

September 8, 2023

Governor Phillip D. Murphy
Chair of the Delaware River Basin Commission
Office of the Governor
PO Box 001
Trenton, NJ 08625

Governor Kathy Hochul
Vice Chair of the Delaware River Basin Commission
Governor of New York State
NYS State Capitol Building
Albany, NY 12224

Governor John Carney
Second Vice Chair of the Delaware River Basin Commission
Office of the Governor
Tatnall Building
150 Martin Luther King Jr Blvd South
Dover, DE 19901

Governor Josh Shapiro
Member of the Delaware River Basin Commission
Office of the Governor of Pennsylvania
508 Main Capitol Building
Harrisburg, PA 17120

Colonel John P. Lloyd
Member of the Delaware River Basin Commission
Commander and Division Engineer
U.S. Army Corps of Engineers North Atlantic Division
302 General Lee Avenue
Brooklyn, NY 11252-6700

Re: Delaware River Basin Commission Business Meeting September 7, 2023; Public Comment Session

Dear Delaware River Basin Commission Members,

The organizations that make up the Delaware River Frack Ban and Climate Action Coalition are enclosing written copies of the verbal testimony organizational representatives presented yesterday after your public meeting during the public comment session. We are offering these written statements to include references and footnotes and to provide full statements that in some cases had to be cut back to fit within the three minute limit for verbal comments.

Thank you for the opportunity to present this important information to you.

Sincerely,

The Coalition Members, as shown in the imbedded comments (alpha order):

Berks Gas Truth

Catskill Mountainkeeper

Damascus Citizens for Sustainability

Delaware Riverkeeper Network

Environment New Jersey

League of Women Voters of Delaware

Natural Resources Defense Council

Comment by Karen Feridun, September 7, 2023

"My name is Karen Feridun and my organization Berks Gas Truth is part of the Delaware River Frack Ban and Climate Action Coalition. I am commenting today because we need immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis on and in the Delaware River Watershed."

"The dog days of summer are not just barking, they are biting," [warned](#) the U.N. Secretary-General two days ago when the U.N.'s weather agency said that earth has just had its three hottest months on record. He continued, "Climate breakdown has begun."

The summer's headlines have been filled with stories of extreme weather events and dire forecasts from climate scientists that indicate things will only get worse, and apparently more quickly than they'd imagined, if we take no action.

The response from most quarters was no action or to make matters even worse with continued leasing of public lands for drilling, plans to ramp up LNG exports, and fossil-fuel driven magical thinking about quick fixes, like blue hydrogen and carbon capture and storage.

Your Commission boasts the existence of an Advisory Committee on Climate Change. I suppose that's the appropriate way to put it. The Committee hasn't held a meeting since October of last year.

I never imagined that I'd be living in times like these, but, if I had, I know I would have assumed that a dire emergency would set wheels in motion. The ACCC would replace its two meetings a year with two meetings a week or even a day!

And in the midst of the recent parade of disasters, Pennsylvania announced on August 15 the results of the first state-funded studies on fracking since the first well was drilled in Washington County 20 years ago. It came as no surprise to anyone who has been paying attention that the researchers found links between proximity to drilling and fracking and increased risks of lymphoma in children, asthma exacerbation in people of all ages, and low birth weight.

"Surely," would have said that version of me who saw all of this coming, "the Governor will respond immediately by stopping all permitting, at minimum. If they say more studies are needed? Surely he will announce that he's funding whatever additional research must be done."

In the dystopian world I actually inhabit, the Governor who, of course, also serves as a Commissioner here, has had nothing to say about it.

But, and this may be the hardest thing to take, the immediacy of the crisis combined with the confirmation that kids have been harmed by the fossil fuel industry for a long time, has destroyed the fantasy of some better version of us coming soon that will save the future. The future is here. What are you going to do about it?

Thank you.

Barbara Arrindell here, Director of Damascus Citizens for Sustainability, part of the Delaware River Frack Ban and Climate Action Coalition. Today I want to stress the need for immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis on and in the Delaware River Watershed - business-as-usual will no longer suffice if the coming generations are to have a viable environment. Passive climate change denial is not acceptable from a body like DRBC that has a mandate to protect the resources of the Delaware Basin - protect these natural resources for the public - which include these annoying commenters, but we are why you exist.

NASA, on its [/climate.nasa.gov/](https://climate.nasa.gov/) website says

While Earth's climate [has changed throughout its history](#), the current warming is happening at a rate not seen in the past 10,000 years.

and

From global temperature rise to melting ice sheets, the evidence of a warming planet abounds.

I'll add fires to that.

Yet the DRBC which has both a 'climate' page/department? and a somnolent Climate Advisory Committee (CAC) which has not even met this whole year is not taking climate into account when making decisions and has pushed the public out of its decision-making. Involving the public will vitalize the CAC and making climate part of DRBC's decision-making and will keep the agency relevant into the future. Involving the public will be a good thing!

Because the fossil fuel industry holds exemptions to major provisions of many protective federal environmental laws means they have little liability for contaminating events they cause that others pay dearly for. By not taking climate impacts into account when evaluating projects DRBC is giving another exemption to this and other polluting industries.

DRBC must not ignore the climate impacts that are here in the watershed and the literally BURNING need for the climate action committee to get to work! -including inviting public input -have SOME meetings this year, it will strengthen the DRBC.

Thank you.

September 7th, 2023

Re: Public Comment Provided During the DRBC 3rd Quarter Business Meeting

My name is Anneke van Rossum and my organization Delaware Riverkeeper Network is with the Delaware River Frack Ban and Climate Action Coalition. I am commenting today because we need immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis on and in the Delaware River Watershed.

We are currently facing the most pressing, urgent, and frankly life threatening issue of our lifetimes – the climate crisis. The simple fact that the wording of this has changed from the mere “greenhouse gas effect” to global warming to climate crisis to the latest term of Global Boiling being mentioned, shows the plight of our world is worsening. A report by leading climate scientists has stated “there is a rapidly closing window of opportunity to secure a livable and sustainable future for all”¹.

Scientists have analyzed over 500 extreme weather events finding 93% of heatwaves and 68% of droughts have been made worse by human-caused emissions.² Studies show that more than 61,000 people in Europe have died in their heatwaves and millions from across the world have died in the past three decades, all because of the climate crisis.³ This is no longer a matter for debate on what must be done, this is a matter of cold hard science proving time and time again that every action taken in ignorance of this crisis or inaction, contributes to the loss of human lives.

The Delaware River Basin and its states are not removed from these issues. From 2011 to 2021, New York has had 16 climate disaster declarations, New Jersey had 13, Pennsylvania had 9, and Delaware had 5.⁴ It is truly a matter of life and death for so many in the Basin that the Delaware River Basin Commission take serious action to do its part in combatting the climate crisis.

While you have created the Advisory Committee on Climate Change, they have only met twice a year from 2020-2022 and from the publicly accessible information on the DRBC website, it would appear that during the hottest year on record the Climate Committee hasn’t even met once. While this doesn’t inspire confidence the Commission is taking actions in doing all in their power to combat climate crisis in the Basin, believe me when I say we are rooting for you to do

¹ Damian Carrington, *Deadly global heatwaves undeniably result of climate crisis, scientists show*, The Guardian, July 25, 2023, https://www.theguardian.com/science/2023/jul/25/deadly-global-heatwaves-undeniably-result-of-climate-crisis-scientists-attribution?utm_campaign=Hot%20News&utm_medium=email&_hsmi=267643290&_hsenc=p2ANqtz-8SVzyLk-ipsnmSSAzezE1faiRDiuO8vf2g5bJc4vGtwAiAspc19qCGjGYqM6kwqnkth1grDWqw2UHLLK2MxseTz0EmaokUp0NF9V-t_JEP106hU&utm_content=267643290&utm_source=hs_email

² *Id*

³ *Id*

⁴ Rebuild By Design, *Atlas of Disaster*, chrome-extension://efaidnbmnnnibpcajpcgclclefindmkaj/https://rebuildbydesign.org/wp-content/uploads/2023/04/ATLAS-OF-DISASTER-compressed.pdf

better. We urge you to take true, meaningful, and consistent action every day to be a part of the solution to the climate crisis and not part of the problem.

Comment for Public Comment Session DRBC Business Meeting 9.7.2023

I am Tracy Carluccio, Deputy Director of Delaware Riverkeeper Network, which is part of the Delaware River Frack Ban and Climate Action Coalition. We are commenting today because we need immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis on and in the Delaware River Watershed.

The Commission makes important decisions on projects at every business meeting, as we have seen here today. Many of these decisions will have impacts on the ability of watershed communities to address the expanding effects of the climate crisis that is gripping the world today; some of them will contribute to making the climate crisis worse.

We know that as the air warms it can hold more moisture, which in turn fuels unpredicted storms and extreme rainfall events. This summer, on July 15, we witnessed such a storm in Washington Crossing PA, just south of where the Commission would routinely meet when you had in-person meetings, before COVID. In that tragic storm event, many inches of rain fell in just a couple of hours and a flash flood roared across Rt. 532 without warning, sweeping away motor vehicles and 9 people. 6 people died, including a toddler and their mother, and a 9 month old infant has never been found.¹ This horrific catastrophe was stunning and heartbreaking. Other flood events have ravaged areas of PA and NJ along the river this summer, many caused similar freak storms. Communities are still recovering and rebuilding today.

The warming of our atmosphere, fed by greenhouse gas emissions emitted by natural gas and other fossil fuel projects that are approved routinely by agencies, including the DRBC, will bring more unexpected cloudbursts, more severe storms, more flooding. Add to this the predicted sea level rise for the Delaware River and it is clear we are in trouble as climate impacts play out here. And it's already happening. For instance, scientists explain that methane and other short lived greenhouse gases are causing sea level rise that will last for centuries.²

In Delaware, for instance, sea level is up to 4 inches higher than it was in 1956 and is rising about 1 inch every 10 years.³ All of the First State and over 50% of its cities

¹ <https://www.nbcphiladelphia.com/news/local/what-we-know-about-the-bucks-county-flood-victims/3607167/>

² Zickfeld et al. (2017). Centuries of thermal sea-level rise due to anthropogenic emissions of short-lived greenhouse gases. *PNAS* Vol. 114, No. 4, 657 -662. Retrieved from <https://www.pnas.org/doi/epdf/10.1073/pnas.1612066114>

³ <https://sealevelrise.org/states/delaware/>

are at risk due to sea level rise and flooding.⁴ There are already over 9,500 properties at risk from tidal flooding in Delaware.⁵

What can the Commission do to become part of the solution to the climate emergency we all face? By requiring dockets to perform a climate impact analysis and show they will help protect the watershed, not feed climate changes or make climate impacts worse.

One way to do this is to require that floodplain regulations and construction rules for DRBC docketed projects prohibit further building where flooding occurs and instead riparian areas and forested regions are protected from any disturbance so they can perform essential natural functions to retard flooding, absorb precipitation, recharge groundwater, and naturally capture carbon.

A recent article recounts how “unbuilding” in cities is being pushed by many neighborhoods that are “on the front lines of the climate emergency”.⁴ What is being prioritized by these overburdened communities? They report that instead of “...: seawalls, levees, concrete river channels and pumping stations” “...the next wave of development needs to be about “unbuilding” – using plantings and landscaping to turn low-lying areas from gray funnels to green sponges. This approach favors waterfront parks, rain gardens and other natural features that soak up floodwater before it backs up into streets and basements.”⁵ The multiple benefits in terms of helping provide cleaner water, air, and places of refuge are measurably valuable.

We advocate that the Commission adopt a combination of proactive policies that regulate the floodplain, its riparian areas and upland forests to prohibit new construction, fill, and vegetation removal, and insist that projects invest in the restoration of communities and their natural assets such as wetlands. This will allow these features to function as the nonpoint source pollution control and natural carbon sinks nature intended. And DRBC must stop approving greenhouse gas emitting projects – fossil fuels are the engine of global warming. These are climate actions the Commission can perform here in the Delaware River Basin through its regulatory powers.

We advocate that DRBC's Advisory Committee on Climate Change should lead this regulatory effort recommending changes to current docket reviews. But, shocking as it is, the Committee has not met even once as a committee this year, the hottest summer in recorded weather history. It must begin meeting again and take on the duties with which it was charged more than 3 years and 9 months ago.

⁴ <https://www.usnews.com/news/health-news/articles/2023-07-25/how-unbuilding-can-help-weather-climate-disasters>

⁵ <https://www.usnews.com/news/health-news/articles/2023-07-25/how-unbuilding-can-help-weather-climate-disasters>

Thank you for the opportunity to comment.

Comment of Environment NJ, Doug O'Malley at DRBC 9.7.2023 Meeting

My name is Doug O'Malley and my organization Environment NJ is part of the Delaware River Frack Ban and Climate Action Coalition. I am commenting today because we need immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis on and in the Delaware River Basin.

This year we experienced the hottest summer on record and the rising temperatures across the globe are due to the heat being trapped in our atmosphere from the burning of fossil fuels.¹ An analysis published by the World Weather Attribution group “found that heat waves in North America and Europe were “virtually impossible” without climate change”.²

- Heatwaves as we have been seeing are expected to occur every 15 years in the US.³
- 3 out of the 4 states in the Delaware River Basin have counties that are the highest risk of climate hazards or disasters for their state – Philadelphia County in Pennsylvania, Ocean County in New Jersey, and both New Castle and Sussex Counties of Delaware.⁴
- Heat is the current leading weather-related cause of death in the US, “outpacing deaths from hurricanes by a factor of eight to one”.⁵
- On June 15th, 2023 the PADEP announced a statewide drought watch because of observed “lowered stream flows, dropping groundwater levels, and persistent precipitation deficits”.⁶ As of August 24, 2023 the drought watch was lifted for 47 counties and remains for 20 counties.⁷
 - Quote by Agriculture Secretary Russell Redding in the drought watch press release said “Pennsylvania’s beneficial natural average rainfall has been upended by weather extremes and unpredictably in recent years.

¹ Andrea Thompson, *July 2023 Is Hottest Month Ever Recorded on Earth*, July 27, 2023, <https://www.scientificamerican.com/article/july-2023-is-hottest-month-ever-recorded-on-earth/>

² *Id.*

³ Damian Carrington, *Deadly global heatwaves undeniably result of climate crisis, scientists show*, The Guardian, July 25, 2023, https://www.theguardian.com/science/2023/jul/25/deadly-global-heatwaves-undeniably-result-of-climate-crisis-scientists-attribution?utm_campaign=Hot%20News&utm_medium=email&_hsmt=267643290&_hsenc=p2ANqtz-8SVzyLk-jpsnmSSAzezE1faiRDiuO8vf2g5bJc4vGtwAiAspc19qCGjGYqM6kwqnkth1grDWqw2UHLLK2MxseTz0_EmaokUp0NFf9V-t_JEP1O6hU&utm_content=267643290&utm_source=hs_email

⁴ Chester et al. (2022). Atlas of Disaster. Rebuild by Design. Retrieved from <https://rebuildbydesign.org/atlas-of-disaster/>

⁵ Oliver Milman, *‘Silent Killer’: experts warn of record US deaths from extreme heat*, August 1, 2023, <https://www.theguardian.com/us-news/2023/aug/01/heat-related-deaths-us-temperatures-heatwave>

⁶ https://www.media.pa.gov/Pages/DEP_details.aspx?newsid=1769

⁷ https://www.media.pa.gov/pages/dep_details.aspx?newsid=1795

This year is no exception with more than 90 percent of the topsoil across the state either short or very short in moisture content in the past week”.⁸

- Low precipitation has also increased Pennsylvania wildfires in 2023. “There have already been 1,400 wildfires reported statewide so far in 2023, compared to 1,036 in all of 2022. This year’s wildfires have burned more than 8,500 acres, compared to 2,700 acres in 2022”.⁹
- Drought in the Delaware River Basin is due to low rainfall and thus on hot days our land becomes baked, vegetation dies, stream flow is reduced, stream temperatures go up, all resulting in the harming of important habitats and species of the Delaware River Watershed.

The WMO’s Secretary General Petteri Taalas explained perfectly “The need to reduce greenhouse gas emissions is more urgent than ever before. Climate action is not a luxury but a must”.¹⁰ In every decision the DRBC and its Commissioners make, you need to consider the effect on the climate crisis and thus the DRBC should only be making decisions that combat it, not worsen it.

One of the purposes of the DRBC’s Advisory Committee on Climate change is, according to its founding resolution, to “provide the Commission with scientifically based information and recommendations for identifying and prioritizing threats and vulnerabilities affecting the Basin’s water resources due to climate change and accompanying sea level rise”.¹¹ We hope the DRBC makes full use of the Advisory Committee on Climate Change it has established and does not use it as a feel good front, but rather a tool the DRBC and Commissioners draw on to make meaningful and powerful decisions to protect the Delaware River Basin and its communities from the dangers of the climate crisis. Scientific studies and meetings filled with recommendations are meaningless without action and implementation. It is our coalition’s expectation that since the DRBC has created this Climate Advisory Committee, the choices made by the Commission will reflect what we need to protect the Basin from the worst of the climate crisis.

⁸ *Id* at 6.

⁹ *Id*.

¹⁰ *Id* at 1.

¹¹ Resolution 2019-8, https://www.nj.gov/drbc/library/documents/Res2019-08_EstablishesACCC.pdf

Comment from LWVDE to DRBC Business Meeting September 7, 2023

My name is Coralie Pryde. My organization, the League of Women Voters of Delaware, is part of the Delaware River Frack Ban and Climate Action Coalition.

Delaware is the state in our region likely to suffer the most significant effects from climate change. Our small size and long, flat coastline mean that we will lose a significant portion of our land to rising seas. Sea level rise here is about one inch every decade.¹ The rise is faster than in most coastal states because our land is sinking.² Tidal flooding has increased by 260% in some areas of Delaware since 2000. The increasingly heavy rainstorms due to rising temperatures also put inland areas at increased risk of flooding.

Sea level rise will bring about loss of tidal marshes, tidal flats and beaches, all of which are important in protecting the flora and fauna that make our shore economically vital and attractive to visitors. Species ranging from blue crabs and flounder to blue herons and red knots are threatened from the loss of habitat and changing seasons associated with climate change.

Rising temperatures are also increasing the humidity. The number of days in which the combination of heat and humidity make outside work in Delaware dangerous has increased significantly in the last four decades.

Delaware stands to lose businesses and suffer losses in our seafood and tourist economies and it will become a much less attractive place to live as climate change proceeds. The DRBC has a Climate Change Committee, but the decisions made by the DRBC in recent years have increased the chances that renewed drilling in the Marcellus Shale will increase our contribution to climate change. To prevent catastrophic warming, fossil fuel extraction must be quickly ended. Stopping natural gas extraction is the fastest way to address climate change because methane causes 80 times more global warming than CO₂ in the first twenty years after it is leaked.³

The DRBC has also failed to consider the dangers to health, safety and existing Delaware industries presented by allowing LNG and other liquefied petroleum gases to be shipped down the Delaware River.

It is past time for the DRBC to take seriously the effects of their decisions on climate change and on the many other factors that affect the quality of our lives and our economies in the Lower Delaware Basin.

¹ <https://sealevelrise.org/states/delaware/>

² <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-de.pdf>

³ <https://climate.mit.edu/ask-mit/why-do-we-compare-methane-carbon-dioxide-over-100-year-timeframe-are-we-underrating>

Public Comment at 9.7.23 DRBC meeting comment session

My name is Sahana Rao, and I am a staff attorney with the Natural Resources Defense Council, which is part of the Delaware River Frack Ban and Climate Action Coalition. We are commenting today because we need immediate, strong, and consistent action from the DRBC and its Commissioners to prevent the worst effects of the climate crisis in the Delaware River Watershed.

We have been seeing the effects of climate change in the Watershed, with extreme heat, storms, flooding, drought conditions in Pennsylvania, fires in the New Jersey Pinelands, and more. We know that these conditions will obviously impact water and water supplies, so the Commission needs to take climate forces into account when making water resource and permitting decisions. We can and should learn from other locations where the impacts are more advanced.

Across the globe, groundwater depletion and resulting water quality degradation are being spurred by climate change.¹ The New York Times water series explained in a September 1 article that in India, where more groundwater is used than any other country, “...hotter temperatures are drying out fields and leaving less moisture to soak into the soil and replenish the aquifers below.”² One might assume that the increased rainfall in monsoon season would simply refill the aquifers, but research shows that the evaporation from increased irrigation in the drier winter months outpaces the wet season precipitation.³ This climate-propelled deficit is compounding with time and continued groundwater pumping.

According to the September 5th article in the same New York Times series, “A similarly rapid transformation is taking place beneath our feet. The aquifers that supply 90 percent of America’s water systems are being damaged and depleted by industrial farms and urbanization. Reserves of groundwater that took eons to form are drying up in a matter of years. Cities and farms are running short on water. And experts say it could take centuries or millennia for some of these aquifers to replenish themselves, if they recover at all.”⁴ In other words, despite being in the wetter and humid northeast, rainfall may not offset use of the Delaware River Watershed’s groundwater as climate effects worsen.

The DRBC does regulate water use and does restrict groundwater extraction in areas identified as groundwater-stressed. But climate impacts are occurring now, changing the capacity of aquifers – and surface waters – to meet our needs.

We consider the DRBC’s Advisory Committee on Climate to be extremely important in helping the Commission account for these impacts. The Committee’s “Purpose” explicitly includes: “water resources planning, monitoring, research and regulations that will support mitigation, adaptation, and resiliency to

¹ https://www.nytimes.com/interactive/2023/08/28/climate/groundwater-drying-climate-change.html?campaign_id=54&emc=edit_clim_20230905&instance_id=101973&nl=climate-forward®i_id=60763411&segment_id=143794&te=1&user_id=e9aeb65b9a8fca95001c017a67cee227

² <https://www.nytimes.com/2023/09/01/climate/india-groundwater-depletion.html>

³ *Ibid.*

⁴ David Gelles, *The Water Crisis*, Climate Forward Newsletter, New York Times, Sep. 5, 2023. https://messaging-custom-newsletters.nytimes.com/template/oakv2?campaign_id=54&emc=edit_clim_20230905&instance_id=101973&nl=climate-forward&productCode=CLIM®i_id=60763411&segment_id=143794&te=1&uri=nyt%3A%2F%2Fnewsletter%2Fd57f3316-4053-5865-846e-5d04b67f9572&user_id=e9aeb65b9a8fca95001c017a67cee227

climate change in the Delaware River Basin.”⁵ But the Climate Committee cannot effectuate this purpose when it has not met this year and has met so seldom since its founding in 2019. Climate changes are and will continue to be relentless. Luckily, the Commission already is in a position to take powerful proactive action, if it chooses to do so. The most effective way to prevent depletion of our watershed and the ensuing threat to our water supplies is to take climate impacts into account now in the Commission’s decisionmaking.

⁵ https://www.nj.gov/drbc/library/documents/Res2019-08_EstablishesACCC.pdf.