

Delaware River Basin Commission

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www.drbc.gov

Kristen Bowman Kavanagh, P.E. Executive Director

Advisory Committee on Climate Change

Virtually via Zoom

MEETING SUMMARY

Wednesday, August 27, 2025 9:30 a.m. – 11:00 a.m.

MEETING ATTENDEES (67)

Members and Alternates (17):

Reserved:

Delaware – Ashley Norton, Ph.D.; Delaware Department of Natural Resources and Environmental Control

New Jersey – Nicholas A. Procopio, Ph.D., GISP; New Jersey Department of Environmental Protection

New York – Leo Matteo Bachinger; New York State Department of Environmental Conservation

United States Government - Amanda L. Babson, Ph.D.; National Park Service

United States Government – Arthur DeGaetano, Ph.D.; United States Government, NOAA Northeast Regional Climate Center, Cornell University

New York City - Brent Gotsch, New York City Department of Environmental Protection

City of Philadelphia - Ashley Ebrahimi, Philadelphia Water Department

Partnership for the Delaware Estuary – Martha Maxwell-Doyle

Pennsylvania – James Horton; Pennsylvania Department of Environmental Protection

Non-Reserved:

William Brady III, P.E.; CCS Strategies LLC

John Callahan, Ph.D.; Climate Scientist, Ocean Associates, NOAA National Ocean Service

Thomas Gilbert; Pennsylvania Environmental Council

Marjorie B. Kaplan, Dr.P.H.; Rutgers Climate and Energy Institute, Rutgers University

Christopher Linn, AICP; Delaware Valley Regional Planning Commission

Howard Neukrug, P.E.; The Water Center at Penn, University of Pennsylvania

Maggie Reilly; Aqua Pennsylvania

David Velinsky, Ph.D.; Academy of Natural Sciences of Drexel University, Drexel

University

Not present: N/A

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DRBC Staff (20):

Amanda Khalil Joey Fogarty Namsoo Suk

Amber Munchback Karen Reavy Naomi Mendelsohn

Amy Shallcross Kate Schmidt Pam Bush

Avery Lentini Kristen Bowman Kavanagh Raveena Pachucki

Chad Pindar Li Zheng Sara Sayed

Elizabeth Brown Michael Thompson Sarah Beganskas

Eric Engle Mike Heller

Other Attendees (30):

Abby Sullivan (City of Philadelphia) Leslie McGeorge (Retired – NJDEP)

Adrienne Rayna (DAEB)

Amy McHugh (USGS)

Barbara Arrindell (DCS)

Brenan Tarrier (NYDEC)

Carolyn He (NJDEP)

Matthew Konfirst (EPA)

Michael Dillon (MGKF)

Natalia Teekah (MGKF)

Paula Kulis (CDM Smith)

Phil Duzinski (PWD)

Coralie Pryde (LWVD) Preston Luitweiler (Retired – Aqua)

Duke Adams (PADEP) Ramona McCullough (SciTek Consultants)

Ed Layton (GEI Consultants)

Renee Reber (NPCA)

Eileen Althouse (CDM Smith)

Ron Heun (PSEG)

Hoss Liaghat (PADEP)

Isaac Carachilo (PSU)

Kathy Klein (PDE)

Sean Dennehy (NYCDEC)

Susan Beganskas (NCC)

Tracy Carluccio (DRN)

Kerry Engelhardt (UDC)

Kinman Leung (PWD)

Attended via phone: 2

Reference acronyms:

Academy of Natural Sciences of Drexel U. (ANSDU), Aqua America (Aqua), Damascus Citizens for Sustainability (DCS), Delaware Appalachian Edge Bioregion (DAEB), Delaware Riverkeeper Network (DRN), League of Women Voters of Delaware (LWVD), Manko, Gold, Katcher & Fox, LLC (MGKF), National Oceanic and Atmospheric Administration (NOAA), Nassau Community College (NCC), National Parks and Conservation Association (NPCA), New Jersey Department of Environmental Protection (NJDEP), New York State Department of Environmental Conservation (NYCDEC), Partnership for the Delaware Estuary (PDE), Pennsylvania Department of Environmental Protection (PADEP), Pennsylvania Environmental Council (PECPA), Pennsylvania State University (PSU), Philadelphia Water Department (PWD), Water Resources Association of the Delaware River Basin (WRA), Upper Delaware Council (UDC), U.S. Environmental Protection Agency (EPA), U.S. Geological Survey (USGS).

MEETING SUMMARY

Call to Order:

Meeting was called to order at 9:32 am by H. Neukrug and held virtually via Zoom webinar and its call-in capabilities.

Member Roll Call:

Attendance was taken by S. Beganskas. Seventeen (17) members present. All committee members (and members of the public) who attended did so virtually.

S. Beganskas welcomed and shared bios for four new ACCC members: Dr. Leo Matteo Bachinger (NYSDEC), Thomas Gilbert (PEC), Dr. Ashley Norton (DNREC), and Maggie Reilly (Aqua).

Approve Meeting Summary:

The 12/17/24 meeting summary was unanimously approved. No discussion. Motion to approve was made by M. Kaplan.

Election of Officers:

S. Beganskas indicated that a new committee Chair and Vice Chair needed to be elected. Terms are for one year each, with no term limits. The new terms will be effective starting September 1, 2025. H. Neukrug moved to nominate A. Cohn (NYCDEP) for Chair. M. Maxwell-Doyle seconded the motion; no discussion, and the motion carried unanimously. A. Cohn was not present, B. Gotsch from NYCDEP accepted on his behalf. M. Kaplan moved to nominate C. Linn for Vice Chair. M. Maxwell-Doyle seconded the motion; no discussion, and the motion carried unanimously. S. Beganskas and K. B. Kavanagh expressed gratitude and appreciation for H. Neukrug and M. Kaplan's five years of service as Chair and Vice Chair.

DRBC Announcements:

- S. Beganskas made the following DRBC announcements:
 - 1. The DRBC will be holding its next business meeting on Wednesday September 10 at 10:30 am virtually over Zoom. You can register to attend on the DRBC website.
 - 2. DRBC also has two upcoming Advisory Committee meetings:
 - a. Water Quality Advisory Committee: Monday September 15 at 9am
 - b. Water Management Advisory Committee: Wednesday October 15 at 10 am Both will be held virtually over Zoom and you can register to attend on our website

Presentations:

"Stronger Together: Updating the Strategy for a Resilient Philadelphia" by Abby Sullivan, Chief Resilience Officer, City of Philadelphia, Office of Sustainability

A. Sullivan provided a presentation including how Philadelphia is vulnerable to climate change, how this vulnerability is amplified for frontline communities, and what the city is doing to prepare and build resilience.

The presentation can be found https://www.nj.gov/drbc/library/documents/ACCC/082725/Sullivan Resilience PWD.pdf

- H. Neukrug commented great presentation and great slides, and asked a question about expanding partnerships. A. Sullivan responded that Philadelphia has applied for funding with NOAA and NFWF to form regional partnerships especially on sea level rise, but those were not funded. Would love to do more, but need more capacity and funding to make it a reality.
- C. Linn asked about the use of first street foundation data to look at pluvial flooding, did you look at ability to do original modeling before decided to do first street? A. Sullivan responded that they have been talking with PWD for years to do modeling, but it is very expensive to do. D.C. did that and it cost a fortune, and it is tiny compared to Philly. Drexel just did something so working with them and also with MACH and researcher in Florida to do Philly specific model. Philly would love to not use first street and have our own, but not there yet.
- N. Procopio asked can you repeat which future climate scenarios were considered? A. Sullivan responded: SSP2 4.5, that is what we are using. SSP3 7.0 is what we are considering a more realistic high end scenario. They used 50th and 90th percentile outcomes for each scenario.

"DRBC's Resilience Plan: Phase 1 Progress" by Sarah Beganskas, Joseph Fogarty, and Sara Sayed, DRBC

- S. Beganskas shared the resilience plan's new name, Water Resources Resilience Plan (WRRP); a revised vision statement; and an overview of the plan's three phases. J. Fogarty described an overview of Phase 2 and shared more details about plans for the vulnerability assessment. S. Sayed shared more details about plans for the gap analysis. S. Beganskas described ongoing outreach efforts and next steps. S. Beganskas posed three questions for the committee to share specific input on the WRRP:
 - 1. What was your approach to expanding the reach of any public input?
 - 2. What do you recommend in terms of selecting future scenarios and planning horizons?
 - 3. Do you favor a qualitative or quantitative approach to defining vulnerability and/or risk?

The presentation can be found https://www.nj.gov/drbc/library/documents/ACCC/082725/DRBC_WRRPupdate.pdf

D. Velinsky suggested that DRBC select future scenarios and planning conditions that align with what others are doing, to avoid different groups using different scenarios. S. Beganskas agreed and noted that part of DRBC's role in resilience planning is to compile and combine what others are doing to ensure common data across the basin.

H. Neukrug asked about the critical role of land management in mitigating impacts from climate change. How do we help DRBC account for that in the plan? S. Beganskas responded that the WRRP is focused on water resources, but it could account for land management and other issues that relate to water resources and note where there are opportunities that partners to take on.

A. Babson recommends using multiple future scenarios that span a range of possible conditions. She noted that NPS has successfully combined climate scenarios with land use and other factors—some of these combinations lend themselves better to qualitative descriptions rather than quantitative outcomes.

C. Linn noted that a quantitative approach is preferrable only if there is enough data to meaningfully support a quantitative analysis. He added that the committee may be able to provide more specific guidance once they have a clearer picture of what datasets the DRBC is working with.

M. Kaplan noted that Rutgers is updating a report from the Science and Technical Advisory Panel (STAP) this fall that will provide relevant information as far as scenarios and planning horizons. She noted that Rutgers is happy to help host events for WRRP outreach and expects other committee members' organizations are as well. She agreed with C. Linn that not all questions lend themselves to quantitative analyses and that qualitative analyses are acceptable in those cases.

A. Sullivan noted that selecting scenarios depends on the specific application: Are you coming at this from a planning perspective, in which case a worst-case scenario may be preferable, or from a design perspective, in which case a more moderate scenario with a contingency plan may be more appropriate. She added that for choosing a planning horizon, it is also important to consider how these analyses are expected to link to policy.

L. Bachinger added that qualitative data can supplement quantitative data, and suggested taking a "yes and" approach rather than choosing one or the other. He offered to make introductions to his colleagues in NYS who can share more about choosing scenarios for the state's impact assessment, there is a lot of technical information that they can share. He added that NYS is also working on a resilience plan and including stakeholder engagement, so perhaps there is an opportunity to work together on outreach. He also asked if DRBC will be considering hazards individually, or will the compounding impacts of multiple hazards be considered? S. Beganskas answered that compounding effects will be considered.

M. Maxwell-Doyle noted that PDE identified as a gap the need for a resiliency hub webpage that will be launching soon with PDE's new website. She added that DRBC should ensure the WRRP aligns with state hazard mitigation plans.

N. Procopio (in chat) noted that he is happy to discuss what scenarios NJ is using.

Public Remarks:

B. Arrindell asked via chat: "What planning is being done for rapid moving developments that produce

emissions and use resources like water...like data centers?" K.B. Kavanagh answered, we have all been reading a lot about this in news. Right now, DRBC is working to inventory data centers that exist in the basin. We have not yet received applications for data centers, but existing regulations about discharges and allocations in basin would apply. A. Sullivan noted in chat that "through our project with DOE, we will also be exploring the data center topic. We'd love to have DRBC and others involved with that--it's just getting started."

- A. Rayna asked via chat: "Will there be a recording of this, and can I share it with the Delaware Appalachian Edge Bioregion group?" S. Beganskas answered, we do not record advisory committee meetings, but the slides and meeting summary will be shared on the DRBC website.
- L. McGeorge asked, For public input to the plan, have faith-based institutions been considered to host listening sessions or provide input? S. Beganskas answered, we have not considered that yet, and you can contact E. Brown with suggestions for specific groups to contact.
- T. Carluccio asked about the purpose of the WRRP once completed. How will it be implemented and will it influence DRBC decisions? S. Beganskas responded that the outcome of Phase 2 will be a range of recommendation for what actions to take. Any specific actions or decisions will be up to DRBC's Commissioners.
- T. Carluccio noted that Climate Resilience Plan was an engaging title and signaled that the plan is about climate, and that changing the name, even in response to federal funding concerns, is a disappointment. S. Beganskas clarified that the name change was not a response to federal funding considerations—it was a response to feedback about what the plan represents. It is a climate plan that is focused on water resources and we will do our best to make that clear.
- T. Carluccio asked about public input sessions, when the Phase 1 report will be finished, and whether the Phase 1 report would be made available for public input or recorded comments. K.B. Kavanagh shared that while we intend to share a draft of Phase 1 for ACCC input, we had not contemplated sharing with the general public as well, and we will consider it. If we do, it would not be via a formal public comment procedure because releasing this report is not a regulation and would not require commission action. S. Beganskas noted that DRBC is in the process of scheduling ~10 listening sessions and other events to resume collecting public and partner input for Phase 1. The plan is to finish Phase 1 sometime in the first half of 2026, and we have yet to determine the timeline for review.

Member Roundtable Updates:

J. Horton: In April, PADEP released a climate impact assessment for PA as well as a climate action plan, do this every three years. Check it out here:

https://www.pa.gov/agencies/dep/residents/climate-change/pa-climate-action-plan https://www.pa.gov/agencies/dep/residents/climate-change/impacts

N. Procopio: NJ Flood Safety week https://dep.nj.gov/newsrel/25_00826/ with link to Statewide Flood Resilience Initiatives report.

M. Maxwell-Doyle: PDE is creating a climate resilience hub on our new improved website, in partnership with DVRPC, PWD, and WRA. We welcome any input and participation from AC3.

Additional Links Shared in Chat:

To sign up to receive via email periodic DRBC-related information and updates on one or more interest areas: https://www.nj.gov/drbc/contact/interest/. And all advisory committee openings can be found online: https://www.nj.gov/drbc/about/advisory/committee-openings.html.

Adjournment:

The meeting was adjourned by H. Neukrug at approximately 10:59 am.

Approved 12/16/2025