

12.0 Community Resiliency

Master Plan Recommendations Updates

Recommendation 12.1: Incorporate the approved *Multi-Jurisdictional Natural Hazard Mitigation Plan (HMP) for Monmouth County (2015)* update into the *Monmouth County Master Plan* by reference; recognizing that the *HMP* is the broadest approach to implementing community resiliency activities at both the local and county level. **(Completed) The *Monmouth County Multi-Jurisdictional Hazard Mitigation Plan* was adopted as part of the 2016 *Master Plan*. An update of the 2015 *HMP* is just about to launch with the selection of a consultant and the establishment of a steering committee. The Division of Planning is providing technical assistance to the Office of Emergency Management (OEM) to complete the new 2020 update. The update will include actions that support municipal advancement in the National Flood Insurance Program (NFIP) Community Rating System (CRS) program.**

Recommendation 12.1 should be modified to include providing professional and technical planning assistance the OEM for the 2020 *Multi-jurisdictional Natural Hazards Mitigation Plan* update and to formally adopt the 2020 *HMP* update as part of the *Master Plan* when completed.

Recommendation 12.2: In partnership with the Monmouth County OEM, continue to encourage and advance municipal participation in the NFIP CRS program. **(Continuous)** The Division of Planning continues to work with the OEM in providing CRS assistance to municipalities. (See 12.4, Stakeholder Efforts, Monmouth County Community Rating System (CRS) Assistance Program)

Recommendation 12.3: Partner with jurisdictions outside of Monmouth County to expand participation in the County's CRS Users Group, eventually resulting in a more influential regional forum. **(Continuous)** Monmouth County CRS User Group meetings continue to

be open to outside jurisdictions. We have responded to inquiries from and provided advice to other counties in New Jersey including Ocean, Middlesex, Somerset, Morris, Passaic, and Hudson. Ocean County and Middlesex County have started programs similar to Monmouth's, adopting comparable program guidelines. The first Monmouth-Ocean County joint CRS User Group meeting was held in September 2018.

Recommendation 12.4 Support the Monmouth County OEM in providing a network of shared emergency response services across the County. **(Completed)** This recommendation was accomplished by OEM through Emergency Operation Plan shared service agreements with municipalities.

Recommendation 12.5 Maintain a collection of Flood Insurance Rate Maps (FIRMs) and historic flood information for use in countywide resiliency and municipal CRS program advancement. **(Completed)** The Division of Planning and the County's Eastern Branch Library in Shrewsbury Borough coordinated the creation of a historic flood information repository. Historic flood documents including FIRMS, Flood Studies, and Watershed Studies were delivered to the Eastern Branch which has completed the process of cataloging the collection and they are now available for searching on their website.

12.3 Emerging Issues and Long Range Challenges

- **NEW! Stormwater Utilities** | See Chapter 3.0 for discussion.
- **NEW! New Jersey Coastal Coalition** | Originally named the Atlantic-Cape May Coastal Coalition, the New Jersey Coastal Coalition is a 501(c)(3) non-profit organization, incorporated in the State of New Jersey. The organization's mission is to build more resilient communities at the Jersey Shore by developing policies and practices that will anticipate future concerns and to create solutions to be shared by all participants. Formed in response to the 2012 Superstorm Sandy, this group of New Jersey waterfront communities has met regularly since 2012 to discuss common

municipal issues. Towns and counties can join the Coalition for a nominal membership fee. Other collaborating institutions include the Jacques Cousteau National Estuarine Research Reserve, Stockton University's Coastal Research Center, Montclair State University, Stevens Institute of Technology, Rowan University, and the John C. Allen Charitable Trust.

A similar coastal issues based committee was recommended in the 2010 Coastal Monmouth Plan (CMP). The CMP recommended a Coastal Monmouth Region (CMR) Committee be established composed of representatives of each of the 30 municipalities in the study area to address the common issues. The CMR was to be responsible for establishing operating guidelines to develop policies and procedures based on the CMP findings and recommendations. The County may wish to consider eventually becoming a member of the New Jersey Coastal Coalition.

- **12.3.3 Pending Flood Insurance Rate Maps** | On June 26, 2015, New York City filed an appeal with the Federal Emergency Management Agency (FEMA) arguing that the agency's storm surge and offshore wave models that resulted in Base Flood Elevations on preliminary FIRM maps were overstated. October 17, 2016 FEMA announced that it would agree to New York City's appeal and also agreed to revise the city's flood maps based on more accurate methodology. Although Monmouth County was well on its way to having its preliminary flood maps finalized during this time, the New York City appeal delayed the County's approval since both New York City and Monmouth County are in the same FEMA region and are subject to the same new flood modeling. In 2018, FEMA provided Monmouth County towns the option of adopting the current preliminary FIRM maps rather than wait for the new model maps which have an anticipated approval date of 2020/21. Highlands and Little Silver both adopted preliminary FIRMS with an effective date of June 20, 2018, which effectively lowered Base Flood Elevations in those

communities and thus decreased flood insurance premiums for policy holders in the Special Flood Hazard Area (SFHA).

12.4 Stakeholder Actions and Efforts

- **Multi-jurisdictional Hazard Mitigation Plan (HMP) for Monmouth County** | See Recommendation 12.1 above.
- **Maintain Flood Insurance Rate Maps (FIRMs) and Historic Flood Information** | See Recommendation 12.5 above.
- **Known Your Zone Flood Address Finder** | The GIS section of the Planning Division developed an Address Finder application to be used with the Know Your Zone locational map. This application allows anyone on the Know Your Zone website (www.mcsonj.org/knowyourzone) to find out their evacuation zone by simply entering their address. Once the address is entered and the site located, the appropriate evacuation zone will appear. There is also a link to the Know Your Zone informational pamphlet for the particular evacuation zone associated with the entered address.

The address finder app was a recipient of the 2018 ESRI Special Achievement Awarded in GIS.

- **Monmouth County CRS Assistance Program** | The Division of Planning continues to host quarterly CRS User Group Meetings. Since 2017, four (4) towns have entered the CRS program including Long Branch City with a CRS classification of 7, Sea Bright Borough entering with a classification of 6, Ocean Township and Monmouth Beach Borough both joining with an 8. Every point decrease in a town's CRS classification below 10 results in a 5% reduction on insurance premiums for policy holders in SFHAs. Since the County's program was launched in 2013, a total of eight (8) new towns have entered CRS and four (4) have improved their CRS classification (Aberdeen from a 9 to an 8, Manasquan, 7 to a 5, Oceanport, 8 to a 7, and Hazlet 8 to a 6) resulting in an additional \$1.2 million a year in policy holder savings. (See Figure 12.6)

Because of the County's outreach and openness to all communities when dealing with matters pertaining to CRS, we have received numerous accolades for our efforts from FEMA, received a 2016 Achievement Award from the National Association of Counties (NACo) and a 2017 Floodplain Management Leadership award from the New Jersey Association of Floodplain Managers (NJAFM), and provided a tour of municipal resiliency activities for the New York City Planning Department. A panel discussion at the 2017 NJAFM Conference in Atlantic City dedicated entirely to Monmouth County's High Water Mark (HWM) Program included representatives from Planning, OEM, Monmouth University, and the New Jersey Sea Grant Consortium.

- **High Water Mark Story Map** | The HWM Initiative, a component of the NFIP, aims to increase local communities' awareness of flood risk and encourage risk mitigation actions. The HWM Initiative uses signs on public and private buildings to show the high water mark from past flooding events, like Hurricane Irene in 2011 and Superstorm Sandy in 2012. A GIS story map was created to help explain the High Water Mark Program and to raise public awareness about resiliency and risk mitigation efforts taking place in municipalities throughout Monmouth County. The story map is accessible online through the Monmouth County CRS program webpage. HWM outreach efforts stem from a joint partnership between Monmouth County Division of Planning, Monmouth County Office of Emergency Management, the Federal Emergency Management Agency's National Flood Insurance Program, Monmouth University's Urban Coast Institute, and New Jersey Sea Grant Consortium.

The High Water Mark Story Map was a recipient of the 2018 ESRI Special Achievement Awarded in GIS.

- **NEW! NJ FRAMES** | The New Jersey Fostering Regional Adaptation through Municipal Economic Scenarios (NJ FRAMES) project is a

regional and collaborative effort that seeks to understand and begins to address future flood vulnerability. The project is led by the New Jersey Department of Environmental Protection (NJDEP) Coastal Management Program in cooperation with the Two Rivers Council of Mayors. It is funded by a grant from the National Oceanic and Atmospheric Administration (NOAA). The end result of the study will be a long-term *Regional Resilience and Adaptation Action Plan* for 15 municipalities in the Two River region of Monmouth County that will identify ways they can work collaboratively to reduce flood risks and impacts at a regional scale. The FRAMES project area is identified in a new Figure 12.6.

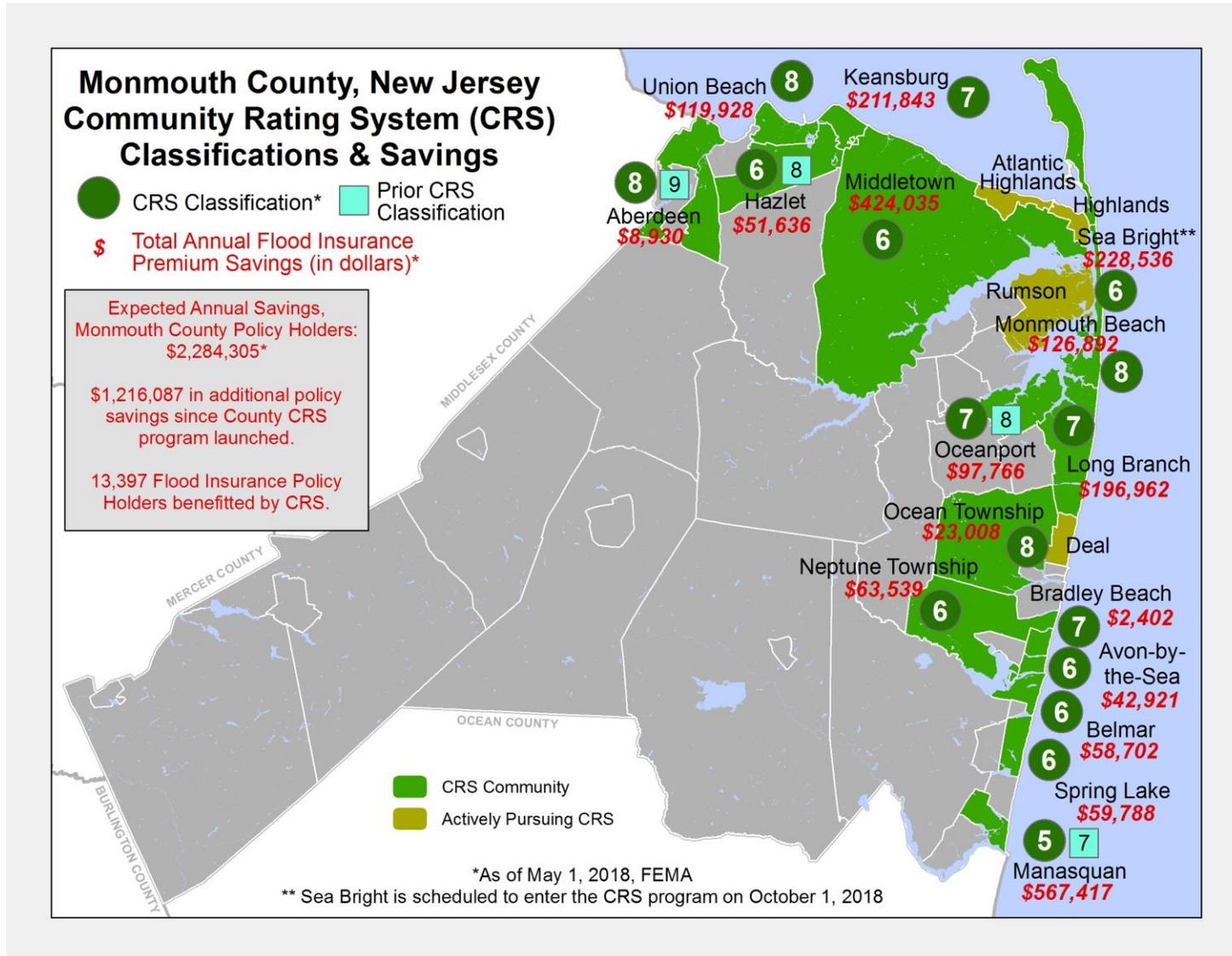
- **NEW! Microgrids** | In 2017, two (2) Monmouth County towns, Middletown and Neptune, were awarded grants from the New Jersey Board of Public Utilities to conduct a twelve-month microgrid feasibility study. Microgrids would allow for continuous operation of critical facilities such as utilities, public works, emergency services, and schools during electrical grid outages. The Middletown project is a partnership with the Township of Middletown, Middletown School District, Middletown Sewerage Authority, Monmouth County, New York Waterway, and Earle Naval Weapons Station and includes critical facilities from each. The Neptune project is a partnership between Neptune Township, Neptune Township School Board, Neptune Township Housing Authority, Monmouth County, and several private facilities including Jersey Shore University Medical Center among others. (See Chapter 7.0, Utilities)
- **NEW! Port Monmouth Hurricane and Storm Damage Reduction Project** | Phase I and II of the \$110 million Army Corps of Engineers flood risk reduction project along the shores of the Raritan and Sandy Hook Bays are underway. Phase I, now complete, consisted of beach nourishment, dune construction, and the construction of a new groin and extension of a fishing pier. Major components of Phase II consist of a concrete floodwall, reinforcement of existing

bulkheads and construction of new bulkheads, a tide gate, levees, water pumping stations, and site restoration such as planting and seeding and road resurfacing.

- **NEW! Shark River Dredging** | The Shark River dredging project was completed in 2017. The project restored 9,000 feet of navigable channel in the Shark River, which is bordered by Neptune Township, Neptune City, Avon-by-the-Sea, Belmar, and Wall. The completion of the project came as a result of State, County, and municipal cooperation and contributions. Sediment was hydraulically dredged and piped to the Belmar Marina parking lot where it was dewatered then sent to the Monmouth County Reclamation Center for beneficial reuse as landfill cover.
- **NEW! Manasquan River Dredging** | Maintenance dredging was completed in the Manasquan River in 2018. Sediment was piped to Manasquan beach for replenishment with the remainder piped to a confined disposal facility on Gull Island.
- **NEW! Wreck Pond Watershed Restoration** | In addition to dredging, the extension of an outfall pipe, and several other activities contributing to this ongoing restoration project, in late 2016 a 600-foot long box culvert was installed in Wreck Pond. The culvert allows fish passage and increases tidal flushing which reduces the risk of flooding in surrounding neighborhoods.

Figure 12.6 | Monmouth County CRS Classifications & Savings

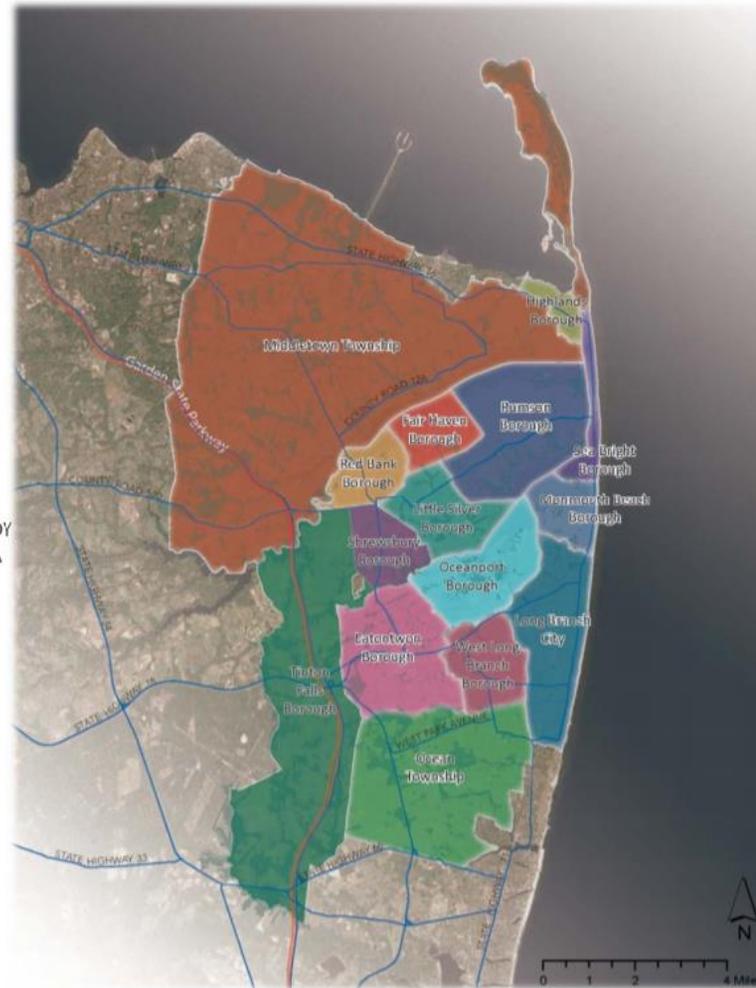
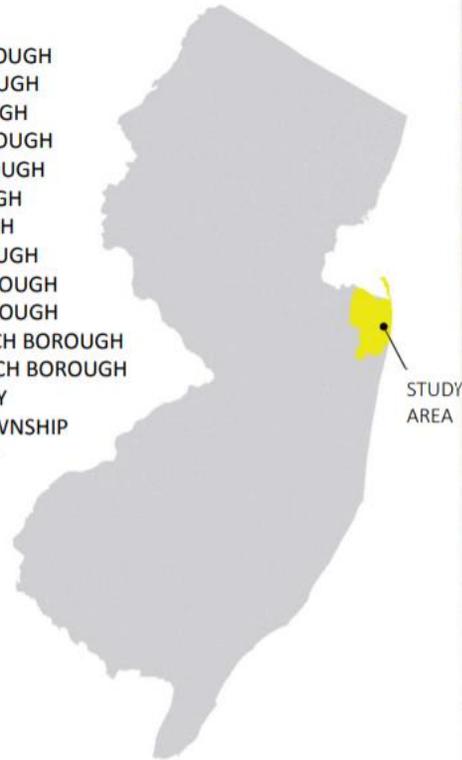
■ Update includes new CRS communities, improved community ratings, and towns considering entering the program.



NEW! Figure 12.7 | Monmouth County FRAMES Study Area

Study area

- EATONTOWN BOROUGH
- FAIR HAVEN BOROUGH
- HIGHLAND BOROUGH
- LITTLE SILVER BOROUGH
- OCEANPORT BOROUGH
- RED BANK BOROUGH
- RUMSON BOROUGH
- SEA BRIGHT BOROUGH
- SHREWSBURY BOROUGH
- TINTON FALLS BOROUGH
- MONMOUTH BEACH BOROUGH
- WEST LONG BRANCH BOROUGH
- LONG BRANCH CITY
- MIDDLETOWN TOWNSHIP
- OCEAN TOWNSHIP



NEW! Figure 12.8 | Coastal Resiliency Projects

