



Joint Legislative Hearing: Environmental Conservation

**Testimony by Adrienne Esposito, Executive Director,
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Thank you for the opportunity to provide testimony today. My name is Adrienne Esposito, and I am the Executive Director at Citizens Campaign for the Environment (CCE). CCE is a 120,000 member, non-profit, non-partisan advocacy organization that works to empower communities and advocate solutions that protect public health and the natural environment throughout New York State.

INCREASE FUNDING FOR CLEAN WATER INFRASTRUCTURE

NY State made history when the legislature worked with the Governor to enact the Clean Water Infrastructure Act of 2017, which is investing \$2.5 billion over 5 years in upgrading wastewater and drinking water infrastructure, protecting source water, and other provisions to protect our treasured waters across the state. The FY2020 budget included an additional \$500 million, as part of the Governor's promise to provide an additional \$2.5 billion over five years. Investments made through the CWIA are making a tremendous impact in advancing shovel-ready projects, protecting drinking water quality, and creating jobs throughout New York.

In the latest round of funding awards in December of 2019, the state awarded more than \$416 million through the Water Infrastructure Improvement Act and the Intermunicipal Water Infrastructure Grant Program to municipalities for infrastructure projects that protect public health or improve water quality. The awards include more than \$120 million for 37 projects to address emerging contaminants on Long Island. These grants are supporting nearly \$1.6 billion in project costs, contributing over 20,000 jobs to New York's economy and saving New York localities over \$700 million. This funding is providing much-needed financial relief to local governments, protecting our treasured waters, safeguarding public health, and helping to drive economic development.

These investments are yielding significant results; however, we still have much work to do to address all of New York's clean water needs. Only a fraction of those that have applied for funding under WIIA have received funding, meaning that many worthy projects have not been funded. This speaks to both the popularity of the grant program, as well as the need to provide additional funding to meet the clean water infrastructure needs of communities across the state.

As you know, New York State has estimated that the combined wastewater and drinking water needs in the state exceed \$80 billion over the next 20 years. This does not even include the cost of treating for new MCLs for 1,4-dioxane, PFOA, and PFOS. On Long Island alone, water suppliers have estimated a cost of \$840 million to treat 185 wells contaminated with 1,4-dioxane. We have solutions to these problems, and we can't afford not to use them.

CCE has brought together a broad, unprecedented collaboration of stakeholders—including water suppliers, wastewater treatment operators, government agencies, environmental organizations, environmental justice organizations, academia, construction contractors, and other water stakeholders—to work together to identify the challenges and solutions to protecting clean water in New York State. This group has called for \$1 billion in *new* funding for clean water infrastructure in the SFY 2020-21 budget, to not only address the long-standing needs to upgrade wastewater and drinking water infrastructure, but also to tackle treatment of emerging contaminants, respond to and prevent harmful algal blooms, and to protect source water.

We are pleased that the Governor has proposed to provide an additional \$500 million in SFY 2020-2021, as part of his promise for an additional \$2.5 billion over five years. Given the massive and urgent clean water needs across the state, we urge the legislature to work with the Governor to seek opportunities to increase this funding line as much as possible in the final SFY 2020-2021 budget.

SUPPORT THE ENVIRONMENTAL BOND ACT AND OTHER CLIMATE FUNDING

Governor Cuomo has proposed a \$3 billion Restore Mother Nature Bond Act, which if approved in the final budget, would go before the voters in November of 2020. The bond act is intended to fund environmental improvements that preserve, enhance, and restore New York's natural resources and reduce the impact of climate change throughout the State.

From the Great Lakes to our marine coast, New York State is on the front lines of the climate crisis. Extreme weather events, such as Superstorm Sandy, along with record flooding, such as what we've experienced along Lake Ontario, have wreaked havoc on New York State in recent years. It is essential that we protect and restore natural systems, while making our shorelines and communities more resilient to the impacts of climate change. The Restore Mother Nature Bond Act can serve as a game-changer in this regard.

CCE looks forward to working with the Governor and the legislature to identify specific allocations for the bond act, and ensure that the program provides maximum environmental benefit. CCE priorities include, but are not limited to, protecting and restoring water quality, addressing the threat of emerging contaminants in drinking water, using nature-based solutions (e.g. restored wetlands, living shorelines) to improve resiliency and ecological value, and upgrading clean water infrastructure as well as addressing our solid waste management crises.

The \$3 billion Restore Mother Nature Bond Act is a meaningful one part of the Governor's proposed 5-year, \$33 billion effort to combat climate change and to help implement the goals laid out in the historic Climate Leadership and Community Protection Act. The Governor's five year funding plan includes:

- *Restore Mother Nature Bond Act (\$3 billion)*
- *Resiliency and environmental conservation (\$740 million)*
- *Offshore Wind (\$9.1 billion)*
- *Land Based Renewables (\$6.1 billion)*
- *Clean Energy Research (\$1.9 billion)*
- *Green Bank (\$1.1 billion)*
- *Electric Transit Buses and Charging Stations (\$1.5 billion)*

CCE supports these increased investments in environmental restoration and resiliency, renewable energy, energy efficiency, and other measures needed to reduce greenhouse gas emissions, fight climate change, and protect New Yorkers and our environment.

BAN FRACKING PERMANENTLY IN NEW YORK STATE

Governor Cuomo became the first Governor in the nation to take decisive action to prohibit the inherently dirty and dangerous process of fracking. He chose to protect public health, clean water, and clean air over short-term corporate profits. Scientific facts and clear evidence of public health and environmental risks associated with fracking made it the right decision then, and it remains the right decision for today.

After seven years of review in New York State, the NYS DEC issued its final SEQR Findings Statement on horizontal drilling and HVHF on June 29, 2015. Since 2015, the case against fracking has only grown stronger. Studies have come out demonstrating that fracking has harmed public health, contaminated water supplies, and exacerbated the climate crisis.

The current fracking ban, accomplished through the regulatory process, could be at risk from future administrations. Enacting a permanent ban on fracking in statute is critical to ensuring that current and future generations are protected from this harmful process. *Governor Cuomo has proposed to enact a permanent ban on fracking in his executive budget proposal, and we urge the legislature to support this in the final SFY 2020-2021 budget.*

PROTECT WETLANDS IN NEW YORK STATE

Independent of size, wetlands play an integral role in protecting water quality, absorbing floodwaters, and supporting wildlife. For example, one acre of freshwater wetland can hold over a million gallons of water. Acting like filters, wetlands protect water supplies by absorbing pollutants, pesticides, nitrogen, phosphorus and other contaminants.

Unfortunately, our wetlands are also under threat. Just last week, the Trump administration finalized its Waters of the United States (WOTUS) rule, which determines what waters are and are not protected under the Clean Water Act. The new rule is massive rollback of protections for our small streams and wetlands.

In the Governor's executive budget proposal for SFY 2020-2021, he has proposed to take an important step necessary to help protect New York's wetlands. The NYS DEC currently only regulates wetlands that are 12.4 acres or larger and smaller wetlands deemed unusually important *if they are on approved wetlands maps*. The Governor has proposed to make the maps educational, rather than jurisdictional—meaning that all wetlands 12.4 acres or larger, or smaller wetlands deemed unusually important, would be protected whether or not they are on an approved map. Wetlands should be determined by their ecological features, such as vegetation and soils, not based on their existence on a map. **This change would go a long way in protecting important wetlands—CCE supports the adoption of this policy in the final SFY 2020-2021 budget.**

While CCE supports this important change related to mapping, we also continue to support legislation that would bring the jurisdictional threshold of regulated wetlands down from 12.4 acres (this number has no ecological basis, but rather, is the result of a political compromise) to one acre, or of unusual local importance. This has been our position for nearly 15 years. Wetlands have become more important in that time, not less.

ADDRESS THE STATE'S SOLID WASTE CRISIS

At the local, state, national level—we are all experiencing a solid waste and recycling crisis. Instead of creating our own markets and developing our own infrastructure, we relied on sending our recyclables to China and other overseas markets. In January of 2018, China dramatically altered their policy and now requires inspections of all recycling materials before accepting them, including New York's paper and plastic. That has essentially halted the ability of the US to send recyclable materials to China.

Municipalities that were once getting paid for their recyclables, now have to pay to recycle them. As a result, many municipalities face recycling costs in the hundreds of thousands or even millions of dollars per year. **According to the Product Stewardship Council, in 2020, these costs are estimated to total \$60 million in New York State, without even including the impact in New York City.** Markets routinely fluctuate, but we have now entered a new normal—a new normal that needs new, innovative solutions.

Policy changes at the state level are a necessity to address New York's ongoing solid waste crisis, save valuable natural resources, drive economic development, and protect the state's environment. CCE thanks the legislature and the Governor for taking a critical step to address our solid waste and litter woes by banning carryout plastic bags in last year's budget. CCE now

recommends that New York State consider the following funding and policy initiatives in the 2020-2021 NYS Budget:

- **Ban EPS Packaging**

One of the most problematic materials in our current waste stream is expanded polystyrene (EPS) foam, commonly referred to as Styrofoam. In addition to increasing public exposure to Styrene, a likely carcinogen, and contributing to the plastic pollution problem in our local waterways, EPS presents a large problem for recyclers. After EPS food and beverage containers are used and discarded, they are contaminated with food residue, compact during trash collection, and break into small bits. **These used EPS containers have no value in the recycling market.** After years of studying this issue, the New York City Department of Sanitation released a determination that EPS foam food and beverage containers cannot be recycled in “an economically feasible and environmentally effective manner.” A court decision upheld DSNY’s findings and allowed New York City to move forward with a ban on EPS containers, which went into effect on January 1, 2019.

Despite the fact that these containers are not actually recyclable, many end up in curbside collections, where they end up contaminating other recyclables at municipal recycling facilities. The lightweight, broken pieces of EPS containers are extremely difficult to capture and remove during the sorting process and end up contaminating valuable recyclable streams, most often paper. Any EPS foam that is properly sorted and removed at these recycling facilities ends up being stockpiled at the facilities or landfilled at additional cost to the municipality. Although EPS makes up less than 1% of most municipal waste streams, it represents a huge problem for recyclers.

While some individual retailers—including McDonalds and Dunkin Donuts—have begun to voluntarily phase out the use of EPS foam, many others are refusing. Counties in New York State are therefore stepping up to protect their communities. Ulster, Albany, Suffolk, Nassau, Westchester, and Dutchess Counties, as well as NYC, have banned EPS food packaging, while others have passed resolutions calling on New York to enact a statewide ban. *Governor Cuomo has now proposed a statewide ban on EPS packaging and packing peanuts in his SFY 2020-2021 executive budget proposal. We urge the legislature to work with the Governor to adopt this important ban in the budget, and implement the ban as soon as possible.*

- **Adopt Product Stewardship/EPR Programs for Carpets and Mattresses**

Extended Producer Responsibility (EPR), also known as Product Stewardship, is a strategy to place a shared responsibility for end-of-life product management on the producers, instead of the taxpayers; while encouraging product design changes that minimize a negative impact—such as making products that are less toxic, less bulky, and

easier to recycle. New York has implemented EPR programs for e-waste, rechargeable batteries, and mercury thermostats; and has adopted policies/working toward implementation of programs for pharmaceutical drugs and paint. *The Governor's executive budget proposal includes a product stewardship program for carpets and mattresses.*

Everyday thousands of mattresses are thrown away in landfills, as there very few options for them to be recycled. In fact, it's estimated that less than 5% of mattresses are recycled, even though 90% of their components can be used to make steel products, carpet padding, animal bedding, and mulch. Mattresses are heavy and bulky, and expensive for municipalities to manage.

Similar to mattresses, the public and businesses have almost no way to recycle carpets in a convenient and cost effective way—it is estimated that only 5% of carpet is recycled, despite a carpet industry agreement to voluntarily increase carpet recycling in 2002. Carpets are expensive and difficult for municipalities to manage, and often contain harmful chemicals, including PFAS.

Implementing a product stewardship program for mattresses and carpets will help ensure that manufacturers take responsibility for managing their products throughout their entire life cycle, which will incentive them to make products that are less toxic and more recyclable, while reducing the financial burden currently placed on already overburdened municipalities and taxpayers across New York State. *CCE supports efforts to adopt a strong policy for carpet and mattress product stewardship in the final SFY 2020-2021 budget.*

The Governor's executive budget proposal also recognizes that there are potentially numerous other products that could be covered by a product stewardship program. *CCE supports the Governor's effort to establish a framework for identifying new products that can and should be covered by a product stewardship program in the future.*

- **Adopt EPR for Packaging and Printed Paper**

CCE also urges the legislature to consider large-scale solution that would create a much-needed, significant transformation to the entire solid waste system—extended producer responsibility for packaging and printed paper. If New York State is serious about truly addressing our solid waste woes, and not merely applying band aids, EPR must be considered in the 2020 legislative session.

Packaging and printed paper constitute a significant portion of the solid waste stream in New York State—approximately 40%—much of which is not being recycled. Policy changes in China that have restricted the importation of recyclable packaging and printed

paper materials have significantly increased the costs for local governments and taxpayers to manage and dispose of these materials. While local governments in NYS are tasked with achieving waste diversion goals—increasing costs to taxpayers—manufacturers currently bear no responsibility in dealing with the waste that they create. Large brands have externalized the cost of disposing of packaging onto our municipal recycling programs. For example, an estimated 165 billion packages are shipped in the U.S. every year, with the cardboard used roughly equating to more than 1 billion trees. Companies (think Amazon and Blue Apron) currently bear no responsibility in dealing with the packaging waste that their business creates.

Extended Producer Responsibility (EPR) would require producers (brand owners) to take responsibility for their products throughout their entire product life cycle, by bearing the cost of proper recycling and responsible disposal for packaging and printed paper. Not only does this provide relief to taxpayers, it also serves as an incentive to producers to minimize packaging materials, improve recyclability, and reduce the toxicity of their products. Packaging EPR policies have existed in Canada and the EU for decades, and have resulted in recycling rates upwards of 80%.

In 2014, British Columbia adopted a packaging EPR law, which now stands as a shining example of success. In 2017, Recycle BC, (the industry funded non-profit organization comprised of over 1,100 companies including manufacturers, retailers, restaurants and first importers that supply packaging and paper to BC residents) recovered approximately 175,000 tons of packaging and paper products from 3.5 million residents, amounting to a recovery rate of 75%. The majority of collected material was sold to end-markets for use in the manufacturing of new products and packaging. Even with the China Ban, the Recycle BC program remains successful. British Columbia's EPR program has garnered improved environmental outcomes by collecting larger quantities of packaging and paper products with lower rates of contaminations. Subsequently, the material is managed more efficiently and responsibly. This program saves local governments an estimated \$100 million annually by shifting the responsibility to the producers of packaging and paper products.

New York State already has EPR policies for e-waste, mercury thermostats, and rechargeable batteries, and most recently, pharmaceutical drugs and consumer paint. Enacting EPR for packaging and printed paper is logical next step, and would help address the state's solid waste problems, while benefiting the environment and providing relief to taxpayers.

- **Expand and Modernize the Bottle Bill**

New York State's Returnable Container Law (aka "the Bottle Bill") was enacted in 1982, and after 37 years of existence, stands as one of New York's most successful and

impactful environmental laws. The program established a 5-cent refundable container deposit on beer, malt liquor, wine coolers, and carbonated soft drinks sold in a metal, glass, paper or plastic container that are less than 1 gallon in volume. The Bottle Bill was updated and improved in 2009 to include bottled water, and to direct 80% of unclaimed deposits to be kept by the state.

The Bottle Bill has reduced roadside container litter by 70 percent. In 2016, the Bottle Bill helped to recycle 5.1 billion plastic, glass and aluminum beverage containers totaling more than 336,000 tons; at no cost to local governments. *It is also important to highlight that a deposit is NOT a tax, it is a deposit—the bottle deposit is 100% refundable, and those that return their bottles don't have to pay a nickel.* Despite the success of the Bottle Bill, more must be done to modernize this bedrock law in order to help address the solid waste crisis, reflect current markets, and further protect the health of our environment.

New York State can improve beverage container recycling rates and support municipal solid waste reduction by modernizing and expanding the Bottle Bill in the 2020-21 state budget. At a minimum, CCE recommends that New York State:

- *Increase the amount of the container deposit to 10 cents on each covered container.* An increased deposit will yield higher return rates through the bottle deposit program. Michigan's 10-cent deposit has produced a return rate of 96% (New York's return rate in 2015 was 65%). Increasing the deposit to 10 cents will help further reduce litter, and will also reduce the amount of materials going in curbside recycling bins, thus reduce costs to local governments.
- *Expand covered containers to include wine, liquor, and other glass beverage bottles.* Many of the **glass containers** that are carefully cleaned and placed into recycling bins have been **sent to landfills for years**. Statewide, more than 122 million pounds of recycled mixed glass was used for landfill access roads and trash cover last year because there were no willing buyers.

In contrast, glass materials collected under the bottle deposit system produce a higher quality post-consumer recycled product than glass collected through curbside recycling programs. Glass collected through curbside recycling programs is frequently heavily contaminated with paper, cardboard and other recyclables, which must be sorted mechanically. Because of this, materials collected actually bring in significantly lower per-ton scrap revenues. Curbside glass, in fact, actually *costs* about \$20/ton to recycle, versus deposit glass that has a \$20/ton scrap value.

Including a deposit on wine, liquor, and other glass beverage containers will provide significant financial relief to municipal recycling programs, while helping to ensure that glass bottles are actually recycled. Glass wine and liquor bottles can and must be incorporated into the current deposit system. Furthermore, the legislature should consider a higher deposit for wine and liquor bottles to incentivize the public to return for recycling—*CCE recommends 25 cents per each wine and liquor bottle.*

CCE has long supported expanding the Bottle Bill to include juices, teas, sports drinks, and other non-carbonated beverages. Including other beverage containers that are popular today would increase recycling, reduce plastic pollution, save energy, and reduce greenhouse gas emissions. CCE also understands that including a deposit on these beverage containers will largely remove them from curbside recycling bins, where they provide a valuable revenue stream for municipal recyclers at a time when they are struggling with significant budget shortfalls that threaten the viability of their recycling programs. *CCE believes that this adverse impact to municipal recycling programs must be addressed before the Bottle Bill is expanded to other non-carbonated beverages.*

CONTINUE ROBUST FUNDING FOR THE ENVIRONMENTAL PROTECTION FUND (EPF)

- **Increase overall EPF funding**

CCE is grateful that the legislature and Governor worked to provide \$300 million appropriations to the EPF over the past four years. This helped create jobs, support tourism, protect clean water, conserve open space, save family farms, bolster recycling programs, revitalize waterfronts, build community parks, and more. CCE appreciates the Governor's commitment to environmental funding with his proposal to fund the EPF at \$300 million for the fifth straight year. *We look forward to working with the legislature and the Governor to support continued EPF funding during this year's budget negotiations. Specifically in the EPF CCE is requesting:*

- **Increase Funding for the South Shore Estuary Reserve to \$1 million**

The south shore of Long Island is a network of 173 square miles of bays, together comprising the South Shore Estuary Reserve (SSER). The relatively calm, protected waters of the South Shore Estuary provide the basis for the water-related economic and recreational activities that have evolved from boat building and the harvesting of oysters, hard clams, and salt hay, to recreational boating, sport fishing, waterborne transportation, and tourism. Today, the Estuary is home to the largest concentration of commercial and recreational vessels, marinas, and other water-dependent businesses in the State, and some of the finest recreational opportunities around. Funding has remained flat in the program since inception, yet there are new challenges facing the estuary including excessive nitrogen, harmful algae blooms, and degraded marshes. An increase in funding is needed to help move forward restoration goals, increase monitoring efforts and expand youth education campaigns.

- **Do not support agency staff funding in the EPF**

CCE also urges the legislature to reject any proposal to offload agency staff costs into the EPF. This raid would take away from important environmental projects throughout the state. While we support efforts to increase staff at DEC, the EPF is not the appropriate funding source. Once we open up that door and redirect EPF funding for staff, the door will never close and we will lose valuable environmental protection programs.

- **Ensure funding for pharmaceutical take-back at pharmacies**

For the past few years, the EPF has included a line item for a pilot pharmaceutical take-back program, which is administered by DEC. The program has been a success, providing drop boxes to hundreds of pharmacies across the state. Providing public access to safe pharmaceutical drug take back options at pharmacies is a convenient and effective way to prevent environmental contamination caused by flushing of drugs, as well as to prevent drug abuse in the home.

In 2018, the Governor signed the New York State Drug Take Back Act into law, which establishes a program that requires pharmaceutical manufacturers to fund a robust, statewide drug take back program. This law is a CCE priority, and we thank the legislature for your support of this critical environmental and public health initiative. The goal has always been for the manufacturers to take responsibility for safe disposal of their product, rather than the taxpayer. So it makes sense that the EPF would eventually stop funding this line item and pilot project.

Unfortunately, the NYS Department of Health's *draft* regulations for the Drug Take Back Act would not require pharmaceutical manufacturers to maintain funding for the hundreds of independent pharmacies currently enrolled in the DEC pilot program. This runs contrary to the intent of the law and means that many communities with access to safe disposal at local independent pharmacies would no longer have access if the pharmacies did not pay to continue with safe disposal, taking New York State a step backward. **CCE urges the Department of Health and the legislature to ensure that safe disposal of pharmaceutical drugs continues at the hundreds of independent pharmacies in the DEC pilot program.**

The PEHL is accredited by both the NYSDOH-Environmental Laboratory Approval Program (ELAP) and the National Environmental Laboratory Approval Program (NELAP). In the past, the PEHL developed analytical methods that have been adapted to include pharmaceutical and personal care products (PPCPs) and a number of other pesticides and their metabolites that are not routinely determined by other laboratories.

Unfortunately, due to severe fiscal constraints imposed in the last several years, the PEHL has struggled to stay ahead of the curve with respect to the analysis of emerging contaminants. A class of contaminants that has emerged as serious contaminates impacting water supplies in Suffolk County are perfluorinated compounds (PFAS). Groundwater contamination from these chemicals has been identified in public and private drinking water wells in Westhampton and in private wells in Yaphank. Since the PEHL does not have the ability to analyze these chemicals, a limited number of analyses were performed by the Suffolk County Water Authority (in Westhampton only) and New York State's Wadsworth Laboratory. There are a number of other public water supply wellfields in Suffolk County that are currently known to have detections of PFAS, and the investigation of potential sources to these contaminants is severely hampered by the inability for the SCDHS PEHL to analyze for PFAS.

Testing for these chemicals is essential for a comprehensive strategy to protect public health. Wadsworth Laboratory capacity to test for PFAS is not unlimited, and is being stretched thin throughout the entire state. New York's limited testing for this emerging chemical may prolong testing and thereby allow unsuspecting residents to ingest this toxic chemical. ***Only if the PEHL acquires the ability to analyze for PFAS will the SCHDS be equipped to better assess the currently known PFAS contamination areas and their potential impacts to public health.*** In addition, by adding PFAS to their currently established water quality monitoring program (public water wells, private wells, surface water samples, etc.), the SCDHS will be able to establish a database that will assist in evaluating the overall threat that PFCs may have to the drinking water supplies and surface waters of Suffolk County.

Support \$200,000 Water Sharing Study for New York City to Nassau County

New York City currently provides over 1 billion gallons of water per day to residents from three upstate reservoir systems. Due to NYC DEP's implementation of successful conservation measures, the city has reduced demand and currently has the capability of supplying an additional 1 billion gallons of water each day. A preliminary report by H2M Architects + Engineers found that Nassau County's water suppliers bordering on Queens, including Water Authority of Western Nassau, New York American Water (Lynbrook District), and Manhasset/Lakeville Water District could feasibly interconnect with DEP's water distribution center and provide NYC water to their customers. The Water Authority of Great Neck could potentially tap into the Manhasset/Lakeville Water District to provide residents with New York City water. While these options require further study, the average daily demand for these areas is 50 million gallons per day, well under DEP's extra capacity.

A comprehensive study is needed to evaluate any water sharing agreement between New York City and Nassau County. Water sharing needs to be accompanied by a meaningful water conservation plan for Nassau County as well as an assessment of our aquifer's capacity. Critical decisions on water management and water supply needs must be based on facts and science. We thank the Governor for including this necessary study in the budget.

The Budget includes funding for the Department of Health and the Department of Environmental Conservation to conduct a comprehensive feasibility study that will evaluate using New York

City's water supply to provide Nassau County with an additional source of drinking water. The study will evaluate several factors, including:

- the cost of connecting Nassau County to New York City's water supply and potential funding mechanisms,
- the capacity of the New York City system to supply water; and
- technical issues, necessary infrastructure improvements or other limitations.

Marine Mammal Strandings and Response Needs -

We are in a Marine Mammal Crisis. Since 1980 Marine mammal and sea turtle stranding numbers have significantly increased. In the first decade of the program, from 1980-1989, a total of 520 strandings were recorded averaging 52 strandings per year. In the last three years AMSEAS has responded to over 650 animals, averaging 216 per year. This is an increase of 400%!

The definitive reason for the increase in strandings is not known. AMSEAS is committed to research that works to identify why we have this dramatic increase in marine mammal strandings, including the frequency of large whales. Past records indicate one stranding every 615 days. However, 2019 and 2018 recorded one stranding every 27 days which equates to 13 whales per year! In addition, in 2019, AMSEAS responded to four live whale strandings, presenting new challenges on how to respond to these events.

Atlantic Marine Conservation Society (AMSEAS) is committed to collecting critical data that helps us understand possible causes of each whale death or reason for the stranding. In 2019 alone, 30% of sea turtles, 11% of seals and 4% of the cetaceans examined by AMSEAS had evidence of human induced mortality including suspected vessel interaction, fisheries interaction and ingestion of marine debris. Loggerhead sea turtles had the highest occurrence of human induced mortality in 2019, with 16 out of 22 loggerheads examined showing signs of suspected vessel interaction. ***This valuable data can help shape New York's action to protect sea turtles, dolphins, seals, and whales, however AMSEAS does not have the current capacity to keep up with increased strandings. New York needs to commit \$900,000 for a robust training, education and response program.***

AMSEAS is a scientific not-for-profit that promotes marine conservation through education and action. AMSEAS works with local communities and municipalities to respond to stranded whales, dolphins, seals and sea turtles. The data collected during necropsy (animal autopsy) exams on these deceased animals provides valuable information on the causes of mortality in New York waters. This data is compared with baseline historical stranding data to identify new challenges or threats facing the marine environment and how these events relate to wild population research studies. ***A critical part of the success of the program is the first responder training, which works with volunteers and municipalities to set up program on how to respond to a whale standing on a local beach.*** The more prepared a municipality and community is for a stranding, the easier it is to collect vital information needed to determine the cause of death.

Environmental challenges are also leading the Greater Atlantic Region Stranding Network to increase emergency response preparedness for response on a national level to critical events like unusual mortality events (UME), large whale strandings and oil spills. AMSEAS continues building organizational capacity for response in New York through first responder training. AMSEAS also continues implementing the Incident Command System, a tool that has been beneficial in previous responses, and will work with the START team to develop, organize and facilitate a first responder training in New York. The START team, a group of highly trained response personnel from the national stranding network, was developed by Robert A. DiGiovanni Jr. to address the changes in marine stranding events. The first response drill will test capabilities and the integration of network partners with local emergency response agencies using the Incident Command System. These exercises will also give the trained first responders practice in the skills learned during the training to keep them current on response protocols.

Increased support for AMSEAS' response efforts is critical to collection of crucial environmental data that managers will utilize when deciding the fate of environmental projects in and near New York waters. *In order to keep pace with NY strandings, AMSEAS needs to increase our equipment needed for response. Specifically, \$175,000 is needed to invest in needed equipment.*

- **Facility Space-\$42,800:** Including utilities, the space needed is approximately 2,500 sq. ft. with running water, heating and air conditioning, sanitation, a garage door and office space for the team.
- **Response Equipment and Data Collection- \$80,000:** Equipment needed to address the most common stranding events encountered in the last three years. This equipment includes a blood chemistry analyzer, doppler heart rate monitor, fume hood, sample storage cabinets, tow straps, cargo nets, stretchers, exposure suits, Toughbook computers, waterproof communication, safety helmets and waterproof video cameras. Other needed supplies to respond to 200 animals stranding (washing up) on New York shores include data recording supplies, necropsy gear, digital cameras and spotting scopes, satellite tags for tracking whales, sample collection supplies and personal protective equipment for the response team members including necropsy gear, digital cameras and spotting scopes, satellite tags for tracking whales and sample collection supplies.
- **Mobile Stranding Response Capabilities- \$57,200:** The initial investment for mobile response capabilities include response vehicles, a 26 ft. trailer equipped with temporary tanks and filtration units for critical event response, and a hospital tent structure for expanded animal response.