The following is a collection of questions that were asked by the Committee regarding the Environment Department's budget at the Working Session on Wednesday, May 6, 2020 at 2:00 p.m. Recording here: https://youtu.be/VceizZUhKb8?t=19

The Administration is requested to respond to all questions in one of three ways:

- 1. Verbally at the hearing on Thursday, May 14th, at 10AM.
- 2. For factual questions, through written responses supplied prior to May 14th, including

budget book page numbers or other references where appropriate.

3. By deferring to a specific scheduled departmental budget hearing.

Please annotate and return this information request before May 14th, indicating how each question will be answered.

Environment Department/Conservation Commission Budget Questions

Councilor Kenzie Bok, Chair, asked:

1. Can you please walk through the planned implementation of the wetlands ordinance, in terms of timing and the roles of the additional staff for the Conservation Commission?

Response: Promulgation of the regulations supporting implementation of the Ordinance will occur in three stages. (Estimated timeline has been updated since the Commission reviewed the work plan in early March.)

- Procedural regulations (approximately January June). The Commission discussed the original proposal at a hearing on May 6.
- Regulations for land subject to coastal storm flowage, isolated vegetated wetlands, and vernal pools and vernal pool habitat (approximately May September). Staff is currently selecting a consultant to support development of these regulations.
- Regulations, mapping, and guidelines for coastal flood resilience zone, inland flood resilience zone, extended riverfront area, climate equity and environmental justice (approximately July- March 2021)

The new Environmental Project Manager included in the proposed budget will expand the capacity of the department to complete the development phase as well as implement and enforce the final regulations.

2. The guidelines for the Coastal Flood Resiliency Zoning Overlay District seem exciting – can you discuss these and speak to the speed with which we plan to actually make them effective in zoning? Often proposed guidelines sit too long prior to actually being codified, allowing a large amount of development to take place in the relevant zone without being subject to said

guidelines. (This was true, for example, of the Stuart St Planning Study, never I believe actually codified in zoning.)

Response: Building on the Coastal Flood Resilience Design Guidelines already released, the Boston Planning and Development Agency is developing the Coastal Flood Resilience Zoning Overlay District. The Environment Department works closely with the BPDA with the goal of ensuring consistency between the proposed overlay district, wetlands protection requirements, and climate adaptation plans. Please ask the BPDA for more details about the overlay district and its timeline.

3. What is the timeline for pursuing Carbon Neutral Zoning, and building standards that discourage or ban new fossil fuel infrastructure?

Response: As with the coastal flood resilience zoning, the BPDA will lead the development of any proposals to modify the green building requirements of Zoning Article 37, Green Buildings, mostly applicable to new buildings. The Environment Department works closely with the BPDA to coordinate this development with the development of a carbon-performance standard for existing plans, as envisioned by the Climate Action Plan. Please ask the BPDA for information about the timeline.

4. As the City responds to the economic crisis with a substantial capital budget over the next few years, there is going to be increased importance of green infrastructure to both support the City economy and make the critical progress necessary on climate change. The capital budget now is dedicating 10% to resiliency – how are we thinking about and evaluating that bucket? What counts? What I'm wondering about is what proportion of it will go to elements like flood mitigation, vs. projects that would actually bring down emissions over time. And how exactly is the 10% calculated – is it 10% of new projects?

We will answer verbally.

5. Do we need to be spending more than 10% on climate resiliency measures to meet our goals? Have we reevaluated our climate-related project pipeline as we think about the logic of having an especially robust countercyclical capital budget over the next few years? Are there opportunities to create jobs accessible to diverse applicants in some major climate capital projects?

Response: In 2018, the Sustainable Solutions Lab at the University of Massachusetts, Boston, estimated that district-scale measures to protect the city against sea-level rise and coastal flooding, one of the important risks of climate change, is likely to cost roughly between \$1.0 and \$2.4 billion dollars over the next thirty years. Not all the costs will belong to the City, because

state and federal governments and private-property owners will also share responsibility. Measures to address rising heat and more intense precipitation will also require investments. In that perspective, 10 percent of the City's current \$3 billion, five-year capital budget represents a major commitment at the start of this process.

Mayor Walsh, like many other mayors across the country and around the world, considers it essential that we use funds to promote economic recovery further the goals of climate action. As a vice chair of C40, the global network of cities taking strong climate action, the Mayor joined in declaring that "The recovery must improve the resilience of our cities and communities. Therefore, investments should be made to protect against future threats – including the climate crisis – and to support those people impacted by climate and health risks." As with all our climate action, the opportunity to create good, green jobs for the diverse population of Boston is an important element.

6. Could we do some city version of a 'California Climate Corps', perhaps hiring and training young people or people who have been recently laid off to work on resiliency projects that improve or manage our lands, wetlands, & waterways? Seems like there are a large number of non-technical job opportunities to plant rain gardens, remove invasive plants, water trees, etc. Could some of these be youth jobs this summer? What about paying youth to do citizen science (i.e. monitoring water quality, rain basins, soil quality near watersheds or in urban wilds, etc.)?

Response: The Parks and Recreation Department has most of the responsibility for maintaining City-owned open space and runs summer programs similar to those mentioned. Please ask PRD for more details.

7. What is our plan so far on how the City can support and incentivize the energy retrofitting of privately-owned historic buildings? With so many such buildings in District 8 and beyond, and with the building stock causing such a large proportion of our carbon emissions, this is going to be a crucial frontier. I'd like to know what our proactive plan on this is, beyond municipal buildings, and what we can do to advance it more aggressively.

Response: Within the Environment Department, the historic preservation team and the climate team meet monthly to further collaborations to decarbonize historic buildings. This includes piloting such retrofits in City-owned buildings, involving historic preservation community in the development of building decarbonization policy, and working to develop resources and guidelines for carbon-neutral and climate-ready retrofits in historic buildings. In the development of the carbon-performance standard for buildings, we are studying what specific provisions need to be made for historic buildings, while also requiring their participation.

8. BERDO seems to have had limited success as a mechanism for encouraging improved energy efficiency in our large buildings; can you speak to what we have learned from BERDO, and what updates it might need to be more effective?

Response: BERDO has been quite successful in its operational goal: in 2018, buildings representing 90 percent of space covered by the ordinance submitted their energy data. (In 2019, there were utility data problems that lowered compliance.) Although BERDO encourages performance improvements, it does not require it. Therefore, in order to accelerate emission reductions, we are developing a proposal for a carbon performance standard for existing buildings, as described in the 2019 Climate Action Plan. A technical advisory group has already started meeting to evaluate potential carbon targets and decarbonization strategies, and we expect to convene a community stakeholder advisory group in June.

9. We've seen COVID-19 be intensified by air quality issues, and I've long been concerned about the tendency for our poorest Bostonians to live closest to highways etc. The most advanced research showing the negative effects of ultrafine particles on population health has all come out of Tufts Medical in Boston. Have we discussed updating our building code to require MERV 13 filters etc. in new buildings near highways, even if we need to act before the State?

Response: The City of Boston does not and cannot have, under state law, a building code separate from the Commonwealth's. However, the City often advises projects near major vehicle routes of the importance of planning their HVAC systems with this in mind. An indirect incentive is provided by the City's LEED-certifiability requirement under Article 37: the use of MERV 13 filters helps in obtaining a LEED credit for "Enhanced indoor air quality strategies."

10. Is there any City of Boston inventory of how buildings have achieved their LEED ratings, so that we can track which points are being consistently achieved vs. which are being missed (since some points have much more significant impacts on emissions than others)?

Response: No, we do not have such an inventory. The Boston Planning and Development Agency posts detailed information on development projects on their website, including, when applicable, the initial LEED checklist in the Project Notification Form. The US Green Building Council maintains an inventory of buildings that are LEED certified and which credits have been achieved by each.

11. What employment requirements limit the pool of applicants to high-level or new positions in the department, and could any of these be adjusted to encourage diversity along with a more multidisciplinary approach? I.e., perhaps in some instances we could bring on staff with an

academic background in environmental justice, rather than landscape architecture, to complement existing staff?

Reponse: Because so much of the work of the Environment Department is multidisciplinary, the department typically looks very broadly when it needs to fill a position. For example, in the current posting for a Climate Resilience Program Manager, the qualifications criteria ask for experience in "environmental science or policy, urban planning, engineering, business or a related field."

In addition to the City's Career Center, we publish news about job openings in our newsletter, which has a diverse readership, and in our social media, and work with the Diversity Office. We also reach out to a diverse range of neighborhood groups and professional organizations, to spread the word, formally and informally, of departmental openings.

For an example of a current job posting, see <u>https://city-boston.icims.com/jobs/17175/climate-resilience-program-manager/job?hub=8</u>.

12. Can you speak specifically to Environment's outreach to, and initiatives focused on, our public housing communities?

Please see response to question #3 from Councilor Flaherty.

Councilor Liz Breadon asked:

1. Broadly, regarding climate change, and in context of the COVID-19 crisis, are we seeing any shift in priorities for the City's climate agenda?

Response: The Covid emergency is having no effect on the City's climate agenda. Rather, we see that it reinforces that agenda, because the people most likely to suffer from the effects of climate change are the same people suffering the most from Covid.

2. The groups in our City that are most adversely affected by the COVID-19 crisis are also those who live in areas with a lot of environmental degradation. How is the Environment Department considering this intersectionality and navigating this space to try to mitigate some of the negative effects of the environment in those neighborhoods?

Response: The impact of COVID-19 on our most vulnerable residents anticipates how climate change will disproportionately affect these same groups, if we do not take measures now to reduce those risks and prepare for the changes that we cannot avoid. The 2016 *Climate Ready Boston* report includes an extensive analysis of where vulnerable populations and the most

serious effects of climate change overlap. The 2017 *Resilient Boston* report, led by the Mayor's Office of Resilience and Racial Equity, provides a further foundation to our work.

To ensure that we understand this intersection, we have been holding an ongoing series of roundtables around climate and equity in different neighborhoods focusing on different aspects of this issue (race, age, gender, and so on.) In the last few weeks, we launched the Climate Ready Story Project. This initiative is highlighting stories of resilience that we see in Boston today in the context of Covid-19 so we can draw on the lessons and on the community networks as we address climate change and other environmental concerns in Boston.

3. In Allston/Brighton, the neighborhoods have lost so much greenspace to development in last 10 years, including urban wilds. Would like to see more robust efforts to preserve those spaces. What investments are being made towards urban wilds in Allston/Brighton?

Response: The Mayor's proposed budget includes a new staff position and funds for Parks and Recreation to increase maintenance in urban wilds across the city. Please ask PRD for more details. Note: Although most urban wilds are owned by the Environment Department's Conservation Commission, most of the care of the urban wilds is undertaken by PRD.

 What is the City doing to address heat island effects and extended heat waves in Allston/Brighton? Can these be counted as part of climate resiliency efforts? (*Previously asked* 4/16)

Response: Preparing for increased frequency and intensity of heat waves is an essential component of the City's climate adaptation program. The Public Health Commission has recently updated its emergency protocols for responding to extreme temperatures, including heat waves. The Parks and Recreation Department is now developing a tree-canopy master plan, and the Mayor's proposed budget includes increased funding for both planting and maintenance of trees. The Environment Department works with both of these offices to ensure that these initiatives are coordinated parts of the City's adaptation work.

a. Are we making investments in HVAC systems for our schools and city-owned buildings?

Response: Renew Boston Trust, the City's internal energy-efficiency and renewable-energy initiative, will include schools in phase 3, which is getting underway this year: phases 1 and 2 focused on other City-owned buildings. All phases have included rigorous evaluations of HVAC systems, because they as they are a significant user of building energy. Also, while phases 1 and 2 were aimed at energy consumption, Phase 3 will also include an evaluation of the extent to which we can decarbonize buildings or at least to prepare them for decarbonization in the future.

b. Any update on assessment of the tree canopy in Allston-Brighton?

Please see answer above.

Councilor Michael Flaherty asked:

1. Is the department running any FY20 surplus that can be redirected to COVID-19 response efforts?

We will answer verbally.

2. Identify the trouble spots with climate resiliency. The decision-making process of CPC includes a climate resiliency piece and it's something that plays a role in many updates throughout the City.

We would be happy to respond to this at the hearing. However, we're not sure what is being asked.

3. Please speak to the seat communities have at the table with regards to climate-related efforts (e.g. how are neighbors and program users at Moakley Park involved as updates are being planned to prevent flooding).

Response: The Environment Department uses many tools to involve Boston residents in our policy and planning initiatives and to enable them to take action on their own and within their networks.

The Climate Ready Dorchester Coastal Resilience Planning Study, for example, had three tiers of engagement. Community open houses gave residents opportunities to meet the planners, raise questions, and react to analyses and options. Because not everyone can attend an open house, we attended meetings of neighborhood associations and presented similar material. Finally, all Boston residents could share their thoughts on the plan through an online survey, through our email listserv, and on boston.gov.

The Greenovate Boston Leaders Program educates and empowers Boston residents to take action on climate change. GB Leaders learn the fundamentals of climate change, how it affects Boston residents, including the most vulnerable, how to take effective action, and where to find resources. The commitment that Leaders make is to take this information to their own networks to spur local action. 4. Any updates on the East Eagle Street shoreline stabilization project in East Boston? Are schematics available for the plan? (*Previously asked 4/16*)

Response: This project is managed by the Public Facilities Department. Please ask PFD for more information.

Councilor Ed Flynn asked:

1. Please provide information about work that the Environment Department does with Public Health Commission. Do you work together on any studies?

Response: The Environment Department and the Public Health Commission have been partners for many years. For example, staff of the Air Pollution Control have long worked with their colleagues in the PHC's Environment Health Division to address air and noise pollution complaints. PHC has also been a strong participant in climate planning, particularly around the risks of increased heat. Please see answer to question #4 from Councilor Breadon.

- 2. What impact will traffic increasing again after the shut-down have on neighborhoods, environment, and public health?
- 3. Environment concerns in South Boston include the Andrew Square area, which is a dense area, with a lot of highway access. What does the Environment Department think of that area as it relates to public health challenges?
- 4. Please speak to environment and public health concerns in the Leather District and Chinatown, particularly asthma due to poor air quality.

Response to 2-4: The Carbon Free Boston social equity report estimated that air pollution from fuel combustion causes \$8 million in healthcare costs each year, and some neighborhoods suffer more exposure than others. Now data are emerging that suggest that communities with higher levels of air pollution suffer higher mortality from Covid-19. Air pollution levels in Boston have declined as a result of the stay-at-home advisory, but a return to normal traffic would liely return them to their previous levels.

GoBoston 2030, the City's comprehensive transportation plan, and the Climate Action Plan are closely coordinated in their aim and actions to reduce carbon emissions and other types of air pollution. Measures are designed to increase active transportation, increase the use and convenience of public transportation, and shift transportation energy to non-carbon sources. The Transportation Department can provide information about implementation of these measures. Our Transportation colleagues are already evaluating some of the decrease in traffic and air pollution can be maintained when Boston shifts to the recovery phase of the pandemic.

The Environment Department's Air Pollution Control Commission (APCC) contributes to these efforts by regulating the quantity of off-street parking in Downtown and South Boston.

Councilor Matt O'Malley asked:

1. Is it possible to use City acquisition of land to advance our climate resiliency goals? Are there any specific opportunities in the pipeline?

Response: This is certainly a possibility. For example, draft options discussed at open houses for Climate Ready Dorchester included a discussion of one instance where such an action might be beneficial. There are no such acquisitions currently in the pipeline.

2. Last year we began mandating a carbon neutral building assessment as part of our Article 37 zoning process. How many buildings voluntarily complied? How can we grow participation in that? Please share any analysis of those who did participate. What opportunities are there to ramp up participation, whether with carrots or sticks.

Response: The Article 37 review process is led by Boston Planning and Development Agency and administered by the Interagency Green Building Committee (IGBC). All buildings that have started the Article 37 review process since the Carbon Neutral Building Assessment was introduced last year have completed, or are in the process of completing, this required assessment. We are currently acquiring the capacity for the IGBC to carry out more detailed evaluations of the assessments that we have received. Please see response to question #3 from Councilor Bok for more information on the development of Carbon Neutral Zoning.

3. Updates on creating a designated position for NZC engineer/manager?

Response: No such position is included in the proposed budget.

4. Last year the City began requiring all new municipal buildings to be NZC. Chief Brophy talked about this in the Capital hearing, but please share specific numbers regarding this rollout for new buildings. Similarly, there are 300 or so municipal buildings that are BERDO compliant. Is there an assessment for those to see how they can be retrofitted for NZC?

Please see response to question #4 from Councilor Breadon.

5. Regarding zero waste, the costs are incredibly high right now for both recycling and trash. While PWD is the proper authority for implementation with regards to waste pickup, can the

Environment Department provide any clarity on textile recycling and curbside composting from policy point of view? Where is the City in terms of moving these initiatives forward?

Response: Chief Osgood provided an update on these initiatives at the hearing for Public Works. As outlined in the Mayor's 2018 Zero Waste plan, the food waste and textiles represent about one third and one tenth, respectively, of residential waste. The programs that Public Works will initiate this summer are important steps in our waste plan.

6. Under the new responsibilities and effects of the wetlands ordinance passed last year, how is the Conservation Commission adapting; are they properly resourced?

Please see response to question #1 from Councilor Bok.

Councilor Kim Janey, President, asked:

1. In seeing how COVID-19 has had a disproportionate impact on vulnerable communities and how it has been devasting the black community, people who are lower income, and the elderly, does this affect how we will think about preparedness in terms of environment and resiliency moving forward? In other words, how to better protect vulnerable populations?

Response: The Mayor's introductory letter to the 2019 Climate Action Plan states, "We know that communities that contribute the least to climate pollution bear the greatest impacts of climate change. As we reduce emissions and prepare our communities for the impacts of climate change, we need to place people first. This means designing and implementing policies for and with our communities of color, low-income neighborhoods, youth, older adults, women, people with impairments, persons facing homelessness, and people with limited English proficiency. This also means asking those who have contributed disproportionately to climate change to take action first. By placing equity at the heart of climate action, we can achieve fair outcomes for every Bostonian, so that they can thrive in a resilient and healthy city."

For more information, please see responses to question #2 from Councilor Breadon and question #3 from Councilor Flaherty.

Councilor Julia Mejia asked:

 The Environment Department has reported trouble hiring for certain positions. Can you walk us through your hiring process and recruitment pathways (who you talk to, where you go, how you keep track of outreach), etc.? What input do you get from nonprofit organizations like Careerlinks/Goodwill etc.? How do you find ways to fill these positions that qualified people in communities of color have usually been left out of? What are the barriers to hire more diversity? Please provide a sample of a job description.

Please see response to question #11 from Councilor Bok.

2. Communities of color in Boston are bearing the brunt of the effects of pollution and climate change. What efforts are being done to activate communities feeling shut out of the conversation? What role does the Environment Department play in community engagement and conversations, and using those things to inform work and outreach?

Please see responses to question #2 from Councilor Breadon, question #3 from Councilor Flaherty, and question #1 from Councilor Janey.

3. Are there opportunities to tap into BPS and engage students in career exploration opportunities through Environment?

Response: The Environment Department often engages with students and staff in Boston schools to help them understand our physical and cultural environment, how it changes, and how to take action. In addition to projects we are developing with schools around recycling, composting, efficiency, and more, we welcome additional invitations.

4. Please provide an overview of WMBE contracts and opportunities through Environment.

Response: The Environment Department does not currently have any WMBE-certified contracts. Although Environment is not a large contracting agency, we explicitly encourage the inclusion of WMBE businesses and use of the City's database of certified businesses in the formation of teams submitting proposals.

Councilor Ricardo Arroyo asked:

1. What portion of Environment Department contracts are MWBE/locally-owned businesses? If there are none, what efforts are being made to contract with MWBE/locally-owned businesses?

Please see response to questions #4 from Councilor Mejia.

What investments are being made to address the heat island effect, which is a big issue in District 5?

Please see response to question #4 from Councilor Breadon.

3. What investments are being made to address stormwater flooding?

Response: The City's management of stormwater flooding is primarily through the Boston Water and Sewer Commission (BWSC). Please ask them for more information about their activities. However, the risk of flooding from more intense storms is a crucial concern of our climate adaptation initiatives. For this reason, the Climate Ready Boston initiative, including the series of neighborhood plans now underway, has always included the BWSC as a crucial participant. Furthermore, because an important component of stormwater management is green infrastructure, which is also important in addressing heat, Environment, BWSC, Parks and Recreation, Public Works, and other City offices are working together to coordinate are various plans, programs, and investments in green infrastructure.

4. Regarding Climate Ready Boston Phase 2 – how is that project being distributed throughout city? Is it focused on the coastline, or will it also apply to inner neighborhoods, like District 5, experiencing things like the heat island effect and storm water flooding?

Response: The City's climate adaptation program is addressing the needs of all neighborhoods as we face the risks of sea-level rise, increased heat, and more intense precipitation. The Climate Ready Progress Tracker, online <u>here</u>, provides information on the implementation of 11 strategies and 39 initiatives. The series of neighborhood coastal resilience plans is one aspect of that work. We will use the Climate Ready Boston capital funding to address planning needs throughout the city.

5. In the 2019 progress report of the Greenovate Boston 2014 Climate Plan, under initiative 4.11, there's a reference to creating a city tree canopy plan – when will that be available for review?

Response: The Parks and Recreation Department is currently developing a tree-canopy master plan. Please ask about it at PRD's hearing on Thursday afternoon.

6. What efforts is the Conservation Commission making to address the dumping of materials in urban wilds owned by the City; is there any portion of the budget dedicated to that?

Please see response to questions #3 from Councilor Breadon.

Councilor Annissa Essaibi-George asked:

1. Please provide an updated breakdown in timeline regarding implementation of the wetlands ordinance. Has the pandemic impacted this timeline? Has there been an RFP?

Please see response to question #1 from Councilor Bok.

2. Please provide information about flood resiliency zones and the impact of the ordinance on these zones, as well as work beyond the ordinance.

Please see response to questions #1 of Councilor Bok.

3. Please provide information/updates about the impact of the wetlands ordinance on coastlines and inland areas.

<u>*Response</u></u>: The Wetlands Ordinance has allowed the Commission to expand its review of proposed projects and, in particular, require proponents to evaluate future changes in climate as part of their proposal. The establishment of the new Waterfront Area has enabled the Commission to reduce impervious surface and preserve resource areas to promote natural open space.</u>*

4. How has the climate action plan considered the work of some of our cultural institutions, social networks, neighborhood coalitions, etc? Where are we in terms of moving forward on that plan?

Response: The City works diligently to establish partnerships with these groups around climate action. The City is supporting strong climate action and education through the Green Ribbon Commission's Cultural Institutions Working Group (in which the Office of Arts and Culture and the Boston Public Library are participating). Through our Greenovate Leaders and Greenovate Ambassadors programs, we are tying into the commitment and local knowledge of residents and neighborhood groups to promote action, enhance understanding, and encourage participation.

5. In the climate action plan, how are we defining vulnerable populations and how are those populations being included in the conversation moving forward?

Response: The Climate Action Plan follows the categories of socially vulnerable populations laid out in the Climate Ready Boston report: older adults, children, people of color, people with limited English proficiency, people with low to no income, people with disabilities, people with pre-existing conditions.

For more information, please see responses to question #3 from Councilor Flaherty and question #1 from Councilor Janey.

6. We are still seeing additional development in the Seaport area; are those plans impacted by the ordinance.

<u>Response</u>: The Wetlands Ordinance provides the authority for the Conservation Commission to promulgate regulations that are stricter than those set by the State. Currently, the resource area most common throughout the Seaport is land subject to coastal storm flowage (LSCSF). Because there are currently no state performance standards for LSCSF, the Commission intends to develop its own. These will apply in all neighborhoods, including the Seaport. The Commission will also identify a new Coastal Flood Resilience Zone, which may bring additional parts of the Seaport under Commission jurisdiction.

7. Please discuss the impact of the pandemic on development and on future plans.

Please see answer to question #1 from Councilor Breadon.

8. Please provide information about the specific investments in the Capital plan involving climate resiliency.

We will answer verbally.

9. The Allendale Coalition would love to see an 'Acquisition Opportunity Program' for Natural Areas, administered by Environment, that could acquire parcels that are problematic/unbuildable, where we could protect wetlands, provide tree canopy, etc. They would like to see a line item like this at \$5M, or at least an expansion of the new Climate Resilience Reserve line item from \$3M to \$5M. Can you speak to the possibility of an Environment program mirroring the DND AOP program, and to the purpose of the new Climate Resilience Reserve line item?

We will answer verbally.

- 10. Are there new investments being made in coastline protection across the whole city? (*Previously asked 4/16*)
 - Where will these happen and over what timeline, beyond East Eagle St?

Response: The Climate Ready plans for East Boston, Charlestown, and South Boston, already released, and the plans for Downtown and Dorchester, to be released later this year, lay out a 30-year program for protecting Boston from up to 40 inches of sea-level rise and more powerful coastal storms expected from climate change over about the next 50 years. Some early projects have already been completed (e.g., Langone-Puopolo Park, Martin's Park); and more are in active development (e.g., Moakley Park).

Councilor Michelle Wu asked:

- 1. Where are the plans to move the City towards 100 percent renewable energy? (*Previously asked* 4/16)
 - We previously got specific costs from the Administration on moving to 100 percent renewable energy through credits, solar panels etc. how are those decisions being made, and how are they factored into the capital plan?

Response: Through FY17, the City of Boston has reduced its carbon emissions from municipal operations by 41 percent since FY05. To further reduce emissions from buildings, the City is focused on the Renew Boston Trust initiative, which is identifying self-funding investments in energy efficiency and renewable energy in existing buildings. The Mayor's proposed budget includes an increase of \$5 million for Phase 3, planning for which will start later this year. The City continues to buy renewable energy credits at a rate similar to that of previous years, that is, equivalent to about one third of our electricity supply.

In regard to transportation, the City is continuing its increase in the number of electric and hybrid-electric vehicles in the City fleet. The Public Works Department, which manages the fleet, can provide information about the number of vehicles of various types.