

**Baltimore Commission on Sustainability
September 27, 2011 Meeting Report**

Date: Tuesday, September 27, 2011 from 4-6 pm

Location: Department of Planning Boardroom, 417 E. Fayette St. 8th Floor

Subject: Commission on Sustainability September 2011 General Meeting

In Attendance: (*Commissioners*) – Cheryl Casciani, Ray Ehrlich, Lynn Heller, Brian Knight, Keith Losoya, Patrick McMahon, Sharon Middleton, John Quinn, Jake Ruppert, Ali Smith, Tom Stosur, Mary Washington, Ed Whalen
(*Staff*) - Beth Strommen, Alice Kennedy, Abby Cocke

Topics addressed:

- Minutes approved August 2011 meeting. Mary moves and Lynn seconds.
- Chair Report
 - Welcome
 - Looking to identify a short list of priorities to be visibly aggressive on
 - Will work to develop list, and will need Commission Members to participate in additional analysis once list is created.
 - Most of tonight's agenda is focused on the Baltimore Ecosystem Study (BES) and Green Infrastructure
 - Beth will be presenting on the Green Infrastructure vision
- Staff Report
 - Urban Farming – negotiating sites with the Farmers
 - Beth attended the Urban Sustainability Directors Network Annual Meeting in Denver. Baltimore was featured for the Urban Agriculture RFP Program
 - Office of Sustainability participated in a press conference to announce 2nd round awardees of energy Savers grant.
 - Climate Action Plan – getting very close to having an approved contract by the Board of Estimates
- Signing of Green & Healthy Homes Initiative Compact
 - Green & Healthy Homes (GHHI) is a public-private partnership that addresses home-improvement programs and how to streamline efforts to provide increased levels of service and cost savings. Programs such as lead abatement, asthma reduction, energy efficiency and how to do these in a cost effective, holistic manner.
 - There are 15 sites: 13 cities and 2 tribes
 - National effort lead by Ruth Ann Norton and the Coalition to End Childhood Lead Poisoning
 - By signing Compact, Commission is not committing resources or entering into a contract.
 - Compact has already been signed by Mayor Stephanie Rawlings-Blake
- Overview of Presentations – Beth Strommen
 - Baltimore Ecosystem Study (BES)
 - Research Partnership
 - Education
 - Partnerships

- Decision-making tools
- Urban Waters Program
 - 7 cities in Country chosen to participate
 - Linking Federal partners to ground work
 - Access to funding and resources
 - Connection to agency operations and mission
 - Regulatory assistance/flexibility
- Green Infrastructure Initiative
 - Implementation strategy that brings work of these partnerships to fruition in a strategic, cost effective manner:
 - Link multiple strategies like TreeBaltimore, stormwater improvements, urban agriculture etc.
 - Identify strategic areas for demolition and rehabilitation as ‘green infrastructure’ elements
 - Build program into existing/future funding opportunities
 - Establish partner roles in implementation and maintenance
- Overview of Baltimore Ecosystem Study – Jackie Carrera, Parks & People Foundation
 - Beyond excited to be here, and would like to thank the Chair, Cheryl Casciani for the invitation
 - We have been working since 1993 on this project
 - Group of researchers that come together to look at the Baltimore Ecosystem
 - In early 1990s, studies of vacant lots turning into usable spaces and the social, cultural and economic impacts
 - Yale interns looked at evidence and believed a lot to be learned here
 - US Forest Service: Ecosystem management
 - Would you create a national model that focuses on integration?
 - What would it look like to revitalize Baltimore through greening?
 - Result of network was beginning of watershed associations, Civic Works job training, Bon Secours Clean & Green
 - Looking at this before Green Infrastructure was a term
 - 1996 National Science Foundation: long term ecological research where there are people. Baltimore became first City to apply for funding and to this day is only one of 2 urban research sites
 - Studies have impacted Chesapeake Bay Executive Order
 - 6 year funding cycles – on 3rd
 - New Phase talking about Sustainability as a study, interaction driven by users
 - Look at the Commission as a resource. Great things are happening. Can share information. We (general assembly members) hear a lot from the advocates, the Commission can help answer questions. What is good about this bill? What can we do? Does it impact the goals of the City’s Sustainability Plan?
- Baltimore Ecosystem Study (BES) – Steward Pickett, Distinguished Senior Scientist, Cary Institute of Ecosystem Studies
 - BES is a “Distinctive Resource”
 - National Science Foundation, Urban Long-Term Research
 - Parts of the Program
 - Research – great science
 - Education – activities; research to improve
 - Community engagement – dialog.
 - Relationship to Green Infrastructure

- Research
- Decision making tools
- Education
- Partnerships.
- Research Products
 - Data
 - Analyses
- Example Data: Nitrate Pollution
- Example Data: West Nile Carriers
- Example Data: Lead in Yards
- Example Data: Effects of Sewer Retrofits
- Analysis: Road Salt in Streams
- Decision Making Tools: Tree Canopy Goals
- Decision Making Tools: Neighborhood Water Management
- Decision Making Tools: Lead in Yards
- Education Activities & Projects
 - Kids Grow
 - “My City’s an Ecosystem” – Curriculum
 - National
 - International
- Partnerships: NGOs, Communities, Agencies
- Ethic of Partnership: Dialog not delivery, Honest broker, Facilitate broader networks
- Where To: Sanitary City to Sustainable City
- BES III Guiding Question:
 - What are the effects of adaptive processes aimed at sustainability in the Baltimore socio-ecological system?
- Growing Partnership
 - National: Research Collaboration Network on Urban Sustainability
 - Regional: Baltimore Academy of Sustainability
 - City: Extend and link agency conversations
 - Sharing expertise
 - Sharing tools
 - Collaborative development of projects
 - Leverage limited human, social, and financial capital.
- Abraham Lincoln, in a time of existential crisis for the country no less, recognized the need for the decisions of government to be based on sound science, chartered the National Academy of Sciences, then the utility and practicality of a Baltimore institution to share crucial information that can help agencies, communities, and individuals make better informed decisions about the structure and function of the ecosystem they inhabit, then the term “academy” shines as an ideal for access to the best knowledge available for practical matters.
- BES & Green Infrastructure
 - Green = whole ecosystem function
 - Capitalize on ecosystem function for services
 - Multiple dimensions & BES:
 - Water: fresh, storm, ground, sanitary
 - Vegetation: public and private; managed and volunteer
 - Adaptive use of “vacant” land
 - Peoples’ well being
 - Baltimore as a human ecosystem.

- Urban Waters Federal Partnership Program – Morgan Grove, Research Scientist and Team Leader, Baltimore Field Station and Baltimore Ecosystem Study (BES), Northern Research Station, USDA Forest Service
 - Morgan is the lead Federal contact for Baltimore
 - Role is to get agencies to work together to address the needs that Baltimore has
 - 7 locations selected for help from the Partnership
 - Led by USDA, Department of Army Corps of Engineers, EDA, NOAA, CNCS, EPA, DHSS, NIEHS, HUD, DOI and DOT – Coordinated by White House Domestic Policy Council
 - Aligns and advances work of White House’s place-based efforts to revitalize communities, create jobs and improve the quality of life in cities and towns.
 - 5 ways to provide assistance
 - Provide Technical Assistance
 - Help monitor & asses did things work
 - Try to help Baltimore be competitive for money
 - New programs oriented
 - Get some of the Federal family member to be more flexible in regulation
 - Partnership will work with Baltimore to develop a Green Infrastructure Plan

- Green Infrastructure Initiative – Beth Strommen, City of Baltimore, Office of Sustainability
 - Traditional Infrastructure
 - Transportation and utility networks
 - Interconnected systems
 - Usually serves a single purpose
 - Often hidden or unsightly
 - Green Infrastructure
 - Network of natural systems and green spaces that provide ecosystem services:
 - Manage stormwater
 - Filter air pollution
 - Reduce urban heat island
 - Enhance habitat
 - Provide recreation
 - Stimulate economic development
 - Improve health & quality of life
 - Natural Areas:
 - Forests
 - Streams
 - Wetlands
 - Constructed Elements:
 - Urban Parks
 - Streetscapes
 - Stormwater Management Practices
 - Community Gardens
 - Green Infrastructure in other cities
 - **New York** (next 20 years):
 - City Commitment: \$1.5 billion
 - Leverage: \$0.9 billion
 - Cost savings: \$1.5 billion
 - **Philadelphia**(next 20 years)

- City Commitment: \$1.6 billion
 - Leverage: \$1.4 billion
- Other cities including **Richmond** and **Cleveland** have green infrastructure plans that target vacant properties.
- Green Infrastructure in Baltimore
 - Existing Green Infrastructure
 - Large Parks: Herring Run, Gwynns Falls, Chinquapin Park, Wyman Park, etc.
 - Scattered Smaller Parks and Green Space
 - Street Trees & Urban Tree Canopy
 - Recent Green Infrastructure Initiatives
 - City Initiatives:
 - Watershed 263
 - Power in Dirt
 - Community Initiatives:
 - Asphalt removal at Robert Poole Middle School
 - Rain Garden at Duncan Street Miracle Garden
- 2005 study of a pilot neighborhood in Philadelphia found: improving vacant lots (with “clean & green” landscapes of mowed grass, ringed with trees) increased surrounding property values up to 30% and planting street trees increased property values up to 10%.
- Potential in Baltimore: Stormwater
 - Federal mandate to meet the Clean Water Act and EPA regulations.
 - Small Watershed Action Plans (SWAPs) created by DPW have begun the technical assessment for the needs and opportunities of green infrastructure in Baltimore.
 - Prioritize Cost Effective Green Infrastructure
 - Stormwater Offset Banking
 - DPW has applied for a grant to create a stormwater offset and banking system.
 - System to track and credit stormwater offsets within a watershed.
 - Greater flexibility for developers.
 - Developers or other entities (e.g. DOT) could build stormwater management practices and bank them for future needs or sell them.
- Other Potential Benefits to Baltimore
 - Urban heat island reduction
 - Fresh food in food deserts
 - Air quality improvements
 - Increase the tree canopy
 - Recreation opportunities
 - Economic development
- Uses for GIS Data
 - To create a tool to provide context and background information for communities, developers and planners interested in green infrastructure.
 - To help the city prioritize green infrastructure investments.
 - Where is it needed?
 - Where would it be feasible?
 - Where would it be achievable?
- Green Infrastructure Typologies
 - Green infrastructure can take a range of forms, from large scale to small scale.

- Projects can be permanent or they can be used as a landbanking strategy.
 - Street Trees & Green Streets
 - Stormwater Pond
 - Stream Restoration/Daylighting
 - Rain Gardens & Bioretention
 - Native Meadows
 - Reforestation & Habitat Restoration
- Recommendations & Next Steps
 - Create a Green Infrastructure Taskforce that works with communities to coordinate efforts between DPW, Housing, Planning, etc. into a comprehensive Green Infrastructure Strategy.
 - Target federal funding through the Urban Waters Partnership.
- Comments
 - Lynn Heller – financing? DPW: maintain competitiveness through mitigation banking, city applied for mitigation banking grant
 - Lynn Heller – How can we (the CoS) help you advance
 - Jake Ruppert – MD stormwater regs: where is the “blessing for this” within those regs?
 - MS4 permit under negotiation, MDE to evaluate, Morgan eluded to working with enforcement agencies
 - Tom Stosur – personally pushing hard to put together to illustrate and break down into simple terms. Specific trigger: stormwater regs costing a lot of money. Get this on the table as a key way to address it. Changes landscape of the City for better
 - Rebecca Ruggles (citizen) – Health Impact Assessment: looking at health savings associated with this. Asthma reductions
 - Geoff Stack (citizen) – Is the Green Infrastructure plan one of the adaptive processes? What is BES studying in the next phase of research?
 - Howard Aylesworth (citizen) – impressed with presentation. Fundamental change improve life and create a more vibrant city. What role will the Climate Action Plan play?
 - Fits under the Climate Action Plan adaptation piece. CAP will help prioritize actions
 - Ryan Miller (citizen) – green roof company. Mr. Pickett question tree canopy that he will ask offline. Other question re: tax or fee for stormwater runoff for commercial owner
 - DPW: we are on it. Developing stormwater fee. How to reduce through BMPs
 - Morgan Grove (BES) – Watershed 263 green infrastructure projects. Science plan for how and would these things work
 - Patrick McMahon – a lot of work has been done. Should look at the work at Neighborhood Design Center. # of vacant at times overwhelming and it is an incredibly ambitious plan. Potential to make remaining vacant have more value
- Cheryl Casciani Chair – would like to table priorities discussion for next meeting. Would like to allow citizen to share concern and information with us.
 - Kimberly Sheridan, 21230
 - Concerned citizen who would like to help
 - Brought with her a LED street lamp hood that she purchased with her own money
 - Takes it to festivals and fairs to educate fellow residents
 - Would like to see the City move to installing LEDs on all street lights
 - She kindly showed the LED streetlamp to the assembled body and Commissioners

- It is a full spectrum light
- Anne Draddy from Department of General Services informed Ms. Sheridan of the pilot LED project funded through stimulus funds
- Alice Kennedy, Office of Sustainability, provided information that there currently is a City Council Bill in committee requiring LED streetlights.

Upcoming Events:

- Next Commission on Sustainability Meeting: Tuesday, October 25, 2011, 4 PM at 417 East Fayette Street, 8th Floor

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 - Collaborative development of projects
 - Leverage limited human, social, and financial capital.
- Abraham Lincoln, in a time of existential crisis for the country no less, recognized the need for the decisions of government to be based on sound science, chartered the National Academy of Sciences, then the utility and practicality of a Baltimore institution to share crucial information that can help agencies, communities, and individuals make better informed decisions about the structure and function of the ecosystem they inhabit, then the term “academy” shines as an ideal for access to the best knowledge available for practical matters.
- BES & Green Infrastructure
 - Green = whole ecosystem function
 - Capitalize on ecosystem function for services
 - Multiple dimensions & BES:
 - Water: fresh, storm, ground, sanitary
 - Vegetation: public and private; managed and volunteer
 - Adaptive use of “vacant” land
 - Peoples’ well being
 - Baltimore as a human ecosystem.

- Urban Waters Federal Partnership Program – Morgan Grove, Research Scientist and Team Leader, Baltimore Field Station and Baltimore Ecosystem Study (BES), Northern Research Station, USDA Forest Service
 - Morgan is the lead Federal contact for Baltimore
 - Role is to get agencies to work together to address the needs that Baltimore has
 - 7 locations selected for help from the Partnership
 - Led by USDA, Department of Army Corps of Engineers, EDA, NOAA, CNCS, EPA, DHSS, NIEHS, HUD, DOI and DOT – Coordinated by White House Domestic Policy Council
 - Aligns and advances work of White House’s place-based efforts to revitalize communities, create jobs and improve the quality of life in cities and towns.
 - 5 ways to provide assistance
 - Provide Technical Assistance
 - Help monitor & asses did things work
 - Try to help Baltimore be competitive for money
 - New programs oriented
 - Get some of the Federal family member to be more flexible in regulation
 - Partnership will work with Baltimore to develop a Green Infrastructure Plan

- Green Infrastructure Initiative – Beth Strommen, City of Baltimore, Office of Sustainability
 - Traditional Infrastructure
 - Transportation and utility networks
 - Interconnected systems
 - Usually serves a single purpose
 - Often hidden or unsightly
 - Green Infrastructure
 - Network of natural systems and green spaces that provide ecosystem services:
 - Manage stormwater
 - Filter air pollution
 - Reduce urban heat island
 - Enhance habitat
 - Provide recreation
 - Stimulate economic development
 - Improve health & quality of life
 - Natural Areas:
 - Forests
 - Streams
 - Wetlands
 - Constructed Elements:
 - Urban Parks
 - Streetscapes
 - Stormwater Management Practices
 - Community Gardens
 - Green Infrastructure in other cities
 - **New York** (next 20 years):
 - City Commitment: \$1.5 billion
 - Leverage: \$0.9 billion
 - Cost savings: \$1.5 billion
 - **Philadelphia**(next 20 years)

- City Commitment: \$1.6 billion
 - Leverage: \$1.4 billion
- Other cities including **Richmond** and **Cleveland** have green infrastructure plans that target vacant properties.
- Green Infrastructure in Baltimore
 - Existing Green Infrastructure
 - Large Parks: Herring Run, Gwynns Falls, Chinquapin Park, Wyman Park, etc.
 - Scattered Smaller Parks and Green Space
 - Street Trees & Urban Tree Canopy
 - Recent Green Infrastructure Initiatives
 - City Initiatives:
 - Watershed 263
 - Power in Dirt
 - Community Initiatives:
 - Asphalt removal at Robert Poole Middle School
 - Rain Garden at Duncan Street Miracle Garden
- 2005 study of a pilot neighborhood in Philadelphia found: improving vacant lots (with “clean & green” landscapes of mowed grass, ringed with trees) increased surrounding property values up to 30% and planting street trees increased property values up to 10%.
- Potential in Baltimore: Stormwater
 - Federal mandate to meet the Clean Water Act and EPA regulations.
 - Small Watershed Action Plans (SWAPs) created by DPW have begun the technical assessment for the needs and opportunities of green infrastructure in Baltimore.
 - Prioritize Cost Effective Green Infrastructure
 - Stormwater Offset Banking
 - DPW has applied for a grant to create a stormwater offset and banking system.
 - System to track and credit stormwater offsets within a watershed.
 - Greater flexibility for developers.
 - Developers or other entities (e.g. DOT) could build stormwater management practices and bank them for future needs or sell them.
- Other Potential Benefits to Baltimore
 - Urban heat island reduction
 - Fresh food in food deserts
 - Air quality improvements
 - Increase the tree canopy
 - Recreation opportunities
 - Economic development
- Uses for GIS Data
 - To create a tool to provide context and background information for communities, developers and planners interested in green infrastructure.
 - To help the city prioritize green infrastructure investments.
 - Where is it needed?
 - Where would it be feasible?
 - Where would it be achievable?
- Green Infrastructure Typologies
 - Green infrastructure can take a range of forms, from large scale to small scale.

- Projects can be permanent or they can be used as a landbanking strategy.
 - Street Trees & Green Streets
 - Stormwater Pond
 - Stream Restoration/Daylighting
 - Rain Gardens & Bioretention
 - Native Meadows
 - Reforestation & Habitat Restoration
- Recommendations & Next Steps
 - Create a Green Infrastructure Taskforce that works with communities to coordinate efforts between DPW, Housing, Planning, etc. into a comprehensive Green Infrastructure Strategy.
 - Target federal funding through the Urban Waters Partnership.
- Comments
 - Lynn Heller – financing? DPW: maintain competitiveness through mitigation banking, city applied for mitigation banking grant
 - Lynn Heller – How can we (the CoS) help you advance
 - Jake Ruppert – MD stormwater regs: where is the “blessing for this” within those regs?
 - MS4 permit under negotiation, MDE to evaluate, Morgan eluded to working with enforcement agencies
 - Tom Stosur – personally pushing hard to put together to illustrate and break down into simple terms. Specific trigger: stormwater regs costing a lot of money. Get this on the table as a key way to address it. Changes landscape of the City for better
 - Rebecca Ruggles (citizen) – Health Impact Assessment: looking at health savings associated with this. Asthma reductions
 - Geoff Stack (citizen) – Is the Green Infrastructure plan one of the adaptive processes? What is BES studying in the next phase of research?
 - Howard Aylesworth (citizen) – impressed with presentation. Fundamental change improve life and create a more vibrant city. What role will the Climate Action Plan play?
 - Fits under the Climate Action Plan adaptation piece. CAP will help prioritize actions
 - Ryan Miller (citizen) – green roof company. Mr. Pickett question tree canopy that he will ask offline. Other question re: tax or fee for stormwater runoff for commercial owner
 - DPW: we are on it. Developing stormwater fee. How to reduce through BMPs
 - Morgan Grove (BES) – Watershed 263 green infrastructure projects. Science plan for how and would these things work
 - Patrick McMahon – a lot of work has been done. Should look at the work at Neighborhood Design Center. # of vacant at times overwhelming and it is an incredibly ambitious plan. Potential to make remaining vacant have more value
- Cheryl Casciani Chair – would like to table priorities discussion for next meeting. Would like to allow citizen to share concern and information with us.
 - Kimberly Sheridan, 21230
 - Concerned citizen who would like to help
 - Brought with her a LED street lamp hood that she purchased with her own money
 - Takes it to festivals and fairs to educate fellow residents
 - Would like to see the City move to installing LEDs on all street lights
 - She kindly showed the LED streetlamp to the assembled body and Commissioners

- It is a full spectrum light
- Anne Draddy from Department of General Services informed Ms. Sheridan of the pilot LED project funded through stimulus funds
- Alice Kennedy, Office of Sustainability, provided information that there currently is a City Council Bill in committee requiring LED streetlights.

Upcoming Events:

- Next Commission on Sustainability Meeting: Tuesday, October 25, 2011, 4 PM at 417 East Fayette Street, 8th Floor