

# *Revising the Comprehensive Conservation & Management Plan for the Delaware Estuary*

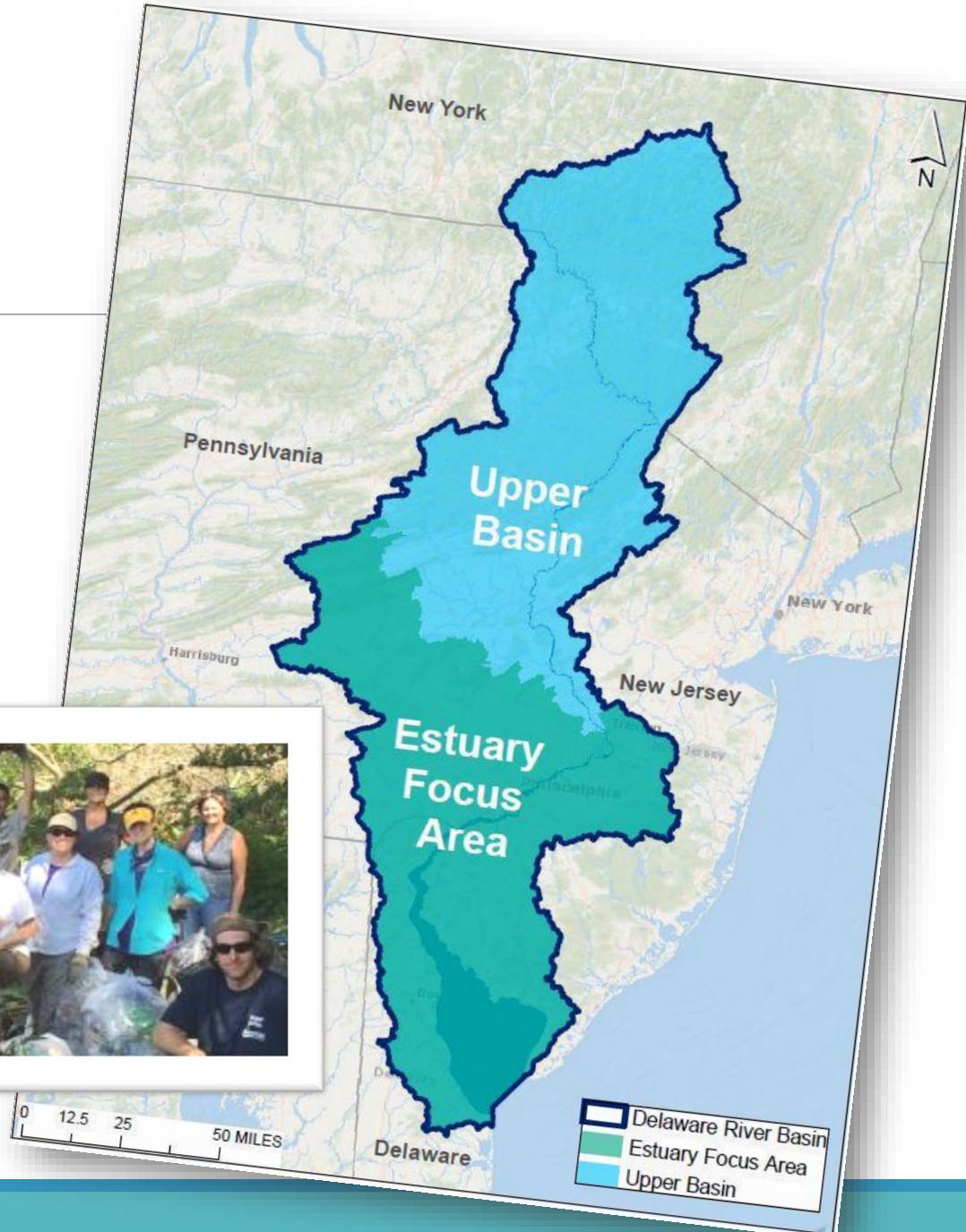


# WHERE?

THE DELAWARE RIVER WATERSHED  
PA, NJ, DE, AND NY

PDE is watershed-based,  
Estuary focused

- Over 6,000 square miles
- 6.7 million people
- 7% of PA, 26% of NJ,  
50% of DE



# WHO?

THE PARTNERSHIP FOR THE DELAWARE ESTUARY

## VISION

Working together for clean water, thriving fish and wildlife, and abundant recreational activities in and around the tidal Delaware River and Bay to support people, communities, and a robust economy.

## CORE PARTNERS

- Delaware River Basin Commission
- EPA Regions 2 and 3
- DE Dept. of Nat. Resources and Enviro. Control
- NJ Dept. of Enviro. Protection
- PA Dept. of Enviro. Protection
- Philadelphia Water



Photo Credit: Amy Baldwin, White Clay Creek

# WHAT?

## THE COMPREHENSIVE CONSERVATION MANAGEMENT PLAN

- Long-term plan that contains actions to address water quality and living resource challenges and priorities.
- Last updated in 1996
- A plan for all partners working in the region

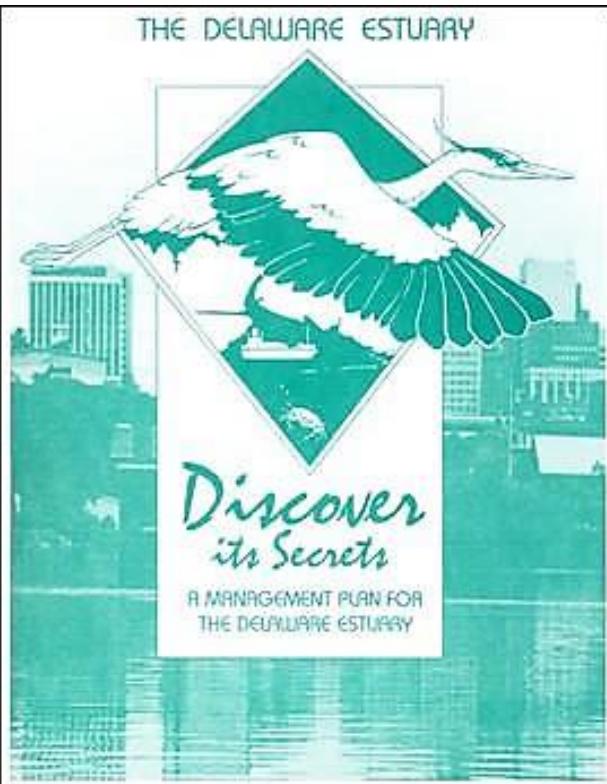


Photo Credit: Stephanie Rindosh, Philadelphia Rain Garden

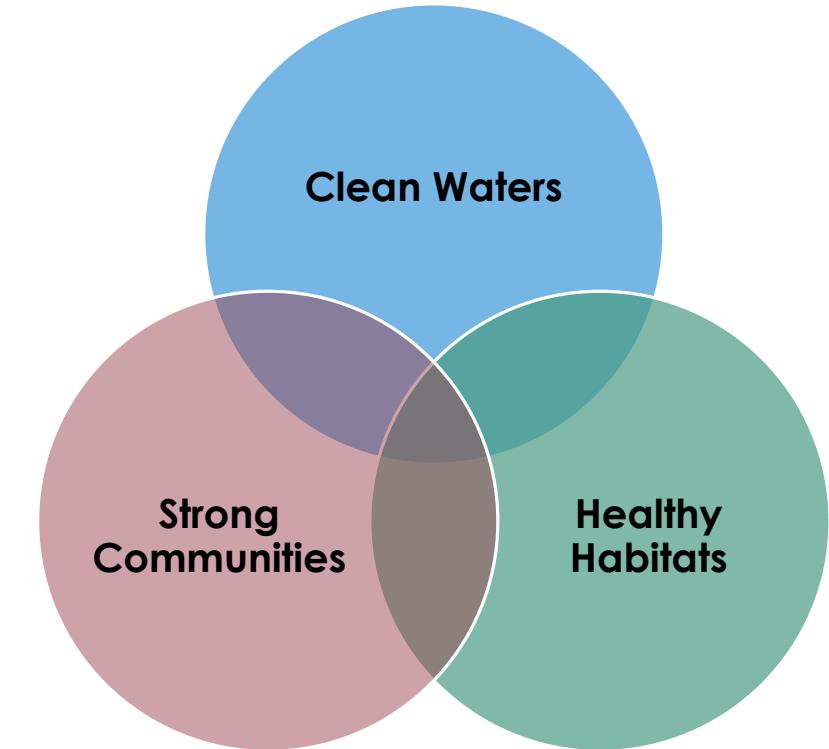
# WHAT?

## ORIGINAL PLAN

- Land Use Management
- Toxics
- Water Use Management
- Education & Involvement
- Habitat & Living Resources

## REVISED PLAN

- Clean Waters
  - Nutrient Pollution
  - Other Pollutants
  - Sustain Flow
- Strong Communities
  - Resilience and Access
  - Engagement
- Healthy Habitats
  - Wetlands
  - Forests
  - Fish & Shellfish



# WHAT'S THE PROCESS?

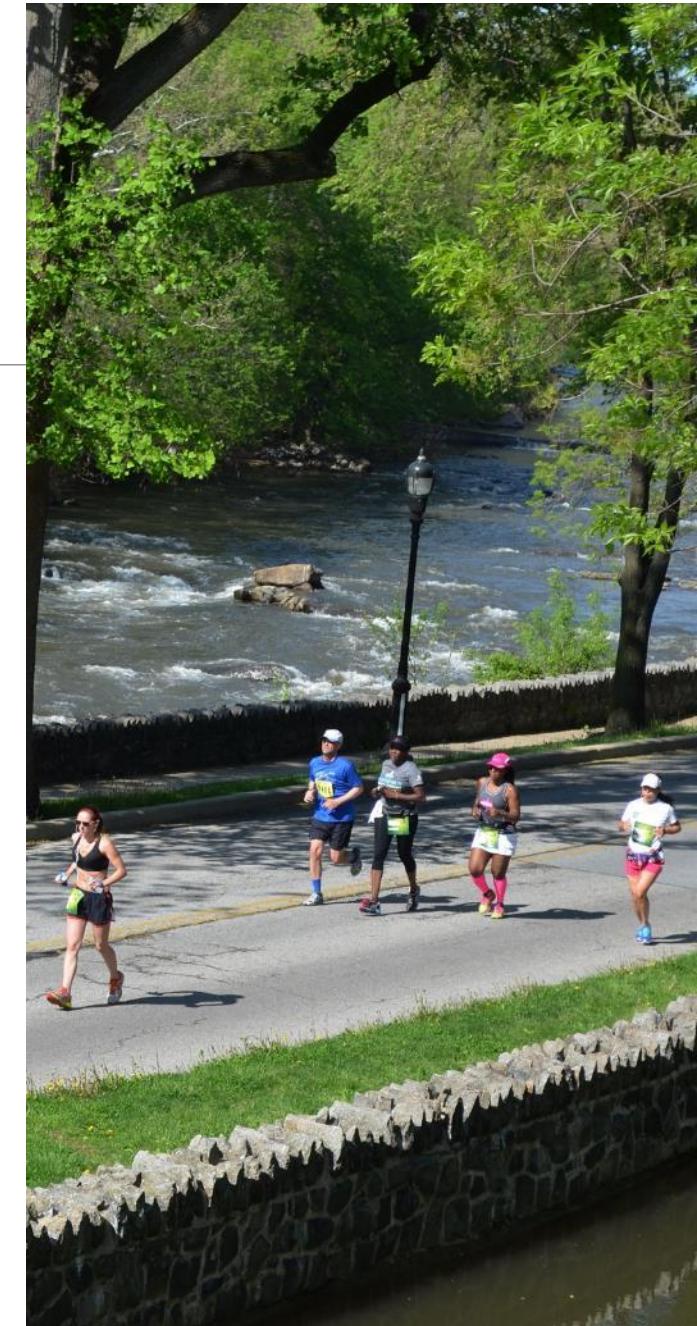
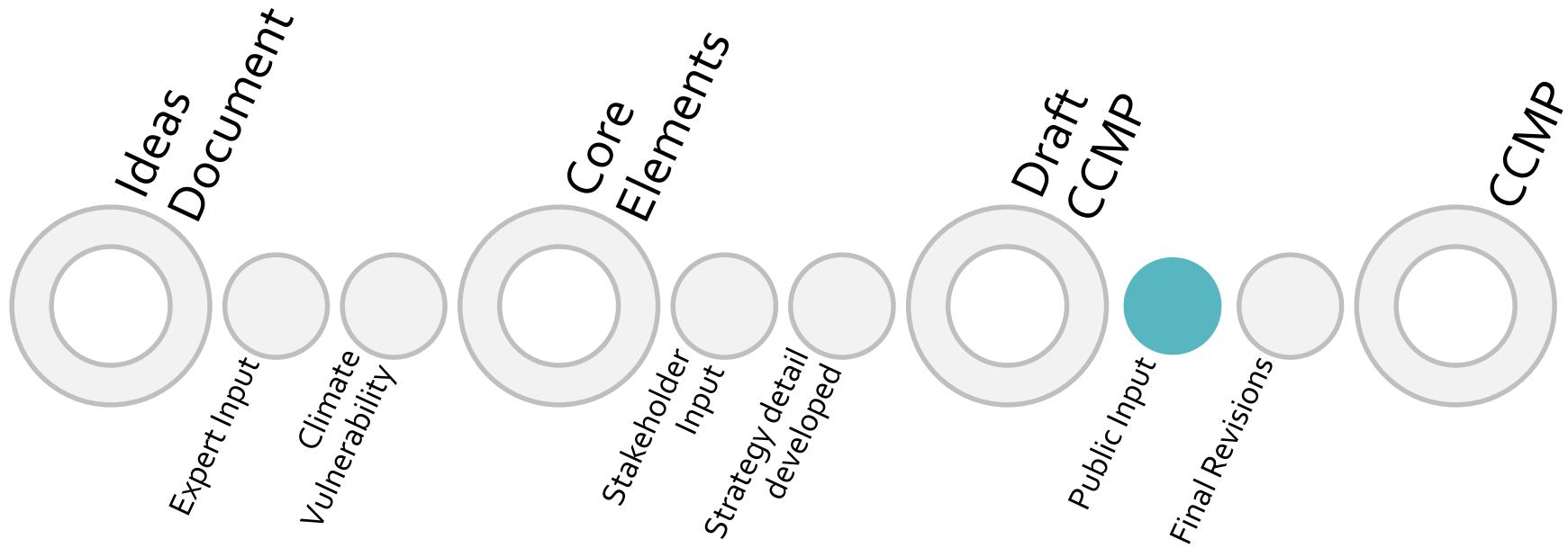


Photo Credit: Thomas Davis, Brandywine Creek

# CLEAN WATERS

## W1: Reduce Nutrient Pollution and its Impacts

Strategy	Description
W 1.1	Promote infrastructure-related improvements to reduce pollutants from point-sources
W 1.2	Support innovative planning and design practices to reduce nutrients from stormwater and agricultural runoff through promotion, education, and implementation
W 1.3	Promote land use planning by local municipalities that prevents, reduces, and/or more efficiently manages stormwater runoff to prevent pollution
W 1.4	Provide outreach and information to property owners to assist in reducing non-point sources of nutrients
W 1.5	Conduct research and monitoring on nutrient impacts in the Estuary for biological and ecological endpoints

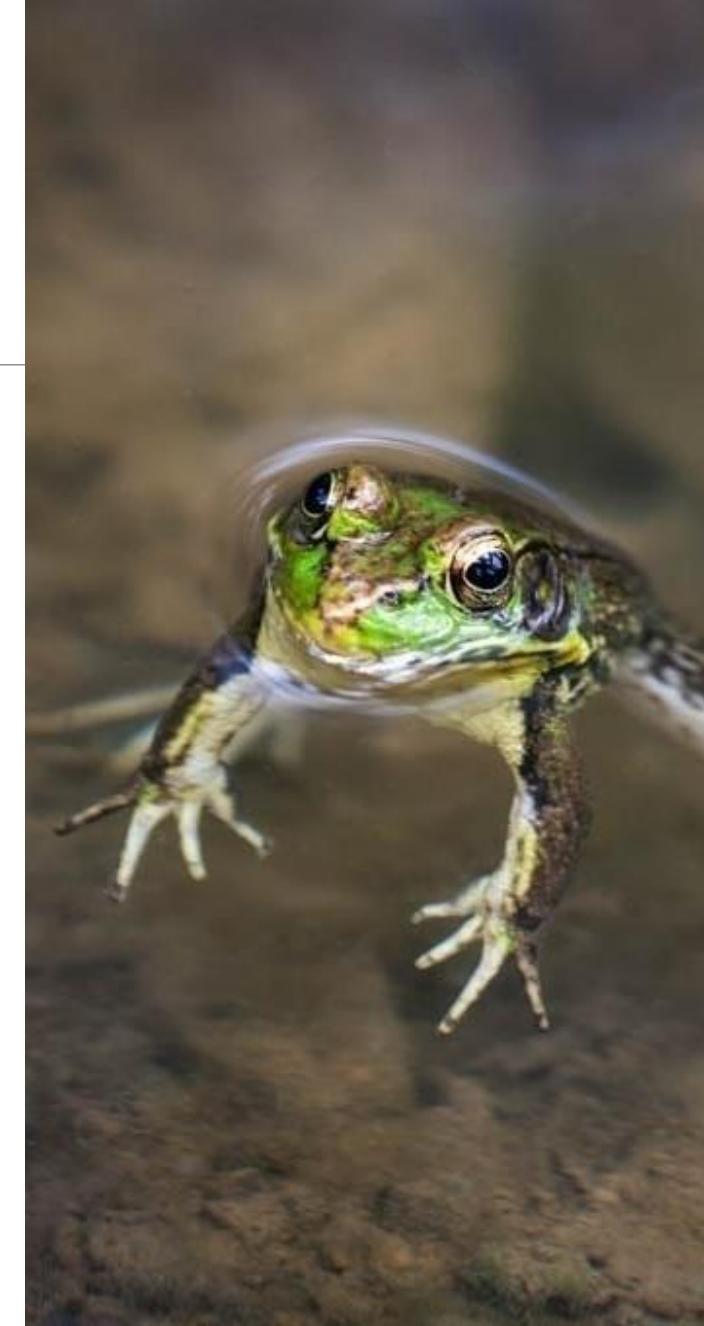


Photo credit: Diane Granger, East Greenville, PA

# CLEAN WATERS

## W2: Reduce Other Pollutants and their Impacts

Strategy	Description
W 2.1	Conduct outreach and technical assistance programs to reduce non-point sources of contaminants
W 2.2	Promote the identification, cleanup, and revitalization of contaminated sites
W 2.3	Support adaptive management and reporting of pollution reductions
W 2.4	Coordinate and promote research and monitoring efforts (chemical, physical, biological) associated with the causes of water quality impacts throughout the Delaware Estuary
W 2.5	Conduct and coordinate (where appropriate) education, research, monitoring, and communication about fish and shellfish consumption to protect human health
W 2.6	Improve, sustain, and enhance spill communication and response with Delaware Estuary partners

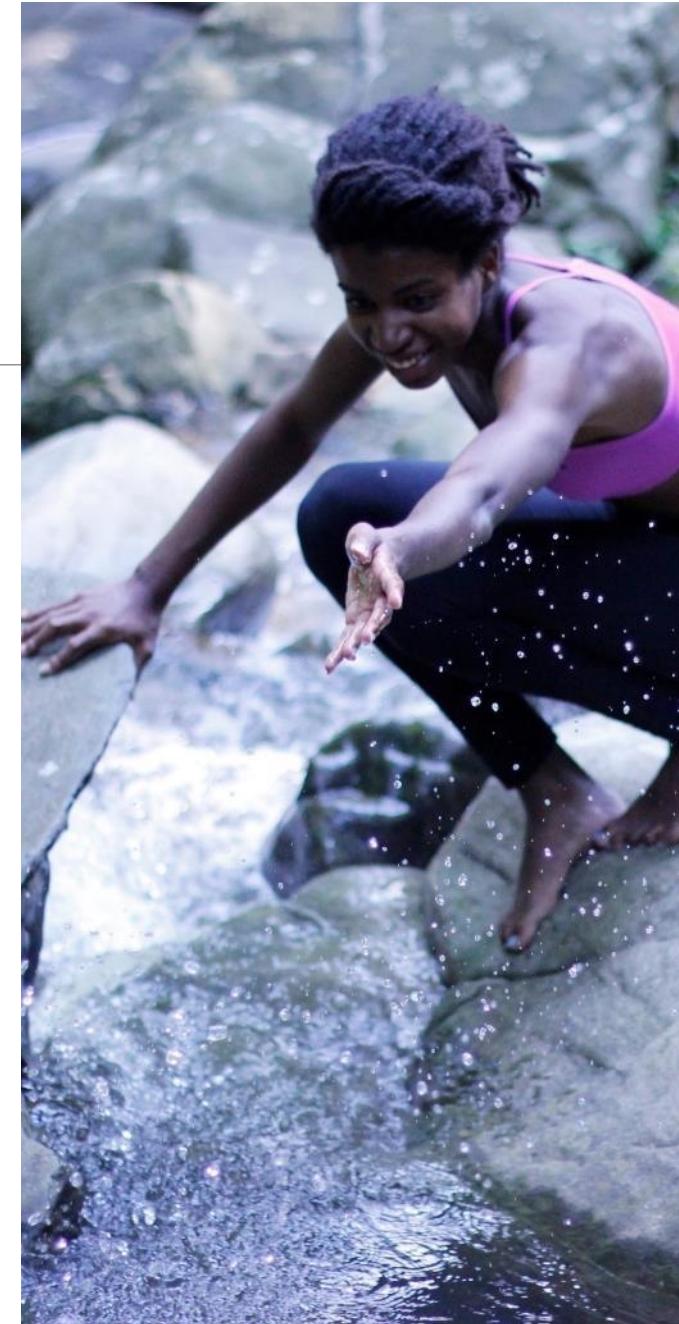


Photo Credit: Kristen Neal, Brandywine Creek

# CLEAN WATERS

## W3: Sustain Flow for Drinking Water and Ecosystems

Strategy	Description
W 3.1	Inform and collaborate with decision makers and water resource managers to ensure that main stem Delaware River flow meets the needs of the Delaware Estuary
W 3.2	Conduct research and monitoring on water quality and habitat requirements of estuary-dependent species
W 3.3	Promote water conservation and efficiency by utilities
W 3.4	Provide outreach and technical assistance to promote water conservation and infiltration by residential and commercial users and communities
W 3.5	Promote and assist in implementing Regional Sediment Management



Photo Credit: Barry Plimpton, Camden, NJ

# STRONG COMMUNITIES

## C1: Increase Community Resilience and Access

Strategy	Description
C 1.1	Restore working waterfronts
C 1.2	Provide tools and technical assistance to waterfront communities & partners to improve economic and environmental resilience
C 1.3	Protect and enhance natural areas and public access
C 1.4	Connect people to natural areas and waterfronts in the Delaware Estuary

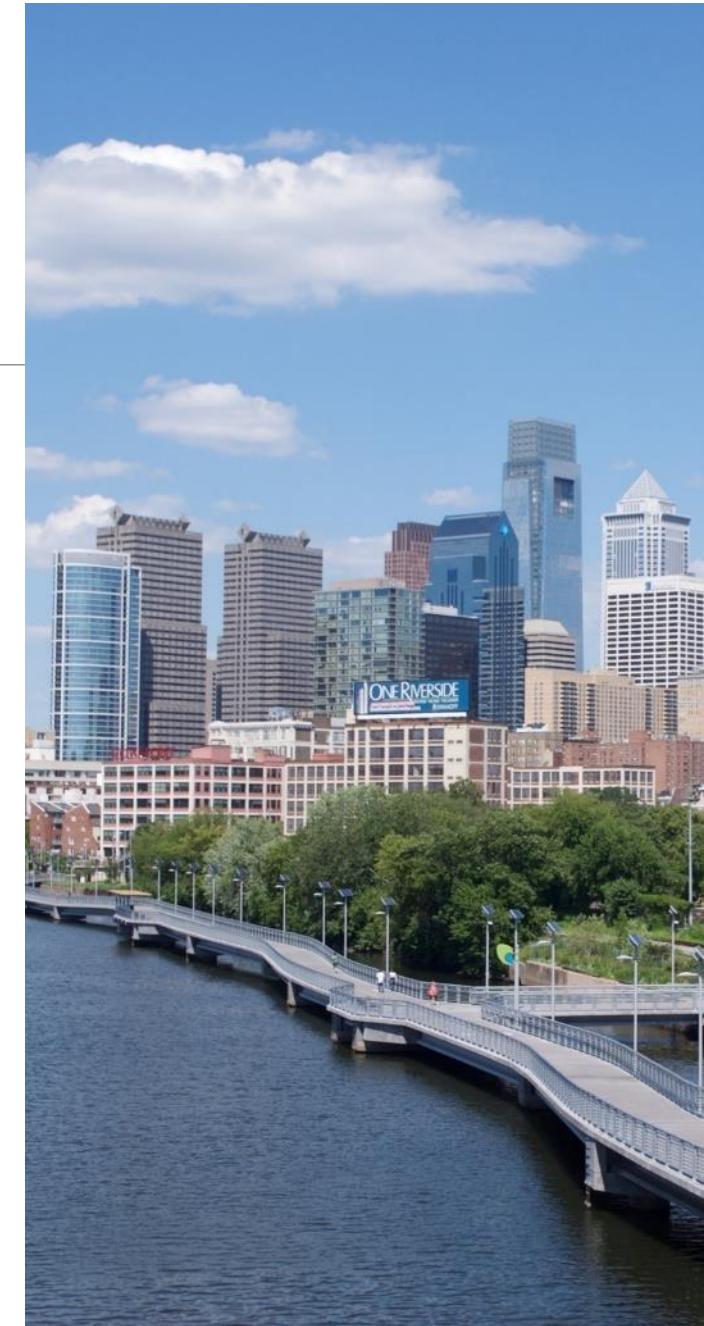


Photo credit: Joe Hengel, Philadelphia, PA

# STRONG COMMUNITIES

## C2: Improve Public Awareness and Stakeholder Engagement

Strategy	Description
C 2.1	Through marketing and communications, build awareness and brand for the Delaware River and Bay
C 2.2	Utilize events to increase stewardship and engage new people
C 2.3	Develop and promote programs that engage teachers and schools in stewardship of the Estuary
C 2.4	Develop and promote programs with local communities and partners that foster volunteer stewardship and experiential learning
C 2.5	Publish and share outreach materials and scientific results
C 2.6	Engage key stakeholders to coordinate science and management of the Estuary
C 2.7	Monitor, develop, and promote opportunities to assess impacts of outreach



Photo Credit: PDE, Highmark Walk

# HEALTHY HABITATS

## H1: Prevent Wetland Loss

Strategy	Description
H 1.1	Establish clear baselines for tidal wetland conditions and track changes over time
H 1.2	Restore, enhance, and manage wetlands for maximum health and resilience
H 1.3	Develop and implement natural and nature-based techniques to stabilize and restore eroding shorelines and build and protect wetlands, infrastructure, and other key resources
H 1.4	Protect, enhance, and improve non-tidal wetlands

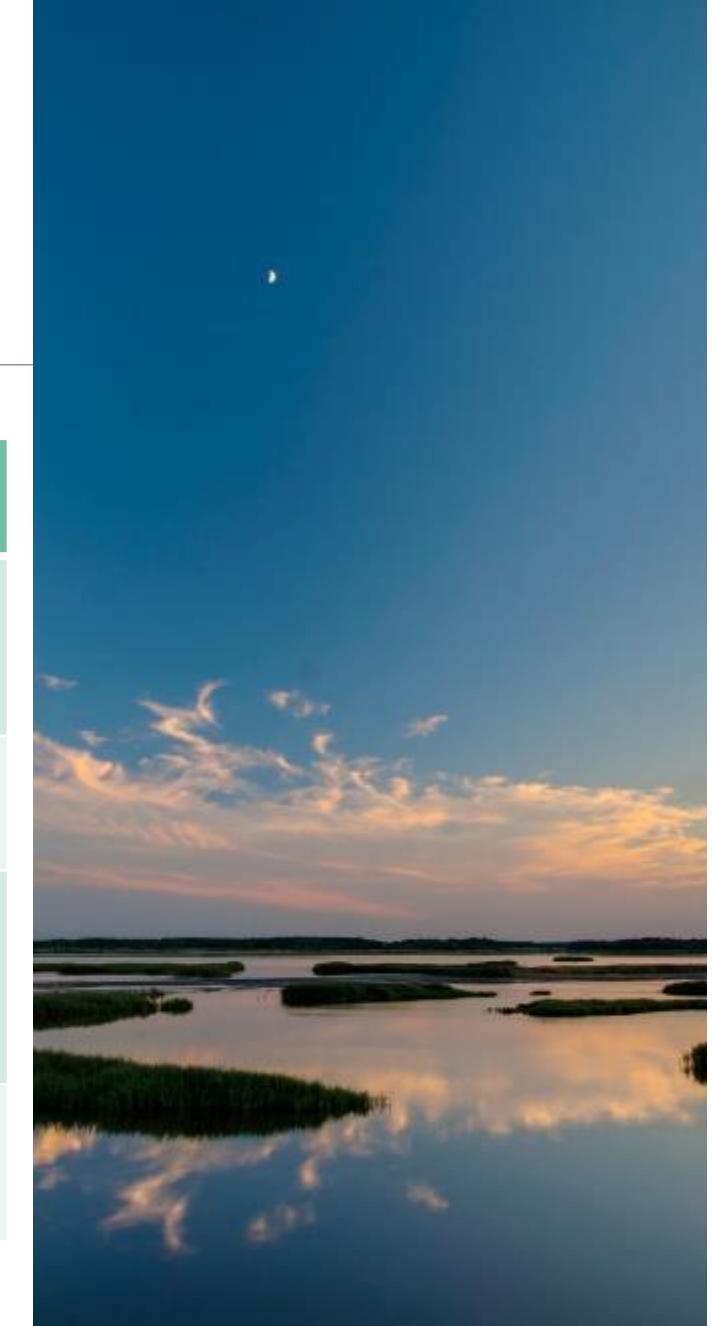


Photo credit: Sandi Bisgood, Broadkill Beach

# HEALTHY HABITATS

## H2: Stem Forest Loss

Strategy	Description
H 2.1	Inventory, map, and increase connectedness and resilience of forests
H 2.2	Promote stewardship practices by local partners for the health and sustainability of forests
H 2.3	Protect and manage high value and threatened forests

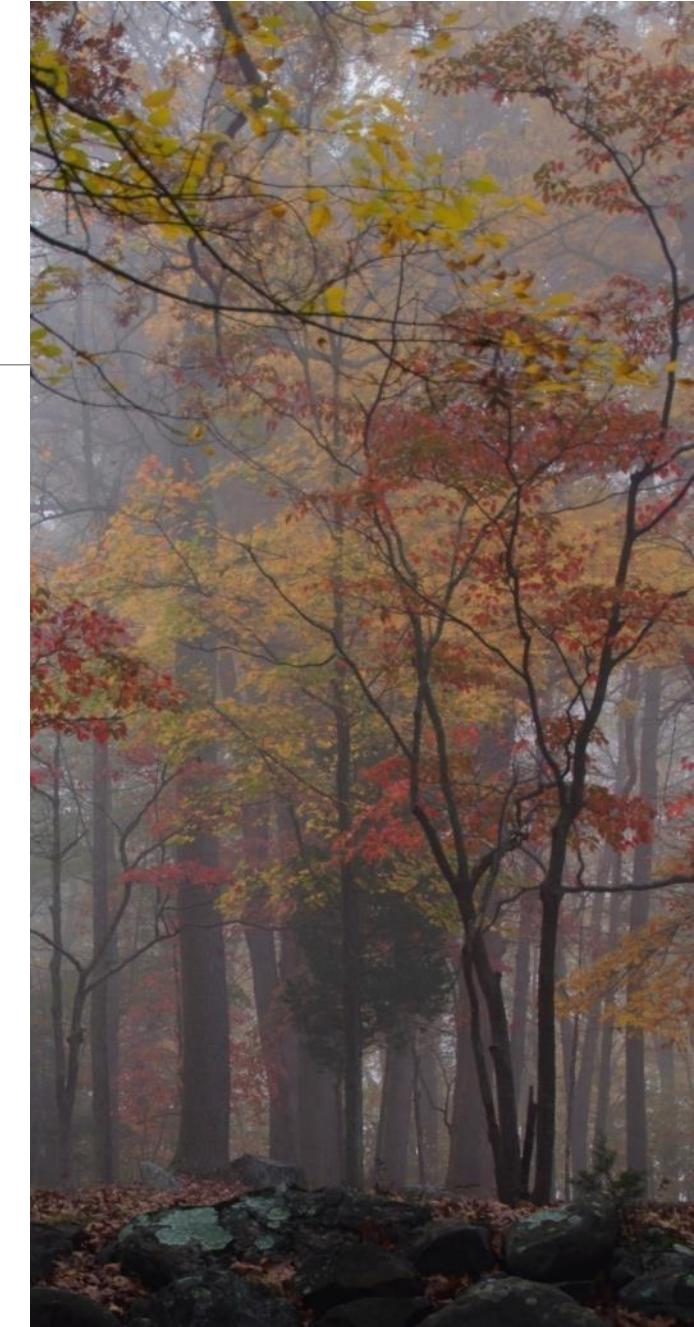


Photo Credit: Carol Tersine, Green Lane, PA

# HEALTHY HABITATS

## H3: Increase and Improve Fish and Shellfish Habitat

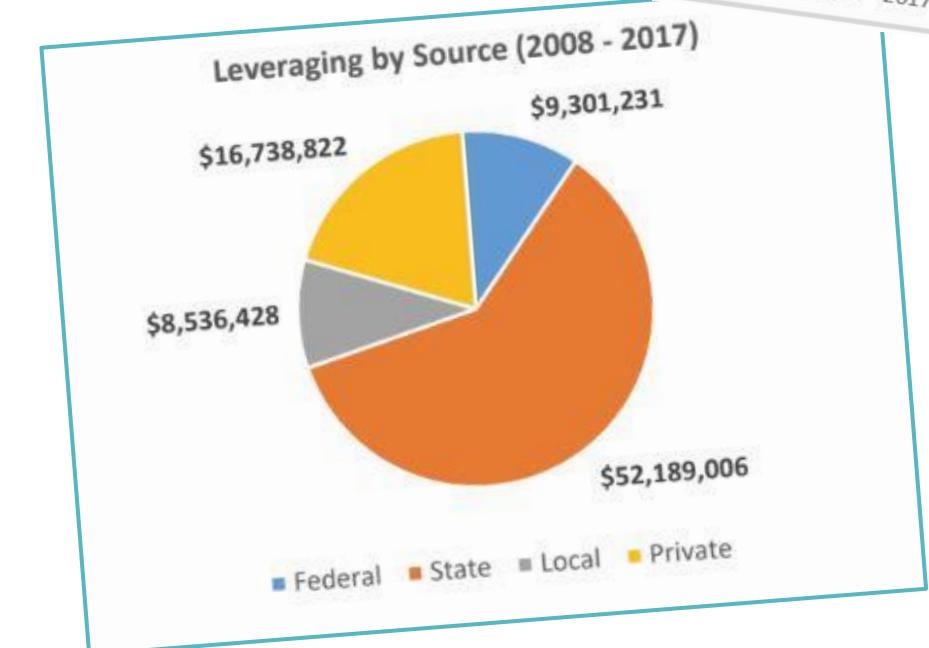
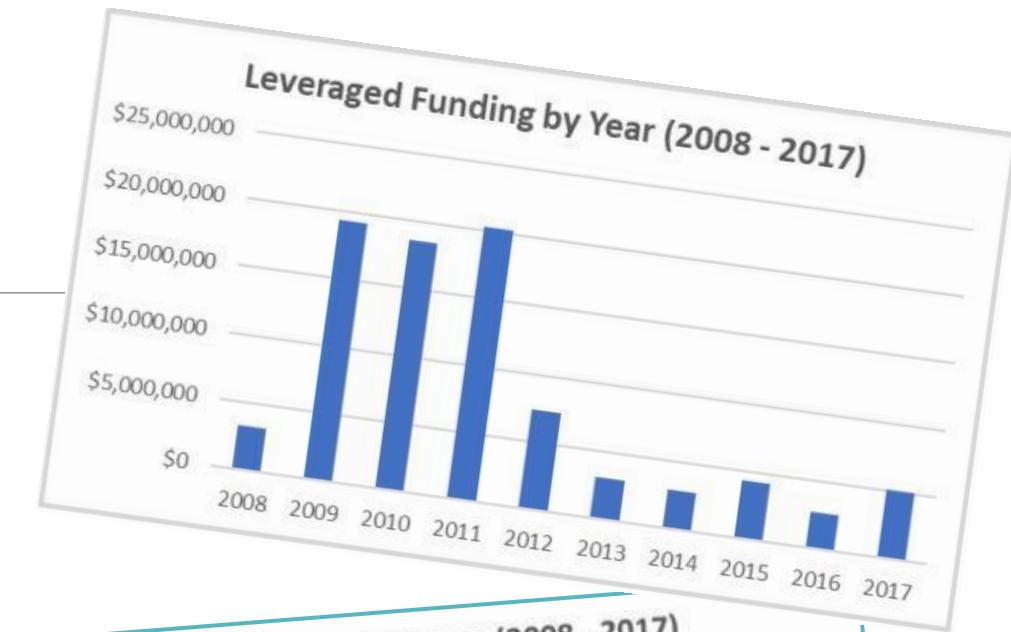
Strategy	Description
H 3.1	Inventory, map, protect, and enhance habitat critical for fish and crabs
H 3.2	Restore oyster beds and productivity in and around the Delaware Bay
H 3.3	Inventory, restore, and manage mussel populations
H 3.4	Protect and restore horseshoe crabs and their habitat
H 3.5	Manage and improve populations of rare, endangered, or otherwise important native species in the Delaware Estuary



Photo credit: Shaun Bailey

# FINANCE STRATEGY

- Current Funding and Support
  - EPA, match for National Estuary Program funds, states, private-sector, other core partners and major initiatives across the watershed
- Resource Needs
  - Dedicated and reliable funding streams
  - Additional resources to help engage people in our Estuary
- Key Activities & Priorities
  - Sustaining, growing, and diversifying streams of funding
  - Leading and participating in collaborative efforts to help develop and increase funding sources



# MONITORING APPROACH

- How We Will Measure Success
  - *Outputs*
  - *Outcomes*
  - *Impacts*
- How We Will Track Progress
  - National Estuary Program Annual Work Plan
  - Annual Habitat and Leveraging Data
  - Regional Monitoring and State of the Estuary Reporting
  - Future Plans for Monitoring



Monitoring changes in surface elevation helps people understand whether these tidal marshes are keeping pace with sea level rise.



Scientists prepare to collect a sample from the bottom of Delaware Bay as part of the Delaware Estuary Benthic Inventory project in 2008.

# WE NEED YOUR HELP!

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1. Review the document on **DelawareEstuary.org/our-plan**. It contains proposed strategies to focus on over the next 10 years
2. Send your comments to **CCMP@DelawareEstuary.org** or through the online form posted on **DelawareEstuary.org/our-plan** by **Friday, July 20th**
3. PDE will respond to written comments submitted by the deadline in a document posted online

***Webinar rescheduled!!!***



Photo Credit: Martha Gery, Prime Hook NWR

# Thank you!

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**Jennifer Adkins, Executive Director**

Questions about the CCMP commenting process? Contact Emily Baumbach at: [Ebaumbach@DelawareEstuary.org](mailto:Ebaumbach@DelawareEstuary.org)



Photo credit: Aaron Maffei, Green Creek, NJ