SNEP Symposium – Science Bringing Solutions Delivering Environmental Improvement to Southeastern Coastal New England

Main Meeting Room, Opening Speaker

May 18, 2022

Adam: Ladies and gentlemen I am now so happy to introduce our regional administrator Dr. David Cash. Dr. Cash was appointed by President Biden this past February to lead EPA's New England regional office. Dr. David Cash has spent his career in public service harnessing science innovative policy and participatory design making to solve challenges and seize opportunities at the intersection of environment economy and equity. Prior to coming to EPA, Dr. Cash was the Dean of the John W. McCormick Graduate School of Policy and Global Studies at the University of Massachusetts Boston where he was also a former professor of mine so I was very excited to see him again once he took this position. Dr. cash also spent a decade in Massachusetts state government where he held a range of senior positions working to transform the commonwealth's environmental and energy policy as assistant secretary of policy in the executive office of energy and environmental affairs in governor Deval Patrick's administration. He was an architect of a range of nation-leading climate clean energy and environmental justice policies. Dr. Cash holds a PhD in public policy from the John F. Kennedy school of government at Harvard University, a science teaching degree from Lewis and Clark in Portland Oregon, and a bachelor's of science in biology from Yale. Dr. Cash, thank you so much for joining us and the floor is yours.

Dr. Cash: Wonderful, thank you so much Adam and thank you so much to all of you who are here at the symposium today. And I just want to highlight the fact that this is a scientific symposium and that in this administration and certainly within the Environmental Protection Agency, science is the core, science is the backbone upon which we understand the complex systems that we regulate and try to support and science is the foundation upon which we make all of our decisions so it's a total pleasure to be kicking off this symposium today and I'm so excited about this kind of program, the geographic programs are fantastic in our region and I'll talk a little bit more about those but I thought it would be helpful if I just give an overview of the priorities now that we have in Region One and weave those into the work that happens in the Southeast New England Program. First of all I want to thank Adam for that nice introduction and the work that you do but also the rest of the EPA Region One team that's been working on, MaryJo Feuerbach and Ian Dombroski, Margarita Pryor and of course Ken Moraff and the rest of the team so thank you so much for all the work that you do and for organizing the event today. It's been a wonderful three months, three plus months, I started in early February and I have been learning so much; it's kind of phenomenal that I get to be briefed on so many big and small issues. I feel like I have my own personal seminar series as I learn from the phenomenal staff at EPA who are just so grounded in scientific evidence and data and have enormous expertise that they bring to the table to address some of these complicated issues that were dealing with.

So in the, you know, not surprisingly from the president to administrator Michael Regan to me in my office in Boston, I have five essential priorities that I'm looking at and working with our staff in really powerful ways to advance these agendas and they shouldn't be a big surprise to any of you. The first is environmental justice, figuring out how we can weave in environmental justice into all the work that we do, into our investments, our regulations, our permitting, how we do science, how we engage with communities and it should be no surprise to anyone that there are communities within Region One that have been overburdened by pollution that have cumulative impacts thrust upon them that involve multiple sources of pollution air and water, but also impacts that have come from poverty and lack of quality housing etc. And there's no question that EPA has been part of the problem in terms of how we have done our permitting and these are issues that we are working really hard to write so to address the bads that have influenced these communities but also to try to understand and support the goods, environmental goods, that can be coming to these communities that have often not in the past. So for example everything from open space to recreational access to green jobs that will be coming for example

with the advancement of the offshore wind industry, that we're working taking a whole of government approach working with the Department of Energy the Department of Interior and EPA certainly in ways that are continue to be protective of our coastal resources and our fisheries resources but also provide the opportunity potentially for jobs in the future.

So environmental justice, a critical area that we're that we're focusing on, and linked with that of course is climate change and I say linked because we know that those same communities that are overburdened and are vulnerable in our existing environment are those that are going to be most impacted in a future with climate change whether this is from increased flooding, precipitation events, heat islands in cities which of course those heat islands in cities which are associated with increased rates of asthma and respiratory disease are also coincident with redlining from the past. Decades and decades and decades ago government and private sector decisions about where people should live map on to the current impacts and will just get worse with climate change so we're focusing on that in a similar kind of way, figuring out how we can address climate change on the mitigation side and there's been a whole raft of regulations that have come out of headquarters whether it's on methane emissions which happen in other parts of the country particularly as it relates to oil and gas exploration but also on issues, sorry, new regulations that are going to be focused on our auto and truck fleets as well.

And then of course we need to be looking at resilience and that's partly of what we're talking about today investments with the with the bipartisan infrastructure law that are going to be focusing on infrastructure and resilience in coastal communities and inland communities figuring out how when we invest in for example wastewater treatment facilities we make sure that they are more resilient to whatever the impacts of climate change may be whether it's sea level rise or increased storm events. And so our teams and all across our divisions whether it's the air division or water division or our superfund team, brownfield team etc. are looking at how do we best incorporate our understanding of climate change and the science of climate change into our permitting decisions and our investments and figuring out how those investments are targeted at communities with environmental justice concerns so we get really big bang for the buck in terms of the positive impact those investments might have.

The third big area of priority is the bipartisan infrastructure law which I mentioned and we're talking billions and billions of dollars that are going to be coming through EPA to communities to advance water infrastructure, to replace lead pipes, to tackle emerging contaminants like PFAS, to upgrade drinking water and wastewater systems and to also, as I mentioned, connect those with environmental justice concerns and climate change as well. And then a part of the infrastructure bill also relates to funding coming to the geographic system programs like an in our region, like lake Champlain, Long Island Sound, and of course the Southeast New England Program and I'll come to those details a little bit later after I talk about my last two priorities and one of those is on diversity within EPA itself. EPA New England phenomenal staff but not representative of the communities that we serve and we're prioritizing especially at this time where we're ramping up some hiring because of attrition but also because of new federal funding we are working hard to diversify our staff, we're doing a reasonably good job on the younger junior staff but we have major problems on the senior staff and leadership in New England. We need to figure out how we can recruit a more diverse staff and hold on to them and retain them and make our workplace one in which is inclusive and folks from all different communities will want to work here. So that's the my fourth and the fifth is communicating about what we do. I actually think that in the environmental movement and environmental governments we have not done a great job in communicating to the public the benefits that we bring in environmental protection and how those benefits are intertwined with economic development. I believe that we have kind of ceded a narrative to those who say that environmental protection is at the expense of economic development and that cannot be farther from the truth and you will of course know that when you're looking at a program like this where we see our coastal resources, our marine resources as a huge driver of economic development whether it's recreation, whether it's fisheries, whether it's development, whether it's port development, I mean the list is long where environmental protection bolsters and supports economic development. And we have an opportunity now in particular to make sure that economic development is shared more broadly than it has

been in the past, particularly when we're thinking about something like offshore wind which is going to be a huge economic boom in the same way that pharma was and biotech was and IT was all of which passed by these communities and now we have an opportunity to make sure that that does not happen.

So those are the five priorities that I'm advancing and of course all of those are wrapped up in the investments that we're making in the Southeast New England Program so if it's part of the bipartisan infrastructure program we're going to be seeing million dollars over five years, three million dollars a year to support these investments in coastal climate resilience water quality environmental justice and of course the discussions like the ones that we're having today to share best practices and sound science on climate resilience projects or solutions for excess nutrients or engineering design for green infrastructure, these are the on the ground type of work that we're looking to support to these program, the kind of impacts that we'll have on everyday people's lives whether it's going to be making sure that when they turn on their tap they know that they don't have to worry about pollutants in their water or that they now have access to a coastal resource that they otherwise would not have that they can use recreational, take advantage of recreational opportunities. So as we build back better these investments are targeted to support the kinds of ecosystems and the communities where we can really see a big bang for the buck and that's how we create win-win-win situations for our communities, we invest in health and resiliency and we help ensure economic vitality through tourism green jobs and engineering or energy and cleanup of water quality.

So again I just want to close today by emphasizing that environmental protection is all about protecting the people and the places that we love and we're here to make sure that that those kind of benefits are spread as equitably as we possibly can do it. And we know of course that there are lots of complexities in this work and that we address it every day, you address it every way and it's so important that we remember why we're doing the work that we're doing. So thank you all so much for protecting the southeastern coast and in New England and I hope that you have a very productive and engaging day, thanks a lot and back to you Adam.

MaryJo: Great, thank you Dr. Cash. It was great to hear your priorities both for you and for EPA and your thoughts for the future so thank you. Next what I'd like to do is introduce Ian Dombrowski. Ian is our SNEP coordinator and he actually plays a few roles with us here at EPA. He's a life scientist and he works with SNEP but he is also our regional wastewater coordinator for on-site systems and Ian also is our Massachusetts nonpoint source coordinator. Ian is going to provide an overview of SNEP, so Ian take it away, the podium virtually is yours.

Ian: Thanks Mary jo. Can you hear me all right? Okay, wonderful. So thanks to Administrator Cash as well that was wonderful, so as MaryJo mentioned I'm Ian Dombroski, EPA Region One Southeast New England Program coordinator. Thanks everybody for being here today, I'm really looking forward to all the presentations and it looks like a great turnout so I'm very excited. So I'll start the day off with just a quick overview of the program as I am seeing some names that I have not seen before which is also very exciting. So to start SNEP is led by EPA Region One out of Boston, the region is shown to the right there we covered the Narragansett Bay and the Buzzards Bay watersheds, the southern facing portions of the Cape and also the offshore islands. We were established by some congressional language in the omnibus spending package and funding actually started coming to us in 2014. We tend to fund grants mainly but we also do conduct research projects and do public outreach and some of the grant projects and research you'll actually be hearing about today which is also very exciting. Some of our general focuses or foci, most of our work does pertain in some way to restoring protecting or improving water quality or habitat and also promoting climate resilience but within that sort of umbrella we do see projects that are innovative we like creative thinking, trying new ideas as you know how else are we going to progress, we like projects that have collaborative elements because many hands make light work and also those hands might have different expertise than our own it also might be additional funding sources, we like projects that are transferable and replicable across our region and potentially elsewhere, projects that are holistic or you know understand how they fit into the broader picture and last as Administrator

Cash mentioned and something that's been on our mind for quite some time now is taking environmental justice concerns into account for our projects and specifically focusing on environmental justice areas and disadvantaged communities and we're very excited about the Biden Harris administration's justice initiative.

So a bit of a fiscal overview at the beginning of this fiscal year we had dispersed about 40 million dollars, a little shy of that over our program life. This year we're receiving an additional six million dollars of base appropriations and as the administrator mentioned we're getting three million this year under this once in a generation bipartisan infrastructure law funding with another 12 million coming over the next four years and so for this year that's about 46.6 million over the program lifetime and that's spectacular and we're really grateful to our Massachusetts and Rhode Island congressional delegation delegations for all their support of this program and a restoration in the region and of course to everybody in the audience right now for doing all the work on the ground.

So to learn a little bit more about SNEP, you know I've only got a couple minutes here, but if folks are interested please take a look at our webpage take a look at our five-year strategic plan which lays all this out but SNEP has a vision for 2050 and the strategic plan states how net plans to assist in getting there. It sort of boils down to working towards resilient, safe healthy waters, thriving watersheds and lands and sustainable communities, then the plan lays out our approach to achieve that and I think those are all goals that probably everybody on this call is working towards.

But from our end to achieve those goals, we proposed a couple of broad key actions we hope to part take in over the next five years. First we want to increase local capacity to bring in funds, propose and execute projects and do environmental work in-house. Second we want to invest in promising new technologies or techniques so that we can diversify our toolbox of environmental restoration. And speaking of diversity we are looking to increase the number of perspectives we have when we're making decisions guiding our program and we'd like to engage groups that we don't usually and invest in areas that aren't not typically invested in. We're also focusing on, are focused on, using examples or pilot projects to help with help identify and address common issues in the hopes that the lessons learned from those pilot projects can be used elsewhere. And finally we're hoping that our work convinces community leaders of the multiple benefits of environmental work, you know, beyond purely just the environmental benefits but also into the social and economic goods that these projects provide.

So in the coming years we're also looking to and I should say this year as well, we're looking to focus on a few research priority areas nutrients of course being first and foremost in our region but especially those from stormwater and septic systems, harmful algal blooms which may be an offshoot of that nutrient issue, algae blooms are definitely a hot topic and seem to be only getting worse as the climate is changing and the weather is warming, we actually currently have a research fellow on full-time handling that topic; Innovative techniques in general like permeable reactive barriers then layer deposition into bioreactors, nature based solutions in general and I do keep mentioning innovation not just because I like pushing the envelope but also because our congressional language does specifically charge us with focusing on innovation, the restoration of salt marshes especially but also eelgrass and riparian areas but not just restoring them but understanding and conveying the benefits that these habitats bring, and I guess to that point also evaluating and quantifying ecosystem service benefits in general would be some of our research foci.

So some key features of the program, one of which is outreach which you are all engaging in right now. We also have quarterly webinars, public workshops, Adam puts out a monthly newsletter which is wonderful, please subscribe it's on our, you can sign up on our website if you have not yet and we're hoping to do more public events like this in the coming years and hopefully in-person if COVID clears up a little bit more. We also provide grants the first two listed here the watershed information implementation grants and the network I'll go into a little bit more detail in a second, but we also work with our two national auditory programs that are within our region the Narragansett Bay and Buzzards Bay Estuary programs we really appreciate all the great work that they do in the region and so we do like to bolster

their work with yearly gla grants as well. We've recently launched the the pilot watershed initiative which is a series of grants that focus on concentrating efforts among multiple partners bringing in multiple sources of funding and expertise into a concentrated area so like a single watershed and so these folks would be working on, you know, topics of broad concern like nutrients from septic systems or stormwater and the idea is to find solutions to these common problems that can be transferred elsewhere. I'd also like to put in a plug for our work with USGS over the past few years, they've been doing a wonderful groundwater studies on nitrogen, pre and post sewering and I think you'll be hearing a little bit more about, I think actually the Cape Rivers project a bit later today but very interesting stuff. And finally we are working towards a state of the region report which is similar to your standard state of the bay report but for the broader region which we hope will tell us something a little bit about our region status and trends of water quality and habitat and also the cumulative impact of our program and we're hoping to put that out in 2025.

So a little bit about SNEP's general structure because there are a lot of moving parts when SNEP was first established it had no funding as I mentioned earlier but was really meant to be a convener of some of the major environmental groups in our region and from this initial charge our committee structure sort of was born. Our committees there are on the left side, we do try to keep abreast with the work of our other federal partners as best we can, we meet them maybe twice a year folks like USGS, Fish and Wildlife Service, NOAA, Army Corps, NRCS, FEMA, I'm probably missing somebody, sorry about that. We also have our policy and steering committees which are made up of state organizations, large NGOs, some academic partners and others other federal partners as well, but they tend to make suggestions for SNEP's direction both for funding and programmatic decisions. The policy committee is a little bit smaller so we'll often workshop ideas with them and then go to the steering committee with those ideas for their input. And finally we do have two technical committees the ecosystem services and monitoring subcommittees and these folks provide a very specific technical input on various issues pertaining to their individual expertise. On the right there is sort of our general grants and financial arm but I'm calling out to two of our larger grant programs which I will get into in a second obviously all of our grants and programs are very important but these are two very publicly accessible programs so I just like to get into them for a second.

So the SNEP network is run by the New England Environmental Finance Center out of the University of Southern Maine and while they're based there it's really a network of experts from all over the place we've got folks from the sunny environmental finance center as well as a University of New Hampshire just all over the place and they provide a number of no-cost technical assistance services to the SNEP communities and municipalities including webinars, trainings and workshops again all free of cost so check their check their website as well because they do provide technical assistance on demand. The link is down there in the right-hand corner. They also put out a yearly call for participants which is essentially it's very similar to a grant proposal request but it's for long-term technical assistance, again at no cost to the applicant if they're selected obviously. They're also conducting demonstration projects in the Medford and Taunton River watersheds which I do not have enough time to get into but are very interesting projects and they're working on tools of regional importance such as the stormwater retrofit manual which you're going to be hearing a little bit more about today during the keynote from Dr. James Houle.

And finally the SNEP watershed implementation grants program is run by our grantee Restore America's estuaries. They've been running it since 2017 and we'll continue running it into the near future. As the name suggests they are focusing on implementation projects this does include planning as well. Generally these projects will of course have to conform to steps overall goals. This year's request for proposal just proposals just closed maybe two weeks back but there's going to be another one next year so be on the lookout and check the website down at the bottom corner there for more information in the coming year. But typical awards at least for this year's funding will be will be between $100,000 and $350,000 with some wiggle room, lower or higher depending on project priorities. These are typically up to two years, two-year grants and are generally available to organizations other than for-profit entities, federal agencies and individuals. And to ease the burden on applicants there is a letter of intent period

just to make sure that the project is a good fit before asking for a full proposal and the letter of intent period actually just closed as I previously mentioned, but again take a look at the web page there in the corner.

So that was that was a bit of a whirlwind and I gave you a little bit of a bit of a better understanding of what EPA SNEP is and what we do so thank you for your time and attention. Feel free to email me and the program at this SECoastalNE@epa.gov anytime with any questions and now I will turn it back to our master of ceremonies Adam, so thanks.

Adam: Excellent thank you so much Ian, really excellent overview and so glad to be able to highlight our program and thanks again for everyone who was able to attend today and then throughout the day.