



Testimony of Dan Shapley
Water Quality Program Director
Riverkeeper, Inc.

Joint Legislative Public Hearing on 2018-2019 Executive Budget Proposal:
Environmental Conservation

February 7, 2018

Thank you to the chairs and members of the Senate and Assembly committees represented here for the opportunity to testify today.

Riverkeeper is a membership organization with nearly 55,000 members and constituents. Riverkeeper protects the environmental, recreational and commercial integrity of the Hudson River and its tributaries, and safeguards the drinking water of millions of New Yorkers.

Recent actions by Governor Andrew M. Cuomo and the Legislature have set the course for New York State to be a national clean water leader. These actions include the Sewage Pollution Right to Know Act in 2012; the Water Infrastructure Improvement Act in 2015, and the doubling of the state's commitment to it in 2016; the establishment of the Governor's Water Quality Rapid Response Team in 2016; and of course the historic actions associated with the FY2018 budget in 2017, including the Clean Water Infrastructure Act and establishment of the Drinking Water Council, as well as emerging contaminant monitoring requirements and Source Water Assessment funding in the Environmental Protection Fund.

With my testimony today, I aim to highlight some of the key opportunities for maintaining and building on these initiatives in FY2018-2019:

1. Department of Environmental Conservation Staff
2. Water Infrastructure
3. Source Water Protection
4. Environmental Protection Fund, and the Hudson River Estuary Program
5. Harmful Algal Blooms and wetlands mapping - Wallkill River
6. New York State's Water Resources Strategy

I will also touch on three legislative initiatives that we hope can be advanced concurrently with the passage of the FY2018-2019 budget, including:

- Plastic bag ban
- Energy Efficiency Jobs Act
- Pharmaceutical takeback programs.

1. Department of Environmental Conservation Staffing

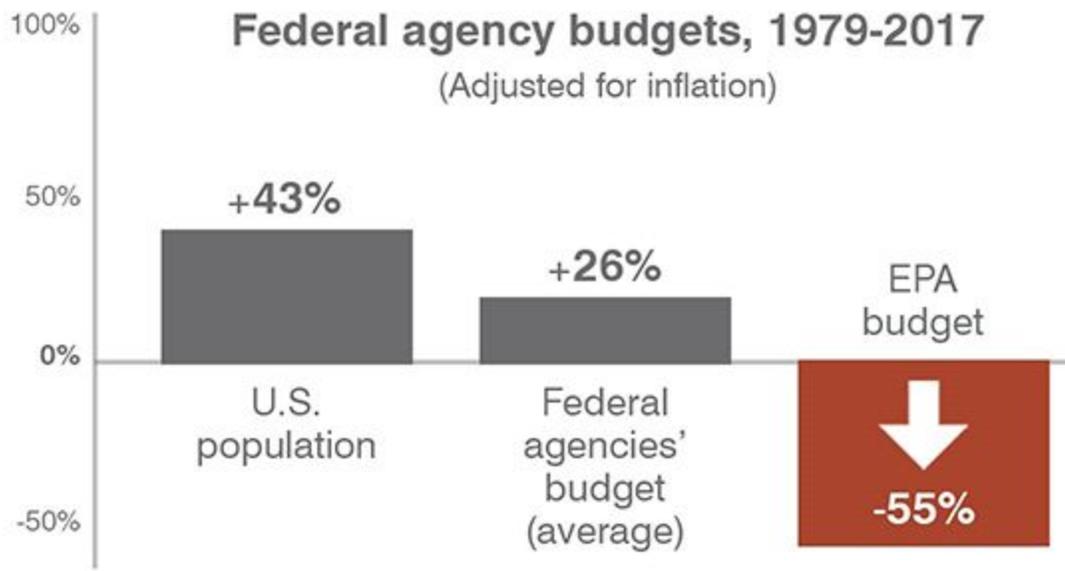
Attention in recent weeks has been understandably focused on the challenging impacts of federal budget proposals on New York State's budget. Equally challenging and important to counteract at the state level is the federal assault on the U.S. Environmental Protection Agency (EPA), and the holes it will leave in New York's ability to protect its environment, including our water.

Riverkeeper calls on Governor Andrew M. Cuomo the New York State Legislature to counteract Trump's assault on the environment, and historic declines in environmental agencies, by restoring staffing for the Department of Environmental Conservation. We are allied in this call by our seven fellow New York State Waterkeepers – Buffalo Niagara Waterkeeper, Lake George Waterkeeper (Fund for Lake George), Long Island Soundkeeper (Save the Sound/CT Fund for the Environment), NY/NJ Baykeeper, Peconic Baykeeper, Upper St. Lawrence Riverkeeper (Save the River) and Seneca Lake Guardian.

President Trump has gutted, rolled back or stalled at least 66 environmental regulations¹, including bedrock clean water regulations such as the “Waters of the U.S.” rule that had protected headwater streams and wetlands that must be maintained in order to protect the quality of downstream waters. Even prior to the latest proposal from President Trump to cut the EPA's budget by 30%, the agency's budget, adjusted for inflation, had declined 55% over three decades, while U.S. population increased 100 million, our economy doubled, and the average federal agency budget increased 26%.²

¹ New York Times, “66 Environmental Rules on the Way Out Under Trump,” January 29, 2018, available at <https://www.nytimes.com/interactive/2017/10/05/climate/trump-environment-rules-reversed.html>

² Environmental Defense Fund, “EPA budget shrank 55% as agency workload grew: The numbers,” January 29, 2018, available at <https://www.edf.org/blog/2018/01/29/epa-budget-shrank-55-agency-workload-grew-numbers>



Source: [Environmental Defense Fund](#)

Within the Department of Environmental Conservation (DEC)'s Division of Water, approximately 70 of the 200 jobs devoted to clean water programs are funded by EPA grants. That's more than one in three. These include staff devoted to Great Lakes, Chesapeake Bay, Long Island Sound, Buffalo River and Chesapeake Bay Watershed programs, and various aspects of Clean Water Act enforcement. Any reduction in EPA support for DEC programs must be replaced in the state budget to avoid a loss of essential environmental protection services.

This sharply declining trend in investments in the federal workforce devoted to environmental programs is, unfortunately, mirrored to a lesser but significant degree in our own state. Based on a Freedom of Information Request by Riverkeeper, staff levels in key Department of Environmental Conservation divisions responsible for protecting, restoring and remediating water, fish and wildlife have declined by 170 individuals over 10 years, a decrease of 15%.³ The Division of Water has experienced the steepest decline over that 10-year period, with a loss of 58 positions, or 21%. Just through 2017, these divisions are down 32 positions, a loss of 3%. We are all familiar with compounding interest, where the interest on dollars invested accrues its own interest, compounding returns. **The loss of DEC staff must be seen as a sort-of compound deficit, with the loss of each staff position compounded over time.** A loss of 170 staff positions over 10 years is equal to hundreds of person-years lost - over 400 in the Division of Water alone.

³ Riverkeeper, "Waterkeepers across NY call for restoration of DEC staff," December 22, 2017, available at <https://www.riverkeeper.org/blogs/water-quality-blogs/waterkeepers-across-ny-call-restoration-dec-staff/>

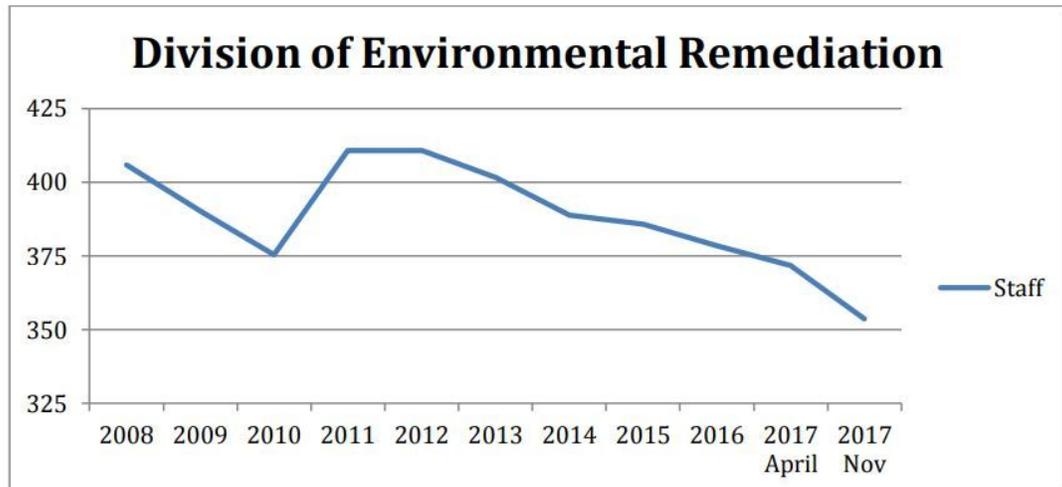
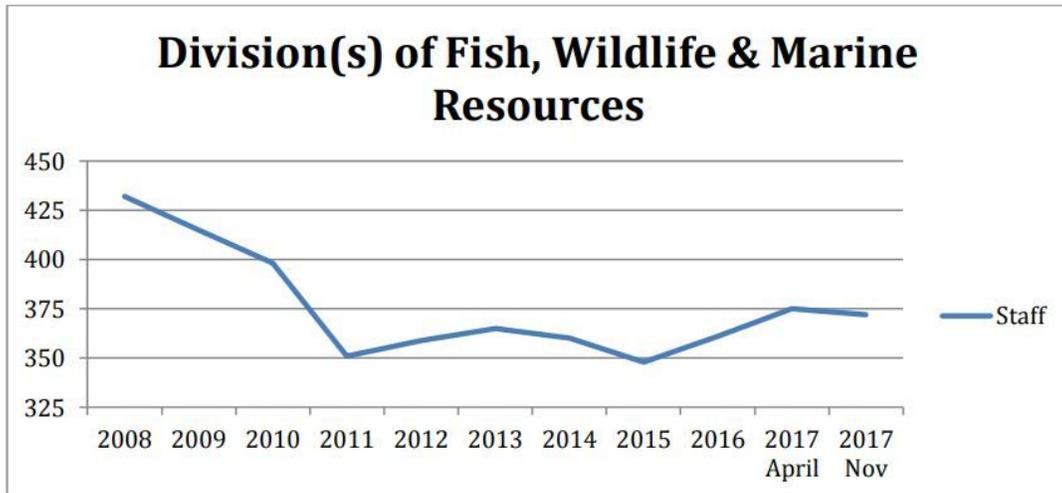
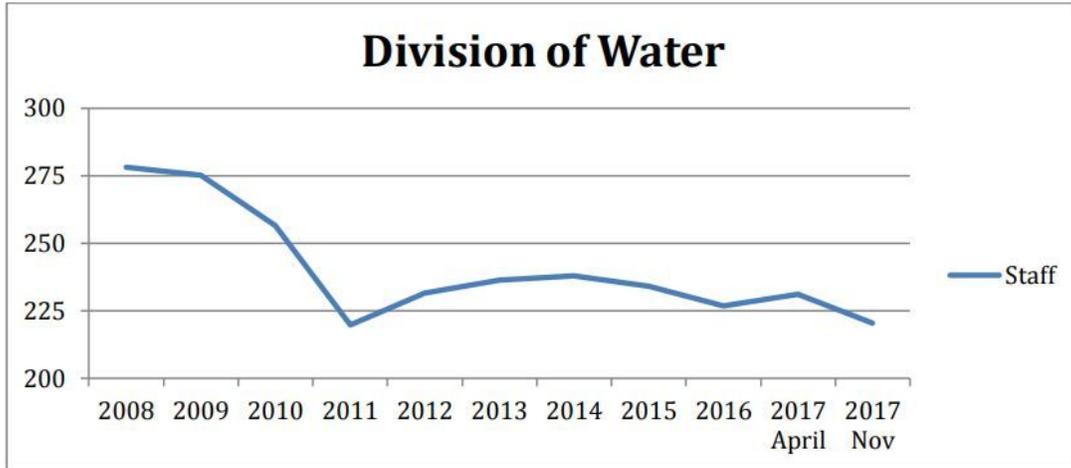
STAFFING LEVELS OVER TIME

Division	2008 April	2009 April	2010 April	2011 April	2012 April	2013 April	2014 April	2015 April	2016 April	2017 April	2017 Nov
Water	278	275	256	220	232	236	238	234	227	231	220
Environmental Remediation	406	390	375	411	411	402	389	386	379	372	354
Fish, Wildlife & Marine Resources	432	415	398	351	359	365	360	348	361		
Marine Resources										67	66
Fish and Wildlife										308	306
TOTALS	1116	1080	1030	982	1001	1003	987	968	966	978	946

STAFFING LEVEL CHANGES OVER TIME

Division	Change From 2008	% Change From 2008	Change Through 2017	% Change Through 2017
Water	-58	-21%	-11	-5%
Environmental Remediation	-52	-13%	-18	-5%
Fish, Wildlife & Marine Resources				
Marine Resources	-60	-14%	-3	-1%
Fish and Wildlife				
TOTALS	-170	-15%	-32	-3%

STAFFING CHANGES OVER TIME, BY DIVISION



The consequences of this staffing shortage can be measured in a retreat on environmental quality. We are acutely aware of the drinking water contamination crises that have affected Hoosic Falls and Newburgh, as well as many communities where Harmful Algal Blooms have affected public drinking water supplies. We also can measure it in the declining water quality in our streams, where nutrients, road salt and sewage-associated pathogens can be measured at increasingly alarming rates - in many cases reversing the historic gains made in the first decades after the passage of the Clean Water Act. We can measure it in the state's position relative to other states: New York had, as of early 2017, among the nation's largest water pollution discharge permitting backlogs; it was among the last states to implement new Water Quality Standards for sewage-associated pathogens in marine waters, based on the EPA's 2012 Recreational Water Quality Criteria; and it is in the lagging half of states that have yet to adopt numeric criteria for nutrients or chlorophyll-a.⁴ These are bedrock Clean Water Act implementation tasks. Failure means more water pollution, plain and simple.

New York should be a leader, not just in water infrastructure investment and drinking water quality standards for now-unregulated contaminants, but for implementation of the Clean Water Act and Environmental Conservation Law. That takes people. This is particularly true at this time, when President Trump has launched an unprecedented, aggressive – and too often, effective – assault on our environment. New York must provide ample ballast as we navigate this tempest. That starts with investing in those who do the hard work of protecting and restoring our waters. Our DEC public servants working on water lack nothing in professionalism, ability, intelligence, dedication or persistence. What they lack is colleagues.

Riverkeeper and Waterkeepers across New York call on Governor Cuomo and the New York State Legislature to restore staffing at the Department of Environmental Conservation.

⁴ U.S. Environmental Protection Agency, "State Progress Toward Developing Numeric Nutrient Water Quality Criteria for Nitrogen and Phosphorus," as of January 31, 2018, available at <https://www.epa.gov/nutrient-policy-data/state-progress-toward-developing-numeric-nutrient-water-quality-criteria>

2. Water Infrastructure

The infrastructure investments made through the Water Infrastructure Improvement Act and Clean Water Infrastructure Act are the biggest New York State investment in this critical priority in a generation.

Given the state’s \$80 billion in documented water infrastructure needs – the largest in the United States – Riverkeeper and a diverse coalition of organizations is calling for a commitment to maintaining the Clean Water Infrastructure Act, and accelerating spending on water grants.

In the Hudson River Watershed, the Water Infrastructure Improvement Act and Clean Water Infrastructure Act have resulted in at least \$500 million in investments⁵ (total of state grant, federal/state loan and local contributions) in our wastewater infrastructure. Much of the investment has gone to projects to reduce combined sewer overflows in the Capital District, in Utica and in river cities like Newburgh and Poughkeepsie; while other projects will upgrade treatment to include modern disinfection, or replace failing components of systems built decades ago.

The Sewage Pollution Right to Know Law has exposed the shocking frequency of sewage overflows and leaks. The first wastewater treatment plant to develop “secondary treatment” (accomplish more than separating solids from liquids) was built in the City of Gloversville, in 1907.⁶ Gloversville discharges treated effluent to the Cayadutta Creek, which flows to the Mohawk River, the Hudson’s largest tributary. A sewer leak from the city’s collection system, which is more than a century old, prompted the mayor in April 2017 to warn the public not to “fish or step into the Cayadutta Creek until further notice.”⁷ We should be outraged that our waters are so frequently unsafe for casual contact. We shouldn’t, however, be shocked that infrastructure that is older than 100 years fails. Most sewage treatment infrastructure is built assuming a useful life of 30-40 years. The lack of ongoing investment at adequate levels produced our current crisis. Robust investment paired with asset management, water conservation and equitable pricing will best alleviate today’s crisis and prevent its recurrence.

Despite the encouraging level of investment, the challenges related to water infrastructure remain great, as Riverkeeper documented recently in, “How’s the Water? 2017: Hudson River Water Quality and Water Infrastructure.” Our findings include:

- While most of the Hudson River is safe for swimming most of the time, more than one in five (21%) of the samples we’ve taken in the Hudson River Estuary have failed to meet federal guidelines for safe swimming. Creeks and smaller rivers that flow into the Hudson are often more contaminated than the Hudson.

⁵ Riverkeeper, “How’s the Water? Hudson River Water Quality and Water Infrastructure” 2017. Available at https://www.riverkeeper.org/wp-content/uploads/2017/11/Riverkeeper_WQReport_2017_final-1.pdf

⁶ U.S. Environmental Protection Agency, “The Clean Water and Drinking Water Infrastructure Gap Analysis,” 2002, Available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/901R0200.PDF?Dockey=901R0200.PDF>

⁷ “City officials say sewage is leaking into Cayadutta Creek,” Fulton County Express, April 27, 2017, available at <https://www.fultoncountyexpress.com/city-officials-say-sewage-is-leaking-into-cayadutta-creek/>

- In the Hudson River Watershed, communities have identified \$4.8 billion in needed investments in wastewater infrastructure alone, based on projects listed in the Intended Use Plans for the Clean Water State Revolving Loan Fund. These include:
 - \$3.4 billion in New York City
 - \$715 million in the Hudson River Estuary Watershed
 - \$573 million in the Mohawk River Watershed
 - \$100 million in the Upper Hudson River Watershed

- Sixteen communities in our watershed rely at least in part on combined sewer systems that overflow at more than 210 discharge points in the Hudson River and its tributaries; and another 440 or more combined sewer overflows (CSOs) are located in New York City.

- Of the tributaries that flow into the Hudson, those with watersheds containing the most sewer pipes and the oldest pipes tend to also have indicators of worse water quality.

- More than half the inventoried sewer pipes in one 10-county region of our watershed are 60-years-old, on average, or older.

- About 10% of treatment plants that discharge directly to the Hudson River Estuary are at or above 75% capacity.

- Roughly four in 10 of the wastewater treatment plants that discharge directly to the Hudson River Estuary are at risk from sea-level rise or flooding from extreme storms that we already see becoming common as the climate changes⁸.

⁸ Riverkeeper, “How’s the Water?” 2017

How frequently is the Hudson River safe for swimming?

This chart, based on 4,000 samples of water quality taken between 2008-2016 by Riverkeeper and our partners at CUNY Queens College and Columbia University’s Lamont-Doherty Earth Observatory, shows the percentage of samples that meet (green) or exceed (red) EPA guidelines for safe swimming. The 74 sites, each sampled monthly from May to October each year, are listed from North to South, and left to right, from the Capital District to New York City.



The lion's share of the \$4.8 billion in documented wastewater projects in the Hudson River Watershed are needed in and around New York Harbor. But we need nearly \$1.4 billion in our watershed upstream of New York City. This is the same region that has benefited from the \$500 million investment commitment since the implementation of the Water Infrastructure Improvement Act. **In short, the grant programs established by the Governor and the Legislature are making a difference in meeting the documented need on a meaningful scale.**

It must be noted, however, that even these documented needs are vast under-estimates of the actual needs. The Legislature must understand that, based on the need, that the most recent commitments must be viewed as a welcome down payment and first step, but not the last step.

- Four in 10 communities that own sewage infrastructure in the 10-county Hudson River Estuary Watershed region have not identified a project in need of Clean Water State Revolving Fund support⁹; therefore, any needs in these communities are unquantified;
- Drinking water infrastructure needs are not included in this estimate;
- Source water protection needs for public drinking water supplies have not been estimated;
- The cost of upgrades to remove nutrients, pharmaceuticals or other unregulated contaminants has not been estimated for most, and therefore is not included in the overall estimate of needs for the watershed, or the state as a whole.

The context for these numbers is well known but bears repeating. The need for investment in clean water and drinking water infrastructure in New York State is estimated to exceed \$80 billion over the next 20 years. New York has the greatest need of any state in the nation, and the federal government's once-robust funding for water infrastructure is a memory. Riverkeeper has lobbied in Washington, D.C., with a diverse coalition of business and environmental interests, the Clean Water Jobs Coalition, in support of a federal doubling of the State Revolving Loan Fund, to \$4.6 billion annually. It's a proposal that has bipartisan support, but uncertain prospects, given the hostility of the Trump Administration and Congress to federal spending generally, and spending on the Environmental Protection Agency budget particularly. The latest indication is that new federal investments are likely to be meager, and poorly suited to supporting our public water infrastructure needs. While we hope and lobby for increased federal investments, New York State can and must provide a backstop against federal backsliding.

The Clean Water Infrastructure Act commitments made to water infrastructure investments are making a difference, and Riverkeeper calls on the Governor and Legislature to accelerate investments to the greatest possible degree.

⁹ *ibid.*

3. Source Water Protection

The Clean Water Infrastructure Act included \$110 million for land acquisition for Source Water Protection statewide, and the Environmental Protection Fund includes \$5 million for Source Water Assessments.

Riverkeeper supports continued funding for Source Water Protection programs established as part of the Clean Water Infrastructure Act and Environmental Protection Fund, a statewide needs assessment, funding for Department of Health updates to Watershed Rules and Regulations, and statewide enabling legislation for Community Preservation Funds.

Both the Clean Water Infrastructure Act grants, and the state-led implementation of assessments via the Environmental Protection Fund will fuel important projects, including those to benefit City of Newburgh, where Riverkeeper highlighted the critical gaps in protection that allowed for the city's watershed to become over-developed, at risk, and ultimately contaminated. A city of 30,000 people lost its water supply, and will only regain it through tens of millions of investment in treatment, remediation and source water protection. The cost of protection would, no doubt, have been far less.

Outside of New York City's watershed, Source Water Protection costs have not been assessed statewide. Our assumption is that most communities do not have costs estimated, and a survey could at this stage, highlight the need to inventory at the local level so the state can plan its investments over the coming years.

In the 10-county region comprising the Hudson River Estuary Watershed, more than 2.2 million people rely on public drinking water systems outside of New York City's supply – including 100,000 who rely on the Hudson River itself. Five treatment plants serve a combined population of 100,000 people in seven shoreline communities - The City and Town of Poughkeepsie, the Village and portions of the Town of Rhinebeck, and portions of the Towns of Hyde Park, Lloyd and Esopus. In addition, a pipeline carries water from Poughkeepsie to the Town of East Fishkill, where it serves one neighborhood and the industrial and commercial complex formerly occupied by IBM, which remains a cornerstone of economic activity in Dutchess County and the region. Despite the importance of this regional water supply, no source water protection program is in place, and the first initial assessment of needs, \$121 million - conducted by Riverkeeper - accounts solely for the costs of community-documented drinking water and wastewater infrastructure improvements in the "Class A" section of the Hudson. This cost does not account for improvements to wastewater infrastructure on tributaries that influence water quality in the Hudson, nor does it account for costs associated with stream restoration, land acquisition, farm management, septic system upgrades or any number of other investments that are likely to be part of a comprehensive watershed-based source water protection program.

The nation's first drinking water treatment plant was built in Poughkeepsie, in 1872 to improve the quality of water drawn from the Hudson River. At that time, nearly 150 years ago, the treatment was needed to reduce significant and immediate risks of human illness associated with microbial

contamination: typhoid, dysentery and cholera. The City and Town of Poughkeepsie, which jointly own and operate the plant, in recent years have invested, with federal and state loan and grant support, \$18 million to improve treatment at this facility, in large part to reduce levels of disinfection byproducts. Town of Lloyd has also identified a \$7.5 million project to address disinfection byproducts. The disinfection byproducts that are the target of these upgrades are emblematic of our drinking water treatment needs today. They are found at low levels but may cause cancer and other illnesses if ingested over the course of a lifetime. They are found in our water because the presence of organic material in source waters is too high, a sign that source waters are inadequately protected. They are currently being addressed with expensive treatment, rather than improvements to the source water quality.

Our sampling in collaboration with Cornell University has also identified more than 80 unregulated contaminants in the Hudson River Estuary, each at very low levels. These include pesticides, pharmaceuticals, personal care products and industrial compounds. Other surveys, including a pilot project Riverkeeper conducted this summer with Lamont-Doherty Earth Observatory, identified microplastics and the toxic chemicals that often adhere to them. The presence of these unregulated contaminants should prompt investigation, but shouldn't come as a surprise: The U.S. Environmental Protection Agency hasn't set a limit for a new drinking water contaminant in 30 years, and the Hudson River's watershed has every imaginable use, including 44 direct wastewater discharges and dozens if not hundreds of other wastewater treatment plant discharges throughout its watershed, vast farming regions and both active industries and the legacy contaminants left by defunct industries. While treatment can be expected to remove or reduce some of these chemicals, neither our wastewater nor our drinking water treatment facilities are designed to remove most of them, and our regulations require the testing of very few of them. Of more than 85,000 chemicals in use, we routinely test for fewer than 100 at most drinking water facilities. The solution to the presence of these low-level contaminants is some combination of more testing and treatment - often at great cost - and better source water protection. Clearly, the best solution is keeping as many risky chemicals out of the waters we rely on for public drinking water supplies.

To estimate the statewide source water protection investments needed, we can look to New York City. Half of New York State residents rely on New York City's drinking water supply, and will benefit from more than \$720 million in planned source water protection efforts in the next 10 years. These include

- \$260 million to upgrade wastewater facilities;
- \$85 million to rehabilitate septic systems
- \$79.5 million for stormwater and other non-point source pollution controls
- \$180 million for whole-farm planning and best management practices
- \$96 million for land acquisition
- \$20 million for land management, including forestry¹⁰

¹⁰ NYC DEP, personal communication based on approved Filtration Avoidance Determination, January 23, 2018

Is the totality of state and local programs for source water protection for the *other* half of New Yorkers on par? Are state programs adequately financed to meet documented needs? Are local funding mechanisms in place? The Legislature should fund a statewide needs assessment to begin to answer these questions.

Riverkeeper calls on the New York State Legislature to fund a statewide assessment of needs for source water protection, to begin to quantify the cost of source water protection statewide.

Ultimately, New York State must establish parallel funding streams for natural infrastructure and “gray” infrastructure, so that watershed protection is funded just as pipes, pump stations and treatment plants are funded via programs such as the State Revolving Funds, Water Infrastructure Improvement Act and Water Quality Improvement Program. In the meantime, Riverkeeper supports the continued funding for Source Water Protection, including the \$110 million established by the Clean Water Infrastructure Act, and an annual addition of \$5 million for Source Water Assessments in the EPF. These are critical first step investments.

Beyond spending, we must recognize that grant programs are insufficient to the task of protecting watersheds generally, or source waters for public drinking water supplies specifically. The tax cap has had the unfortunate effect of grinding community-driven planning and investment to a halt. Capital planning, asset management and watershed protection – categories already long suffering from under-investment – have suffered. Riverkeeper supports exempting municipal water infrastructure projects and watershed planning projects – both capital spending and debt service – from the State tax cap.

In addition to fiscal policy changes, two high-priority actions can significantly help communities jumpstart planning and protection programs for watersheds generally, and source waters particularly.

The most powerful and under-used source water protection tool is the Watershed Rules and Regulations established by state Public Health Law § 1100 – the bedrock on which New York City’s source water protection programs are built. Most public water supplies in the state, however, lack updated Watershed Rules and Regulations.¹¹ As a result, communities responsible for delivering clean water via public drinking water systems are virtually powerless to protect the source of their water, which in most cases includes watersheds in other municipalities, which, under Home Rule, may or may not enact protections to ensure the quality of water downstream. In many communities, such as Newburgh, the focus of existing Watershed Rules and Regulations is on water quality threats from privies and other outdated risks, while real and present dangers are unaddressed, including risks to both quality (toxic pollution from the Stewart Air National Guard Base) and quantity (the alteration and diminishment by development of one of the two main tributaries to the city’s reservoir). While Clean Water Act protections, which came after the adoption of Watershed Rules and Regulations, can fill the gap to a degree, those responsible for public water supplies - including those convened as a regional source water

¹¹ Riverkeeper, “Contamination of the Drinking Water Reservoir and Watershed of the City of Newburgh: A case study and a call for comprehensive source water protection,” 2016. Available at <https://www.riverkeeper.org/wp-content/uploads/2016/08/White-Paper-Newburgh-Source-Water-Protection-FINAL-2.pdf>

group by the Hudson River Estuary Program this Fall - express a clear and urgent desire for more robust tools they can use themselves to protect public water supplies.

Riverkeeper calls on the New York State Legislature to empower the Department of Health with budget sufficient to write new model Watershed Rules and Regulations, and to implement them locally, using Newburgh as a pilot.

Finally, The Legislature should empower communities to better protect their own drinking water supplies by enacting statewide enabling legislation for Community Preservation Funds. A Community Preservation Fund with water protection as a primary goal could enable voluntary open space preservation at the local level, funded by one-time 2% real estate transfer tax fees on homes that exceed local median housing costs.

Riverkeeper supports statewide enabling legislation for Community Preservation Funds.

4. Environmental Protection Fund

Riverkeeper is part of the broad We Love New York coalition that supports maintaining the Environmental Protection Fund (EPF) at \$300 Million. Governor Cuomo and the New York State Legislature have been champions of the EPF, and we urge you to maintain your commitment to this important source of funding. Within the EPF, Riverkeeper supports:

- Increased funding of the Hudson River Estuary Management Program at \$8 million, inclusive of \$1 million for the Mohawk Basin Program;
- Steady \$20.25 million funding for the Water Quality Improvement Program, including \$5 million for Source Water Assessments;
- Steady \$16 million funding for Waterfront Revitalization, with a new specific allocation of \$3 million for community-led watershed planning and implementation.

The Hudson River Estuary Program is the state's only program dedicated to protecting the Hudson River and its watershed. Recognizing it as an indispensable source of technical advice, community grants and planning expertise, Governor Cuomo has proposed boosting its budget by \$1 million to \$6.5 million, and we are grateful for his commitment. The Estuary Program has performed at a high level for years, due to its excellent management, and its ability to secure funds both from current year Environmental Protection Fund as well as previous year appropriations. Funding from past years is no longer available to supplement the annual appropriation, and a new level of investment is required to maintain the state's environmental legacy for the Hudson. Riverkeeper, Scenic Hudson, and a diverse coalition of more than 50 organizations, municipalities and business interests support \$8 million for the program, including \$1 million for the Mohawk River Basin Program.

The Estuary Program's celebrated accomplishments include investing in local watershed protection efforts and state-leading regional efforts in support of source water protection; creating new parks, boat launches and fishing piers; collaborating with over 500 nonprofit and regional partners; providing training to 7,000 local leaders, educational opportunities to 5,000 students, and grants to 500 communities and non-profits. This work has resulted in lasting benefits to communities from the Capital District to New York City, and helps to support the region's \$5.3 billion annual tourism economy.

Riverkeeper and a diverse coalition of interests in the Hudson River Valley call on the Legislature to double down on Governor Cuomo's commitment to the Hudson River Estuary Program, and fully fund the program at \$8 million.

The Water Quality Improvement Program is, along with the Water Infrastructure Improvement Act, a key source of needed grants to support community investments in wastewater infrastructure. Significant Clean Water Infrastructure Act funds are spent via the Water Quality Improvement Program, but the terms of Water Quality Improvement Program grants are more favorable to communities, typically allowing for less local match and greater state investment per project. The funds should be allocated to the greatest degree possible based on statewide needs, to ensure all communities have access to this important funding source. The Governor's proposal, consistent with spending in recent years, allocates 44% to specific wastewater projects, and 30% to specific programs (including Source Water Assessments, PFAS firefighting foam disposal and pharmaceuticals takeback programs that Riverkeeper supports). Just 23% would remain for competitive grants. Riverkeeper supports allocating as much of the *project* expenditures to competitive grants as possible, while retaining the dedicated funding for programs.

Riverkeeper supports maintaining Water Quality Improvement Program funding of at least at \$20.25 million, including \$5 million for Source Water Assessments, while reserving as much grant money available for statewide competitive grants.

The Waterfront Revitalization Program is virtually the only source of community-led watershed management funding for communities statewide. It funds community grants to plan for and implement both waterfront revitalization and watershed management projects. The Hudson River Estuary Program, within its 10-county region, funds planning projects, typically up to \$50,000; and other state-led programs such as DEC's implementation of the Clean Water Act to restore impaired waters provide top-down assistance in a select few cases. The Waterfront Revitalization Program grants, up to \$200,000, are the only source for the scale of grants needed for the community-led 9-element watershed plans that are favored by the Environmental Protection Agency and the Department of Environmental Conservation for addressing watershed-scale water quality problems caused by multiple sources of pollution, including non-point sources. In short, this is a critical and under-appreciated component of the state's spending on clean water protections statewide. Because grants are awarded for this program as part of the Consolidated Funding Application, the recommendations of Regional Development Councils account for 20% of the score for any application for funding from this program. Waterfront restoration and protection

in many cases undergird economic activity, by ensuring abundant high quality public water supplies and making possible varied on-water and waterfront activities. But the case for economic development is often indirect, and therefore less likely to be fully endorsed by Regional Economic Development Councils tasked with prioritizing projects based on economic metrics. The state should not view all investments through the lens of economic development, and watershed protection is an investment that we know pays dividends in terms of saving future treatment and remediation costs.

This systemic barrier to funding community-led watershed management means that many urgent projects are going unfunded. For example, with Department of Environmental Conservation collaboration, and support from five municipalities and a county, as well as a number of non-profit groups, Town of New Paltz applied to complete a 9-element watershed plan to address the Harmful Algal Blooms in the Wallkill River. These Harmful Algal Blooms have had significant community impacts, affecting 30 miles of river for 60 days in 2016. New Paltz's application was rejected, despite scoring well based on Department of State criteria.

In the past seven rounds of funding, 11% of projects and 12% of funding for the Local Waterfront Revitalization Program has been allocated to watershed planning or implementation projects.¹² On average, \$1.1 million has been committed to watershed protection statewide, in each of the last seven years. The overall Waterfront Revitalization Program is oversubscribed, with over \$56 million in applications in the last round, competing for \$16 million. Watershed management shouldn't be left with these long odds. The stakes are too high. Riverkeeper is calling on the Legislature to prioritize community-led watershed management by ensuring that a minimum of \$3 million – approximately 20% of the \$16 million Waterfront Revitalization Program – is committed annually to watershed management planning and implementation.

Riverkeeper supports steady funding the Waterfront Revitalization Program at \$16 million, inclusive of a new dedicated fund of \$3 million for watershed planning and implementation.

5. Harmful Algal Blooms Initiative and the Wallkill River

We are grateful that Governor Cuomo has proposed a \$65 million initiative to address Harmful Algal Blooms (HABs). This initiative will help us understand the underlying causes of, and identify solutions to prevent future HABs. Such an effort would significantly help our efforts, in collaboration with the Department of Environmental Conservation (DEC), to respond to HABs on the Wallkill River.

Riverkeeper supports Governor Cuomo's proposal to invest \$65 million to address Harmful Algal Blooms, and calls on Governor Cuomo and the New York State Legislature to include the Wallkill River among the initiative's priority waterbodies.

¹² Riverkeeper analysis of grants, available at <https://regionalcouncils.ny.gov/cfa/projects>

The Wallkill River runs for just under 90 miles, and is one arm of the largest tributary to the Hudson River Estuary. In 2015 and 2016, the Wallkill River experienced Harmful Algal Blooms (HABs) documented by citizen data with confirmation by the DEC. Anecdotal evidence suggests blooms also occurred in previous years, but were not documented. The 2016 bloom was severe, affecting 30 miles of the river for as much as 60 days, affecting 10 towns and villages in Orange and Ulster Counties.

Recreational uses of the river were impaired during the bloom. A private beach closed, a small business suspended kayak tours and rentals, public paddles were canceled, and the DEC posted signage at boating and fishing access sites warning the public about risks of exposure to the water. Food safety was a concern for many farmers and gardeners that irrigate with river water. More than 40 people attended an educational event, organized by the DEC Hudson River Estuary Program and the Wallkill River Watershed Alliance. The Wallkill River bloom in 2016 also affected a portion of the Rondout Creek downstream of the confluence of the Wallkill, which is part of the source waters identified by the Department of Health for public drinking water supplies that rely on the Hudson River Estuary. More than 100,000 people rely on drinking water from the Hudson in Port Ewen, Rhinebeck, Highland, Hyde Park and Poughkeepsie.

As noted above, multiple municipalities have supported watershed-based planning to address water quality problems that underlie these Harmful Algal Blooms in the Wallkill River; in addition, a separate intermunicipal group is forming to begin source water protection activities for the Hudson River drinking water supplies. The community has expressed clear concerns, and capacity for partnering with the state to address these concerns.

Riverkeeper and the Wallkill River Watershed Alliance are requesting that Governor Cuomo and the Legislature include the Wallkill River as a priority waterbody in the Harmful Algal Blooms initiative.

6. New York's Water Resources Strategy

Riverkeeper is calling for a new initiative, "Reforming the Water Vision," modeled after the "Reforming the Energy Vision." We first introduced this idea in testimony before a joint Legislative committee this fall. New York is setting a national example for water infrastructure investments, drinking water contaminant testing, and source water protection. We need to advance as priorities watershed management, water conservation and equitable pricing. The vehicle we are proposing for accomplishing this comprehensively is an update to New York State's Water Resources Strategy and the re-convening of a Water Resources Planning Council, which are required under Environmental Conservation Law (Article 15, Title 29). This update can serve as a vehicle for advancing a Reforming the Water Vision, and build on and complement the work of the Water Quality Rapid Response Team, the Clean Water Infrastructure

Act, and the Drinking Water Quality Council.

Watershed protection in a home rule state poses particular challenges: watersheds do not follow municipal boundaries, and those suffering the consequences of upstream mismanagement often have little power to protect or restore their water. The failure of meeting these challenges - particularly where public drinking water supplies are concerned - results in significant costs, both in remediation and public health. Water lost through waste, or failures of wastewater treatment represent real costs to communities and taxpayers. The burden of investments in wastewater, drinking water and source water protection are not currently borne equitably.

Communities such as New York City and Newburgh¹³ have achieved significant savings through coordinated leak detection and water conservation initiatives; cities in other states, such as Philadelphia, enacted the nation's first water rate based on household income, with a monthly payment plan for families at or near the poverty line,¹⁴ and Ithaca may be the first municipality in New York State to enact a user fee for stormwater management¹⁵ to raise local funds for needed local water investments.

A new Water Resources Strategy should advance proactive programs for watershed management (including source water protection), water conservation and equitable pricing. Connecticut recently completed a new State Water Plan¹⁶, aspects of which may serve as a model.

Riverkeeper calls on the State Legislature to fund “Reforming the Water Vision,” via creation of a new Water Resources Strategy to address the intertwined issues of watershed management, water conservation and equitable pricing.

OTHER OPPORTUNITIES

The state budget provides the opportunity to advance a number of policies, and I want to identify several others that Riverkeeper is championing that I haven't mentioned elsewhere in today's testimony. They include:

- **Single-use plastic bag ban or fee**

Riverkeeper supports statewide policy disincentivizing use of plastic bags, up to and including a ban on single-use plastic bags. The most effective policy¹⁷ to reduce plastic bag pollution involves a ban on single-use plastic bags and a fee on single-use paper bags. Until the state passes a

¹³ Mid Hudson News, “Newburgh cuts water use in half by detection leaks,” May 29, 2017. Available at https://www.midhudsonnews.com/News/2017/May/29/Nbrg_water_leaks-29May17.html

¹⁴ Circle of Blue, “Philadelphia Water Rate Links Payments to Household Income,” May 2017. Available at <http://www.circleofblue.org/2017/water-management/pricing/philadelphia-water-rate-links-payments-household-income/>

¹⁵ City of Ithaca, “Establishing the Stormwater User Fee,” Available at <https://cityofithaca.org/faq.aspx?TID=35>

¹⁶ Connecticut Water Planning Council, <http://www.ct.gov/water/site/default.asp>

¹⁷ Scientist Action and Advocacy Network, “Scientific Support for a Plastic Bag Reduction Law,” https://docs.google.com/viewerng/viewer?url=https://scaan.github.io/docs/ScAAN_Bags_report.pdf

comprehensive policy, the legislature should respect local governments in their efforts to reduce plastic pollution.

- **Pharmaceutical extended producer responsibility law**

Riverkeeper supports adoption of a manufacturer-funded safe pharmaceutical disposal program, both to reduce incidence of addiction from misuse of pharmaceuticals, and to reduce the impacts of water pollution caused by the flushing of unused medications.

- **New York Electric Efficiency Jobs Act (Carlucci/Cusick)**

Riverkeeper supports the New York Electric Efficiency Jobs Act as part of a statewide strategy to support adoption of electricity efficiency, meet energy goals and reduce or eliminate the need for new fossil fuel power plants at the lowest cost while creating the most jobs..

Conclusion

New York State's recent actions to support water infrastructure, drinking water quality and source water protection should be seen as the second or third wave of historic leadership on clean water from New York State. In 1965, voters approved Governor Rockefeller's Pure Waters Bond Act, which preceded the modern Clean Water Act and provided funding for wastewater infrastructure. In today's dollars, the Pure Waters Bond Act's \$1 billion investment would equal nearly \$7.8 billion. Even before the approval of the Pure Waters Bond Act, New York was a leader in clean water action. New York State is home to both the nation's first drinking water treatment facility, in Poughkeepsie, the nation's first wastewater treatment facility utilizing secondary treatment, in Gloversville; and the world's most celebrated source water protection program, for New York City's drinking water supply.

The Governor and Legislature have the opportunity, even in a year when budgeting is a particular challenge, to make significant new progress in protecting and restoring our waters. Thank you for your consideration, and for the opportunity to present this testimony.