LC005025

# 2014 -- H 7904

# STATE OF RHODE ISLAND

#### IN GENERAL ASSEMBLY

#### JANUARY SESSION, A.D. 2014

## AN ACT

#### RELATING TO HEALTH AND SAFETY - CLIMATE CHANGE ADAPTION AND MITIGATION - RESILIENT RHODE ISLAND ACT OF 2014

Introduced By: Representatives Handy, Ruggiero, Walsh, Keable, and Naughton

Date Introduced: March 11, 2014

Referred To: House Environment and Natural Resources

It is enacted by the General Assembly as follows:

1	SECTION 1. Title 23 of the General Laws entitled "HEALTH AND SAFETY" is hereby
2	amended by adding thereto the following chapter:
3	CHAPTER 84.1
4	<b>RESILIENT RHODE ISLAND ACT OF 2014</b>
5	23-84.1-1. Short title This act shall be known and may be cited as the "Resilient
6	Rhode Island Act of 2014."
7	23-84.1-2. Legislative findings The general assembly finds and declares that:
8	(1) Article 1, section 17 of the Rhode Island Constitution secures to the people of the
9	state "their rights to the use and enjoyment of the natural resources of the state with due regard
10	for the preservation of their values;" and requires adoption of "all means necessary and proper by
11	law to protect the natural environment of the people of the state by providing adequate resource
12	planning for the control and regulation of the use of the natural resources of the state and for the
13	preservation, regeneration and restoration of the natural environment of the state";
14	(2) Climate change will have an impact on the use and enjoyment of the natural resources
15	of the state and will require new types and levels of effort to secure their preservation,
16	regeneration and restoration;
17	(3) The science of climate change is dynamic and evolving. The application of that

18 science to the challenges faced by Rhode Island requires continual updating and adjustment to

1 obtain optimal practical outcomes, and that this updating and adjustment is best achieved through 2 the practice of "adaptive management"; 3 (4) Carbon dioxide has been recognized by the Supreme Court as a pollutant, and that 4 reducing Rhode Island's contribution to that pollution and addressing the effects of that pollution 5 on the natural resources of the state falls within the jurisdiction of the department of environmental management; 6 7 (5) The effects of climate change are real and measurable in Rhode Island and have been 8 publicly recognized, these include rising sea level measured 10.6 inches since 1930 at the 9 Newport Tide Gauge; Thirty percent (30%) more intense storms driving worsening floods; 10 measurably longer and hotter summers and heat waves; and increasingly damaging coastal 11 storms; 12 (6) These impacts are driving current and prospective challenges and damages to Rhode 13 Island's economy, citizens' livelihoods and quality of life; 14 (7) There is scientific consensus that conditions of climate change will continue for the 15 next century and beyond, and that these changes will impose increased vulnerability in Rhode 16 Island and substantial costs to Rhode Island, which costs will be broadly borne across the 17 ecosystem and society; 18 (8) Rhode Island is a global leader in coastal management and adaptation to climate 19 change, and as the center of a regional belt of ocean institutions from Boston to New London has 20 the potential to develop that expertise and associated industries into a major engine of economic 21 growth; 22 (9) Rhode Island is engaged in local, national and international efforts to respond to 23 climate change including governor Lincoln Chafee's executive order creating the executive 24 climate change council, the Eastern Canadian premiers climate change action plan, and the 25 regional greenhouse gas initiative; 26 (10) The Rhode Island Foundation and the Rhode Island commerce corporation, through 27 an open, private sector-generated process, have recognized that making Rhode Island more 28 resilient can be a means of "creating new industries that will create new jobs"; 29 (11) The adjoining states of Massachusetts, Connecticut, and through shared marine 30 boundaries New York have taken substantial measures, including planning, reducing greenhouse 31 gas emissions (mitigation) and adapting to climate change, and that it is reasonable and prudent 32 for the health, safety and welfare of the people of Rhode Island that Rhode Island should be 33 consistent with this regional attention to this grave challenge; 34 (12) Rhode Island has shown leadership in developing energy programs, such as least

1 cost procurement (2006), long-term contracting standards (2009), and distributed generation 2 standard contracts (2011) that are fundamental to reducing emissions of greenhouse gases 3 (mitigation), but has not yet counted these programs as contributing importantly to that purpose; 4 (13) As a densely populated state with relatively low levels of energy consumption per 5 capita, Rhode Island has the opportunity to build a unique and highly efficient economic model that instead of buying energy from out-of-state sources keeps Rhode Island spending in the local 6 7 economy; 8 (14) Improving energy efficiency provides multiple benefits for the state and its citizens, 9 assisting both in reducing greenhouse gas emissions, but also allowing us to adapt to increasingly 10 severe heat waves and other impacts of climate change; sharp gains in efficiency also creates the 11 resources and context for making truly renewable energy sources viable; 12 (15) Low income and minority communities, neighborhoods, households, and individuals 13 may have disproportionate exposure to climate change risks, including, but not limited to, heat 14 islands, disease, food and energy cost and availability, and infrastructure decline, and this 15 disproportionate risk is a significant public health, community development and social equity 16 concern; 17 (16) Many of Rhode Island's premier cultural, historic, economic, recreational and natural 18 resources, including habitats and ecosystems, lie in harms' way with regard to the potential effects 19 of sea level rise and climate change; and 20 (17) The further necessary progress on climate change adaptation and climate change 21 mitigation within Rhode Island will require a broad based intentional community effort, that 22 networks existing capacities in state agencies, and as necessary establishes new capacities, 23 purposes, goals, indicators, and reporting requirements for climate change mitigation and 24 adaptation in public agencies, and expects public agencies to act collaboratively in an open, 25 accountable and iterative manner to make Rhode Island a resilient state in the face of these 26 extraordinary challenges and daunting levels of change. 27 23-84.1-3. Purpose. – The purpose of this chapter is to: (1) Protect public health, safety, and welfare of the people of Rhode Island in the face of 28 29 probable, but not precisely predictable, effects of climate change by pursuing strategies of 30 mitigation in order to contribute to the reduction of the risk of catastrophic change and by 31 pursuing strategies of adaptation in order to achieve the benefits of resiliency; 32 (2) Utilize the powers of existing institutions of Rhode Island government, including without limitation, its state departments, agencies, offices, instrumentalities, and its political 33 34 subdivisions to accomplish purpose number one, above, in a comprehensive, integrated, dynamic 1 manner through adaptive management, which is publicly responsive and publicly informative and

2 <u>inclusive;</u>

3 (3) Create a climate change science advisory council of experts for the state, to annually 4 review and consider the current science regarding climate change, and assess the adequacy of 5 Rhode Island's programs of emissions reductions and adaptation; (4) Designate the department of environmental management as the coordinating agency 6 7 for addressing issues of mitigation, given its established authority over air quality and the effects 8 of air pollution, and designate the department of administration, division of state planning, as the 9 coordinating agency for adaptation given its established authority for land use planning, 10 community development, and the development, maintenance and use of the state guide plan and 11 its elements; 12 (5) Recognize that strategies for mitigation and adaptation are frequently interrelated and 13 complementary and benefit from broad interagency, intergovernmental and public-private 14 coordination; 15 (6) Make available to decision makers, planners, administrators, in the public, private, 16 and nonprofit sectors and to the general public current generally accepted scientific information

17 <u>about climate change and its potential effects on Rhode Island;</u>

18 (7) Develop opportunities for public, private, and nonprofit sectors to develop economic 19 and social opportunities that will contribute and advance the cause of community and urban 20 revitalization and environmental justice, improve environmental quality across the state, create 21 jobs accessible to low and moderate income people and their families, reduce energy costs in all 22 households by achieving high levels of energy efficiency, and promote public health;

(8) Facilitate public, community, and private action in addressing matters pertaining to or
 arising from, climate change and its effects, and provide robust and on-going opportunities for

25 public involvement in accomplishing the purposes of this act; and

(9) Intensify and sustain efforts to ensure preparedness planning, to integrate climate
 change adaptation planning into existing plans, to update standards to accommodate anticipated
 change expected during design life (i.e., build for conditions of the future, to plan for flexibility
 and monitor change and to protect natural areas and landscape features that buffer changing
 climatic conditions.

23-84.1-4. Definitions. - As used in this chapter, words and terms shall have given to
 them the meanings set forth in § 23-84.2-3, unless the context indicates another or different
 meaning or intent.

34 **<u>23-84.1-5. Public participation and community involvement. – In the implementation</u></u>** 

1	the requirements of this act pertaining to adaptation and mitigation, in addition to requirements		
2	for public notice and hearing required by the administrative procedures act, chapter 35 of title 42		
3	and the open meetings act, chapter 46 of title 42, there shall be the following obligations of state		
4	agencies and instrumentalities and political subdivisions for public inclusion and public review		
5	and comment in preparing, adopting, implementing, and revising plans and programs to address		
6	climate change:		
7	(1) Public scoping of plans, programs, or major action to address climate change, to		
8	receive and consider public comment on the nature and purpose of the plan, program, or action		
9	the content and methods of study and processes for reaching decisions, and consideration of		
10	alternatives;		
11	(2) Public availability of studies, analyses, and proposed findings and actions;		
12	(3) Community review meetings and/or workshops for purposes of discussion between		
13	the agency, instrumentality, or political subdivision proposing the plan, program, or action and		
14	the public; which community review process shall consider processes and criteria, including		
15	metrics if appropriate for evaluating the effectiveness of the plan, program, or action; and		
16	(4) Public reporting concerning the effectiveness of the plan, program, or major action in		
17	achieving the intended results.		
18	SECTION 2. Title 23 of the General Laws entitled "HEALTH AND SAFETY" is hereby		
19	amended by adding thereto the following chapter:		
20	CHAPTER 84.2		
21	<b>CLIMATE CHANGE MITIGATION AND ADAPTATION</b>		
22	23-84.2-1. Short title This act shall be known as and may be cited as the "Climate		
23	Change Mitigation and Adaptation Act of 2014."		
24	23-84.2-2. Purpose The purpose of this chapter is:		
25	(1) To clarify the role of the department of environmental management as the		
26	coordinating agency for climate change mitigation in the state, and to designate the division of		
27	planning in the department of administration as the coordinating agency for climate change		
28	adaptation;		
29	(2) To provide for networked multi-agency collaboration as the optimum means to		
30	accomplish climate change adaptation in Rhode Island;		
31	(3) To establish adaptive management as a basic principle for the management of the		
32	natural resources of the state for the benefit of the current and future generation of residents;		
33	(4) To authorize the use of green infrastructure and low impact development and the		
34	strengthening of ecosystem system services, when practicable, as the preferred means of		

1 <u>achieving resilience;</u>

2	(5) To provide a common set of definitions of words and terms used in considering		
3	matters pertaining to climate change; and		
4	(6) To accomplish the foregoing purposes in a manner provides opportunities fo		
5	developing informed and engaged public collaboration, especially at the local and community		
6	levels.		
7	23-84.2-3. Definitions As used in this chapter. the following words and terms shall		
8	have the following meanings, unless the context indicates another or different meaning or intent:		
9	(1) "Adaptation" means in human systems, the process of adjustment to the actual or		
10	expected climate and its effects, in order to reduce adverse impacts, moderate potential damages		
11	take advantage of beneficial opportunities, and cope with the consequences of climate change. In		
12	natural systems, human intervention may facilitate adjustment to expected climate.		
13	(2) "Adaptation assessment" means the practice of identifying options to adapt to climate		
14	change and evaluating them in terms of criteria such as availability, benefits, costs, effectiveness		
15	efficiency, and feasibility.		
16	(3) "Adaptation benefits" means the avoided damages (measured in monetary terms or		
17	otherwise) or the accrued benefits following the adoption and implementation of adaptation		
18	measures.		
19	(4) "Adaptation costs" means the costs of planning, preparing for, facilitating, and		
20	implementing adaptation measures, including transition costs and unavoidable negative side		
21	effects.		
22	(5) "Adaptive capacity" means the combination of the strengths, attributes, and resources		
23	available to an individual, community, society, organization, or natural system that allow it to		
24	respond to climate change (including climate variability and extremes), reduce adverse impacts,		
25	moderate potential damages, take advantage of beneficial opportunities, and cope with the		
26	consequences.		
27	(6) "Adaptive management" means a framework and flexible decision-making process for		
28	ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvements		
29	in management planning and implementation of a project to achieve a specified objective.		
30	Adaptive management is a structured process that allows for taking action under uncertain		
31	conditions based on existing interdisciplinary experience and the best available scientific		
32	information, closely monitoring and evaluating outcomes, and re-evaluating and adjusting		
33	implementation decisions as more information is learned in order to identify key knowledge gaps		
34	and link science to dynamic policy.		

- (7) "Created wetland" means previously dry land converted to a wetland by raising the
   water table in inland wetlands or removing obstructions to hydrologic flow and/or raising or
   lowering the soil elevation to appropriate tidal elevation in coastal wetlands.
- 4 (8) "Deforestation" means human-induced conversion of forested land to non-forested
- 5 <u>land by direct or indirect agents or causes.</u>
- 6 (9) "Ecosystem services" means the benefits people obtain from ecosystems, including 7 basic provisioning services such as the delivery of food, fresh water, wood and fiber, and 8 medicine; services that are less tangible and harder to measure but equally critical, including 9 regulating services like carbon sequestration, erosion control, and pollination; cultural services 10 like recreation, ecotourism, and educational, cultural, and spiritual values; and supporting 11 services like nutrient cycling, soil formation, and primary productivity.
- 12 (10) "Fresh water wetlands" means a fresh water wetland as defined in § 2-1-20 and shall 13 include, but not be limited to, marshes, swamps, bogs, ponds, rivers, river and stream flood plains 14 and banks, areas subject to flooding or storm flowage, emergent and submergent plant 15 communities in any body of fresh water including rivers and streams and that area of land within 16 fifty feet (50') of the edge of any bog, marsh, swamp, or pond.
- (11) "Greenhouse gas" means any chemical or physical substance that is emitted into the
  air and that the department of environmental management determines by rule may reasonably be
  anticipated to cause or contribute to climate change, including, but not limited to, carbon dioxide
  (C02), methane (Clit), nitrous oxide (N20), sulfur hexafluoride (SF61), hydrofluorocarbons
  (HFCs), perfluorocarbons (PFCs), and other fluorinated greenhouse gases as defined in this
  section.
  (12) "Green infrastructure" means the use of vegetation, soils, and natural processes to
- 24 manage water and create healthier urban environments. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, 25 26 cleaner air, natural cooling, and cleaner water. At the scale of a neighborhood or site, green 27 infrastructure refers to stormwater management systems that mimic nature by soaking up and 28 storing water, and climate adaptive benefits by cooling neighborhoods, compared to pavement, buildings, and other impervious surfaces. 29 30 (13) "Low Impact Development" (LID) means land development (or re-development) 31 that works with nature to manage stormwater as close to its source as possible. LID employs 32 principles such as preserving and recreating natural landscape features, minimizing effective 33 imperviousness to create functional and appealing site drainage that treat stormwater as a
- 34 <u>resource rather than a waste product.</u>

1 (14) "Mitigation" means a human intervention to reduce the sources or improve the 2 uptake (sinks) of greenhouse gas emissions. 3 (15) "Renewable energy" means "renewable energy" as defined in § 39-26-5. 4 (16) "Resilience" means the ability of a social or ecological system and its component 5 parts to anticipate, absorb, accommodate, or recover from some disturbance, change of conditions, or hazardous event in a timely and efficient manner and, if necessary, transform and 6 7 improve itself in order to continue to be able to function and provide essential services and 8 amenities that it has evolved or been designed to provide. It is important to note that resilience, as 9 the term applies to ecosystems is used as a way to measure a system's ability to recover from 10 stress or disturbance without undergoing a fundamental change in process or structure with the 11 recognition that climate change will likely not allow for the return to a pre-existing equilibrium as 12 the definition of resilience implies. 13 (17) "Sequestration" means the process of storing carbon in a carbon pool, for example 14 forest bio-mass, wood products, soils. 15 (18) "Storm surge" means the temporary increase, at a particular locality, in the height of 16 the sea due to extreme meteorological conditions (low atmospheric pressure and/or strong winds). 17 The storm surge is defined as being the excess above the level expected from the tidal variation alone at that time and place. 18 19 (19) "Tidal wetland or coastal wetland" means lands within the coastal zone which may 20 be covered periodically or permanently with shallow water and include saltwater marshes, 21 freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens and are defined by the coastal resources management council pursuant to § 46-23-6(2) as "coastal 22 23 wetland or tidal wetland". 24 (20) "Transit oriented development" means a form of community development that 25 includes a mixture of housing, office, retail and/or other amenities integrated into a walkable 26 neighborhood and located within a half-mile of quality public transportation. 27 (21) "Urban heat island effect" means the relative warmth of a city or urban 28 neighborhood compared with surrounding rural areas, associated with changes in stormwater 29 runoff, the "concrete jungle" effects on heat retention, changes in surface albedo, changes in 30 pollution and aerosols, lack of trees, and so on. 31 (22) "Vulnerability" means sensitivity which measures the weakness of the system and 32 the physical predisposition of populations, infrastructures, or an ecosystem to being adversely affected by a threat. Vulnerability to climate change is a function of the character, magnitude, and 33 34 rate of climate variation to which a system is exposed, as well as of non-climatic characteristics

1 of the system, including its sensitivity and its coping and adaptive capacity to anticipate, absorb,

2 accommodate, and recover from the effects of a disturbance in an efficient manner.

3 (23) "Vulnerability assessment" means a practice that identifies who and what is exposed
4 and sensitive to change, and how able a given system is to cope with extremes and change,
5 considering the factors that expose and make people or the environment susceptible to harm, and
6 accesses to natural and financial resources available to cope and adapt, including the ability to
7 self-protect, external coping mechanisms, support networks, and so on.

8 (24) "Working landscape" means an area where people live and work in a way that allows
9 the ecosystem to be sustained. Working landscapes combine the provision of ecosystem services
10 and economic activity in a manner that is sustainable.

11 (25) "Working waterfront" means a parcel of land, or a portion thereof, abutting water to 12 the head of tide, land located in the intertidal zone or submerged land that is used primarily or 13 predominantly to provide access to or support the conduct of a working waterfront activity. 14 Activity includes commercial fishing activities, commercial boat building and repair, commercial 15 hauling, launching, storage and berthing of boats, marine construction, marine freight and 16 passenger transportation, and other similar commercial activities that are dependent on the 17 waterfront.

18 23-84.2-4. Climate change science advisory council. -- There is hereby authorized and 19 established within the department of environmental management a climate change science 20 advisory council consisting of nine (9) members; four (4) of whom shall be from institutions of 21 higher education in the state; two (2) of whom shall be from research laboratories located in the 22 state; and three (3) of whom shall be from state agencies with expertise in and responsibility for addressing issues pertaining to climate change. The members of the advisory council shall be 23 24 appointed for terms of three (3) years; provided, however, that with regard to the initial appointments, three (3) members shall be appointed for terms of one year; three (3) members 25 26 shall be appointed for a term of two (2) years; and three (3) members shall be appointed for a 27 term of three (3) years; members may serve not more than three (3) successive terms, and their 28 appointments shall continue until their successors are appointed. The chairperson of the advisory 29 council shall be appointed by the director of the department of environmental management; a 30 vice-chair person and a secretary shall be elected by the council for a term of two (2) years; all 31 officers of the advisory council shall serve until their successors are duly appointed or elected. 32 The advisory council shall meet not less frequently than semi-annually. The advisory council shall review and consider current science regarding climate change and shall review Rhode 33 34 Island's programs of mitigation and adaptation and shall make findings with regard to the

- 1 adequacy of these programs in light of current science; the advisory council shall annually issue a
- 2 public report of its findings to the director, the governor, the speaker of the house, and the senate
- 3 president by November 30 commencing in the year 2014.
- 4 23-84.2-5. Adaptive management. -- All state departments, offices, commissions, 5 councils, agencies, and instrumentalities, which are authorized by this chapter to exercise powers for the purposes mitigation, adaptation, or resilience, may utilize the process of adaptive 6 7 management for such purposes unless expressly prohibited by law.
- 8

23-84.2-6. Mitigation. -- The director of the department of environmental management 9 shall, within the authority conferred by law, establish and implement goals, plans, and strategies

- 10 for mitigation of greenhouse gas emissions from Rhode Island sources.
- 11 (1) Preliminary Inventory. Within ninety (90) days after the effective date of the Resilient 12 Rhode Island Act of 2014, the director of the department of environmental management shall 13 issue a proposed preliminary inventory of greenhouse gas emissions by sector and major source, 14 based on the best currently available information for energy use and energy production in Rhode 15 Island and using a standardized tool for estimating emissions, and shall hold at least one 16 community review meeting with thirty (30) days notice for purposes of public discussion of and 17 public comment on the proposed preliminary inventory; on or before December 31, 2014, the 18 director shall issue a preliminary inventory as a working document for greenhouse gas mitigation 19 planning in Rhode Island. 20 (2) Greenhouse Gas Mitigation Plan. On or before September 30, 2015, the director shall 21 issue a notice for public hearing in accordance with requirements of chapter 35 of title 42, a 22 greenhouse gas mitigation plan, which plan shall include: (i) An inventory of greenhouse gas emissions by sector and major source; 23 24 (ii) Strategies and implementation measures to achieve targets for greenhouse gas 25 emissions as set forth in subdivision (3) of this section; and 26 (iii) Procedures and methods for evaluating the effectiveness of the plan in accomplishing 27 its purposes. 28 (3) Targets for greenhouse gas emissions. The targets for greenhouse gas shall be as a minimum as set forth below, greater reduction targets may be established in accordance with the 29 30 provisions of chapter 35 of title 42, as necessary to accomplish the purposes of the Resilient
- 31 Rhode Island Act of 2014:
- 32 (i) Twenty-five percent (25%) below 1990 levels by 2025;
- (ii) Fifty percent (50%) below 1990 levels by 2035; and 33
- (iii) Eighty-five percent (85%) below 1990 levels by 2050. 34

Within these overall targets, targets for specific sectors may be set at a higher or lower
 level as necessary or practical to achieve the overall target.

3 (4) Strategies to accomplish emission reductions. The plan, which shall be developed in 4 collaboration with the office of energy resources, shall include strategies, programs, and 5 compliance mechanisms with measurable goals and targets for each sector which strategies, programs, and compliance mechanisms may include, but are not limited to, the following: 6 7 offering market-based mechanisms; expanding financing and investment tools; modernizing the 8 electric grid, regulation and rates; improving incentives for combined heat and power systems; 9 expanding the renewable energy standard and procurement; extending least-cost procurement 10 (including to unregulated fuels); improving state energy efficiency codes and standards; 11 providing legal mechanisms to expedite response to requests by tenants to landlords; addressing 12 natural gas leaks; promoting alternative fuel and electric vehicles; increase use and availability of 13 efficient public transport; and changing land-use patterns, consistent with the state guide plan, to 14 support transit-oriented development and mixed-use commercial and residential areas.

15 23-84.2-7. Adaptation. -- (a) Committee. (1) Creation. There is hereby created a climate 16 change adaptation planning and implementation coordination committee of twenty-four (24) members, which shall include the following thirteen (13) state agencies: the department of 17 administration, the division of state planning, the office of management and budget, the 18 19 governor's policy office, the department of health, the department of environmental management, 20 the department of transportation, the executive office of commerce, the RI commerce corporation, 21 the coastal resources management council, the Rhode Island historical preservation and heritage 22 commission, and the Rhode Island emergency management agency, the office of energy 23 resources, and the bays, rivers and watersheds coordination team, five (5) representatives of cities 24 and towns, including the RI League of Cities and Towns, and six (6) public members, including two (2) representatives from institutions of higher education who have expertise in climate 25 26 change issues, two (2) representatives of conservation/environmental organizations, one 27 representative of tourism, and one representative of Rhode Island marine trades; members of the 28 committee from entities that are members of the state planning council shall be either the member 29 of the state planning council, or a representative of that entity, appointed that entity's chief 30 officer; members of the committee who are not from an entity represented on the council shall be 31 appointed by the chair of the council with the approval of the council. All members of the 32 committee shall serve until their successor is duly appointed. All departments, agencies and 33 instrumentalities of the state shall furnish such advice and information, documentary, and 34 otherwise, to the committee and its agents as is deemed necessary or desirable by the committee

1 to facilitate the performance of its functions pursuant to the purposes of this chapter. The 2 department of administration is hereby authorized and directed to provide suitable quarters and 3 administrative support for the commission; for purposes of administration the committee shall be 4 assigned to the department of administration. The division of state planning shall be the 5 coordinating agency for the duties set forth below. (b) Duties. The committee shall: 6 7 (1) Aggregate and integrate vulnerability assessments required by subsection (d) below of 8 this section by population and geographic area; 9 (2) By January 1, 2017, set goals, to substantially reduce the impacts of climate change 10 on Rhode Island 's population by collecting data, which shall be publicly reported, and by setting 11 standards for measurable progress around indicators of the impacts of climate change and 12 indicators of preparedness for the impacts of climate change, which indicators shall be established 13 and promulgated as guidance by July 1, 2015 with substantial input from affected communities, 14 recognizing that vulnerability depends on social and economic conditions, collection of data 15 around these indicators should be disaggregated by race, age, income, and geography (urban v. 16 <u>rural);</u> 17 (3) Evaluate the elements of the state guide plan as those may have a bearing on matters affected by climate change and recommend such revisions as may be appropriate to advance the 18 19 purposes of climate change mitigation, adaptation and to increase adaptive capacity; 20 (4) Provide for coordination among state agencies and instrumentalities of planning for 21 increasing adaptive capacity; 22 (5) Maximize to the extent reasonably feasible strengthening ecosystem of services, 23 extending "low impact development", securing sequestration, and employing "green 24 infrastructure" solutions as means to achieve long-term resilience, adaptation, and mitigation; and 25 (6) Report its findings and recommendations publicly to the governor, the speaker of the 26 house, the president of the senate, and to the state planning council, annually. 27 (c) Vulnerability assessments. As set forth below, the following state agencies shall 28 conduct vulnerability assessments on the subject areas indicated by January 2016: 29 (1) Public water supply - lead agency: The department of health, in conjunction with the 30 Rhode Island water resources board and the department of environmental management. 31 (2) Waste water treatment - lead agency: Department of environmental management in 32 conjunction with the Narragansett bay commission. 33 (3) Transportation infrastructure - lead agency: Department of transportation in conjunction with statewide planning program and the RI public transit authority. 34

1 (4) Parks and recreation and natural areas - lead agency: Department of environmental 2 management. 3 (5) Historical and cultural resources - lead agency: RI historical preservation and heritage 4 commission. 5 (6) Tourism resources - lead agency: RI commerce corporation in conjunction with regional tourism councils and the department of environmental management. 6 7 (7) Public health - lead agency: Department of health in conjunction with the department 8 of elderly affairs and the executive office health and human services. 9 (8) Emergency management and hazard mitigation - lead agency: RI emergency 10 management agency. 11 (9) Coastal resources and shoreline - lead agency: RI coastal resources management 12 council. 13 (10) Gas and electric infrastructure - lead agency: The office of energy resources in 14 conjunction with the division of public utilities and RI emergency management agency. 15 (d) Any assessment of risk or hazard mitigation, which is substantially equivalent to a 16 vulnerability assessment as herein required, that was commenced, being undertaken or was completed on or after July 1, 2013, shall be considered satisfactory for the purposes of this 17 18 section provided notification is given to the committee of such assessment, which notice shall 19 include a statement of the scope and nature of the assessment. The methods used to conduct the 20 assessment, and the findings of the assessment, if completed, or the subject areas of findings if 21 the assessment has not been completed as of the date of notification. 22 (e) Vulnerability assessments herein required shall include at least one public scoping 23 session prior to the commencement of the assessment and least one community review meeting 24 prior to the adoption or acceptance of the assessment by the lead agency; provided, however, that 25 no scoping session shall be required for any assessment that was commenced prior to the 26 effective date of this act; and no community review meeting shall be required for any assessment 27 that was substantially complete as of the effective date of this act and is either adopted or 28 accepted by the lead agency within sixty (60) days after the effective date of this act. 29 23-84.2-8. State planning council. -- The state planning council is hereby authorized and 30 directed to adopt amend and maintain as an element of the state guide plan and/or as provisions of 31 elements of the state guide plan, or as appropriate formal guidance, such provisions as may be 32 necessary or appropriate to effectuate the purposes of §§ 23-84.2-5, 23-84.2-6, and 23-84.2-7. 33 23-84.2-9. Exercise of existing authority. -- The following state departments, agencies, offices, commissions, councils and instrumentalities, and political subdivisions shall be deemed 34

1	to have and to exercise amon	g their purposes in the exercise of their existing authority, the	
2	purposes set forth in this chapter pertaining to climate change mitigation, adaptation, and		
3	resilience in so far as climate change affects the mission, duties, responsibilities, projects, or		
4	programs of the entity:		
5	Title/Chapter(section)	Agency	
6	<u>2-4-3</u>	State Conservation Committee	
7	<u>2-4-7</u>	Conservations Districts (Northern, Eastern, and Southern)	
8	<u>20-3-1</u>	Marine Fisheries Council	
9	<u>23-1-1</u>	Department of Health	
10	23-27.3-100.1.2	State Building Code Commission	
11	<u>30-15</u>	Emergency Management Agency	
12	<u>32-3</u>	Town (and City) Forests, Parks, and Recreation	
13	<u>37-5</u>	Department of Transportation, including responsibilities for	
14		<u>state piers, § 37-5-4</u>	
15	<u>37-6</u>	State Properties Committee	
16	<u>39-2</u>	Public Utilities Commission and Division of Public Utilities	
17	<u>39-18</u>	RI Public Transit Authority	
18	<u>42-11-10</u>	Division of State Planning, State Planning Council, and	
19		Statewide Planning Program	
20	<u>42-13-1</u>	Department of Transportation	
21	<u>42-17.1-2</u>	Department of Environmental Management	
22	<u>42-44.1-1</u>	Sewage and Water Supply Failure Fund	
23	<u>42-45</u>	<b>RI Historical Preservation and Heritage Commission</b>	
24	<u>42-64</u>	RI Commerce Corporation and its subsidiaries	
25	<u>42-64.10</u>	Quonset Development Corporation	
26	<u>42-64.19</u>	Executive Office of Commerce	
27	<u>42-82-1</u>	Farmland Preservation Commission	
28	<u>42-106</u>	RI Agua Fund	
29	<u>42-111-1</u>	Bay State - Ocean State Compact	
30	<u>42-125</u>	RI Greenways Council	
31	<u>42-140-2</u>	RI Office of Energy Resources	
32	<u>42-140.1-3</u>	RI Energy Efficiency and Resources Management Council	
33	<u>45-22-1</u>	Local Planning Boards or Commissions	
34	<u>45-35-1</u>	Conservation Commissions	

1	<u>45-61</u>	Storm Water Management Districts		
2	<u>45-62</u>	Dam Management Districts		
3	<u>46-12.8</u>	Clean Water Finance Agency		
4	<u>46-15, 46-15.1</u>	RI Water Resources Board		
5	<u>46-23</u>	RI Coastal Resources Management Council		
6	46-25-4	Narragansett Bay Commission		
7	<u>46-28-4</u>	RI Rivers Council		
8	<u>46-28-8</u>	Local Watershed Councils		
9	<u>46-31-3</u>	RI Bays, Rivers, and Watersheds Coordination Team		
10	23-84.2-10. Coordination with the executive office of commerce and the RI			
11	commerce corporation The departments of environmental management and administration			
12	shall coordinate their duties with regard to the administration of climate change mitigation and			
13	adaption with the executive office of commerce and the RI commerce corporation to realize the			
14	benefits of industry creation and expansion and job growth that may be realized by Rhode Island			
15	becoming resilient. The executive office of commerce and the RI commerce corporation shall in			
16	consultation with the RI emergency management agency establish and maintain an assessment of			
17	the benefits and costs of an affirmative strategy for resilience, adaptation, and risk reduction and			
18	management including, in comparison with other states, especially Massachusetts and			
19	Connecticut, and shall pursue opportunities for industry creation and growth and job that may be			
20	realized by Rhode Island becc	oming resilient.		
21	23-84.2-11. Use of	green infrastructure (a) The director of the department of		
22	environmental management s	hall, in the exercise of his or her authority, to supervise and control		
23	the protection, development, p	planning, and utilization of the natural resources of the state:		
24	(1) Increase the susta	inable level of ecosystem services that contribute to climate change		
25	adaptation and mitigation and	resilience in all areas of the state including specifically areas which		
26	are or have the potential to be	urban heat islands; and		
27	(2) Preserve, expand,	and create working landscapes throughout the state.		
28	(b) The director shall	, to the maximum extent allowed by law and practically feasible, in		
29	the exercise of the regulatory	authority provide for the use of "green infrastructure", "low impact		
30	development" measures, and pervious surfaces to achieve the purposes of climate change			
31	adaptation and resilience.			
32	(c) The director shall plan for, support, assist, and as necessary, provide the preservation,			
33	expansion, and creation of urban and metropolitan parks and greenways as a means to temper the			
34	effects of high temperatures and heat waves.			

1 (d) The director of the department of transportation shall adopt and promulgate state 2 regulations which will implement and recognize the benefits of green infrastructure such as, but 3 not limited to, permeable road structures, constructed wetlands, and bioswales in order to increase

- the resiliency of the structures, as well as to manage stormwater. 4
- 5 SECTION 3. Section 20-18-1 of the General Laws in Chapter 20-18 entitled "Wildlife Management Areas" is hereby amended to read as follows: 6

7 20-18-1. Acquisition or control of land for protecting wildlife. -- The director may in 8 the name and for the use of the state, and subject to the approval of the state properties 9 committee, acquire by gift, lease, purchase, or easement, land within the state for the purpose of 10 protecting, conserving, cultivating, or propagating any species of wildlife, plant or animal, or 11 protecting or enhancing the environmental services thereof. The director may, with the consent of 12 the owner of the land, control any land suitable with character and situation for those purposes. 13 Any land so acquired or controlled by the department of environmental management shall be 14 posted conspicuously and designated as a state park or management area.

15 SECTION 4. Chapter 23-27.3 of the General Laws entitled "State Building Code" is 16 hereby amended by adding thereto the following section:

- 17 23-27.3-100.1.5.6. Climate change risk mitigation and adaption. – (a) The state 18 building code standards committee has the authority in consultation with the building code 19 commissioner, to adopt, maintain, amend, and repeal code provisions, which shall be reasonably 20 consistent with recognized and accepted standards and codes, including for existing buildings, to 21 mitigate climate change by reducing energy consumption and to adapt to the effects of climate 22 change by producing levels of structural integrity to build resilience to withstand severe weather 23 events, which may become more frequent in the lifetime of the structures. Such code provisions 24 shall, to the extent reasonable and feasible, take into account climatic changes and potential 25 climatic changes and sea level rise and storm surge calculations by the coastal resources 26 management council. 27 (b) The code requirements shall be based on achieving the following goals in reducing 28 total energy consumption per square foot per year: reduce consumption per square foot by one
- 29 percent (1%) per year through 2020, two percent (2%) per year through 2030, three percent (3%)
- 30 per year through 2050, with the result that building energy consumption is:
- 31 (1) Five percent (5%) below current levels by 2020;
- 32 (2) Twenty-five percent (25%) below current levels by 2030; and
- (3) Sixty percent (60%) below current levels by 2050. 33
- 34 (c) The state building code standards committee in consultation with the building code

1 commissioner shall implement the provisions of this section in collaboration with the office of

2 <u>energy resources and the energy efficiency and resources management council.</u>

3 SECTION 5. Chapter 23-84 of the General Laws entitled "The Rhode Island Climate
4 Risk Reduction Act of 2010" is hereby amended by adding thereto the following section:

5 <u>23-84-4. Sunset --</u> The provisions of this chapter shall sunset as of the effective date of

6 the Resilient Rhode Island Act of 2014, and all state authority vested in the commission shall

7 dissolve and state authority granted to the commission in § 23-84-3 shall revert to the appropriate

8 <u>state authority.</u>

9 SECTION 6. Section 34-37.1-3 of the General Laws in Chapter 34-37.1 entitled
10 "Homeless Bill of Rights" is hereby amended to read as follows:

11 <u>34-37.1-3. Bill of Rights. --</u> No person's rights, privileges, or access to public services 12 may be denied or abridged solely because he or she is homeless. Such a person shall be granted 13 the same rights and privileges as any other resident of this state. A person experiencing 14 homelessness:

(1) Has the right to use and move freely in public spaces, including, but not limited to,
public sidewalks, public parks, public transportation and public buildings, in the same manner as
any other person, and without discrimination on the basis of his or her housing status;

(2) Has the right to equal treatment by all state and municipal agencies, withoutdiscrimination on the basis of housing status;

(3) Has the right not to face discrimination while seeking or maintaining employment
due to his or her lack of permanent mailing address, or his or her mailing address being that of a
shelter or social service provider;

23 (4) Has the right to emergency medical care free from discrimination based on his or her
24 housing status;

(5) Has the right to vote, register to vote, and receive documentation necessary to prove
identity for voting without discrimination due to his or her housing status;

(6) Has the right to protection from disclosure of his or her records and information
provided to homeless shelters and service providers to state, municipal and private entities
without appropriate legal authority; and the right to confidentiality of personal records and
information in accordance with all limitations on disclosure established by the Federal Homeless
Management Information Systems, the Federal Health Insurance Portability and Accountability
Act, and the Federal Violence Against Women Act; and

33 (7) Has the right to a reasonable expectation of privacy in his or her personal property to34 the same extent as personal property in a permanent residence.

- 1 (8) Has the right to be protected as any other person from any harmful effects of climate
- 2 change, including, but not limited to, weather-related disaster events and heat waves.

3 SECTION 7. Sections 39-26-3 and 39-26-4 of the General Laws in Chapter 39-26
4 entitled "Renewable Energy Standard" are hereby amended to read as follows:

5 <u>39-26-3. Purposes. --</u> The purposes of this chapter are to define renewable energy 6 resources and to facilitate the development of new renewable energy resources to supply 7 electricity to customers in Rhode Island with goals of stabilizing long-term energy prices, 8 enhancing environmental quality, <u>reducing greenhouse gas emissions</u>, and creating jobs in Rhode 9 Island in the renewable energy sector.

10 <u>39-26-4. Renewable energy standard. --</u> (a) Starting in compliance year 2007, all 11 obligated entities shall obtain at least three percent (3%) of the electricity they sell at retail to 12 Rhode Island end-use customers, adjusted for electric line losses, from eligible renewable energy 13 resources, escalating, according to the following schedule:

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(1) At least three percent (3%) of retail electricity sales in compliance year 2007;

(2) An additional one half of one percent (0.5%) of retail electricity sales in each of the
following compliance years 2008, 2009, 2010;

17 (3) An additional one percent (1%) of retail electricity sales in each of the following 18 compliance years 2011, 2012, 2013, 2014, provided that the commission has determined the 19 adequacy, or potential adequacy, of renewable energy supplies to meet these percentage 20 requirements;

(4) An additional one and one half percent (1.5%) of retail electricity sales in each of the
following compliance years 2015, 2016, 2017, 2018, and 2019, 2020, 2021, 2022, 2023, 2024,
and 2025, provided that the commission has determined the adequacy, or potential adequacy of
renewable energy supplies to meet these percentage requirements;

(5) In 2020 2026 and each year thereafter, the minimum renewable energy standard established in 2019 2025 shall be maintained unless the commission shall determine that such maintenance is no longer necessary for either amortization of investments in new renewable energy resources or for maintaining targets and objectives for renewable energy <u>including the reduction of greenhouse gas emissions</u>.

30 (b) For each obligated entity and in each compliance year, the amount of retail electricity
31 sales used to meet obligations under this statute that is derived from existing renewable energy
32 resources shall not exceed two percent (2%) of total retail electricity sales.

(c) The minimum renewable energy percentages set forth in subsection (a) above shall be
 met for each electrical energy product offered to end-use customers, in a manner that ensures that

the amount of renewable energy of end-use customers voluntarily purchasing renewable energy is
 not counted toward meeting such percentages.

3 (d) To the extent consistent with the requirements of this chapter, compliance with the 4 renewable energy standard may be demonstrated through procurement of NE-GIS certificates 5 relating to generating units certified by the commission as using eligible renewable energy sources, as evidenced by reports issued by the NE-GIS administrator. Procurement of NE-GIS 6 7 certificates from off-grid and customer-sited generation facilities, if located in Rhode Island and 8 verified by the commission as eligible renewable energy resources, may also be used to 9 demonstrate compliance. With the exception of contracts for generation supply entered into prior 10 to 2002, initial title to NE-GIS certificates from off-grid and customer-sited generation facilities 11 and from all other eligible renewable energy resources shall accrue to the owner of such a 12 generation facility, unless such title has been explicitly deemed transferred pursuant to contract or 13 regulatory order.

(e) In lieu of providing NE-GIS certificates pursuant to subsection (d) of this section, an
obligated entity may also discharge all or any portion of its compliance obligations by making an
alternative compliance payment to the Renewable Energy Development Fund established
pursuant to section 39-26-7.

18 SECTION 8. Section 39-26.1-1 of the General Laws in Chapter 39-26.1 entitled "Long19 Term Contracting Standard for Renewable Energy" is hereby amended to read as follows:

20 <u>39-26.1-1. Purpose. --</u> The purpose of this chapter is to encourage and facilitate the 21 creation of commercially reasonable long-term contracts between electric distribution companies 22 and developers or sponsors of newly developed renewable energy resources with the goals of 23 stabilizing long-term energy prices, enhancing environmental quality, <u>reducing greenhouse gas</u> 24 <u>emissions</u>, creating jobs in Rhode Island in the renewable energy sector, and facilitating the 25 financing of renewable energy generation within the jurisdictional boundaries of the state or 26 adjacent state or federal waters or providing direct economic benefit to the state.

SECTION 9. Section 42-10.1-2 of the General Laws in Chapter 42-10.1 entitled "Public
Finance Management Board" is hereby amended to read as follows:

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**<u>42-10.1-2. Purpose. --</u>** It shall be the purpose and responsibility of the board:

(1) To advise and assist all state departments, authorities, agencies, boards, commissions,
 and public and quasi-public corporations having authority to issue revenue or general obligation
 bonds or notes with respect to issuance of and financial planning related to all those bonds and
 notes;

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(2) Upon request, to advise and/or assist any city or town and any municipal or regional

agency, authority, board, commission, or public or quasi-public corporation having authority to
 issue revenue or general obligation bonds or notes with respect to the issuance and financial
 planning related to those bonds and notes;

4 (3) To collect, maintain, and provide information on state, municipal and public or quasi5 public corporation debt authorization, sold and outstanding, and serve as a statistical center for all
6 state and municipal debt issues;

7 (4) To maintain contact with state municipal and public or quasi-public corporation bond
8 issuers, underwriters, credit rating agencies, investors, and others to improve the market for state
9 and local government debt issues;

10 (5) To undertake or commission studies on methods to reduce the costs and improve11 credit ratings of state and local debt issues;

12 (6) To recommend changes in state laws and local practices to improve the sale and13 servicing of state and local debts.

14 (7) To develop, in consultation with the auditor general and the director of the office of 15 management and budget, advisory guidelines, for the use by state departments, authorities, 16 agencies, boards, commissions, and public and quasi-public corporations, and by municipal or 17 regional agencies, authorities, boards, commissions, or public or quasi-public corporations having 18 the authority to issue general obligation or revenue bonds, for considering the effects of climate 19 change on the performance or likely useful life of any asset being acquired, substantially 20 rehabilitated, or financed through the issuance of such bonds. The advisory guidelines shall be 21 maintained and provided to the state budget officer as the capital development officer, the 22 chairperson of the house finance committee and of the house committee on municipal 23 government, the chairperson of the senate finance committee and of the senate committee on 24 housing and municipal government, the house fiscal advisor, the senate fiscal advisor, the 25 president of each city and town council, the chief administrative official of each city and town, 26 and to city and town finance directors, and to all departments, authorities, agencies, boards, 27 commissions, public and quasi-public corporations and political subdivisions with authority to 28 issue general obligation or revenue bonds. Until such time that the guidance herein required is 29 promulgated by the board, the director of administration shall develop and issue interim advisory 30 guidance for the purposes described in this subsection through the state budget office for use by 31 state agencies and instrumentalities and for use by cities and towns and other political 32 subdivisions through the office of municipal affairs; the interim advisory guidance shall be issued 33 within sixty (60) days after the effective date of this act so that it will be available for developing 34 budgets and capital expenditure plans for fiscal year 2016.

SECTION 10. Chapter 42-66 of the General Laws entitled "Elderly Affairs Department" 2 is hereby amended by adding thereto the following section: 3 42-66-4.3. Duties with regard to heat emergencies. -- The department shall exercise the 4 duties set forth in § 42-66-4 above in order to assure the availability of appropriate services to 5 elderly persons during periods of high temperatures. SECTION 11. Chapter 42-140 of the General Laws entitled "Rhode Island Energy 6 7 Resources Act" is hereby amended by adding thereto the following sections: 8 42-140-3.1. Duties with regard to climate change adaptation and mitigation. -- The 9 office shall exercise the duties set forth in § 42-140-3 in a manner that serves to facilitate 10 adaptation to the conditions of and mitigate the state's contribution to climate change. 11 42-140-3.2. Duties with regard to climate change and low income household impacts. 12 -- The office shall, by June 30, 2015, in conjunction with the department of human services, 13 department of health, the department of environmental management pursuant to § 23-84.2-5, the 14 Rhode Island housing resources commission, Rhode Island housing, and the RI energy efficiency 15 and resources management council, develop a plan for weatherization of all dwelling units 16 occupied by LIHEAP eligible households in neighborhoods subject to an urban heat island effect, 17 which plan shall include an implementation program to accomplish such weatherizations by June 18 30, 2025, for the purposes of reducing summertime peak energy demand, air conditioning costs, 19 air pollution and greenhouse gas emissions, heat-related illness and mortality. The 20 implementation program may be supported from funding, including, but not limited to, federal 21 funds for housing, low income household energy assistance program resources, least-cost 22 procurement pursuant to § 39-1-27.7. PACE programs and such assistance as may be available through Rhode Island housing. 23 24 SECTION 12. Section 42-140.3-8 of the General Laws in Chapter 42-140.3 entitled "The Rhode Island Renewable Energy Coordinating Board" is hereby amended to read as follows: 25 26 42-140.3-8. Strategic renewable energy implementation plan. -- (a) The board shall 27 develop and recommend a strategic renewable energy implementation plan to promote the 28 development of renewable energy resources in Rhode Island. 29 (b) The strategic plan shall: 30 (1) Coordinate the short and long-term implementation of renewable energy policies by 31 state agencies; 32 (2) Assess and include recommendations to realize the potential of renewable energy 33 development to create new businesses, employment opportunities, and industries in Rhode Island; 34 and

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(3) Address any other issues deemed appropriate by the board to advance renewable 1 2 energy development in Rhode Island; and (4) Address the need to mitigate climate change by reduction of greenhouse gas 3 4 emissions. 5 (c) The board may incorporate into the strategic plan the reports and findings of state agencies including, but not limited to, the results of any special area management plans. 6 7 (d) On or before November 15, 2011, the board shall adopt the strategic plan. The board 8 may amend the strategic plan as necessary. The board shall, on or before November 15, 2016, 9 amend the strategic plan as necessary to address the need to mitigate climate change by reduction 10 of greenhouse gas emissions in order to meet goals set forth such mitigation that may be 11 promulgated or accepted by the department of environmental management. 12 (e) On March 15 and September 15 of each year, commencing in 2012, the board shall 13 issue the strategic plan biannual report, which shall be made available to the public and 14 transmitted to the governor; the senate president; the speaker of the house; and state agencies. The 15 strategic plan biannual report shall: 16 (1) Assess compliance with the strategic plan by state agencies and cities and towns; 17 (2) Evaluate the effectiveness of state renewable energy policies; 18 (3) Analyze the structure and sources of public funding for renewable energy 19 development; 20 (4) Evaluate the extent to which public funding for renewable energy development is 21 allocated to energy efficient projects; 22 (5) As necessary, make recommendations to state agencies and cities and towns; and 23 (6) As necessary, make recommendations for legislative action relating to renewable 24 energy development and financing. 25 SECTION 13. Chapter 42-140.3 of the General Laws entitled "The Rhode Island Renewable Energy Coordinating Board" is hereby amended by adding thereto the following 26 section: 27 28 42-140.3-14. Liberal construction of chapter required. -- This chapter shall be 29 construed liberally in aid of its purposes. 30 SECTION 14. This act shall take effect upon passage.

LC005025

#### **EXPLANATION**

## BY THE LEGISLATIVE COUNCIL

## OF

# AN ACT

#### RELATING TO HEALTH AND SAFETY - CLIMATE CHANGE ADAPTION AND MITIGATION - RESILIENT RHODE ISLAND ACT OF 2014

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1 This act would create the "Resilient Rhode Island Act of 2014" and the "Climate Change 2 Mitigation and Adaption Act" to provide a comprehensive and coordinated state response to 3 climate change. This act would designate specific roles for certain state agencies in mitigating 4 and adapting to climate change for the benefit of future residents of the state. 5 This act would take effect upon passage.

LC005025