

Good Morning Mr. Chairman,

I would like to personally thank you for your leadership and for convening this hearing today in South Florida.

As you know, Florida, and especially South Florida, is vulnerable to the effects of Climate Change.

During my public service as a Broward County Commissioner, I have devoted a great amount of effort -- and passion -- to addressing Climate Change. And the more I learned, the more I realized that the issues facing my county were the same issues facing my sister counties here in South Florida. The scale of the need for comprehensive responses and pragmatic solutions meant that we were going to have to think like Mother Nature does: regionally, holistically, and long term. From that idea began a four-county effort committed to working across the human-imposed boundaries of cities and counties. We also faced the significant journey of working beyond party lines. After all, when saltwater has overtopped the seawall and filled your swimming pool, or sewer water is backing up in your house, do you care which party the person you call for answers belongs?

I am thrilled to be before this esteemed panel today to share with you the exciting ways our super region, one which represents 5.5 million people has worked together to reach new heights of coordination and cooperation by embracing a regional approach to resiliency.

I would first like to begin with what some might term as the “doom and gloom” outlook we are facing, and then share with you why I believe there is good reason for calm optimism.

The sobering truth is that Broward County and the South Florida region are facing significant vulnerabilities. They include:

- Coastal and inland flooding
- Storm surge
- Saltwater contamination of drinking water supplies
- Impacts to water supply and wastewater systems
- Beach erosion
- Threats to public and private property and infrastructure.

We will also experience:

- Hotter temperatures
- Public health challenges
- Ocean acidification and warming with impacts to coral reefs and fisheries
- Additional stresses on the Everglades.

Many of these impacts will affect critical resources, community sustainability, and the heart of our economic engine – tourism.

Sea level rise is just one result of Climate Change, but the challenges we are facing from this one issue alone paint a daunting picture. To give you an idea of the scope of the issue for Palm Beach, Broward, and Monroe counties, at just one foot of sea level rise up to \$4 billion of taxable property will be inundated with seawater. That number does not even include Miami-Dade County. At three feet, that

figure rises to \$31 billion. Keep in mind that a significant percentage of our sewer systems are gravity-fed, meaning that waste literally rolls downhill. These figures do not take into account the inland impacts that would take hold when these non-pump-operated systems begin to fail.

Sea level rise also affects our drinkable water, as salt water migrates inland into the fresh water aquifer; we lose our fresh water wells. The salt water intrusion line in Broward County has been creeping steadily west. As that salt water intrusion line marches ever westward and we lose more and more wells, local governments will have to seek water from new sources. Local governments may look to the nearest utility, but there is no guarantee the infrastructure required to provide water to so many new customers will exist. This situation will pose great difficulty for local governments.

It is especially daunting for Broward County, when you consider that unlike Miami-Dade County, which has a large water utility, Broward has 28 separate individually governed water utilities supplying 31 cities. The cost of reaching inland to compensate for loss of wells in the coastal zone is estimated to be upwards of \$350 million in Broward County alone.

Restoring the Everglades must remain a high priority at all levels of government, not only for the value of maintaining a unique ecosystem, but also because restored freshwater flow through the Everglades system will help protect drinking water supplies threatened by sea level rise.

Sea level rise also increases the severity of flooding and makes drainage more expensive. Broward County consists of 1,800 linear miles of canals and myriad retention lakes all connected and designed to keep us dry. Most people do not know that the urbanized area of Broward accounts for only one-third of the actual acreage in our county. The other two-thirds are held in conservation land, our beautiful and one-of-a-kind Everglades. The Everglades has a higher elevation than the urbanized area and the cost of pumping and maintaining water levels continues to escalate.

Here are few other examples from the region.

Fort Lauderdale recently estimated that it might cost \$1 billion to upgrade the city's storm water system in the face of rising sea levels and increased flooding. Miami Beach pegged its storm water upgrades at \$400 million. Pumps to replace gravity water control structures are estimated at \$50 million each. This doesn't speak to the improvements needed within associated drainage basins, or improvements to roadways and other infrastructure. There's no question that these are large numbers. These examples show that these issues are not limited to just one city or county.

Now the reasons for my optimism.

In 2009 Broward, Palm Beach, Miami-Dade and Monroe Counties came together to form the Southeast Florida Regional Climate Change Compact. I am proud to say that we have been able to work together on an agreement to reduce greenhouse gas emissions and to adapt to climate change impacts we are already living with.

While we have been recognized both nationally and internationally as a leading example of effective local climate action, I am most proud of the work the staff of each county has done in putting together our Regional Climate Action Plan covering 110 specific recommendations for resiliency divided into seven categories:

1. Energy
2. Water
3. Transportation
4. Sustainable Communities
5. Natural Systems
6. Agriculture
7. Outreach and Public Policy

While the Regional Climate Action Plan leaves it up to the individual counties and cities to implement the plan in the ways which work best for them, we are finding that in practice, it makes fiscal and practical sense to work together. It is this spirit of cooperation, the ability to share and learn from each other, which has led to accelerated action throughout our region.

Examples of what we have seen so far include:

- Incorporation of climate change considerations into county comprehensive plans and other planning documents,
- Efforts to advance a regional surface water reservoir providing water supply benefits for communities in Palm Beach, Broward and Miami-Dade counties by improving surface water storage, diversion of storm water runoff and aquifer recharge.
- The formation of a coastal resilience work group to expand the use of coral reefs, mangroves, dunes and other living shoreline projects. When integrated with urban systems, these provide optimum shoreline protection, habitat preservation, or restoration.

And while all of this gives us great reason to celebrate success, the truth is, we could not have done it without our Federal partners.

- Agencies like NOAA and USGS helped the four counties baseline our projections for how high the sea will rise and by when so we are all working from the same set of assumptions.
- A grant from NOAA is enabling Broward County, the South Florida Regional Planning Council and the City of Fort Lauderdale to explore the use of "Adaptation Action Areas." A recent innovation in Florida law that allows communities to identify climate-vulnerable areas and prioritize where adaptation investments should go first.
- The Regional Climate Action Plan mitigation priorities include mitigation and programs like the Go Solar Florida program which is funded by a US Department of Energy Grant. This program makes installing rooftop solar easier and more affordable for homeowners.
- Broward and Miami-Dade counties have worked with the US Geological Survey to create advanced hydrologic models that look at the interaction between sea level rise, stormwater and potable water supply.
- Compact Partners are benefiting from a Federal Highway Administration grant to assess the vulnerability of transportation infrastructure to climate change.

Local governments and regional initiatives like the Compact play a significant role in supporting regional decision making with technical support, expertise, and financial assistance from the federal government.

Although the local level is where much of the needed adaptation to climate impacts will happen, we are still in great need of policies at the state, federal and international levels that reduce carbon pollution and accelerate the transition to a clean energy economy.

I have the personal honor and privilege of serving on President Obama's State, Local and Tribal Leaders Task Force on Climate Preparedness and Resilience. I remain immensely impressed with our President's consistent recognition that local governments are already in the trenches dealing with the impacts of climate change and that we have common sense solutions to offer.

Our President, through the creation of this Task Force, has drawn together governors, mayors and county commissioners from all over the country to craft recommendations to help the Federal Government understand exactly what they what we need in order to become prepared for and resilient to the effects of a changing climate, whether its drought, or flood, or fire or hurricanes or mudslides.

Senators, I must tell you that it is not only impressive that our President is listening and reaching out to us, but so too, are you. You have rightly recognized that, as my mom used to quip, "If you're not at the table, you're on the menu."

On behalf of the entire Broward County Commission and our sister Counties, Miami-Dade, Palm Beach and Monroe, and more than 100 cities in the South Florida region, I thank you for the opportunity to sit at your table today and share my insights.