

## Message from the Board Chair and Interim Executive Director

Thanks to our dedicated Board of Directors, amazing staff, and energized partners from across the Delaware Estuary region, 2018 was a fantastic year for the Partnership for the Delaware Estuary (PDE). After many years of planning, we celebrated the completion of two major milestones: the adoption of a revised Comprehensive Conservation and Management Plan for the Delaware Estuary and an agreement with the Pennsylvania Infrastructure Investment Authority (PennVEST) for the Mussels for Clean Water Initiative. You can learn more about these initiatives in this report.

At the end of 2018 we bid farewell to many long-time Board members including Chairman Roy Denmark, Finance Chair Tom O'Conner, Bob Dobbs, Victor Giudice, Kim Long, and Christie Patel. We appreciate all of their support on behalf of PDE. In early 2019, we also bid farewell to Jen Adkins, PDE's Executive Director since 2007. Jen's commitment to PDE's mission over the years resulted in tremendous growth on all organizational levels. We are grateful for her years of service and wish her all the best in her future endeavors.

We are all so fortunate to live and work in a region that has so much to offer. The connections we have to the Delaware River and Bay are critical to our quality of life. By working together, we can ensure Clean Water, Strong Communities, and Healthy Habitats for future generations.

In gratitude for your ongoing support,

Joseph M. Tarsavage Board Chair Kathy Klein
Interim Executive Director



#### **Executive Committee**

Kimberly Long -

Chair: Roy E. Denmark, Jr. –
Urban Engineers, Inc.
Vice Chair: Joseph Tarsavage
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Secretary: David J. Athey –
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Robert K. Dobbs, Jr. –
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Colleen M. Arnold – Aqua America
Danielle A. Buehler – Philadelphia International
Airport
David Bushek – Rutgers University Haskin
Shellfish Research Laboratory
Carol R. Collier – Academy of Natural Sciences
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Laura Copeland – Philadelphia Water Department
Michael Dillon – Manko, Gold, Katcher & Fox, LLP
Francis Faunt – Faunt Environmental Concerns

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#### **New Board Members in 2019**

Craig Durand – TTI Environmental, Inc.
Katherine S. Eberhart – CEDARVILLE
Engineering Group
Ronald B. Heun, Jr. – Exelon Generation
Kristina Kesack – Brown & Caldwell

David Small - Duffield Associates

## 2018 By the Numbers

1,160
FEET OF
LIVING
SHORELINE
INSTALLED

SUPPORTERS
ATTENDED THE
EXPERIENCE THE
ESTUARY
CELEBRATION

480

TONS OF TRASH REMOVED IN THE 2018 SCHUYLKILL SCRUB



**27,960** 

LBS. OF OYSTER SHELL RECYCLED



750 NATIVE PLANTS GIVEN AWAY AT WILMINGTON EARTH & ARBOR DAY

109

PRESENTATIONS
PLANNED FOR
THE 2019
SCIENCE SUMMIT

1,529
STUDENT
ENTRIES
IN ART
CONTESTS

**MORE THAN** 

46,000
HABITAT ACRES
RESTORED BY
DELAWARE
ESTUARY
PROGRAM
PARTNERS
SINCE 1996

Artwork by Frank McShane

530

CONTRIBUTORS TO THE NEW 10-YEAR CONSERVATION PLAN FOR THE ESTUARY



136
YOUNG
PROFESSIONALS
TOURED THE
FAIRMOUNT
WATER WORKS



150
PEOPLE SUPPORTED
THE 2018
HIGHMARK WALK

3,500+
ATTENDEES AT PENNSYLVANIA COAST DAY



## 2018 Audited Statement of Activities

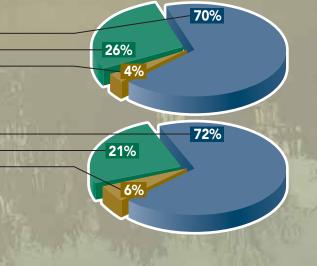
#### FOR THE YEAR ENDED DECEMBER 31, 2018

#### **Support and Revenue:**

Government Grants	\$1	,761,688
Contributions and Grants	\$	646,906
Other Revenue	\$	89,751
TOTAL SUPPORT AND REVENUE	\$2	,498,345

**Expenses:** 

Program	\$1	,765,571
Management and General		
Fundraising	\$	152,184
TOTAL EXPENSES		



Please remember PDE in your giving!



### **Mussel Madness**

Microscopic glochidia (above), and adult mussels (below).

Often the biggest plans are hatched from the smallest ideas. At PDE, our 'big idea' is actually microscopic in size and it's called glochidia. For the laymen, that translates to 'baby freshwater mussel.'

In 2018, the Pennsylvania Infrastructure Investment Authority (PennVEST) awarded PDE \$7.9 million in funding to build a **freshwater mussel hatchery** at Bartam's Garden in Philadelphia. While we're still several years away from stepping into an actual building, planning is well underway.

Freshwater mussels are natural water filters that can live as long as humans and provide an incredible service to our streams. In a single day, one freshwater mussel can filter up to 10 gallons of water. Over an 80+ year life span, that translates to a lot of clean water.

Historically, beds containing thousands of mussels could be found throughout our region's streams. These populations of mussels were severely impacted by the building of dams and degraded environmental conditions. Through the *Mussels for Clean Water Initiative*, we will be able to produce up to a half-million baby mussels per year that will be placed in streams to improve water quality.





It takes a village to build a mussel hatchery! In May, we celebrated with many of our key partners along the banks of the Schuylkill River in Philadelphia.

Action Network

LEBRATING 15 Y

## Schuylkill Action Network's 15th Anniversary

The 2,000 square mile Schuylkill River Watershed is as diverse as it is valuable. It encompasses preserved forests, productive farmlands, residential communities, and diverse habitats. There are a bounty of recreational opportunities from hiking the

Appalachian Mountains to kayaking and fishing. It is also the largest tributary to the Delaware River, providing drinking water for nearly 2 million people.

In 2003, the Philadelphia Water Department (PWD) identified threats to the Schuylkill Watershed, and decided to take action. That same year, the **Schuylkill Action Network** (SAN) was established to work with partners upstream to protect Philadelphia's drinking water.

Fast forward 15 years, and there are now nearly 150 SAN member organizations that work together to protect the Schuylkill's water resources. During the past 15 years, there has been incredible progress, including 14.3 million dollars invested to address pollution from abandoned mines, installation of 166 manure storage facilities on local farms, support of more than 3,500 Schuylkill Scrub trash cleanups, engagement of 25 schools in green infrastructure projects, and much more!

Here at PDE, we could not be more proud to host SAN and to join forces with such a diverse group of individuals and partner organizations.



In May, PDE's staff collected about 500 pounds of trash in West Philadelphia as part of the 2018 Schuylkill Scrub.

# Resilient and Sustainable Communities

PDE values strong, resilient communities and we work across the Estuary to inform

In the last ten years,

like the Schuylkill,

almost 50,000 volunteers

have removed over 600

tons of trash from rivers

Christina, and Delaware.

local communities about the impacts that result from climate change. Delaware, in particular, is especially vulnerable to storms and rising sea levels because of its low lying topography, with a mean elevation of only 60 feet.

For this reason, since 2015, PDE has been working with the **Delaware Resilient and Sustainable Communities League** (RASCL) to provide technical expertise and support to Delaware communities who are working to adapt and respond to environmental changes. Over the past several years, RASCL has grown to include 17 partner

organizations consisting of practitioners from nonprofit and academic backgrounds, working in collaboration with state agencies. Together, RASCL is building the capacity of local communities to become more sustainable and resilient to impacts related to climate change.

One way that RASCL reaches local communities is through coffee hours that rotate between Delaware's three counties. In 2018, PDE and RASCL partners hosted 3 coffee hours for local community members to attend and ask questions, talk about project ideas, and hear about available resources. These events are informal and foster important conversations between RASCL partners and community members.



"Groups like RASCL are helping local communities identify and understand their needs for the future. It's a natural fit for PDE to work with other Delaware-based organizations and RASCL on resilience and sustainability issues across the state."

– Kate Hutelmyer, Watersheds Program Manager

## **River Cleanups**

When was the last time you took a walk, drive, or hike and didn't spot any litter? Unfortunately, most of that trash on the ground will end up in our waterways. In an effort to address this reality, every year PDE participates in several river cleanups to help reduce the amount of trash in the Estuary. These cleanups also provide a great opportunity to help people understand the connection between trash and our waterways.

Each spring, thousands of volunteers join forces to clean up the Schuylkill Watershed. In 2018, the **Schuylkill Scrub** yielded incredible results. During the 3-month cleanup, more than 29,000 volunteers participated in 797 cleanups and removed more than 516,000 pounds of trash. Since its inception eight years ago, nearly 9 million pounds of trash has been removed

from the Schuylkill Watershed.

For nearly 30 years, the **Christina River Watershed Cleanup** has been taking place in Delaware. Each spring, PDE hosts a site on the Christina River in Wilmington. In 2018, more than 65 volunteers participated at the PDE site and more than 14.9 pounds of trash were removed from the watershed. Meanwhile, on the other side of the Delaware River, PDE launched a new cleanup called the **South Jersey Scrub**. The 2018 event was a true grassroots effort and hosted two cleanups. All of these efforts are ongoing and are building momentum every year.

A family helps to collect tires and other trash from the Schuylkill River.



#### Experience the Estuary Celebration Nearly 400 supporters joined PDE at our gala fundraiser in October! Thank you to our sponsors and everyone who came out for networking, fresh Delaware Bay oysters, and the silent auction. **Shell Recycling** In just three years PDE has collected more than 190,000 Reading pounds (95 tons) of shell from local restaurants. With the help of volunteers, 2,100 shell bags were created for use in living shoreline restoration projects. Rain Garden In June, PDE planted a new rain garden at Glasgow Park in Newark, DE. In addition to helping manage storm water, the garden's native plants will provide habitat for Maryland Earth Day Nearly 3,000 people celebrated Wilmington's Earth and Arbor Day event in Rodney Square. In addition to native plant giveaways and live music, all 12 winners of the Wilmington Clean Waterways Art Contest were honored with awards! Teachers' Workshops In July, 25 teachers attended our Watershed Workshops. Activities included a cruise on the Maurice River, "gyotaku" or fish printing, a living shoreline tour, and an urban green infrastructure tour.

## PDE's 2018 Work across the Estuary

The Delaware Estuary spans 134 miles from the head of tide at Trenton, NJ to the mouth of the Delaware Bay. An estuary is a tidal waterway where fresh and salt water mix.

Audubon

Philadelphia

Bridgeton

Downe

Kitts Hummock

Milford

Cedarville

Delaware Bay

Norristown

Chester

Wilmington

Leipsic River

Dover

Delaware

C&D Canal

Chester

Salem

Money Island

Pottstown

Schuylkill River

Pennsylvania

Palmyra Pennsauken

Matt's Landing

Cape May

Heislerville

Camden

Bordentown

**New Jersey** 

Dennisville

Map by Frank McShane

completed.

#### Mussel Exhibit

In April, 75 young professionals toured the Mussel Hatchery at the Fairmount Water Works. They learned how these bivalves reproduce, clean streams, and PDE's plans to restore them in local streams.

#### Volunteer Freshwater Mussel Surveus

PDE trained 111 volunteers to search for freshwater mussels in local waterways. Since 2012, over 70 volunteer surveys have been



#### Marsh Monitoring

Throughout the summer, PDE scientists studied the health of the Estuary's tidal marshes. They collected information on water, elevation, and plants for 7 tidal marshes within New Jersey and Delaware.

#### Living Shorelines

PDE scientists monitored and maintained 11 living shorelines in New Jersey and Delaware. Future funding will enable PDE to expand oyster habitats in DE and install 3 new sites in NJ.



#### Tree Studies

PDE launched a new project to study how rising sea levels are affecting forests along tidal marsh margins. Our scientists are using cores to see how tree growth responds to increased flooding.

## 2018 Funders, Sponsors and Donors

The Partnership for the Delaware Estuary thanks everyone who supported our work with contributions, grants, event sponsorship, cooperative agreements, and donations.

#### Grants, Contracts, & **Project Funding Support**

3Mgives

The Academy of Natural Sciences of Drexel University

Barnegat Bay Partnership

Borkee-Hagley Foundation

City of Dover

City of Wilmington

Colonial Pipeline Company

Delaware Department of Natural Resources

and Environmental Control

Delaware Department of Transportation

**Delaware Nature Society** 

Delaware National Estuarine

Research Reserve

Delaware Recycling Public Advisory Council

Delaware Water Infrastructure

**Advisory Council** 

DuPont Clear into the Future

The Energy Transfer/Sunoco Foundation

Esri

The Franklin Institute

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Laffey-McHugh Foundation

Longwood Gardens

National Fish & Wildlife Foundation

National Oceanic & Atmospheric

Administration

The Nature Conservancy,

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New Jersey Department of

**Environmental Protection** 

Pennsylvania Coastal Zone

Management Program

Pennsylvania Department of

**Environmental Protection** 

Pennsylvania Sea Grant

**PENNVEST** 

Philadelphia Water Department

**Proud Pour** 

**PSEG** Foundation

**Rutgers University** 

Salesforce Foundation

Stantec Consulting Services, Inc.

State of Delaware

SUEZ North America

Sunoco Foundation

University of Maryland Finance Center U.S. Environmental Protection Agency

Wakefern Food Corporation/Shoprite

Welfare Foundation

The William Penn Foundation

Wilmington Flower Market

#### Corporate & Community **Environmental Stewardship** Program (CESP)

Logan Generating Plant Mannington Mills



Photo by Richard Shay

#### 2018 Donors

#### \$1,000 and Above

Jen Adkins & Andy Cloud All Saint's Parish Thrift Shop

Frances B. Carter

**Ethel Cebra** 

Curtis W. McGraw Foundation

EarthShare

Dr. Susan S. Kilham

Kathy Klein & David Paul

Monroe Energy

**PSEG** Foundation

George F. Phelps

TEAM HQ

#### \$500 to \$999

Colleen Arnold, PE

Danielle & Scott Buehler

Roy Denmark & Judy Hykel

Tom & Melina Ei

**Gross Graphics** 

Roxanne E. Jayne

Joseph & Jeanne McAtee

Shawn McGlinchey

Gus Mergenthaler

Christine Neely

O'Brien & Gere

Thomas C. Roberts

Joseph Tarsavage

Jill Voorhees

Tracey Whitesell &

Terrance Huettl

In March, PDE and the Philadelphia Water Department unveiled the Mobile Mussel Hatchery cart at the Philadelphia Flower Show.

#### \$250 to \$499

Anonymous

Buzz & Kathy Adkins

David Athey

Jenifer N. & John Burghardt

David Bushek

Carol Collier

Joanne Dahme

Michael Dillon

Robert K. Dobbs Ted & Kathy Erickson

**Exelon Foundation** 

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Leah Gaffney & Mike Pickel

Gallagher Marine Systems, LLC

Robert Goldman

Vincent & Jeanette Gorman

Helen Gregory

Ed Grusheski

James & Monica Hall

Judi Jeffers

Alison Kraus

Mr. & Mrs. Scott Long

Lawrence D. Malizzi

Maritime Exchange for the

Delaware River & Bay

Daniel J. Martin

Frank McShane & Vanessa Fenton

Drew Mihocko

Andrew & Kathleen Moody

Hiram H. Munger The O'Connor Family

Octoraro Native Plant Nursery

Christie Patel

Joni L. Powell

Ralph Stahl Fred Wood

GREENWOO DIATOMS

#### \$150 to \$249

Anonymous (3) Juni Alam & Marco Lapignola Michael E. Beal Warren Butt & Elaine Schmerling Leon K. Chain Thomas Chegwidden & Julie Varner Nathan & Carolyn Cloud Nancy Descano Kevin Donnelly **Burt & Jeanne Doremus** Kevin B. Doyle Jeff & Karen Fleming Alfred Gaus Jr. Rich & Deb Grohs Duncan & Mary Grove J. Elizabeth Horsey Integrity Staffing Solution **Bob Kahley** Kristina Kesack Dave & Bonnie Kitts Dawn Rittenhouse John W. Schneider Mary Ellen & Robert T. Scott Kash Srinivasan Richard & Susan Taylor Robert J. Valihura, Jr. Jerome W. Virden



Lisa Wool

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Gary Willoughby

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Anonymous June Alt & Andrew Blair Charles App Ronald G. Ashley Charles D. Barksdale Jr. Christopher Baum Mark Biddle Ridgely & Ed Biddle Bernie Bittner Carl Borkland Sarah Bouboulis Don & Becky Brill Andy & Hilde Burger Senator Tom Carper Steven & Margaret Castorani Edward W. Christoffers Marjorie Crofts Deer Valley Dane, LLC Anne DePaul Jane Donohue & Darica Ward James Eisenhardt Patty Elkis Anne Elmlinger Ann Faulds & Christopher Robinson Richard & Lorraine Fleming Karen & Kyle Forst French & Pickering Creeks **Conservation Trust** Russ Furnari



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Jonathan & Gwyneth Sharp Wade Sjögren

Julie Slavet

David & Cynthia Small Louisa Hill Spottswood

Eric Sprengle & Diane Pierce

Ann Tegnell Steve Thompson

Virginia Thompson

Robert Traver

Marianne Walch Kenneth J. Warren

Donald E. Wolfe

#### Up to \$75

Anonymous (8) Frank Acker Michael & Barbara Alushin AmazonSmile Foundation Donald & Diane Azuma Jessica Bacigalupl **Antyne Bailey** Shaun & Jamie Bailey Neil Baker Rochele Barham

In September,

members of the

Schuylkill Action

Network toured restoration project

sites in Berks and

in Pennsylvania.

Schuylkill Counties

Brooke Bartolo Chris Bason & Archer Larned Karen Batt

**Emily Baumbach** Merian Klein Beagle

Irina Beal **Brad Bernard** 

Andrea Blinn John J. Blona

Laurie Bottoni-Lorenz

Amanda Bowers Renée Brecht

Bristol-Myers Squibb Foundation

Cadbury at Lewes Residents' Association Mike Castle

John M. Cheezum, Sr.

Kurt Cheng Nicole Christian Marianne B. Cinaglia

Jill Clark

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Celia Colsher

Laura Copeland

James & Joanne Cordingley Sharon & Dan Crampton

Robert S. Croop & Ginny Kreitler

Jaime Donnelly Stevie Eskinazi

William S. & Melonie K. Ettinger Sharon & Alexander Ewing

Mr. & Mrs. Robert Fonash

Carl B. Ford

Samantha Fruchtman

Lorraine Fuselli

Lou Gallo

Matt Gentry Johnna Gooden

LeeAnn Haaf Kylie Hall



In June, PDE participated in the Highmark Walk for a Healthy Community. Thousands participated in the 5K walk, which took place on the Riverfront in Wilmington, DE.

Bruce M. Hashinger III Molly Hebert-Wilson Sara Hirschler Jeff Hoeltzel Maryann D. Hooker Su Knoll Horty Sharon Houston William & Martha Hudson Kate Hutelmyer Mary Jane Isaacs Sherry Jackson Kyrra Johnson JPMorgan Chase & Co. Heather Kaczmarczyk Eugene Kasperowicz Matthew Keegan Jackie Roeder Kelleher Eleanor M. Kelly Sue Kofoet John & Carol Kraeuter Carla & George Krupanski Ellen Kuntzmann Carl & Carolee Kunz

Carl & Carolee Kunz
Kate Layton
Janet Louise
Cotty Lukk
Christina Mancinelli
Suzanne S. Marinell
Bill Matulewicz
Martha Maxwell-Doyle
Andy McClay
Kimberly Medley
Joshua Moody
Kerri & Joe Morris

Cynthia Murdough Anne & Gary Murphy

Stephanie Napoli Kevin Ostien David Othmer

Dr. Harry & Mrs. Nancy Otto

Angela Padeletti Richard Pagnotta Dennis Palmer Jesse Paul Lynn & Joseph Pokrifka Irene Y. Purdy Charles H. Reed

Charles H. Reed Brian J. Reidy Roger J. Rider Barbara T. Ross Erica Rossetti Sari Rothrock & Kel Elkins Ronald B. Rulon William Saley & Marcia Hanson John H Saunders

Eric & Linda Schrading
Judith Schwank
James & Eileen Shissias
Ronald & Lisa Smith
Carol Spiker
Lucy S. & Lily C.
Victoria Taylor
Thornwood Knits
Dr. Rosalind H. Troupin
Kaitlin Tucker
Marissa Valladares
Virginia Vassalotti

Mr. & Mrs. Carl Weihrer Carrie & Dave Wells Kim West

Diane Zilka Cindy Zirkle

In Memory of Angelo Bisciotti
Ms. Mary Addison

#### In Memory of Elmer W. Getz

Ms. Sharon Baird

Mr. Frederick & Mrs. Kathleen Best

Ms. Nelma Keen Ms. Debora Skelly

In Memory of Nancy & Jack Grey

Dr. David Mattern & Ms. Charlotte Crystal

In Memory of Mary McGoldrick

Mr. Howard & Mrs. Gail Schaevitz



In August, PDE received the 2018 Fishery Conservation Award from the American Fisheries Society. Dr. Danielle Kreeger accepted the award for PDE from AFS President Steve McMullin.

#### 2018 Highmark Walk Donors

Anonymous (18)
Justin Acacio
Buzz & Kathy Adkins
Jen Adkins & Andy Cloud
John Alam
Shahjabin Alam & Marco Lapignola

Shahreaj Alam
Candace Armstrong
Colleen Arnold, PE
David Athey
Andrea Baker
Susan Baker
Dawn Becker
Ed & Ridgely Biddle

Claire Birney John Booser Paolo Borghi David Bostaph

Sarah Bouboulis Danielle & Scott Buehler

David Bushek
Dale Collins
James Cosgrove

Rosemary Crawford Victoria Crompton

Donna Curtin Barbara Debo Ralph DeLuca Anne DePaul

Nancy Descano Jennifer DiJoseph Jennifer Easter

Sandra Edwards Mary Efstathiou Robert Ehlenberger Tom & Melina Ei

Exelon Foundation Christopher Farschon Robert Feighery

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Naomi Gandia Janice Gardner Joseph Gawarzewski Clyde A. George

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Stacey Wiedaseck

Patricia Woodruff

## 2018 Experience the Estuary Celebration Sponsors

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Chemours

Chesapeake Utilities Corporation
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**Energy Transfer** 

Environmental Standards Inc.

**Exelon Corporation** 

**Exelon Generation** 

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HDR, Inc. Jacobs

Kathy Klein & David Paul

Kleinfelder

Logan Generating

Manko, Gold, Katcher & Fox, LLP

Monroe Energy

New Castle Conservation District

O'Brien & Gere

Philadelphia Energy Solutions
Philadelphia International Airport

Philadelphia Regional Port Authority

Philadelphia Water Department Pilots' Association for the Bay

liots Association for the

& River Delaware

PSEG Nuclear LLC

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Rutgers University, Haskin Shellfish

Research Lab

Rutgers University, Marine and

Coastal Sciences

Sweet Amalia Oyster Farm

Tetra Tech, Inc.

Total Wine & More

Urban Engineers, Inc.

#### 2018 Experience the Estuary Celebration Supporters

1812 Productions

Jennifer Adkins & Andy Cloud

**AE Ceramics** 

**AEG Presents** 

Juni Alam

Colleen Arnold

David Athey

Brandywine River Museum

Iris Burt

David & Debbie Bushek

Cape May-Lewes Ferry

Cape Resorts Group

Carol Collier

Senator Chris Coons
Corrective Chiropractic
The Daily Show with Trevor Noah
Dave & Busters of Philadelphia
Delaware Museum of Natural History
Roy E. Denmark, Jr.
Nancy Descano
Rick Chefboy RD Descano
Robert K. Dobbs, Jr.
Dogfish Head Brewery

Kevin Donnelly
Double Spiral Chocolate
Dover International Speedway
Eastern State Penitentiary

Exelon Generation Company, LLC Francis Faunt

Fringe Salon & Boutique

Jen Gius Go Ape!

Rob Goldman

Photo by

Mungin

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Longwood Gardens
Emily McGurk

Gus Mergenthaler

Moore Brothers Wine Company

Sarah Morales

Newark Country Club Newark Natural Foods Northbrook Canoe

Thomas J. O'Connor

OPERA Delaware

Oyster House

Emma Paul

Jesse Paul

Philadelphia Eagles

Philadelphia Flyers

Philadelphia Phillies

Philadelphia Rock Gyms

Plianthos Family

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Red Frog Events

Leo Sewell

Jenny Shinn

Joseph Tarsavage

United by Blue

Julie Varner & Tom Chegwidden West Chester Golf & Country Club Whitewater Farm AirBNB

Whitewater Farm Airbind

The Partnership for the Delaware Estuary makes every effort to ensure the accuracy of these listings. If you find an omission or a misspelling, please excuse our error and contact us at 1-302-655-4990, ext.114 so that we may update our records for future donor listings.



# Partnership for the Delaware Estuary

#### Staff

Emily Baumbach, Estuary Program Coordinator Irina Beal, Science Technical Specialist Sarah Bouboulis, Habitat Project Coordinator Kurt Cheng, Shellfish Coordinator Nancy Descano, Deputy Executive Director Karen Forst, Coordinator of Grants Matt Gentry, Shellfish Specialist LeeAnn Haaf, Wetland Coordinator Kylie Hall, Development Coordinator Elizabeth Horsey, Interim Director of Donor Relations

Kate Hutelmyer, Watersheds Program Manager

Kathy Klein, Interim Executive Director

Danielle Kreeger, Senior Science Director Kate Layton, Marketing & Communications Manager

Jonetta Lucas, Staff Accountant Josh Moody, Restoration Programs Manager Sarah Morales, Outreach Associate Brittany Musolino, Outreach Program Specialist

Beatrice O'Hara, Wetlands Fellow Angela Padeletti, Science Programs Manager

Erica Rossetti, SAN Associate Asia Tran, Office Administrator Kaitlin Tucker, Watershed Planning Coordinator Virginia Vassalotti, SAN Coordinator

#### 2018 Steering Committee

Chair: Bruce Friedman, Water Monitoring and Standards Division
Director – New Jersey Department of Environmental Protection

Roy E. Denmark, Jr., Chairman – Partnership for the Delaware Estuary Board of Directors

Shawn Garvin – Delaware Department of Natural Resources and Environmental Control

Javier Laureano, Ph.D., Director of the Clean Water Division – U.S. Environmental Protection Agency, Region 2

Debra McCarty, Commissioner – Philadelphia Water Department
Jennifer Orr, Director of the Compacts and Commissions Office –
Pennsylvania Department of Environmental Protection

Cosmo Servidio, Regional Administrator – U.S. Environmental Protection Agency, Region 3

Steve Tambini, Executive Director – Delaware River Basin Commission

## 2018 Estuary Implementation Committee (EIC)

Chair: Jennifer A. Adkins - Partnership for the Delaware Estuary

Kelly Anderson - Philadelphia Water Department

Gregory Breese - U.S. Fish and Wildlife Service

Kimberly Cole – Delaware Department of Natural Resources and Environmental Control

Roy Denmark – Partnership for the Delaware Estuary Board
Rhonda Manning – Pennsylvania Department of Environmental
Protection

Kenneth Najjar - Delaware River Basin Commission

Nesmarie Negron, Irene Y. Purdy – U.S. Environmental Protection Agency, Region 2

Michelle Price-Fay, Megan Mackey – U.S. Environmental Protection Agency, Region 3

Jay Springer - New Jersey Department of Environmental Protection

## 2018 Science & Technical Advisory Committee (STAC)

#### STANDING REPRESENTATIVES

Chairperson: Susan Kilham, Ph.D. – Drexel University; Department of Bioscience and Biotechnology

Science Advisor: Danielle Kreeger, Ph.D. – Partnership for the Delaware Estuary

Ex Officio Representative: Jennifer A. Adkins – Partnership for the Delaware Estuary, EIC Chair

Lance Butler - Philadelphia Water Department

Donald F. Knorr – Pennsylvania Department of Environmental Protection

Ron MacGillivray, Ph.D. - Delaware River Basin Commission

Kristin Regan & Kelly Somers – U.S. Environmental Protection Agency, Region III

Namsoo S. Suk, Ph.D. - Delaware River Basin Commission

David Wolanski – Delaware Department of Natural Resources and Environmental Control

John Yagecic - Delaware River Basin Commission

Metthea Yepsen - New Jersey Department of Environmental Protection

#### **ELECTED REPRESENTATIVES**

Gregory Breese - U.S. Fish & Wildlife Service

David Bushek, Ph.D. – Rutgers University, Haskin Shellfish Research Laboratory

Laura Craig, Ph.D. - American Rivers

Jeff Fischer, Ph.D. - U.S. Geological Survey

Dorina Frizzera - Getting to Resilience, LLC

Desmond Kahn, Ph.D. - Fishery Investigations

Gerald J. Kauffman, Ph.D. – University of Delaware, Water Resources

Daphne Munroe, Ph.D. – Rutgers University, Haskin Shellfish Research Laboratory

Alison Rogerson – Delaware Department of Natural Resources and Environmental Control

Pete Rowe - New Jersey Sea Grant Consortium

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Kenneth A. Strait - PSEG

Elizabeth Watson - The Academy of Natural Sciences of Drexel University



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The Partnership for the Delaware Estuary, host of the Delaware Estuary Program, leads science-based and collaborative efforts to improve the tidal Delaware River and Bay, which spans Delaware, New Jersey, and Pennsylvania.

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