

**Board of Supervisors Environmental Committee**

**October 3, 2017 - DRAFT**

***Board of Supervisors Members Present:***

Board Chair Sharon Bulova  
Committee Chair Penelope A. Gross, Mason District  
Supervisor John Cook, Braddock District  
Supervisor John Foust, Dranesville District  
Supervisor Cathy Hudgins, Hunter Mill District  
Supervisor Jeff McKay, Lee District  
Supervisor Dan Storck, Mount Vernon District  
Supervisor Linda Smyth, Providence District  
Supervisor Pat Herrity, Springfield District  
Supervisor Cathy Smith, Sully District

**Others Present:**

Dave Molchany, CEX  
Rick Haley, EQAC  
Ken Lanfear, EQAC  
Marcia Pape, Braddock District  
Goldie Harrison, Hunter Mill District  
Laura Grape, NVSWCD  
Jordan, VCLMA  
Wayne Kotter, DPWES  
Dipmani Kumar, DPWES  
Susan Hafeli, DCCS  
Noel Kaplan, Senior Environmental Planner, DPZ  
James Patteson, Director, Department of Public Works and Environmental Services (DPWES)  
Hans Christenson, DPWES  
Eric Forbes, DPWES  
Eleanor Ku Coddling, Land Development Services  
Kate Bennett, MS4 Program Coordinator, Storm Water Planning Division, DPWES

October 3, 2017 Meeting Agenda:

<https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/meeting%20materials/committees/2017/oct03-environmental-agenda.pdf>

October 3 2017 Meeting Materials:

<https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/meeting%20materials/committees/2017/oct03-environmental-presentations.pdf>

The following is a summary of the highlights of the discussion from the **October 3, 2017** meeting.

Today's meeting was called to order at 10:10 A.M.

### **Opening Remarks**

After a brief welcome and introduction from Supervisor Gross, Committee Chair, the minutes from the **May 23, 2017** meeting were accepted into the record.

As part of the opening remarks, James Patteson, Director of the Department of Public Works and Environmental Services, provided a brief update on the status of the Covanta Waste-to-Energy facility. James indicated that Covanta is anticipating to be fully operational by the first or second week of December as we are still waiting for Fire Marshal's permits.

James also mentioned that the first topic on the agenda, converting the I95 Landfill to an environmental resource, demonstrated The Department of Public Works and Environmental Resources' continued commitment to environmental sustainability.

### **Item II Converting the I95 Landfill to an Environmental Resource**

The first topic on the agenda was a presentation regarding the conversion of a portion of the I-95 to an environmental resource.

Eric Forbes, I-95 Landfill Complex Manager, provided the committee with a detailed presentation of environmental improvements and new sustainability initiatives at the landfill. The projects included the rehabilitation of six Pump Stations, Landfill Gas Extraction Program, Honeybee Initiative and Pollinator Program, Mulch & Hay Program, Glass Recycling Program Pilot, Dredge Material Reuse and Compost Pilot.

As part of the presentation, Eric shared some honey samples with Board members and mentioned that the Honeybee initiative Pollinator Program (HIPP) is a project to install hives of honeybees and pollinator habitat. Eric also mentioned that as part of the project, staff is creating sustainable

habitat with Habitat for pollinators, Milkweed for butterflies, Native flowers for bees, Nesting/shelter for wildlife and Ecosystem services.

Eric also shared recycled glass samples with the Board and explained that the county currently has a small glass recycling machine which processes one glass bottle at a time and the big machine which processes 15 bottles at a time.

### **Board Discussion:**

Gross – Thank you Eric. These environmental improvements and sustainability projects are really exciting. It is unique in a way we are taking the landfill and making it something more productive. And I would imagine there are a number of others that could benefit from learning about this. So, I would suggest that we keep an eye on that. Questions??

Storck – I think this is a wonderful approach and more importantly, I see it as the first steps of reusing the landfill and converting what it will be and the question is how quickly that evolves into a major educational and recreational area for the community. For example, bees will help people to better understand the important role they play to other wildlife. I think the more we can do to further add those elements to what is happening there is important. The last point I would make is over time we are going to be needing to look and take a broad strategic look at the landfill. How do we change this? Where do we go with this? I know staff is looking into it and I look forward to having something come back to the board. We need to bring them back and talk about how this particular program fits in with the other strategic ways that we are looking at evolving and developing this amazing county property.

McKay – I was going to agree with what Dan said and having been out there Friday to see the ESI Landfill and the position in relation to the county landfill we are talking here, presents a really big strategic opportunity for us to do something down there, take a piece of property loathed by the community and necessary and convert it into something the community could be proud of. I was surprised to see all the trees in the landfill and I did see birds. I was not clear about protecting the structural integrity and what can and can't happen. Threat to the construction? Can you elaborate on that? What is the threat to the structural area?

Eric – so we will be mowing the trees every 2 years or so that stems don't develop. Part of the tree selection might have been the huge shallow rooted trees that don't develop large tap roots.

Gross – Thank you. And of course this effort to look at how the landfill is sort of recycled is not new. This has been an effort that has been on going. What we have got are new, interesting approaches. We talked about solar, and we talked about wind. We didn't talk about beehives at that time. This could have great benefit and it's exciting from the partnership with George Mason also, which is why I think if we look at this and try to put it together for some sort of a, for example, a demonstration of partnerships that work that are really thinking outside the box. I think we should continue to work on this so that we have got something to brag about.

James – I just wanted to highlight a couple of things that, the nice thing with using the dredge material, what I like with some of the elements we have come up with, it's a win-win. We had discussed with the board a few years ago also about dredge material. We at least got it to be called dredge soils instead of dredge spoils. It was a huge cost for us. We were able to spread it around I-95. It is highly fertilized soil and it really supports the growth of the meadow.

The glass recycling – there was no market for it and it was a huge cost for us – John Kellas is looking at the opportunities of creating our own glass crusher, we are going to use this as bedding material for our infrastructure projects.

### **ITEM III**

#### **Future Recycling Goal Setting & Status of Covanta**

John Kellas, Deputy Director of the Department of Public Works and Environmental Services (Solid Waste Management) provided an overview of the County's integrated solid waste management system which provides municipal solid waste (MSW) management programs to County residents and businesses and includes a comprehensive range of activities consisting of waste reduction and diversion, recycling, processing, and disposal. John explained that the County is interested in solid waste management and construction and demolition debris (CDD) methods, facilities, and approaches (or combinations thereof) that are consistent with and enhance the County's 20-Year Solid Waste Management Plan.

This plan includes the service contract with Covanta Fairfax, Inc. (CFI) for use of the I-95 Energy/Resource Recovery Facility (E/RRF) to provide the primary disposal capacity for the County's MSW. The contract is structured for a 15-year period, with three 5-year terms. This initial term expires on February 1, 2021, with two additional terms - one expiring on February 1, 2026 and the other on February 1, 2031. As part of an ongoing strategy to support the County's long-term solid waste planning process, the Solid Waste Management Program is seeking to identify possible emerging technologies that would support the County's long-term goals for sustainability.

John referred to the package which was given to the board committee members.

#### **Board Discussion:**

Gross: It would be wise to review of the paperwork and review whole negotiations. Great job!! We need to be aware of this document.

Kellas: If I did not make it clear, this is not an offering to enter into a contract. We are trying to get ahead of most of these offerings.

Herrity: I know that we had this five-years ago and we did it right as we are negotiating this contract.

Patteson: We did it right before as we're negotiating the Covanta deal.

Herrity: Are we including the opportunity for privatization of part or all as – is that still open?

Patteson: It's more structured similar to what we did before the last Covanta contract. We are really looking for disposal options. What are the technologies available outside?

Herrity: Yes, that was my question, thank you.

Patteson: Yes, it is focused on the disposal.

Kellas: It also benefits from CDD recycling. If someone makes a proposal that says he we can do it better, faster, smarter and we are willing to partner with you.

Gross: It has changed tremendously from the last 20 years. Than you John!

Kellas: It's this blue Plaque here – it's not part of the glass program – I just want to point of pride, these folks behind me, the leadership team accepted a national award in Baltimore last week for their safety practices in North America. It was an international conference and we were awarded the most improved safety award.

Gross: Asked if this team could stand up for the board so that they can be recognized. Board applauded. Congratulations John!!

Dan: Thank you all for bringing this forward. Is there anything else in particular besides the leadership they have shown that was crucial to achieving those kinds of outcomes?

Kellas: Yes, there is. But due to short time, he shared the depth of this application form with the board members.

Herrity: Congratulated Kellas for his leadership and his team.

Gross: Discussed environmental vision over time, that's why we started in 2004 was making sure that every employee in that particular area recognized their role. Thank you.

## **ITEM IV**

### **Chesapeake Bay Exception Review Committee**

Eleanor Ku Coddling, Director of Code Development and Compliance Division, Land Development Services, provided an update to the discussion of May 24, 2016 meeting presentation at which time the Board's committee requested that staff report back in 2017. The

discussion centered on the history of the establishment of the ERC and its continued relevance given changing circumstances in the county.

After some discussion, Eleanor presented a series of options for Board Committee consideration to facilitate a more efficiently operating Exception Review Committee (ERC). This presentation was a follow-up to a presentation made to the Board's Environmental Committee on May 24, 2016. The options considered included the following:

- 1) Maintain Exceptions Review Committee (ERC) "As is"
- 2) Maintain ERC approval and reduce the quorum requirement
- 3) Abolish the ERC
- 4) Abolish the ERC and designate another existing board/commission

\*Staff Recommendation: Maintain ERC "as is." If achieving quorum becomes an issue or if other complications arise, bring issue back before BOS.

### **Board Discussion:**

Gross: Any questions? This was a significant issue a few years ago, but we decided to see how it might work out. I think there have been changes in both the staffing and also the membership of the ERC that may have precipitated some friction. I was certainly one who was looking at abolishing the ERC at one point because it seemed to be more trouble than it was worth. Staff's recommendation now is to maintain it as is.

Cook: I think our strategy worked. Congratulate us on doing that.

Bulova: I am supportive of staff's recommendation. It sounds like things resolved themselves.

Gross: But we do need to alert staff that should there be an issue, they need to come back and let us know.

Bulova: It's important that board members get the feedback that you provide information to members of board of supervisors.

Gross: We need to know not just attendance but if there is an issue, a serious issue, not just a disagreement.

Foust: What is the denial rate?

Codding: That's a good question. All the discussion information is on the last two slides of the presentation

Foust: When was the denial?

Codding: April 2016 – That was cherry drive.

Foust: I am very satisfied with the recommendation. This is an educational process for the members of this commission that needs to be carried forward and as to what their scope is. I was very disappointed when it was discovered it was a factual error and the information was presented to the commission, they refused to rehear it. That was a really serious issue for that builder.

Codding: We have had training with both staff and the ERC since then.

## **ITEM V**

### **Update on DEQ Inspection of the County's MS4 Program**

Kate Bennett, Municipal Separate Storm Sewer System (MS4) Program Coordinator, DPWES, provided the Board's committee with an update regarding state inspection of the county's MS4 program. In her presentation, Kate mentioned that the Department of Environmental Quality (DEQ) had been ramping up their inspections of MS4 programs. The purpose of the ramp up was to let DEQ be the main enforcement agency.

Kate indicated that the DEQ has set a goal of inspecting MS4 programs at least once every five years. DEQ inspected the county's program in February 2017 and followed up with an inspection report in April. The report describes the MS4 program and implementation, identifies observed compliance issues and provides for recommendations and correction action to be taken.

The DEQ also had recommendations related to targeting swimming pool discharges. We submitted our response on May 26<sup>th</sup> which described how we were addressing the compliance issues.

Kate mentioned that the county's program is not the responsibility of a single agency, but rather many agencies were involved in preparing for the inspections and the county attorneys were present with us at every step of the way. Bennett shared the comprehensive two days inspection agenda with the board.

### **Board Discussion:**

Gross: Thank you Kate.

Herrity: I was just curious if we took them to any state facility?

Bennett: Yes

Storck: What was the issue with the Rainwater facility?

Kate: The rainwater landfill has a separate permit from the state. One of the requirements of our industrial and high-risk section is, we are meant to receive discharge monitoring reports from any facilities holding stormwater permits from the state. We had reported that we had not received the report, further a review indicated the facility is not in the County's MS4 service area.

Gross: for those watching Rainwater landfill is a private landfill. It is not a county landfill.

Storck: I don't understand enough to understand why it's not part of the MS4. I am interested in learning more, but we can do that off line.

Gross: Thank you. Any other questions/comments for Kate?

## **Item VI**

### **Street Light Study**

James Patteson, Director, DPWES, began the presentation by mentioning that street lights are the infrastructure people love to hate. James also indicated that it's been a challenge working with Dominion Energy (formerly Dominion Virginia Power). Dominion has been slow to respond to our requests for flexibility on types of poles, types of fixtures and lighting types. We are probably always going to have some street lights owned by Dominion Energy and working to see what we can do with that. We are also looking at other options from other communities. The punch line of the presentation is that we want the nod from the board to do a study and come back to the board with some recommendation of what our future in street lights looks like. James indicated that Wayne Kotter and his team has done some research and due diligence work leading into it and passed the presentation to Wayne.

Wayne Kotter, Director, Utilities Design and Construction Division, DPWES, began his part of the presentation by noting that in fiscal year '17, Fairfax County used just under 40 million kilowatt hours of electricity for 58,400 non LED streetlights. That is the equivalent to the power used for 6,600 average size home. That usage generated 30,850 Metric tons of GHG ((68 million pounds) or 1,160 lbs. of CHG per fixture per year. Wayne indicated that LED street lighting could reduce power consumption by as much as 68%. That is the equivalent savings of power to run almost 4,500 average sized homes, reducing 46.2 million pounds GHG per year, or 790 lbs reduction GHG per fixture. LEDs would also allow us to take advantage of smart city technology adaptations such as the auto dimming features which Arlington County is trying to use.

Light quality for HPSV vs. LED is dramatic. National and local municipalities are converting like New York City, Los Angeles, Washington, DC, Virginia Beach, and Arlington County. Washington DC is under a current procurement going to P3 arrangement with all of their street lights and signage being converted to LEDs with Smart City technologies.



We would like to commission a study to look at pros and cons of County vs. Dominion Energy ownership and control of selective streetlights to be able to realize real cost savings in energy usage/maintenance, utilization of smart city applications, and reduction our carbon footprint on the environment.

### **Board Discussion:**

Gross: Thank you! Barbara Byron, you have our office of community investment and revitalization, this came to you through the various revitalization groups.

Byron: That's what I wanted to tag on at the end. As you stated this is a multifaceted issue. It's financial, it's energy and also revitalization. As Wayne said, we have been trying for several years now without success to get a limited number of additional fixtures in the standard palette that is more conducive to revitalization.

Gross: Questions??

Linda Smyth: In my office, lights, it's an awful can of worms – we had a new development and James would know what I mean by Chestnut Street – private street that has nice little acorn lights. There were many complications with development issues there. But what we learned because the folks, the neighborhood said why can't we have the pretty acorn lights? So it's a lot more. This process/storing parts etc. So there's a lot more to this maintenance issue than just replacing a bulb. This whole business with the lights has so many ramifications in terms of cost and reading the fine print that you know, if you start multiplying this out over time.

Gross: Thank you, Jeff.

Jeff McKay: We cannot move forward until we do a deep analysis. My frustration level with Dominion Power is the highest level ever because we can't get decisions made. I see the study as two benefits – one is to get us the data and two is to give us ideas as to what our path forward may be and to get Dominion responsive. This might help senior management which is the other recommendation.

Wayne: We would like to allocate approximately \$100,000 and get a study done for that or less and we would like to report back in next spring and come back to board at that time.

Catherine Hudgins: I support moving forward because our move to smart counties has been an exception piece in the lighting for decades and now we have progressed to the point where others are and we still have a challenge there.

Wayne: I failed to mention, the LED technologies out there are more in line with what the dark sky initiatives out there.

John Cook: I think we should do the study. It's we have a confluence of two positives because I think people like the LED light better. You can see better and also save energy. I am wondering if we should have some sort of legislative package about Dominion.

Gross: I think it is safer to have street light and be safer. I think that we should get lights if it's an unsafe community.

Cook: We encourage, we want walkability and we encourage walkability and there is no light. I am not suggesting 10,000 lights but in a targeted way help at intersections in neighborhoods with some analysis so we don't get out of hand.

Gross: Before I close of this particular presentation, question about it, and it may apply to the 50 plus community.... We get a lot of constituents who tell me they don't drive at night because they can't see. We have a big community of senior citizens and they can't drive because they can't see properly, so it is a big issue.

Bulova: I am all for this study. Excellent presentation and I am looking forward to further discussion

McKay: A letter to the delegation will be good for us to have.

Storck: Are there part of the county that have communities that have their own street lighting? I want to make sure that was potentially captured in the study.

Herrity: Suggested that we should check on partnership to do it.

James: For Urban Center, Dominion has the flexibility to rent their poles and put certain telecommunications on their poles.

## **Item VII**

### **USACE-MWCOG Coaster Storm Risk Management Study**

Dr. Dipmani Kumar, Chief, Watershed Planning and Evaluation Branch, Stormwater Planning Division, DPWES, provided the committee with an update on a co-sponsored regional coastal storm risk management study where the county is a proposed partner. The scope and purpose of the study will be conducted by the Army Corps of Engineers with the COG providing support and helping to facilitate with the regional cost-sharing partners. The study will investigate flood risks in the regions tidal areas and identify solutions to protect vulnerable infrastructure. County share is expected to be \$250,000 to \$350,000 paid over three years. Arlington County, Prince Georges County, The City of Alexandria and the District of Columbia are also expected to participate in the study. In addition to the jurisdictions listed, DC Water and the Airports Authority have been invited to participate as well. Proposed study is a follow-up to the USACE North Atlantic study. In addition to the benefits mentioned above, the study will also provide the most up to date sea level rise estimate, provide an assessment of climate change impacts on precipitation and groundwater and identify solutions to protect vulnerable urbanized areas and infrastructure.

**Board Discussion:**

Gross: Is that because there are so many requirements for public input and so forth at the federal level?

Kumar: I believe yes, we had that discussion as well. We haven't asked but we do think it's because the Corps has specific requirements before they publish an official report.

Dan Storck: I know we are heading in the right direction with the Huntington community. We still have another year and a half. Troubled by the delay. Need some background to me and secondly please clarify some questions on presentation slides.

Kumar: I will confirm this but the study will consider changes in precipitation patterns that impact pretty much the whole county to an extent.

Gross: Dipmani— maybe you can get a specific response and you can do it by a memo to the board. Certainly there was the original study area was further north of the, what is identified as the southern boundary. I think the original boundary line was somewhere below Huntington creek.

Bulova: I just wanted to say this is a really important study and I am sure that our board is glad to support. This is a regional issue. COG, Northern Virginia Regional Commission and I am asked a lot by organizations and individuals about climate change. It is an important study and look forward to supporting this.

Gross: If you have seen an interpretation in our area, what that means, it is more than significant. It is overwhelming, and disastrous. So we need to understand what is going to mean for the future of our county.

**Meeting was adjourned at 12:15 p.m.**

**Next Environmental Committee meeting TBA**