
Advisory Committee on Climate Change

MEETING SUMMARY

Wednesday, 20 December 2023

10:00 am – 12:30 pm

MEETING ATTENDEES (55)

Members and Alternates (18):

Delaware – Robert Scarborough, 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 – Mark Lowery; 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.; NOAA Northeast Regional Climate Center, Cornell University

Pennsylvania – James Horton; Pennsylvania Department of Environmental Protection

New York City – Alan Cohn, New York City Department of Environmental Protection

City of Philadelphia – Julia Rockwell, Philadelphia Water Department

Partnership for the Delaware Estuary - Danielle Kreeger, Ph.D.

Aneca Atkinson; Audubon Mid-Atlantic

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

James J. Chelius, P.E.; American Water, Inc. (ret.)

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

Upmanu Lall, Ph.D.; Columbia Water Center, Columbia University

Christopher Linn, AICP; Delaware Valley Regional Planning Commission

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

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

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

DRBC Staff (13):

Sarah Beganskas, Elizabeth Koniers Brown, Pamela Bush, Fanghui Chen, Kristen Bowman Kavanagh, Avery Lentini, Chris McCann, Chad Pindar, Kevin Pregent, Sara Sayed, Kate Schmidt, Amy Shallcross, Steve Tambini

Other Attendees (24):

Kelly Anderson (PWD), Barbara Arrindell (DCS), James Barbis (WSP), Stefanie Baxter (DGS), Shana Beiger (GHD), Tracy Carluccio (DRN), Jennifer Egan (Environmental Finance Center, U. of Maryland), Hedef Essaid (USGS), Karen Feridum, Dalia Ghobrial (City of Trenton), Molly Hesson (Sage Services), Kathy Klein (PDE), Matthew Konfirst (EPA), Douglas Mauro (Liberty Coke), Martha Maxwell-Doyle (PDE), Doug O'Malley (Environment NJ), Anthony Preucil (NOAA), Coralie Pryde, Darrell Rulon (Kion Group), Julie Schneider (CWP), Meredith Streeter (NYSDEC), Brenan Tarrier (NYSDEC), Anneke van Rossum (DRN), Brian Yerger (PDE).

Reference acronyms: Delaware Riverkeeper Network (DRN), Center for Watershed Protection (CWP), National Oceanic and Atmospheric Administration (NOAA), New Jersey Department of Environmental Protection (NJDEP), New York State Department of Environmental Conservation (NYSDEC), Pennsylvania Fish and Boat Commission (PAFBC), Partnership for the Delaware Estuary (PDE), Philadelphia Water Department (PWD), University of Delaware (UDel), U.S. Environmental Protection Agency (EPA), U.S. Geological Survey (USGS), William Penn Foundation (WPF).

MEETING SUMMARY**Call to Order:**

Meeting was called to order at 10 am by H. Neukrug, The Water Center at Penn and Committee Chair, and held with remote attendance only using Zoom webinar and its call-in capabilities.

Member Roll Call:

Attendance was taken by K. B. Kavanagh, DRBC. All members present.

Approve Meeting Summary:

The 10/12/22 meeting summary was unanimously approved. No discussion. Motion to approve was made by D. Kreeger and seconded by J. Chelius and D. Velinsky.

Election of Officers:

K. B. Kavanagh announced that a new committee Chair and Vice Chair needed to be elected. Terms are for one year each, with no term limits. A. Babson moved to nominate H. Neukrug for another term as Chair and M. Kaplan for another term as Vice Chair. D. Kreeger seconded the motion; no discussion, and the motion carried unanimously.

DRBC Announcements:

K. B. Kavanagh announced that the Commissioner representing the federal government had been recently promoted from Colonel to Brigadier General John P. Lloyd; and introduced new ACCC member, Aneca Atkinson of Audubon Mid-Atlantic (a former DRBC alternate Commissioner for Pennsylvania).

Presentations:

“DRBC Climate Water Resource Program and Work Plans,” by Kristen Bowman Kavanagh, P.E., Deputy Executive Director at DRBC

This presentation included a discussion of the DRBC annual work plan development process, key climate change risks to Basin water resources, and highlights of DRBC’s current and ongoing climate change work plan activities.

Committee Discussion: J. Rockwell suggested PWD and DRBC discuss in future the use of common climate scenarios. R. Scarborough noted consideration of the proposed Mid-Atlantic Clean Hydrogen Hub on water availability.

“Projecting Extreme Precipitation in the Delaware River Basin: Interactive IDF Curves,” by Art DeGaetano, Ph.D., Director of NOAA Northeast Regional Climate Center and Cornell University

This presentation introduced a new webtool developed by NRCC for the DRBC, Projecting Extreme Precipitation in the Delaware River Basin Tool, and summarized the methods used to develop the tool, spatial scale and uncertainty, and website design and specifications.

Committee Discussion: N. Propocopio asked how the analysis results for the DRBC tool compared to the NJDEP tool in the overlapping portions of NJ, and C. Linn asked what defines an event in the observed record. A. DeGaetano responded that there was very good correlation in the results, and an event is one of the largest daily precipitation events in an n year record; so if a station has 70 years of record, an event is one of the 70 biggest events.

“DRBC Climate Action Plan,” Steve Tambini, P.E., Executive Director at DRBC

This presentation included a discussion of the need for and DRBC’s role and authority in potential development of a climate action plan; possible topics for inclusion in such a plan (flood management and drought; flood loss; water quality; water availability and efficiency; project reviews; equity and environmental justice); possible metrics; and next steps for developing a charge for development of such a plan.

Committee Discussion: H. Neukrug asked who is responsible for land use/management. S. Tambini responded that climate action on energy/transportation is the responsibility of the states, and the charge of the DRBC is in water resources; also the Delaware River Watershed Conservation Collaborative is working on a blueprint for land use and restoration issues. A. Cohn suggested that an area to explore is decision scenarios and decision making under uncertainty. M. Kaplan asked what the ACCC role would be in a climate plan. S. Tambini responded that DRBC is looking for input and recommendations from the committee on what they see as possible topics missing from the plan, what priorities they recommend if different than those proposed by DRBC; the ACCC would not develop the plan but are being asked for input.

Attendee Questions: B. Arrindell said she believes the climate action plan should be in the Comprehensive Plan (CP), and how can we [stakeholders] help accomplish that. S. Tambini responded

that the climate action plan will define how we get to any changes in the CP; the Commission can take up issues broadly as policies or specifically with implementing regulations. T. Carluccio stated that the public thinks the DRBC must develop policies to address climate change that are in the Water Code and CP and this is an urgent issue; she is hoping the DRBC gets to the end of the process/studies in order to enact policies and regulations in particular in two areas: 1) flooding/floodplain regulations will DRBC require structures to be out of the flood plain and prevent building activities in the floodplain, and 2) will DRBC consider addressing green house gas emissions (GHG). S. Tambini responded that we do not have answers now as to what exactly will be in the climate plan, and non-water resource management topics are addressed by the states. He noted that the public will have input on the climate plan. K. Feridun asked what the relationship/role of the ACCC would be with the climate plan. S. Tambini stated that the committee can make non-binding recommendations, and the DRBC values the expertise of the members to inform our day-to-day work.

“Climate and Resilience Support Around Best Practices for Resilient Utilities,” by Jennifer Egan, Ph.D., Environmental Finance Center, University of Maryland

This presentation included information on the role of the EFC UMD in the EPA Region 3 Water Technical Assistance (WaterTA) program; challenges in the basin around funding, finance, and climate; upcoming Water Research Federation projects for water utilities on developing an environmental, social, and governance (ESG) framework, as well as on making the case for climate-resilient water infrastructure and supporting strategies; and EPA funding and tools available for climate resilience planning support.

Member Roundtable Updates:

Limited time was available for committee members to provide updates on their/their organizations' work. A. Cohn of NYCDEP and J. Rockwell of PWD shared that they cohosted a successful Climate Resilience Workshop in October with the Water Utility Climate Alliance (WUCA) with sessions on climate science and decision making under deep uncertainty (DMDU), among others. <https://www.wucaonline.org/training/index.html>

M. Kaplan proposed that DRBC staff update the committee on substantive take-aways and timing on phases to development of any climate plan. She also raised the thought of the ACCC making a statement of support for such a plan. She further provided the following information in the meeting chat – NJ Climate Change Resource Center Climate Academy webinar on January 23, 2024 at 1:00 pm regarding updates to Rutgers NJADAPT Climate Planning tools. The updates include: a guided NJ Local Planning Navigator to help municipalities develop climate-change related hazard vulnerability assessments under NJ's Municipal Land Use Law; NJ Public Health Adapt to explore potential impacts of climate change on public health; and a hazardous materials/substances commercial facilities flood analysis and correlated with Overburdened Communities. Learn more/register at: https://njclimateresourcecenter.rutgers.edu/upcoming_events/nj-adapt-new-tools-and-critical-enhancements/

N. Procopio shared via meeting chat – Please see <https://dep.nj.gov/climatechange/> and scroll down for "reports" which includes our draft Strategic Climate Action Plan, scientific reports, and resilience docs. Also see <https://dep.nj.gov/climatechange/resilience/resilience-council/> for the state's Interagency Council on Climate Resilience.

R. Scarborough shared the following via the meeting chat – Climate Bill passed in DE – "Climate Solutions Act" <https://legis.delaware.gov/BillDetail?LegislationId=130272> – requires all state agencies to incorporate climate change adaptation and mitigation into agency action and establishes Climate Officers in each agency. DNREC has contracted with UD to update climate impact assessments using CMIP6., report due November 2024. Information of the Mid-Atlantic Clean Hydrogen Hub can be found at www.mach-2.com.

C. Linn shared via meeting chat – DVRPC received a \$1.6 million grant from the William Penn Foundation in December for regional climate change work. About \$800k will be for regional energy transition planning (mitigation) and \$400k will go to regional climate resilience facilitation. The latter project will address many of the issues outside of DRBC's purview that Steve/we discussed. The project will: 1) Conduct a landscape assessment to better understand partner resources, needs and objectives; 2) Conduct a stakeholder mapping and engagement process to build relationships with new partners, especially CBOs; 3) Assess how we can best assist partners with tools, data, coordination funding; and 4) Develop a work program to implement priority tasks. This is a broad initiative to understand how DVRPC can best assist partners on climate resilience actions and goals. Also, DVRPC is leading the EPA-funded Climate Pollution Reduction Grant (CPRG) Philadelphia/Camden/Wilmington metropolitan area planning process – focused on GHG mitigation activities. Work and engagement is underway. Currently we are developing a Priority Climate Action Plan due on March 1st and cultivating/coordinating regional projects to submit to the competitive \$5 billion implementation grant program (due April 1st). Please contact us or visit our CPRG webpage should be live in early Jan.

J. Callahan shared via meeting chat – NOAA National Ocean Service is looking for stakeholders in our area that utilize the High Tide Flooding Outlook products in any planning or operational use, <https://tidesandcurrents.noaa.gov/high-tide-flooding/>. Those are subseasonal to annual timescale, not necessarily long-term SLR/climate change. I can answer any questions you may have.

Public Remarks:

C. Pryde stated her concern that she only heard about adaptation and not mitigation. In Delaware, climate change impacts are a big issue, e.g., salt line, groundwater salinization/intrusion, and flooding of low-lying areas.

A. van Rossum said that if the ACCC is not actively involved in the climate action plan, it should be. She advocated for public input on the DRBC's climate action plan. She also said that things need to get done quicker and the ACCC should meet more frequently.

D. O'Malley stated that climate change is hitting home for people, especially flooding. He asked what the process is for coming up with the plan and timing, and funding. S. Tambini responded that next steps in 2024 are to propose a resolution to develop a climate action plan consistent with his presentation today, and draft resolution would be notice for public comment; he agreed that the sooner the DRBC starts on a climate action plan the better.

T. Carluccio advocated for public participation; it's a huge issue, and the public wants to participate in every way (policies, regulations, and taking part in developing solutions). She suggested the DRBC

think about holding informal workshops to access the brain trust of the public and to rethink the old way of doing things.

Adjournment:

The meeting was adjourned by H. Neukrug at approximately 12:37 pm.

Additional resources and links shared in meeting chat:

Recent paper published by PWD and CDM on comparison of various methods to develop extreme rainfall projections: <https://iwaponline.com/jwcc/article/14/11/4245/98484/Three-methods-of-characterizing-climate-induced>

To stay current on DRBC news, science, events and more, please sign up here: <https://www.nj.gov/drbc/contact/interest/>

Approved 09/11/2024.