Preparing for a Changing Climate in New Jersey: Actions For Individuals, Communities and Businesses Today

Prepared by the New Jersey Climate Adaptation Alliance June 2014

Why does New Jersey need to adapt?

Adaptation: Adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects.

Source: National Climate Assessment, 2014

Changes in climate, including more high heat days, heavy rainstorms and sea level rise, can affect people, places and property in several ways. More frequent extreme heat days could be harmful to the elderly and chronically ill. Rising sea levels will make tidal flooding more severe, causing harm to roads, bridges and homes. Increasingly frequent heavy rainstorms may lead to flash floods. All of these effects can result in business disruption, insurance losses and interference with day-to-day life in New Jersey. There are many actions that individuals, communities, and businesses can take to prepare for a changing climate.

What can you do to increase resilience?

Resilience: A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

Source: National Climate Assessment, 2014

> At home

- 1. Have an emergency plan to prepare for storms, flooding and heat waves. See <u>www.ready.gov</u> and <u>www.ready.nj.gov</u> for tips.
- 2. Review your transportation needs. Do you rely on public transportation systems or routes that could be affected during floods?
- 3. Plan to help elderly residents or families with small children who may need assistance during a high heat or flooding events.
- 4. Talk to members of your local zoning board, emergency services, and other municipal officials to understand the near-term and potential long-term hazards to you and your home from storms, flooding and heat.
- 5. When constructing or improving a home, consider ways to reduce environmental impacts that can help mitigate the impacts of climate change.
 - Purchase appliances and materials that decrease energy and water consumption and waste.
 - Reduce paved surfaces and build rain gardens to capture storm water and reduce runoff.
 - ✓ Use low- and non-toxic building materials to decrease exposure to your family and reduce pollution in the event of damage.



> In your community

- 1. Support or volunteer with not-for-profit and faith-based organizations working to restore natural areas to increase resilience, create healthy communities, and increase awareness of climate adaptation.
- Ask your local department of transportation and transit agency(s) to review or develop plans for helping neighbors with limited mobility during storms, flooding, and heat waves.
- 3. Incorporate climate change projections into your municipal master plans, hazard mitigation plans, and everyday municipal operations tasks.
 - ✓ Does your master plan discourage new development in flood prone areas?
 - Do your building and zoning codes include shade tree provisions to reduce heat as well as provisions to reduce paved surfaces to allow water to soak into the ground?
- Encourage your local officials to help reduce flood exposure and lower flood insurance rates for residents and businesses by enrolling the community or improving current scores in FEMAs Community Rating System (CRS). For more information, go to <u>www.fema.gov/national-flood-insurance-program-communityrating-system</u>.
- 5. Use available tools, such as the Getting to Resilience (GTR) Community Planning and Evaluation tool (<u>www.prepareyourcommunitynj.org/</u>), to help plan for a changing climate in your community (GTR also provides a checklist for the CRS).
- 6. Does your town have a plan in place for continuity of operations for storms, flooding and heat waves?
 - ✓ Are critical facilities such as firehouses, police stations, schools, evacuation routes and shelter locations in safe areas?
 - ✓ Does your town have a plan in place to communicate with residents?
- 7. Encourage your community to identify contaminated sites that may be in flood prone areas and monitor those sites carefully in the event of a flood.

> In your workplace

- 1. Identify how a changing climate may affect the stability of operations for your business.
 - ✓ Will changes in temperature and precipitation affect manufacturing equipment?
 - ✓ Can your supply chain respond to increases in disruptive events?
 - ✓ If not, what will it cost to address the above in the future?
- 2. Identify how a changing climate affects your employees and colleagues
 - ✓ Are the critical routes and transit systems employees use susceptible to disruption from events such as extreme heat or flooding?
 - Does your business have an emergency notification system to alert employees in the case of a storm related event?
- 3. Pinpoint the critical services that your business may provide during extreme weather events including food, shelter, transportation and banking services.

> Learn more

Several resources are available to help individuals understand climate change and impacts in New Jersey:

- 1. Intergovernmental Panel on Climate Change (IPCC): www.ipcc.ch/report/ar5/wg2/
- 2. National Climate Assessment: <u>nca2014.globalchange.gov/</u>
- 3. New Jersey: <u>njadapt.rutgers.edu/</u>

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