

## **RASCL SUMMIT NOTES:**

### **AJ Schall (DEMA Director): Welcome and Opening Remarks**

Topic: Delaware's New All-Hazard Mitigation Plan

Why mitigate?

- Flooding/Infrastructure Damage
- Inconvenience and damage cost tax dollars
- Serious problems not always caused by massive storms or hurricanes or nor'easters
- To become more resilient
- \$1 on mitigation saves \$6 in future disaster costs

Goals of mitigation

- Provide strategy at all levels of government
- Better position to receive funding

Entire community effort, not just a DEMA effort

- Public involvement
- Many contributors

The mitigation plan

- Hazard identification
- Vulnerability assessment
- Capability Assessment
- Mitigation Strategy

Takeaways

- Stay in contact
- Make sure local mitigation plan has been adopted
- Help spread the message of savings
- Team sport, takes a partnership
- Land management is a must

## **Panel One: Stemming the Tide, Investing in a resilient future**

**(Lisa Sharrard, John Kane, Darlene Finch, Tony Pratt)**

**Lisa Sharrard** (Principal, U.S. Flood Solutions, LLC)

What are our responsibilities?

Flood damage and insurance takes money out of local economies

Premiums increasing 25% per year

Mitigation makes sense over repeated losses

We all have plans, but need implementation to rescue people who need help

FEMA moonshot

- Double flood insurance policies by 2020
- Insurance more fair and equitable
- 4x Mitigation funding, implement strategies on national level

**John Kane** (Senate Environment and Public Works Committee)

One burning question: how to get money, how to get attention to project

Congress: authorization and appropriation

7001 report – eligible projects to authorize

Most projects in DE focused on beaches and ports, ACOE Philly focused in NJ and PA

USACOE

- What corps does is made so by us
- 7001 process
  - Compiled list of authorized projects into a bill which can be appropriated
- Assistance to help us work with the corps, workshops
  - Education opportunities through corps to teach people the process

Problem is Delawareans are quiet. Need to speak up, ask for help with funding.

**Tony Pratt** (Consultant to the Association of Coastal Towns)

Consistent themes on this morning's presentations

- We don't have the gumption to implement projects needed to prepare and mitigate
- In coastal areas, investment might be more like \$10 saved for 1 spent
- We need databased return on investment, better information
- How to make more compelling argument to those appropriating money?

- Monetize the damage and savings
- Find hidden costs, social costs
- Lost wages, suicide, depression, child abuse
- We typically prefer as a people to spend money after disasters instead of before
- Maybe we include mitigation in National Defense budget?
- Find open space to move residential areas out of flood prone areas

#### **Darlene Finch (NOAA Office for Coastal Management)**

##### Fourth National Climate Assessment

- Lots of data, climate change, flooding, rising temps, etc
- DE impacts
  - 30 billion dollars in property loss by 2100
  - Rising temps, coastal flooding, etc

##### NOAA

- Gathering data, make it useful
- Resources
  - Climate.gov (education, training, data, lots of info)
  - Climate explorer
  - National Centers for Environmental Information
  - State Summary of Climate information for Delaware
  - US climate resilience toolkit (resources, case studies, steps to resilience, etc)
  - Digital Coast (a lot of tools relevant to resilience)
- Thoughts about data delivery
  - DE needs more local data to find the best solutions
  - All levels of government need to work together for this to work

##### Funding

- Remember nature of funding, federalism, demonstrate results
- Bigger impacts attract more funding (6 communities better than one)
- Innovation appeals to federal government
- Broader impacts more attractive, crossing state lines, example for other projects
- Think outside the box, think ahead, consider private funding
- Ask for feedback if unsuccessful

#### **Questions from Audience**

1. Anti-poverty association – wants to hear more about protecting vulnerable communities

Kane – army corps focuses on benefit to cost ratio, businesses, local economy

Wants this to change to focus on impact to low income residents

Mitigation money comes second to recovery

Projects need to be authorized first, blind to economics, but needed first so  
when federal money becomes available it's good to go

2. Nature based solution and CRS, successes in Carolinas?

Lisa – open spaces that can be enjoyed, gives water a place to go

Look at how to be creative and use the spaces we have in an innovative way

Maximize resources

If you need help you must ask for it

CRS is a great way to rethink what's happening in local governments

**Polling Questions:**

What type of mitigation project should be a priority in your community?

Retreat, stormwater, flooding, beach, protection, preservation

Stormwater, flooding, replenishment (top 3)

Which of these recommendations by fed partners hardest to implement?

Identify grant opportunities and resources (32%, highest by a lot)

Prioritization of mitigation in advance (17%)

Panel wants us to broaden networks, talk to successful communities, talk to feds ahead

(Trend is a strong move away from grants to loans –Kane)

## **Panel Two – Show Me the Money: New Out of the Box Funding Initiatives**

**(Ann Gravatt, Tony DePrima, Ellen Kohler)**

**Ann Gravatt:** reviewed Transportation Alternatives Program (TAP) – a DelDOT program that facilitates community driven projects. Reviewed project development process and examples that have been done under the TAP program. Hopes to spark interest in project sponsors that might be eligible to apply to start developing funding strategy. Community driven so communities go to DelDOT for project ideas.

TAP is funded through federal highways based on 2009 appropriation. Ann reviewed types of qualifying projects (listed on PPT), including stormwater management to address environmental mitigation. Typically TAP projects are smaller streetscape projects (has to be related to surface transportation) that local communities take on themselves. DelDOT administers the projects. Match funds are necessary.

DelDOT will undertake a study (engineers, landscape architects etc) to make a plan, then go to design and then construction. Some communities have a plan and DelDOT implements a portion of the project;

Examples of TAP projects that are context sensitive and address sustainability (Main point: Sustainability can be context sensitive and can enhance the streetscape):

1. Seaford – had a plan to beautify the Seaford waterfront park going in to the city. Applied for TAP and got funding. Project includes street trees which addresses heat and water quality by minimizing impervious surfaces as a form of mitigation. Roads have flow-through stormwater bio-retention facility. Doesn't manage water quantity but does manage water quality. Projects can be pretty and effective, and small-scale projects are helpful. Leaving concept planning now and going in to design.
2. Wilmington – Delaware Avenue. Streetscape and traffic calming project. Street trees were added to encourage comfortable walking and mitigates stormwater by including a potential bio-retention facility of low maintenance landscape plantings that can withstand wet feet.
3. Bethany beach – Anchorage Pond: Sea colony sponsored this project with Delaware CIB. They wanted to minimize pollutants going into their waterways and mitigate the quantity. They removed a slip ramp and replaced with a multi-use path. They plan to build a beautiful facility to address environmental concerns and adds to quality of life. In the design phase now. Will go into construction next fall.
4. TAP projects can be also be small/lower cost in scale (e.g. Permeable sidewalks minimize impervious surfaces as a mitigation strategy).

What is needed (on PPT): a sponsor (local governments, natural resources or public land use agencies, nonprofits; 20% non-federal match). Broken out between design and construction phases. Project cap 1 million for design and construction. Concept planning covered by DelDOT.

To apply, go through NCC WILMAPCO, or for KC/SC go to Ann:

[www.deldot.gov/programs/tap/index.shtml](http://www.deldot.gov/programs/tap/index.shtml).

**Dr. Tony DePrima** – Delaware Sustainable Energy Utility Director. Looks for ways to save residents and businesses money through sustainable energy. [www.energizedelaware.com](http://www.energizedelaware.com)

Tony started by identifying lots of programs across businesses, homes, non-profits that promote renewable energy and were present in the audience: New Ecology (Bahareh); Preston Lee with Lewes board of public works – small program trying to increase activity in home performance. Megan Stanley is energy manager for Division of Energy Facilities for State of Delaware. Helping to finance to help Colonial School District and Indian River School District to become more energy efficient. Did solar projects with Delaware National Guard. Financing Jefferson school and solar system with battery back-up to keep power going during outages.

Talked about Energize Delaware C-PACE initiative (Property Assessed Clean Energy). Mission to reduce energy usage and reliance on fossil fuels through grants/loans/TA/education. Financing program bringing private sector investors into the property assessment process. C-PACE is active around country since 2009. C-PACE signed by Carney in August, enables DE to roll out C-PACE program. Requires program guidelines in consultation with stakeholders. Goal is to roll out program in first quarter 2019.

New way of financing energy efficiency and new renewables in C&I building retrofits and new construction. Takes private sector loans and works with counties to transform them to public benefit assessment. More secure than other lending and doesn't require personal guarantees. Can be attractive financing for energy efficiency and renewable energy projects.

Reviewed eligibility (e.g anything that saves energy or uses clean energy). Focuses on existing buildings.

In Delaware, project *does* have to be related to energy. It is happening in other places where resiliency is an eligible project, and perhaps as this program gets going the legislation could be amended.

This is county based, so counties have to participate. Hoping to have all three counties sign up.

DESEU provides centralized oversight of the program, so will operate same in Sussex as it operates in NCC. Open market access to private capital.

**Ellen Kohler:** Works with communities to address sustainability challenges through policy analyses, research, technical assistance etc.

Need to understand where the problems come from first:

- Past development: Allowed development to occur without sufficient stormwater management. Requires retrofits on existing development
- Aging infrastructure
- Heavy storm events: lots of storm and waste water systems are designed to take advantage of gravity so everything flows down into waterways. Storm events create other infrastructure challenges. Urban managers in MD acknowledge that flooding is occurring despite stormwater systems in place.
- Sea level rise and land subsidence. Drinking water wells will be affected as sea level rise occurs. Salt water intrusion into water supply. Also experiencing more salt entering rivers and streams through stormwater runoff (salts that are parts of other chemicals, not ocean salt)

Solutions and money (ppt): Look for examples in region and existing tools to leverage, and existing funding mechanisms to figure out how to implement. Local solutions to address local problems.

### Examples:

- Camden County Municipal Utility Authority: over-performs on NPDES program (they do better than required effluent limitations). View water quality protection as their role. Found technology to put on end of pipes to catch bio-solids. Found loans to pay without raising rates. Partnered with stakeholders to implement green infrastructure. By reducing stormwater entering system, better able to manage waste-water. Invests in energy sustainability, so utility can function despite a storm event (e.g. solar systems). Aims to be energy sustainable by 2020.
- Derry Township Municipal Authority: Waste water treatment plant flooded badly. They assessed what is happening throughout the community and realized they have failing stormwater pipes that need to be replaced. Engaged community stakeholders and got support to shift priorities, and \$ to fund the work. Expanded authority of the waste-water authority to include stormwater. Implemented stormwater fee, to fund green infrastructure/stormwater pipe replacement projects).
- Prince George's County Clean Water Partnership: example of embracing sustainability as an economic driver in community. Partnered with engineering firm. Contract required that company not only treat stormwater and plant trees, but also include job training and creation. Made sure kids came out of community with relevant job skills etc.

### Other tools: resources for financing:

- Land use ordinances can be used as financing tools. Tell us what we can and can't do. For example, if you put in too much impervious cover then you have to manage for this much stormwater. Can use ordinances to prioritize land uses to protect water resources and improve water quality.
- How do we use state revolving fund dollars. Make sure we aren't investing in infrastructure that is going to be inundated by SLR. Can use \$ to incentivize green infrastructure/sustainability projects.
- Delaware went through assessment of water quality challenges in state (water quality and flood abatement task force). So now we know what the problem is. Strategies for financing water quality restoration in Delaware is a report that is available
- Final message – resources are in our communities, just need to fit them to achieve sustainability.

### Panel II Audience Questions:

- Are there DE examples of solarizing/improving sustainability of WWTP and stormwater TP.
  - o Tony DePrima – Wilmington got financing from DNREC for solar at one of their facilities and have been talking about it in Lewes. KC also put some solar in when Hans was there.
  - o Ellen – drinking water TP in Wilmington does have solar. Might be an opportunity to frame projects for funding that come through state revolving fund \$.
- Q for Ellen. Do we need to be a municipality to work with finance?
  - o Ellen – we will partner with anyone.
- Question on financing. One of the barriers in communities is getting voter approval for the debt that comes with the financing opportunities. Is there an education/outreach need to get ahead of that?
  - o Ellen – agree. Part of financing strategy has to be communication, but also know your community well and what that additional \$ figure would mean to people in the community. Consider communities that don't have economic resources to deal with a rate increase. Demonstrate that we've maximized existing opportunities and been as efficient possible.

Show that we looked at existing opportunities for collaboration and partnerships before asking for more money.

- Tony D: were teed up to loan money for an HVAC system and when town checked their charter, found they couldn't accept the \$. Had to change their charter before funding. So need to look at existing laws. Interestingly, school districts don't use local funds so doesn't have to go for referendum. Not sure if same would apply for municipal governments.

### **RASCL interactive questions**

- What is the most critical infrastructure or natural resource that Delawareans should sustainability manage or invest in: Stormwater, drinking water, schools, green space, clean energy stood out.
- What kinds of tech innovations are needed to advance sustainability and resiliency: Solar, wind, infrastructure
- What is the single most important thing Delawareans can do to encourage buy-in to sustainability goals: connect sustainability to economic development benefits

### **Keynote Lisa Sherrard US Flood Solutions ([simplyflood.com](http://simplyflood.com))**

Mentioned database for funding resilient communities.

NFIP Reauthorization. FEMA is looking at doubling NFIP coverage by 2023, and increasing investment in mitigation. Looking at re-doing rating structure (Risk rating 2.0). Looking at replacement costs of insured structures. Using aerial photography to understand types of architecture in an area and use that technology to rate structures. By April 2019, coming out with published rates, starting in Southeast. Testing the rates and by April 2020, will roll out nationwide.

- Some communities in audience have a standalone flood plain management ordinance. Current FEMA flood insurance program doesn't take into account future conditions (floodplain management regulations have not been updated since 1989, despite increasing frequency of disasters). Communities should realize that meeting basic FEMA requirements are not sufficient to protect against flooding. Part of what communities need to start with is looking at local building codes. If you require free boarding, it will benefit you in the long run.
- Flood Maps: 100 year/1% chance flood is outdated. People seek getting out of insurance requirements when they can. Need to look beyond this because it doesn't account future conditions, runoff, sea level rise, doesn't take anything into account except existing conditions to prepare the preliminary map. The data are outdated the minute the model is run.
  - The new maps are live internet tools. Can figure out if buildings are in or out, but need to recognize maps aren't perfect, and adjacent properties are also at risk.
  - Flood insurance is an option for purchase if they are in B, C, X zone if paid off mortgage. But usually homeowners drop insurance when they pay off the mortgage. 12% of US homeowners have flood insurance. In DE 5.4% have flood insurance. 4% is national average.
  - Rates increase 25% a year when building becomes severe repetitive loss. Then people can't afford flood insurance. Get applications done so ready when grant funds become available.



- Mitigation
  - What are communities doing? Building and floodplain ordinances need to address flooding. Most ordinances don't exceed FEMA standards, so communities will likely flood.
  - Mitigation plans: People have mitigation plans through county and state. Municipalities should contact counties to find out about them, participate in updates.
  - Community rating system
    - A few communities in the community rating system. If it prevents flooding in your community it is worth your time.
    - Zoning and flood plan codes need to consider local conditions. Height restrictions will flatten roofs as buildings are elevated. Might lead to smaller homes, which might decrease tax revenue and fewer jobs.
    - If you adopt minimum code is not going to protect you from flooding. **FEMA minimum standards are not enough.**
    - High flood insurance premiums affects communities and economies – expensive for individuals to pay, hard to sell because have to factor in insurance into mortgage. When too expensive, structures are abandoned, removes the tax base. Small businesses might lose everything in a flood and can't operate.
- Reviewed Action items for community
  - Look for the real flood hazard beyond the FEMA maps; Join community rating system; Update and implement mitigation plans; Update local codes and ordinances; Seek public input; Ask for help if you don't know where to go (e.g. state, federal agencies, county emergency management, coalition).
  - Mitigate now. Just because something isn't required doesn't mean you shouldn't offer the option (e.g. save money on flood insurance, by reducing rates if you elevate your house up).

## Audience Questions

- After a nor'easter, got an email from a resident that included a picture of her property under water. She said what do I do about this. She was in the flood plain, an older home. He offered to petition the town to fill in the canal by her property, but she didn't want to lose waterfront amenity.
  - Education of real estate agents important. There are mandatory disclosure laws in DE. So a real estate agent or property owners have to disclose if they know a property flooded, but no way to know if it flooded two home owners ago. Some homeowners had no idea that they might be knocked with repetitive loss category if they file a claim. The buyer needs to ask more questions about the hazards associated with the structure. It is your job to get the word out about what questions they should be asking.
- What is status of reauthorization of national flood insurance program?
  - Expires Friday, supposed to be a continuing resolution. But congress is so busy right now and with changing leadership in the house that I think they will continue it until spring and kick the can down the road once again.

## **Panel Three – Stories from the Field- Local Success Stories, Best Practices, and Lessons Learned**

**(Brian Shannon, Ed Lewandowski, Leah Kacanda)**

**Brian Shannon** (Laurel Redevelopment Corporation) and **Ed Lewandowski** (DE Sea Grant)

Case Study: Laurel DE Redevelopment

Creative funding strategies

Visioning exercise

- What places have you visited, what did you like, not like, want to add, future?

Next step: series of studies

Kayak launch, nature based children's playground, green infrastructure

Rebrand and market community, nature destination based

Diverse sources of funding and assistance

Lessons learned:

- Raising money takes time
- Develop compelling story
- Use network and circle of influence
- Identify organizations with similar or overlapping goals
- Share and celebrate successes

**Leah Kacanda** (City of Wilmington Office of Economic Development)

Case Study: South Wilmington Wetland Park

26 million dollar project

Plans are crucial, not only for preparation but for recordkeeping and communications

Project goals:

- Mitigate flooding, water quality, functioning wetland, clean brownfield, mosquito control

Modelling results before project

Partnership and Funding

- Community engagement
- Support from all levels of government
- Non-profit and community partners
- Funding sources:
  - From the city (water/sewer fund)

- State land conservation loan
- NOAA Grant
- Support from stakeholders key

### **Panel 3 Discussion/Questions**

1. Why isn't the area of the project bigger? (Wilmington)

Private owner holdout, hopefully ending soon

2. What is CTF?

Community transportation fund, for DE only

### **Polling questions:**

Besides the funding itself, what is the most frequent impediment to funding?

1. Public stakeholder buy in (34%)
2. Lack of political will (29%)
3. Lack if staff or expertise (21%)

Name one sector in your area that might entertain a new partnership?

Schools, Sea Grant, universities, breweries, agricultural

### **Discussion Session – Where do we go from here?**

1. What new idea resonated the most with you today?
  - Funding, DDFRC, community, 7001, redevelopment
  - So much of our regulations based on outdated 100 year flood, eventually we'll have to shift our standards and perspective
  - Need quality leadership, and building partnerships
  - Encouragement of private partnerships
  - We have to think outside of the box, look deeper, don't just rely on one set of information
  - Land use regulations, zoning either done poorly or outdated, needs to be part of the discussion
  - Question about what information RASCL will provide. Let us know what you want to hear about.
2. Name one step you will encourage community/org to take to promote resiliency and sustainability
  - CRS
  - Targeting outreach
  - Follow RASCL
  - Advocacy
  - Mitigation/sustainability planning
3. How can RASCL be most effective in advancing DE's capacity for resiliency and sustainability
  - Identify sources of funding

- Develop new plans, policies and ordinances
- Training and technical assistance
- Connect us with information and experts

Looking for RASCL support for including legislators. RASCL has state agencies as members, but RASCL can objective information to the legislators.

RASCL can come up with priorities to take to state as wish list when new budgets are made

RASCL can help develop best practices list or ideas from outside the state for guidance

4. Any other thoughts and ideas? Were expectations met? Critique of sessions?

This year was better than last year, more involvement statewide. RASCL was asked to be more involved at state and federal level, and RASCL delivered.