



**HYDE COUNTY
DISASTER RESILIENCY
WORKSHOP
APRIL 21, 2015**

**HOSTED BY:
THE COUNTY OF HYDE
N.C. RURAL CENTER
N.C. SEA GRANT
N.C. COASTAL FEDERATION
HYDE COUNTY SOIL & WATER**

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On April 21, 2015, Hyde County hosted a Disaster Resiliency Workshop. The workshop was co-sponsored by the North Carolina Rural Center. The meeting began with registration at 8:30 AM. A light breakfast was provided.

Our featured speakers were Alice Keeney, retired Hyde County Planner and Economic Developer, Jessica Whitehead, PhD, Coastal Communities Hazards Adaptation Specialist with North Carolina Sea Grant/North Carolina State University, Erin Fleckenstein, Coastal Scientist with the North Carolina Coastal Federation, and Daniel Brinn, North Carolina Agricultural Cost Share Technician for the Hyde County Soil and Water Conservation District. Our speakers were chosen based on their wide range of knowledge about hurricane impacts in eastern North Carolina and Hyde County, their experience in disaster recovery preparation, recovery and mitigation and the preservation of coastal resources. We have had the pleasure of either working with these individuals directly or indirectly on other projects related to disaster preparedness and community resilience and have first-hand knowledge that these individuals were the perfect fit for our workshop. In choosing the topics for discussion, we wanted to first tell the story of Hyde County's experiences with hurricanes and disaster recovery, talk about the steps that the county is taking to address future disaster situations and share with participants the flood mitigation strategies that we have put in place and the results of these strategies in the hope that others can gain flood resiliency knowledge that can be utilized in their own communities.

We began advertising for our workshop in mid-March. We distributed flyers (Attachments A & B) to local businesses in Hyde County, and published the announcement in our newsletter, Hyde Happenings, on our Facebook and Twitter websites, and on our official website, www.hydecountync.gov. We did a press release on March 26, which was also published on our website, and sent the flyer to five newspapers; the Washington Daily News, The Coastland Times, the Roanoke Beacon, the Ocracoke Observer and the Ocracoke Current. We sent email invitations that included our flyers to county government officials in our offices and the surrounding counties of Beaufort, Washington, Tyrrell, Pamlico, Dare, Pasquotank, Perquimans, Currituck, Pitt and Camden. Invitations and flyers were also sent via email to county chambers of commerce, fire departments, the Hyde County school system, Beaufort Community College, local banks, realty companies and farmers. People on the contact list were encouraged to share the invitation with anyone that they thought would be interested, including volunteers and non-profit organizations. The NC Rural Center also sent invitations to their contact lists.

Approximately 33 people attended the workshop. There was a variety of participants present, from county officials to county chamber members, school officials, non-profit businesses, community college officials, American Red Cross, banks and building inspectors.

Our introductory speaker Alice Keeney shared her personal experiences with flooding and hurricanes as a native of Carteret County, North Carolina and as Hyde County's planner and economic developer for 15 years (1997-2012). During Ms. Keeney's employment, Hyde County experienced the wrath of Hurricanes Bonnie, Dennis, Floyd, Isabel, and Irene. Hurricanes Bonnie and Dennis did cause some destruction in Hyde County. With the passage of Bonnie came the first of several hazard mitigation programs to elevate homes in Hyde County. Twenty-one homes became eligible for elevation and work began. However, Hurricane Bonnie was just a mere reflection of what was to come. First, Hurricane Dennis hit Hyde County twice, bringing with it more rain than the county could handle. Then, Hurricane Floyd arrived in September of 1999 and caused massive record flooding and was categorized as one of the nation's most costly hurricanes in the 20th century. Water levels were especially high in Hyde County, including Swan Quarter, Sladesville, and Scranton. At least 13 fatalities were reported for the 15-county warning area that included Hyde County, along with approximately \$410.6 million in property damage and \$413.6 million in crop damage. The Hyde County government offices received 18" of water from the storm surge. The Office of Planning and Economic Development took over 150 applications for elevation or acquisition. The mitigation process has continued into the present time with the county having elevated, acquired and or replaced hundreds of flood damaged or flood prone structures.

In September of 2003, Hurricane Isabel arrived. The Hyde County Government offices were flooded yet again, receiving 36" of water. Hyde County experienced significant storm surge damage with hundreds of homes flooded. Storm surges from 2 to 6 feet occurred across Hyde County with the highest water levels in Swan Quarter where homes and businesses flooded. County employees were displaced from their offices due to destruction from the flood waters, and were relocated to various locations around the county. Hyde County received \$2.9 billion in HMGP funds, but most of that was returned to the government as most homeowners chose not to sell their property to the government and relocate. Hyde County continued to re-build with the aid of disaster assistance programs and FEMA. The new Hyde Government Center was built and during mid-October 2007, all offices began the process of moving back to Swan Quarter. Unfortunately, some of the businesses that flooded did not reopen their doors.

In late August 2011, Hyde County was again hit by Hurricane Irene. Most of the damage was concentrated in the western end of the county in the Sladesville/Scranton area. The day after the storm hit, the Office of Planning and Economic Development drove around the Ponzer, Mackleyville and Scranton communities, visiting homeowners of damaged homes and distributing FEMA call-in numbers.

Ms. Keeney emphasized that disaster resiliency is the key to successful existence in our coastal areas. Hyde County and surrounding coastal counties are particularly

vulnerable to the effects of a wide range of natural hazards so it is important to continue to educate citizens about disaster preparedness and resiliency.

After the conclusion of her talk, Ms. Keeney shared a brief slide presentation of some pictures she took coming into Swan Quarter on the day after Hurricane Floyd hit in September 1999. The pictures painted a vivid picture of the devastation created by the storm.

John Cole of the National Weather Service gave an informative talk about the center's predictions for the upcoming hurricane season, historical hurricane statistics for Hyde County, storm surge scenarios if a major hurricane threatens the coast, and flood risks.

Jessica Whitehead with NC Sea Grant, has been working with Hyde County OPED since July 2014 to develop a Coastal Resiliency Plan specifically tailored for Hyde County based on a series of public workshops designed to obtain input from citizens about coastal hazards and come up with solutions to address the problems that arise from coastal storms, flooding, and salt water intrusion. This work was made possible by the NC Sea Grant Community Climate Adaptation Initiative and is grant funded by NOAA. At today's meeting, she presented the information that has been compiled so far from the workshops. She defined disaster resiliency as the ability to withstand, respond and recover rapidly from disruptions without long-term damage to the environment or economy, requiring less government funding to recover and rebuild/redevelop communities and sustaining the role of ecosystem services that natural systems provide. She emphasized that a resilient Hyde County starts with Hyde County's residents and needs to be supported by education and preparation. Residents and business owners should be educated about the major impacts; flooding of homes, businesses, agricultural and fishing impacts and the ways to prepare before a storm hits, such as having flood insurance in place and preparing property for the prevention of storm surge damage. At the end of her presentation, Ms. Whitehead conducted a question and answer session with participants. Attendee participation in the Q&A was good. Participants from Tyrrell and Beaufort counties expressed interest in hosting disaster resiliency workshops in their counties.

Erin Fleckenstein with the NC Coastal Federation talked about landscape scale wetlands restoration in Hyde County. She talked about the benefits of creating oyster sanctuaries that promote water quality, protect shorelines, create habitat for sea life and enhance economy and culture. She briefly reviewed the oyster restoration and protection plan being developed by the Federation's northern work group and the Lux Farms hydrologic restoration project which involved restoring historic sloughs and flow patterns to enhance the productivity of cultivated farmlands. Finally, she touched on the implementation of the shorebirds project, an effort to create sustainable habitat for migrating shorebirds. All of these initiatives play a vital part in overall disaster resiliency.

Lunch was catered by Martelle's Feedhouse of Engelhard from 12:00-1:00 pm.

After lunch, Daniel Brinn, Agricultural Cost Share Technician with Hyde County Soil & Water gave a presentation about Swan Quarter's West Quarter Watershed Project. He talked about the history of how the idea of protecting the greater Swan Quarter area with a dike was conceived, how the dike was installed, and the areas it protects. He shared pictures of the dike in action during Hurricane Isabell and how flood waters were kept at bay from the town's homes and businesses.

Upon the conclusion of Mr. Brinn's presentation, all participants were invited to take a tour of the Mattie Art Center, (an art center located in a portion of the old courthouse that was renovated after Hurricane Isabell), which is located next to the Hyde Government Center. Judy McLawhorn, director of the center, guided participants through the first story of the art center and talked about the history of the building and the classes that are now conducted there. After the tour of Mattie Art Center, participants boarded a bus provided by Hyde Transit and were taken on a tour of Swan Quarter's dike system and viewed some of the homes that have been elevated. The workshop concluded around 3:30 PM.

After the conclusion of the workshop, we received many favorable comments regarding the content and information provided. There was much participation during the workshop; everyone seemed engaged and interested in the topics of discussion. We think that the speakers we chose delivered the message well and that everyone walked away with a better understanding of the importance of disaster resiliency and how it plays a part in the overall survival of their communities. Hyde County plans to continue its work with North Carolina Sea Grant to develop its Coastal Resiliency Plan. Our workshop also heightened interest from other counties to hold workshops in their own communities. Overall, the workshop was a big success and we thank the N.C. Rural Center for affording us with the opportunity to facilitate an informative session for our citizens and citizens in the surrounding communities.

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