

STATE OF DELAWARE



EXECUTIVE DEPARTMENT
DOVER

**EXECUTIVE ORDER
NUMBER FORTY-ONE**

TO: HEADS OF ALL STATE DEPARTMENTS AND AGENCIES

RE: PREPARING DELAWARE FOR EMERGING CLIMATE IMPACTS AND SEIZING ECONOMIC OPPORTUNITIES FROM REDUCING EMISSIONS

WHEREAS, burning fossil fuels causes the release of heat-trapping greenhouse gases that contribute to a changing climate, which presents both economic opportunities for new jobs and industries, as well as challenges to protecting public health and safety, supporting a vibrant economy, and conserving natural resources; and

WHEREAS, Delaware's greenhouse gas emissions have decreased by more than any state in the nation (29.7% from 2000 to 2010) and recent investments to modernize our energy system and efforts by several of Delaware's major employers and institutions of higher learning will result in significant additional reduction, however more must be done; and

WHEREAS, initiatives to responsibly reduce greenhouse gas emissions and prepare Delaware for climate impacts present significant economic development and employment opportunities in infrastructure construction, energy efficiency, clean energy, and advanced transportation; and

WHEREAS, as a low-lying coastal state with the lowest average land elevation in the United States and significant population living along 381 miles of shoreline, Delaware is vulnerable to coastal erosion, storm surge, flooding, saltwater intrusion, and tidal wetland losses, all of which will be exacerbated by sea-level rise; and

WHEREAS, Delaware's critical infrastructure, including roads, bridges, dams, dikes, impoundments, energy distribution systems, emergency services, outdoor recreation facilities, drinking water and wastewater treatment facilities, industrial sites, and landfills are at-risk to climate change impacts; and

WHEREAS, Delaware's Bayshore and Inland Bays communities have experienced saltwater intrusion into drinking water supplies and irrigation systems, and climate impacts could negatively affect the availability and reliability of the groundwater aquifers that provide water to many municipalities, residents, and farmers; and

WHEREAS, agriculture in Delaware is an \$8 billion industry which could be significantly impacted by increasingly variable temperatures, precipitation, extreme weather events, and droughts; and

WHEREAS, tourism in Delaware is an \$6 billion industry supported by world-class beaches, parks, wildlife areas, cultural assets, and recreational waterways, all of which are vulnerable to more extreme storms and sea-level rise; and

WHEREAS, the State of Delaware was an original signatory to the Regional Greenhouse Gas Initiative and is working in collaboration with other states to reduce regional greenhouse gas emissions from power plants by more than 30% compared to 2008; and

WHEREAS, to coordinate the efforts of state agencies to create a clean energy economy and a sustainable natural environment, I signed Executive Order No. 18 on February 17, 2010; and

WHEREAS, under Executive Order No. 18, the State of Delaware, under the direction of and coordination by the Cabinet Committee on Energy, has reduced the number of state vehicle miles traveled by 25%; has increased its use of clean, renewable energy to 30% of its overall annual electric energy demand; and has taken important steps to reduce energy consumption, lower gas consumption and emissions from state vehicles, increase recycling, and implement environmentally-friendly procurement and building practices, resulting in millions of dollars of savings; and

WHEREAS, the State of Delaware, through the Department of Natural Resources and Environmental Control (DNREC), has developed a sea level rise adaptation policy that serves as a pilot for further statewide application; and

WHEREAS, a variety of entities—including, among others, the Floodplain and Drainage Advisory Committee, the Bay Beaches Working Group, the Wetlands Advisory Committee, the State Sea Level Rise Advisory Committee, and the Delaware Climate Change Steering Committee—have developed or are developing policies and recommendations to address various discrete issues related to our changing climate and rising sea levels; and

WHEREAS, it is important for the State of Delaware to continue to reduce greenhouse gas emissions cost-effectively, while preparing for current and emerging climate risks; and

WHEREAS, it is in the best interest of the State of Delaware to address climate change and rising sea levels in a coordinated and cost-effective manner, at the highest levels of government, using a structure similar to the one that has been employed so successfully in connection with Executive Order No. 18.

NOW THEREFORE, I, JACK A. MARKELL, by virtue of the authority vested in me as Governor of the State of Delaware, do hereby DECLARE and ORDER the following

1. There is hereby created a Governor's Committee on Climate and Resiliency (the "Committee"), which shall be comprised of the following members:

a. Each of the members of the Cabinet Committee on Energy as set forth in 29 *Del.C.* § 8054, including the Secretaries of the Department of Natural Resources and Environmental Control, Department of Agriculture, Department of Transportation, Department of Health and Social Services, Department of Safety and Homeland Security, and Department of State; the Director of the Delaware Economic Development Office; and the Director of the Office of Management and Budget;

b. The Director of the Delaware State Housing Authority;

c. The Director of the Office of State Planning Coordination; and

d. Such other persons as the Governor may from time to time appoint.

2. The Committee shall oversee development of an implementation plan to maintain and build upon Delaware's leadership in responsibly reducing greenhouse gas emissions, including identifying appropriate interim goals. The plan shall ensure that efforts have a positive effect on the State's economy, including advancing the strategy of securing cleaner, cheaper, and more reliable energy, improving public health outcomes, increasing employment in Delaware, strengthening Delaware's manufacturing capabilities, and enhancing Delaware's overall competitiveness. The Committee shall report to the Governor on the completed plan by December 31, 2014, and annually thereafter.

3. The Committee shall develop agency-specific actionable recommendations for improving Delaware's preparedness and resiliency to climate impacts on public health and safety, public infrastructure and facilities, water resources, natural ecosystems, agriculture, tourism, and other industries. The recommendations shall prioritize the use of natural systems or green infrastructure as the preferred means to improve resiliency. Recommendations shall be submitted to the Governor by December 31, 2014 and shall include, but not be limited to:

a. Actions state agencies can take both within their departments and with assisting residents to adapt to and prepare for more extreme storms and projected temperature and precipitation variations expected over the next several decades, based upon research conducted through the Delaware Climate Change Steering Committee;

b. Actions local governments can take to improve community resiliency, including assessment of infrastructure vulnerabilities, land use policies, and other adaptation strategies that may be integrated into Comprehensive Land Use Plans in coordination with the Office of State Planning Coordination; and

c. Outreach strategies to inform and prepare Delaware's residents and businesses about identified risks, vulnerabilities, adaptation strategies, and basics of climate change and its causes, with particular attention to providing strategies to help protect at-risk populations.

4. In addition to the foregoing, all state agencies shall adhere to the following requirements related to flood hazard mitigation and sea level rise:

a. All state agencies shall incorporate measures for adapting to increased flood heights and sea level rise in the siting and design of projects for construction of new structures and reconstruction of substantially damaged structures and infrastructure. Such projects shall be sited to avoid and minimize flood risks that would unnecessarily increase state liability and

decrease public safety. Construction projects shall also incorporate measures to improve resiliency to flood heights, erosion, and sea level rise using natural systems or green infrastructure to improve resiliency wherever practical and effective;

b. Where avoidance is not practicable, structures within a Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Area shall be designed and constructed with habitable space at least 18 inches above current base flood elevation on a foundation appropriate for anticipated flood risk factors. If the structures are within an area mapped by DNREC as vulnerable to sea level rise inundation the projects shall be designed and constructed to account for sea level changes anticipated during the lifespan of the structure, in addition to FEMA flood levels; and

c. All state agencies shall consider and incorporate the sea level rise scenarios set forth by the DNREC Sea Level Rise Technical Committee into appropriate long-range plans for infrastructure, facilities, land management, land-use, and capital spending. DNREC shall periodically update the scenarios with the best scientific data available and distribute new guidance to state agencies.

5. The Secretary of Natural Resources and Environmental Control shall serve as chair of the Committee and, with the cooperation of other state agencies, is responsible for managing and tracking implementation of this Order. In connection therewith, the chair and the Committee shall leverage the work of leading scientists and subject matter experts, as well as any research, studies, work groups, advisory councils, and committees as may be required to complete the tasks outlined herein. DNREC shall provide support to state agencies to meet the requirements of this Order, including the development of maps illustrating areas of combined flooding and sea level rise.

6. No provision of this Order shall create any individual right or cause of action that does not currently exist under state or federal law.



APPROVED this 12 day of September, 2013

Jel Marshall
Governor

ATTEST:
[Signature]
Secretary of State