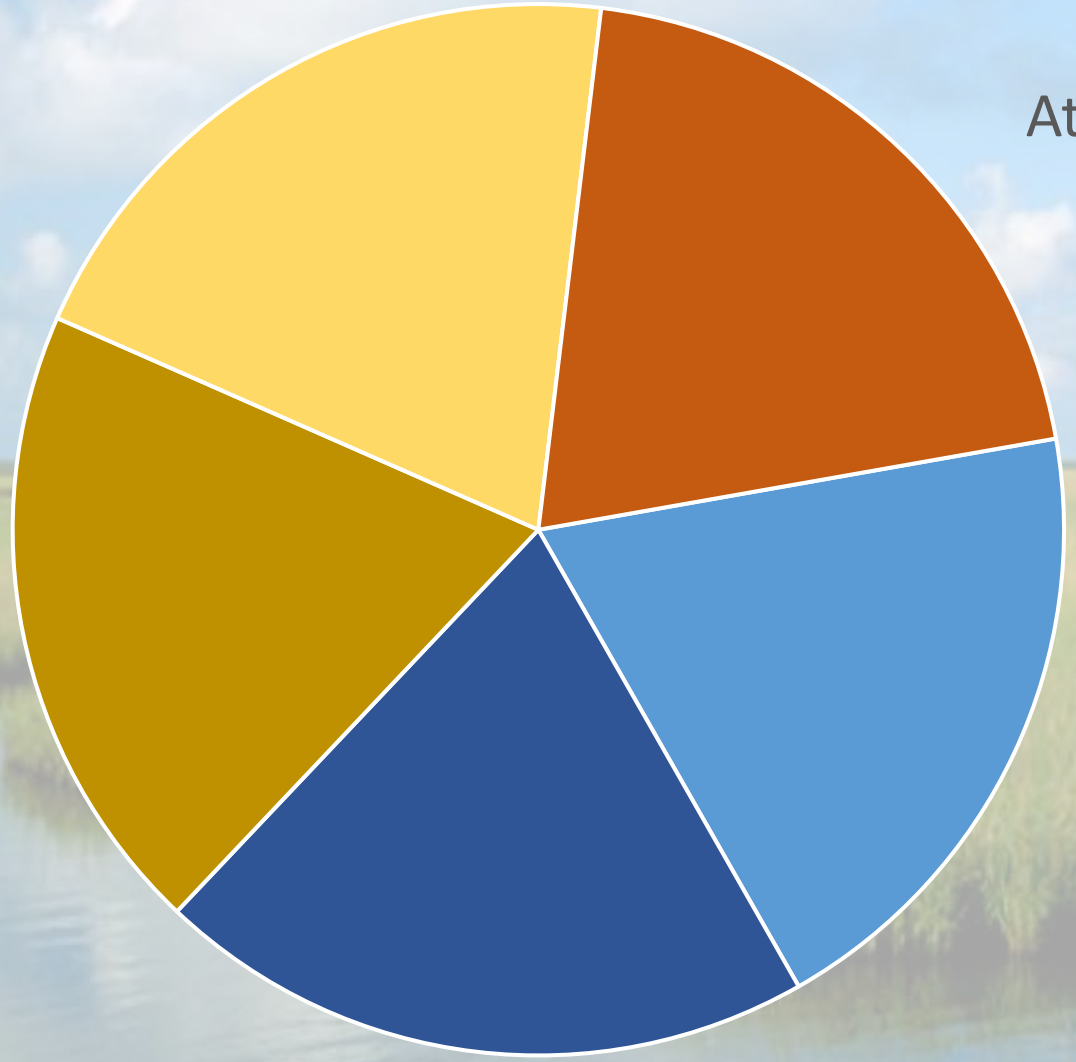

GREENPRINT
PARTNERS


Land Trust Alliance


res


CHESAPEAKE BAY FOUNDATION
SAVE THE BAY

Maryland's Comprehensive Conservation Finance Act



Maryland's Comprehensive Conservation Finance Act

- Recognize watersheds as state infrastructure
- First definition in law for blue infrastructure; first green infrastructure for climate resilience
- Water infrastructure loans include new priority for environmental justice & burdened communities
- Loan guarantees for nonprofits or for profits lower the cost to borrow money (used to finance green bonds, impact bonds, and pay for success contracts)
- Directs state to allow multiyear SRF and grant program applications for projects where intermediaries would deliver green infrastructure projects with co-benefits
- Steps toward human right to water
- Prioritizes projects with quantifiable co-benefits (local jobs, soil carbon, EJ)
- "Pay for Success" added as a contract category for environment agencies and DOT in state procurement code

Define Environmental Outcomes as Commodities

"Environmental outcome" means a commodity that is modeled or directly measured as a single, quantifiable, and certified unit of improvement to the environment, including a nutrient or carbon benefit

Hannon Armstrong investment in Tinkers Creek stream restoration project located in Prince George's County, Maryland.

Photo Credit: GreenVest LLC

Putting Private Finance to Work for Conservation

April 2, 2021, 4:01 AM

Listen

Achieving the ambitious goal of net-zero greenhouse gas emissions by 2050 will require scaling up private sector investments in nature-based infrastructure solutions, such as wetland and forest restoration, say Jeff Eckel, CEO of Hannon Armstrong, and Timothy Male, executive director of the Environmental Policy Innovation Center. They look at projects around the Chesapeake Bay and state legislative efforts.

Jeff Eckel
Hannon Armstrong

Timothy Male
Environmental Policy Innovation Center

https://bit.ly/2R88KsI

General policy principles that will help private investment expand

- Larger restoration projects are critical - investments from pension funds and other investors have large minimum sizes ($50M+)

- Environmental outcomes need to have a stable or predictable value; simply putting a definition in procurement code, allowing outcomes to be measured with models, raises the value of outcomes including for fully privately financed projects

- If it takes longer to permit or approve an oyster reef restoration or green infrastructure project than a highway interchange we've messed up - and made the work less investable

- Opportunities for multi-year Revolving Loan and other funding will make it easier to add private investment to the funding pool for larger green infrastructure initiatives and the larger scale creates efficiencies that lower project costs

- Private conservation investment is best able to meet and accurately price the offset needs of regulated private activity – let it. Don't subsidize development by having impact fees collected by government only at prices that are politically acceptable

What's on the Horizon: Q&A Session

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The 2021 SRS Biennial Meeting is currently on a break.

The meeting will resume at 12:30 PM EDT

Photo by Matt Rath/Chesapeake Bay Program

Opportunities for Accelerating Progress in Outcomes

Sean Corson

Outcome Attainability Team, Sustainable Fishers GIT Chair

Adaptive Management Successes & Challenges

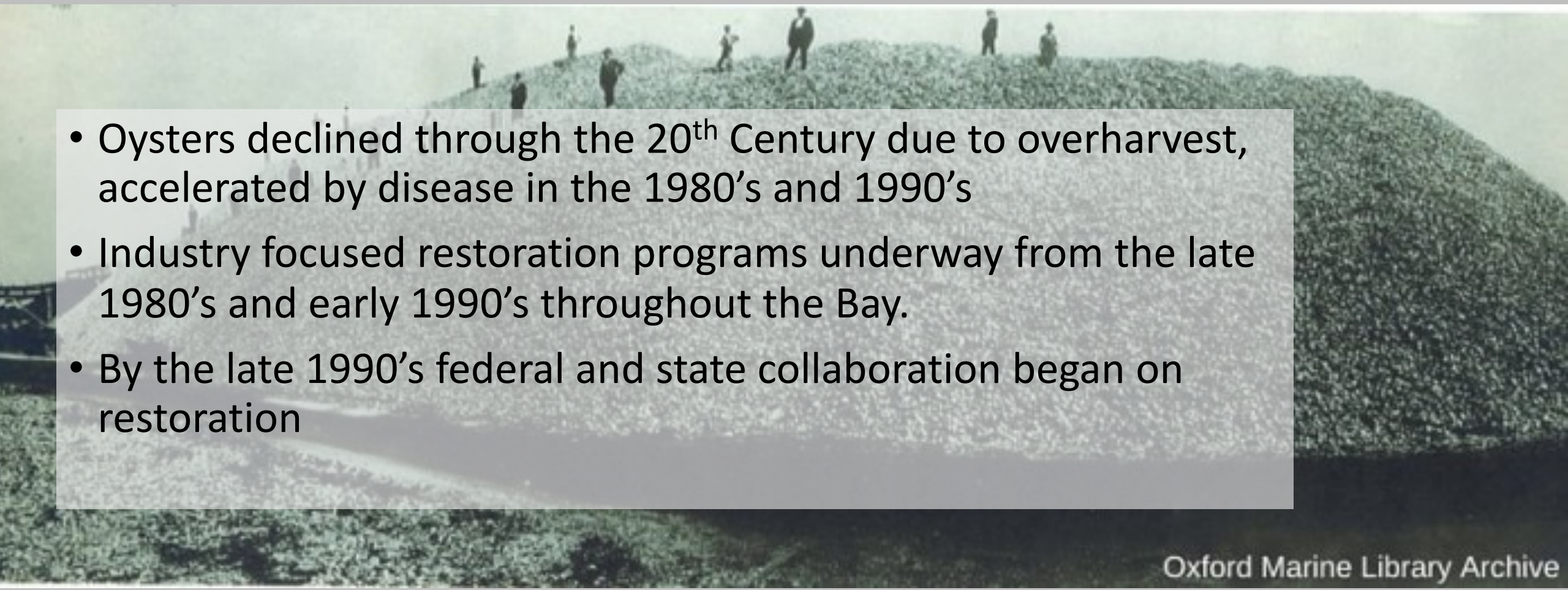
1. **Oyster Restoration**, *Sean Corson, Sustainable Fisheries GIT Chair*
2. **Land Conservation**, *Joel Dunn, Chesapeake Conservancy President & CEO*
3. **Forest Buffers**, *Sally Claggett, Forestry Workgroup Coordinator*
4. **Wetlands**, *Christine Conn, Habitat GIT Co-Chair*

Large-Scale Oyster Restoration in the Chesapeake Bay

SRS Biennial Meeting
5/13/21

Sean Corson
Director
NOAA Chesapeake Bay Office

History and Status

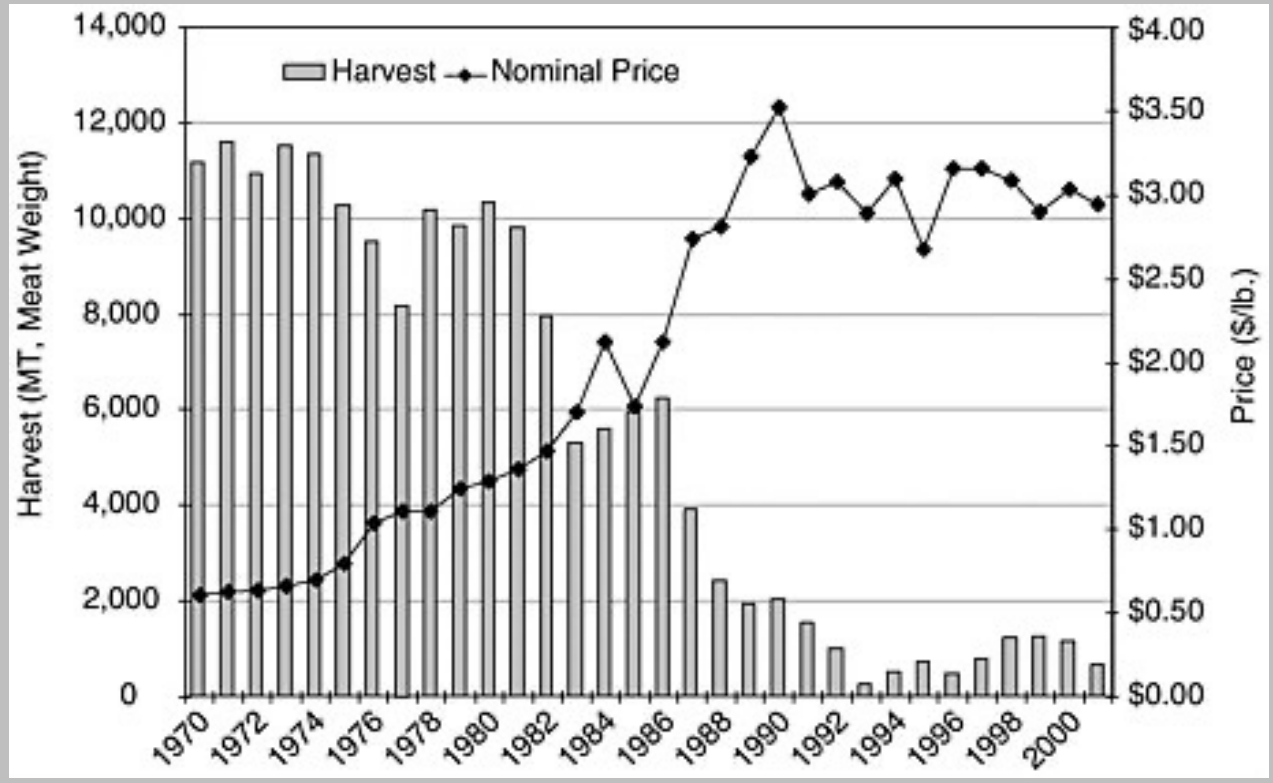


- Oysters declined through the 20th Century due to overharvest, accelerated by disease in the 1980's and 1990's
- Industry focused restoration programs underway from the late 1980's and early 1990's throughout the Bay.
- By the late 1990's federal and state collaboration began on restoration

Early Collaborative Restoration

An example of entrenched thinking

- Small scale in size, a few acres at a time
- Counting acres restored in aggregate vs by project
- Closely tied to industry goals, with ancillary ecological benefits
- Sedimentation and disease suggested fishing them up within 3 years
- Seen as helping the economy and ecology, good solution under difficult circumstances



Shifting Perspective

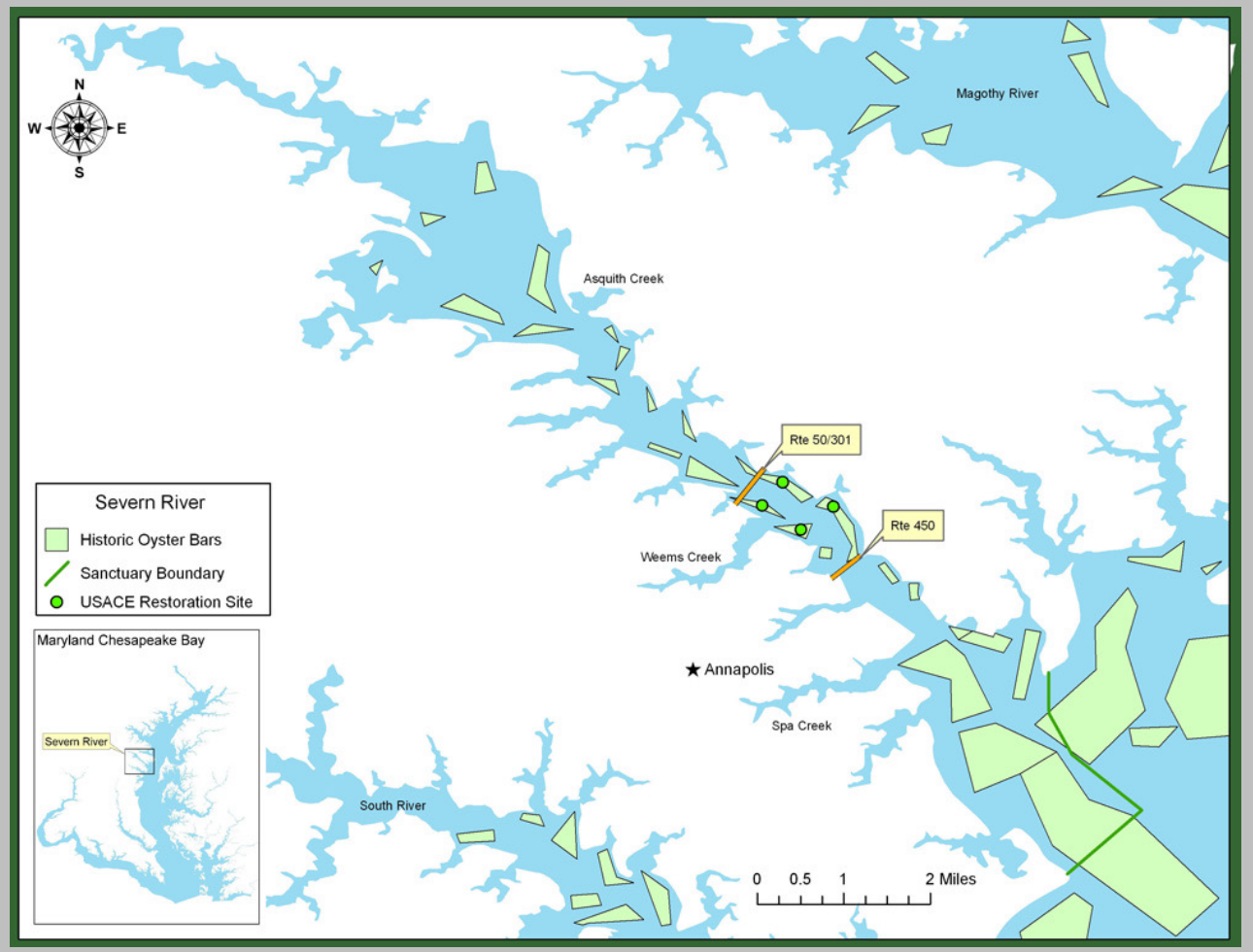
Steve Droter

- Chesapeake 2000 called for a 10x increase in oysters by 2010.
- Questions began to surface around the objective of restoration
- Economic benefits were simple to estimate
- An accountability problem developed around ecological benefits as the focus/perspective of the work changed

Severn River

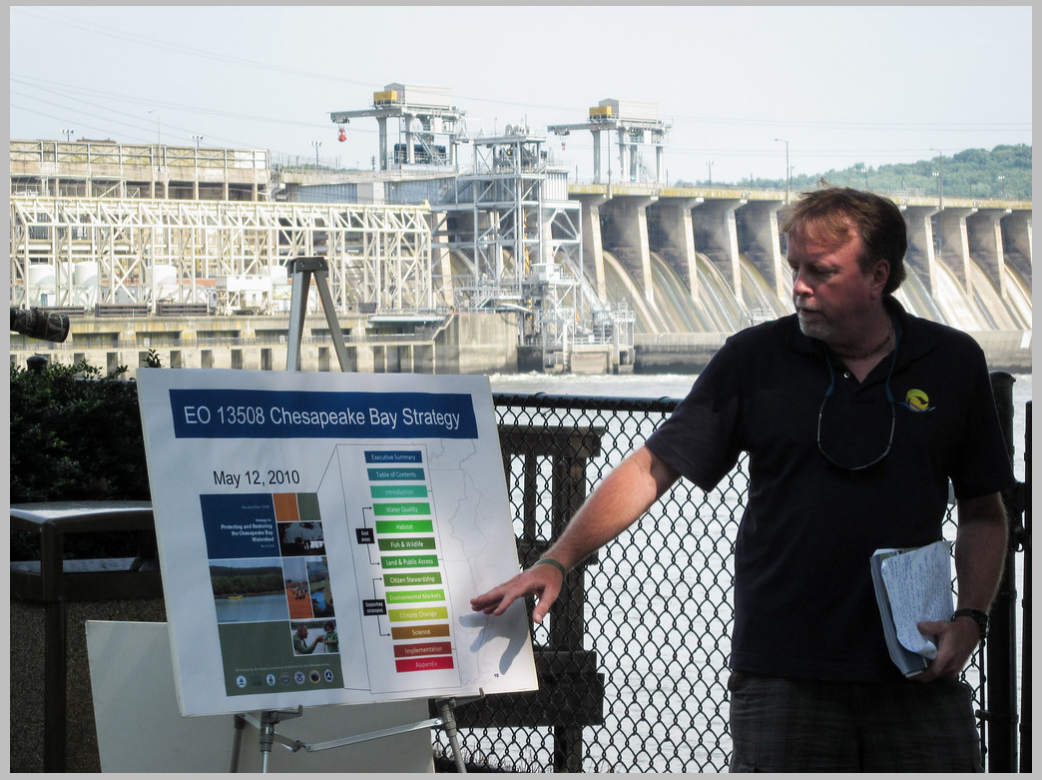
new paradigm begins

- 2009 Turning point toward current approach in MD with implications for entire Bay
- Condemned waters, alternative substrates, bigger scale, pre-restoration survey
- Clearly defined roles between MD, USACE, NOAA, UMCES, NGO



MD DNR

Taking the Concept to Scale

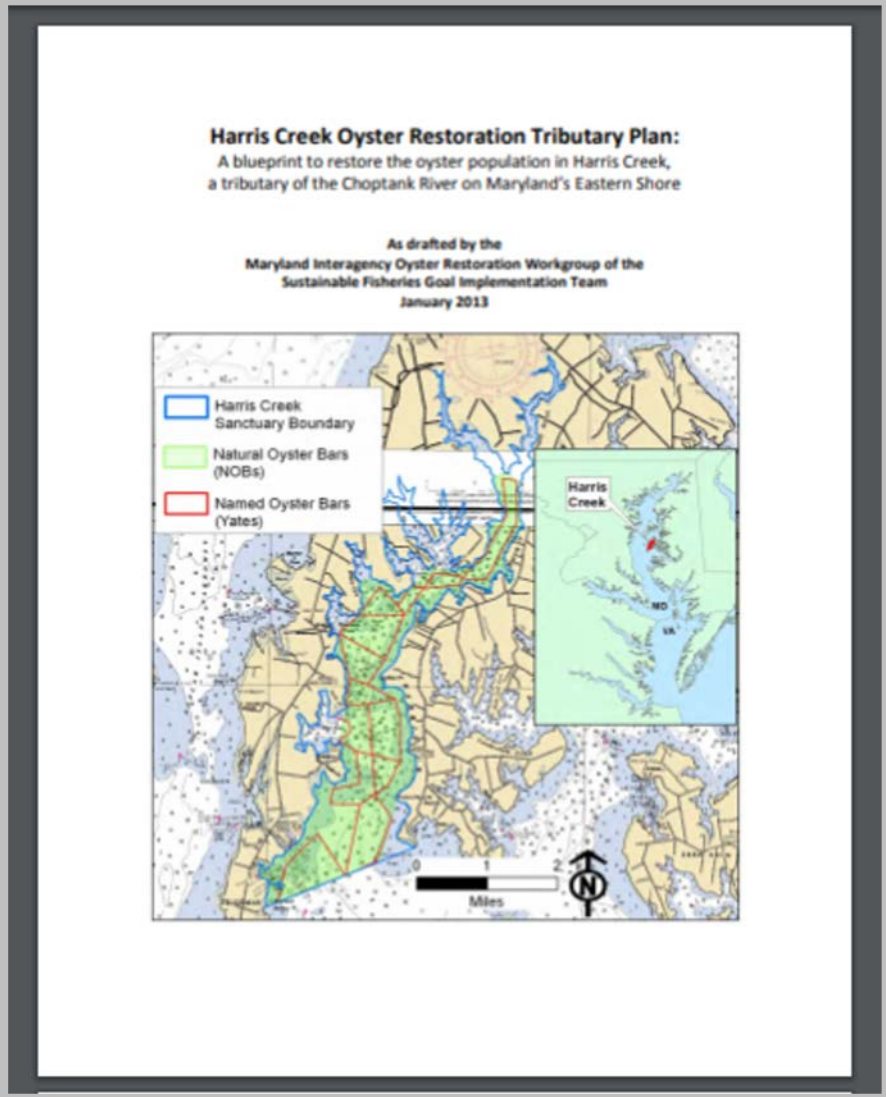


New kind of Goal

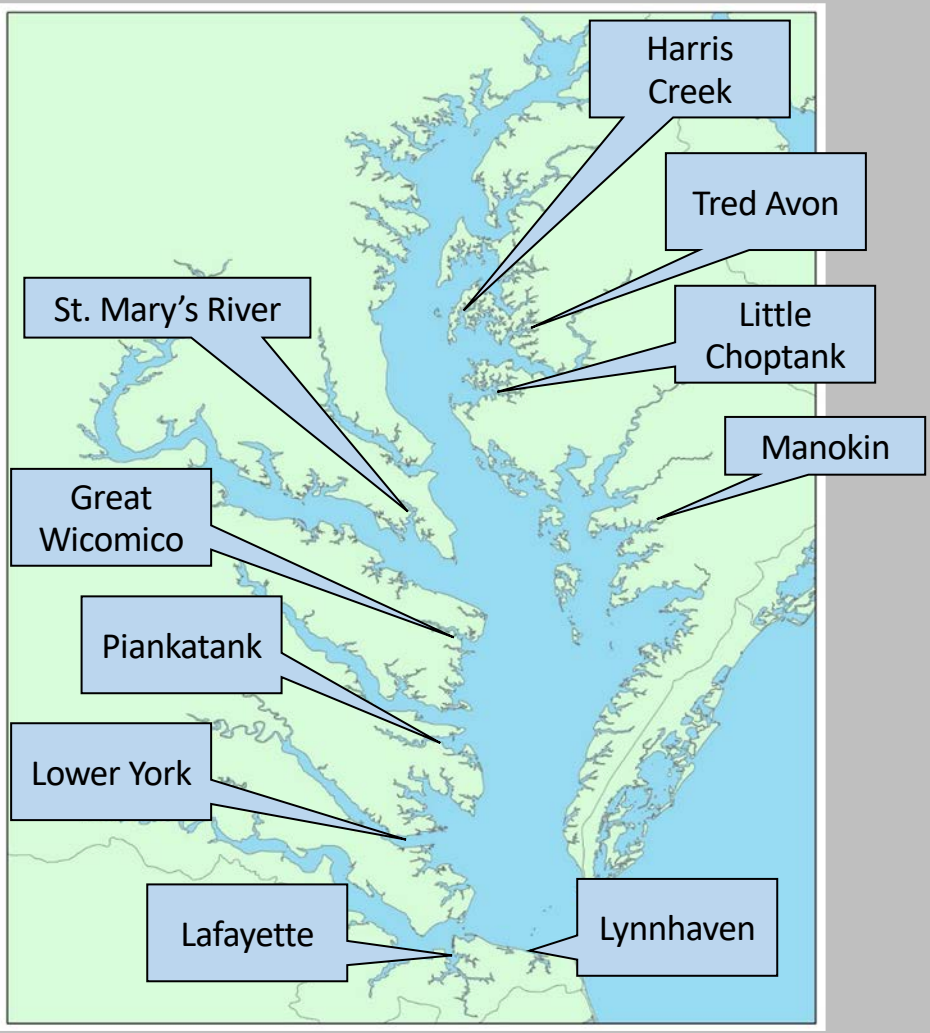
- Restore 20 tributaries by 2025 under EO 13508
- Emphasizing economic aspects of spillover, fish habitat, water quality
- USACE Master Plan
  - Evaluate best options in the Bay
- Federal invitation to work with states, NGO, universities; agreed to in theory

Cost and Accountability

- Overarching goal was set
- A general federal-state agreement to participate was in place
- Details needed to move forward
  - Metrics: What is a tributary? What is restored? What does success look like?
- Break goal out into manageable pieces
  - Begin with Harris Creek
- Blueprint clarified roles, responsibilities, costs, timelines
- One project in the context of 20



When Theory Meets Practice



2010 Harris Creek

- Sanctuary expansion 4%-24%
- Many potential targets, 20 tributaries +
- Price tag for project is $30M

Adjust Expectations

- 2014 Agreement: 10 tributaries by 2025

Planning, accounting and monitoring success is critical

Meanwhile in Virginia

Good progress but a large resource gap

- USACE making progress on ecological restoration
- Virginia Marine Resources Commission, sanctuaries, and rotational harvest
- Multiple NGO's operating at a small scale

Building on recent success

- Blueprint, metrics, monitoring and strong performance results
- Design, cost, schedule providing predictable results

Conditions ripe for Commonwealth to find resources

- Flexibility in implementation but consistent with blueprint
- Provides structure while allowing for local differences led to additional cost savings
- Led to enough enthusiasm an 11th tributary was identified and completed

Keys to Success

- Collaboratively set goal (federal-state)
- Calibrate goal with access to property (public/private lands and water)
- Standardize measures of success
- Specify interim steps to achieve goal
- Establish clear roles and responsibilities in general and on each project
- Implement accounting and monitoring
- Remain patient, flexible, ambitious, yet realistic

Kathy Reeves

The Journey & Conditions for Success


Chesapeake
CONSERVATION PARTNERSHIP
DCR
Virginia Department of Conservation & Recreation
DHR
Department of Historic Resources
CHICKAHOMINY TRIBE
CLEARWATER conservancy
NORTHERN NECK LAND CONSERVANCY
NATIONAL PARK SERVICE
Chesapeake Conservancy
EXPLORE. CONSERVE. INNOVATE.
LANCASTER CONSERVANCY 50 YEARS of SAVING NATURE
PRESERVATION VIRGINIA APVA 1889 125th ANNIVERSARY
LOWER SHORE LAND TRUST
American Farmland Trust
SAVING THE LAND THAT SUSTAINS US
Land Trust Alliance
Together, conserving the places you love
CIVIL WAR TRUST
Saving America's Civil War Battlefields
Civilwar.org
CHESAPEAKE BAY COMMISSION
MARYLAND · PENNSYLVANIA · VIRGINIA
ACCOKEEK FOUNDATION
at Piscataway Park
ANACOSTIA WATERSHED SOCIETY
THE URBAN STUDIO
VIRGINIA OUTDOORS FOUNDATION
DUCKS UNLIMITED
Cacapon & Lost Rivers LAND TRUST
OTSEGO LAND TRUST
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA
THE CONSERVATION FUND
U.S. FISH & WILDLIFE SERVICE
Piedmont Environmental Council
MARYLAND DEPARTMENT OF NATURAL RESOURCES
JAMES RIVER ASSOCIATION
DCNR
pennsylvania
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
Journey Through HALLOWED GROUND PARTNERSHIP
MARYLAND HISTORICAL TRUST
NPC
Northcentral Pennsylvania Conservancy
PRESERVATION MARYLAND
NATIONAL PARKS CONSERVATION ASSOCIATION
LIVING LANDSCAPE OBSERVER
EASTERN SHORE LAND CONSERVANCY
APPALACHIAN TRAIL CONSERVANCY
Chesapeake Bay Program
Science. Restoration. Partnership.
U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
NatureServe
DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
Maryland Environmental Trust
SUSQUEHANNA GATEWAY HERITAGE AREA
1914 - 2014 VIRGINIA FORESTRY
Shenandoah AT WAR
National Historic District
THE TRUST for PUBLIC LAND
potomac conservancy
www.potomac.org
The Nature Conservancy
Protecting nature. Preserving life.
FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE
Saving Nearby Nature
NVCT
Northern Virginia Conservation Trust
National Trust for Historic Preservation
Save the past. Enrich the future.
FINGER LAKES LAND TRUST

Chesapeake
CONSERVATION PARTNERSHIP

Farms

Forests

Habitat

Heritage

Human Health

All interconnected:

Vibrant economy

Strong communities

Healthy people

Working farms/forests

Thriving native wildlife

Clean water

Healthy watersheds

Shared heritage

Recreation

Quality of life

Chesapeake
CONSERVATION PARTNERSHIP

Timeline

2009

President Obama EO 13508: Chesapeake Bay Protection and Restoration.

In response to EO, NPS convened a group of conservation organizations to develop recommendations on land conservation and public access.

2010

NPS & Chesapeake Conservancy (newly formed) establish partnership and begin to regularly co-convene the group.

CCP partners articulated for the first time the goal of protecting an additional 2 million acres and adding 300 public access sites by 2025.

2014

CCP presents at National Workshop on Large Landscape Conservation

2014 Chesapeake Bay Watershed Agreement signed with verbatim CCP goals

2019

Marking Milestones, comprehensive report on progress in conserving land in the watershed and compilation of State funding.

CCP sets new conservation goal to protect 30 percent of the watershed by 2030

2021 -

March 2021, CCP Steering Committee sent letter to Secretaries Haaland, Vilsack, and Raimondo to share our commitment to 30x30 and equitable access.

May 2021, *Conservation and Restoration of America the Beautiful* report release with Chesapeake call out!

Conditions for success

- NPS leadership and support
- Leadership & engagement of a diverse senior-level Steering Committee
- Diverse funding
- Formal organization: guiding charter document, regular meetings, goals and annual initiatives, formal venue for idea and resource sharing
- Administration

Chesapeake CONSERVATION PARTNERSHIP

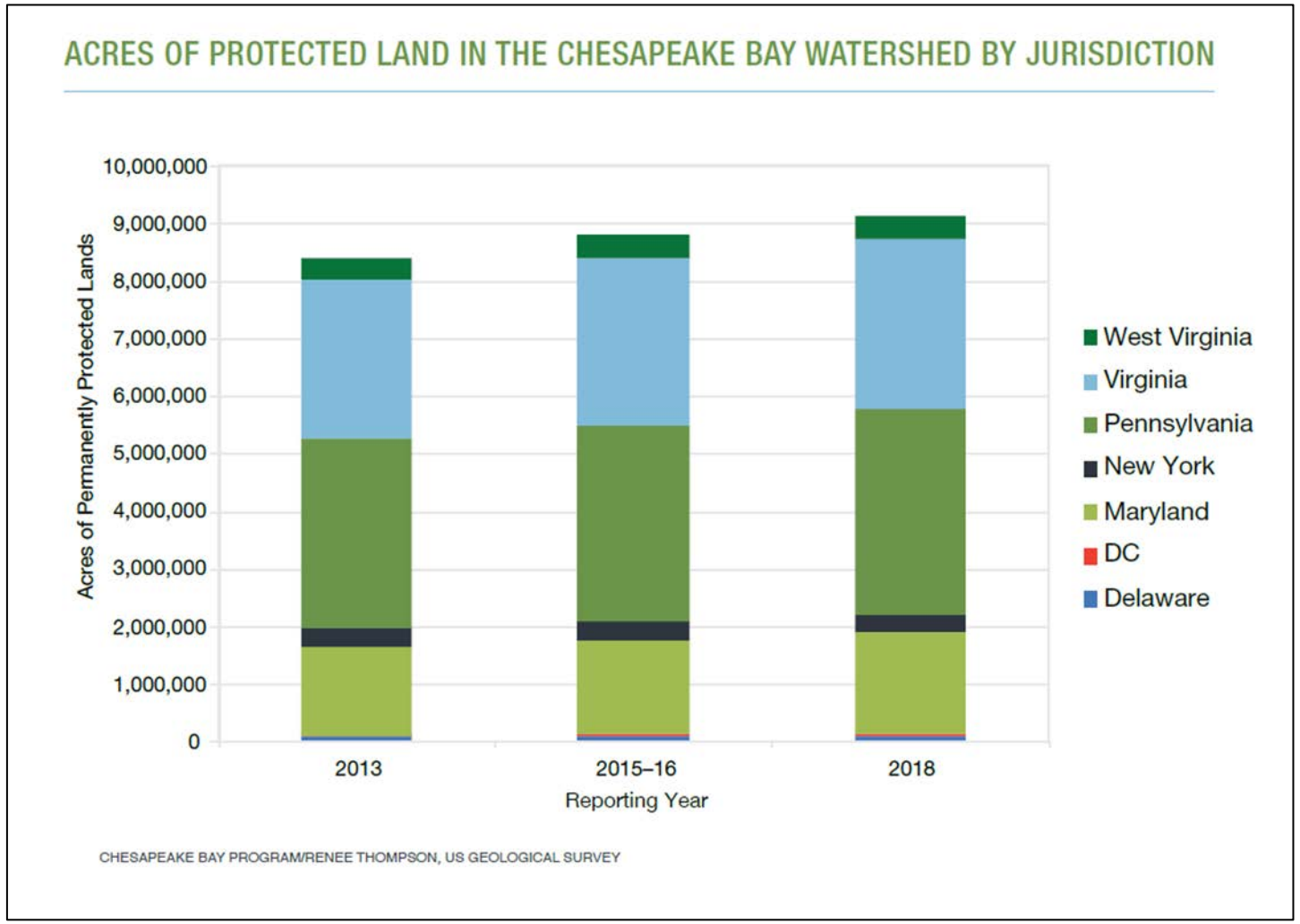
Results

Increasing / Enhancing conservation across the Chesapeake Bay watershed through:

- **Conservation Atlas**
- **Engaging an inclusive, new generation of conservationists**
- **Expanding land conservation financing**
- **Advancing conservation policy**
- **Building capacity of CCP and its members**

Chesapeake
CONSERVATION PARTNERSHIP

Charting the future



Additional 2 million acres by 2025

30% by 2030

"Half Chesapeake"

Chesapeake CONSERVATION PARTNERSHIP

2021 Strategy Review System (SRS)

Biennial Meeting

May 12-13, 2021

Wetlands

Christine Conn,
Habitat Goal Implementation Team Co-Chair

Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*

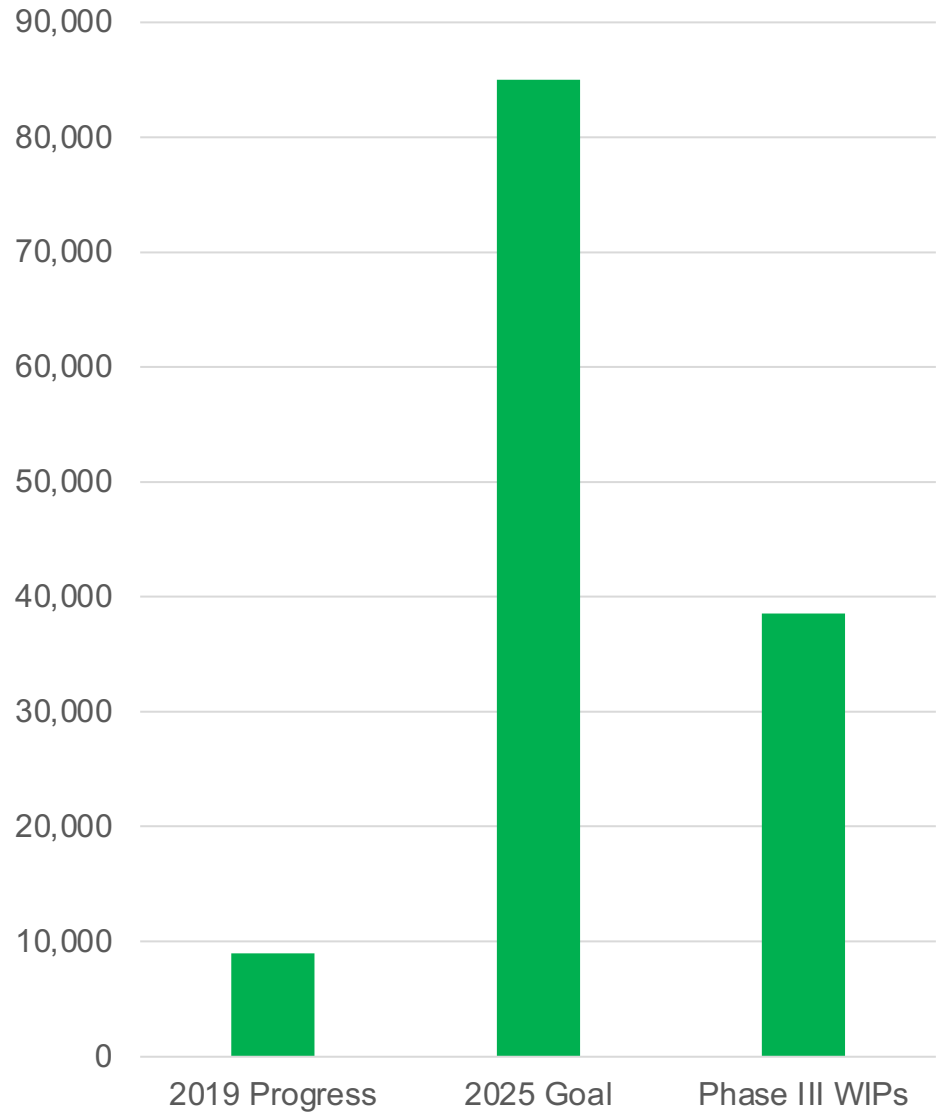
Goal: Vital Habitats (*WETLANDS*)

Outcome:

Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 85,000 acres of tidal and non-tidal wetlands and enhance function of an additional 150,000 acres of degraded wetlands by 2025. These activities may occur in any land use (including urban), but primarily occur in agricultural or natural landscapes.

What is our Progress?

- 2010-2019: **16,130** acres of wetlands restored on agricultural lands (non-tidal)
- No tracking of tidal restoration



Is 85,000 Feasible?

- Outcome designed to address **HABITAT** with complementary water quality co-benefits
- Historic loss of about 1.5 million acres
- Restoration Potential = 1 million acres
- Restoration Goal = < 1% of available agricultural land

The Opportunity to Restore is There!

Big Ideas to Make Some Big Gains…

- **Tidal Wetlands**
- Coastal Resilience
- Marsh Migration and Enhancement
- Shoreline Management

- **Non-Tidal Wetlands**
- Inland Resilience
- Floodplain Management/Flood Mitigation

Big Ideas = Big Projects = Landscape Conservation and Restoration

Opportunities for Accelerating Progress in Outcomes
Breakout Group Session

- Breakout Group Assignments:
  - Participants will be placed into *random* groups ~10 persons each
  - Groups focus on one outcome: Forest Buffers, Tidal Wetlands, or Non-tidal Wetlands
- Breakout Agenda (~40 min):
  - Assign a person to facilitate the process and report out
  - Conduct quick intros
  - Discuss questions below and report brief responses in Jamboard pages that align with your breakout group name:
  - Sessions will end by 1:40pm for report-outs by outcome group

1. *Which **solutions and/or best practices from successful Outcomes** can be applied to Forest Buffers and Wetlands? How and why?*
2. *What **new, creative and/or big ideas should we consider** for Forest Buffers and Wetlands that could **significantly change the rate of trajectory** in the short term?*

Opportunities for Accelerating Progress in Outcomes
Breakout Group Session Ground Rules

- Focus on response to the two questions
  - Focus on identifying solutions
  - Refrain from picking apart the problems
  - Avoid judgement, be supportive
  - Move roadblocks and limitations to a parking lot
  - Focus on what we can do now and in the near future
- Think big, think differently
  - Be creative and positive
  - Be curious to explore
  - Look at how we can change the trajectory in a big way to achieve Outcomes
- No need for more input
  - Forest Buffers and Wetlands leads will be participants of this process; they will not act as SMEs to answer questions or pick apart issues

Opportunities for Accelerating Progress in Outcomes
Report Outs: Observations & Key Takeaways

- [Show Jamboards]
- Observations & Key Takeaways from the Outcome Attainability Team

The Journey Forward

Nainoa Thompson
Native Hawaiian navigator
Polynesian Voyaging Society President

Renewed Commitment & Collective Call to Action

Denice Wardrop

CRC Executive Director, Biennial Meeting Co-Chair

Renewed Commitment & Collective Call to Action

Menti.com, Passcode: (see chat)

1. [List question]?
2. [List question]?

Observations and Key Takeaways

- Sean Corson, Sustainable Fisheries GIT Chair
- Carin Bisland, Branch Chief, Partnerships, EPA CBPO

Day 2 Wrap-up & Closing Remarks

Michelle Price-Fay
CBPO Acting Director

Thank you for your support and participation!