SENATE . . . . . No. 1973

The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court
(2015-2016)

SENATE, Tuesday, July 21, 2015

The committee on Ways and Means, to whom was referred the Senate Bill providing for the establishment of a comprehensive adaptation management plan in response to climate change (Senate, No. 451),-- reports, recommending that the same ought to pass with an amendment substituting a new draft with the same title (Senate, No. 1973).

For the committee,
Karen E. Spilka

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An Act providing for the establishment of a comprehensive adaptation management plan in response to climate change.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. The General Laws are hereby amended by inserting after chapter 21O the following chapter:-

CHAPTER 21P.

COMPREHENSIVE ADAPTATION MANAGEMENT ACTION PLANNING IN RESPONSE TO CLIMATE CHANGE

Section 1. As used in this chapter, the following words shall have the following meanings unless the context clearly requires otherwise:

"Adaptation", a response and process of adjustment to actual or expected climate change and its effects that seeks to increase the resiliency and reduce the vulnerability of the commonwealth's built and natural environments and seeks to moderate or avoid harm or exploit beneficial opportunities to reduce the safety and health risks that vulnerable human populations and resources may encounter due to climate change.

13 “Executive office”, the executive office of energy and environmental affairs.

14 “Hazard mitigation”, an effort using nonstructural measures to reduce loss of life and
15 property by lessening the impacts of major storms.

16 “Plan”, the comprehensive adaptation management action plan.

17 “Public utility”, as defined in clause (7) of paragraph (j) of section 5 of chapter 21E.

18 “Resilience”, the capacity of social, economic and environmental systems to cope with a
19 hazardous event, trend or disturbance by responding or reorganizing in ways that maintain their
20 essential function, identity and structure while also maintaining the capacity for adaptation,
21 learning and transformation.

22 “State agency”, a legal entity of state government established by the legislature as an
23 agency, board, bureau, department, office or division of the commonwealth with a specific
24 mission that may either report to an executive office or secretariat or be independent division or
25 department.

26 “State authority”, a body politic and corporate constituted as a public instrumentality of
27 the commonwealth and established by an act of the legislature to serve an essential governmental
28 function; provided, however, that “state authority” shall include energy generation and
29 transmission, solid waste, drinking water, wastewater and stormwater and telecommunication
30 utilities serving areas identified by the executive office as subject to material risk of flooding;
31 provided further, that unless designated as such by the secretary of energy and environmental
32 affairs, “state authority” shall not include: (i) a state agency; (ii) a city or town; (iii) a body
33 controlled by a city or town; or (iv) a separate body politic for which the governing body is

34 elected, in whole or in part, by the general public or by representatives of member cities or
35 towns.

36 "Sustainability", the establishment and maintenance of conditions under which humans
37 and nature can exist in productive harmony and fulfill the social, economic and other
38 requirements of present and future generations in a just and equitable manner, including
39 providing for the long-term viability of the people and economy of the commonwealth and its
40 natural ecosystems, which requires consideration of the risks posed by climate change, the
41 practicality of maintaining a long-term presence in the most vulnerable areas and the need to
42 protect and restore natural ecosystems and their services.

43 Section 2. (a) The secretary of energy and environmental affairs and the secretary of
44 public safety and security, in consultation with appropriate secretariats as determined by the
45 governor, shall develop, draft, adopt and revise at least once every 10 years, a comprehensive
46 adaptation management action plan. The plan shall encourage and provide guidance to state
47 agencies, state authorities, and regional planning agencies to proactively address the
48 consequences of climate change and provide a process for local and regional climate
49 vulnerability assessment and adaptation strategy development. The plan and any updates shall be
50 filed with clerks of the house of representatives and senate. The plan shall be developed with
51 guidance from the comprehensive adaptation management action plan advisory commission
52 established in section 3.

53 Upon the adoption of the plan, all certificates, licenses, permits, authorizations, grants,
54 financial obligations, projects, actions and approvals for any proposed projects, uses or activities

55 in and by a state agency or state authority shall be consistent, to the maximum extent practicable,
56 with the plan.

57 (b) The plan shall include, but not be limited to: (i) a statement setting forth the
58 commonwealth's goals, priorities and principles for ensuring effective prioritization for the
59 resiliency, preservation, protection, restoration and enhancement of the commonwealth's built
60 and natural infrastructure; (ii) a commitment to the adherence of sound management practices
61 which shall take into account the existing natural, built and economic characteristics of the
62 commonwealth's most vulnerable areas and human populations; (iii) data on existing, forecasted
63 and projected impacts including, but not limited to, drought and temperature changes, inland
64 flooding and sea level rise according to the best and latest data, forecasting and models; (iv) a
65 statement on the preparedness and vulnerabilities in the commonwealth's emergency response
66 and infrastructure resiliency including, but not limited to, energy, transportation,
67 communications, health and other systems; and (v) an assessment of the economic vulnerability
68 of local businesses in high-risk communities.

69 Section 3. (a) There shall be a comprehensive adaptation management action plan
70 advisory commission to assist the secretary of energy and environmental affairs and the secretary
71 of public safety and security in developing the comprehensive adaptation management plan. The
72 commission shall consist of the state climatologist and the following 12 members who shall be
73 appointed by the secretary of energy and environmental affairs and the secretary of public safety
74 and security: 1 person who shall have expertise in transportation and built infrastructure; 1
75 person who shall have expertise in commercial, industrial and manufacturing activities; 1 person
76 who shall have expertise in commercial property management and real estate; 1 person who shall
77 have expertise in energy generation and distribution; 1 person who shall have expertise in land

78 conservation; 1 person who shall have expertise in water supply and quality; 1 person who shall
79 have expertise in the outdoor recreation economy; 1 person who shall have expertise in economic
80 justice; 1 person who shall have expertise in ecosystem dynamics; 1 person who shall have
81 expertise in coastal zones and oceans; 1 person who shall have expertise in rivers and wetlands;
82 and 1 person who shall have expertise in local government. The secretary of energy and
83 environmental affairs and the secretary of public safety and security shall designate 1 of the
84 members to serve as chair.

85 (b) The advisory commission shall prepare a report:

86 (1) identifying: (i) how the secretary of energy and environmental affairs can support
87 existing adaptation, resilience and hazard mitigation efforts of state agencies, such as the
88 StormSmart Coasts program at the office of coastal zone management, BioMap2 at the
89 department of fish and game and vulnerability studies being conducted by the department of
90 public health and the Massachusetts Department of Transportation; (ii) recommendations of new
91 actions that may be implemented immediately using existing state agency legal authority, state
92 resources and funding based upon the recommendations included in the climate change
93 adaptation report prepared pursuant to section 9 of chapter 298 of the acts of 2008 and existing
94 climate change action plans prepared by regional planning agencies and municipalities; (iii)
95 unilateral actions that can be taken by the executive branch to increase climate adaptation,
96 resilience and hazard mitigation including, but not limited to, executive orders and policy
97 directives issued by the governor or policies, regulations and guidance by the secretary of energy
98 and environmental affairs; and (iv) recommendations of new climate resilience and adaptation
99 actions that require legislative authority, state resources or funding, including identification of
100 funds to leverage opportunities through public-private partnerships; and

101 (2) providing information relative to the risks associated with climate change
102 including, but not limited to, the risks associated with temperature changes, drought, increased
103 precipitation and coastal and inland flooding identified by the advisory committee on flood risks
104 created by climate change established in section 39 of chapter 52 of the acts of 2014.

105 Section 4. Each state agency, state authority and public utility, as designated by the
106 secretary of environmental affairs and the secretary of public safety and security, shall, in
107 consultation with the executive office, develop and update at least once every 10 years a
108 vulnerability assessment for their portfolio of assets based on the relative scientific information
109 collected by the comprehensive adaptation management action plan advisory commission
110 pursuant to section 3. The vulnerability assessments shall classify the economic losses over time
111 associated with each major asset for each flooding scenario as unacceptable, noncritical or
112 immaterial. For assets exposed to material risk of unacceptable losses, the vulnerability
113 assessment shall include order-of-magnitude cost-estimates for: (i) measures to protect the assets
114 from flooding; (ii) measures to make the assets flood resilient; and (iii) removal and relocation of
115 the assets from flood-exposed coastal and river areas. Estimates shall also be prepared for the
116 economic, social and environmental damages if no adaptation actions are taken. Qualitative cost-
117 benefit discussions of projected social impacts of flood prevention versus flood resilience shall
118 also be included in the vulnerability assessment.

119 Section 5. The secretary of energy and environmental affairs and the secretary of public
120 safety and security shall, at least 6 months before establishing a comprehensive plan pursuant to
121 this chapter, provide for public access to the draft plan in electronic and printed copy form and
122 shall provide for a public comment period, which shall include not fewer than 5 public hearings
123 across the commonwealth. The secretary of energy and environmental affairs and the secretary of

124 public safety and security shall publish notice of any public hearing in the Environmental
125 Monitor not fewer than 30 days but not more than 35 days before the date of a hearing. A notice
126 of a public hearing shall also be placed, at least once each week for the 4 consecutive weeks
127 preceding the hearing in newspapers with sufficient circulation to notify the residents of the
128 municipality in which the hearings shall be held. The public comment period shall remain open
129 for at least 60 days from the date of the final public hearing. After the close of the public
130 comment period, the secretary of energy and environmental affairs and the secretary of public
131 safety and security shall issue a final plan and shall file the plan, together with legislation
132 necessary to implement the plan, if any, by filing the same with the clerks of the house of
133 representatives and senate.

134 Section 6. The plan shall be consistent with this chapter and all other general and special
135 laws. Nothing in the plan shall be construed to supersede existing general or special laws or to
136 confer any rights or remedies in addition to those conferred by general or special laws existing
137 on the effective date of this chapter.

138 SECTION 2. The secretary of energy and environmental affairs shall develop and
139 support a regional comprehensive climate change adaptation management action plan grant
140 program which shall consist of financial assistance to regional planning agencies to develop and
141 implement comprehensive adaptation management action plans at the regional level of
142 government. Funds shall be expended from item 2000-7070 of section 2A of chapter 286 of the
143 acts of 2014 for the grant program and the department of energy resources may make available
144 monies from amounts collected by the Department of Energy Resources Credit Trust Fund
145 established in to section 13 of chapter 25A of the General Laws for the grant program. Regional
146 comprehensive adaptation management action plans shall include, but not be limited to: (i)

147 technical planning guidance for adaptive municipalities through a step-by-step process for
148 regional climate vulnerability assessment and adaptation strategy development; (ii) development
149 of a definition of regional impacts by supporting municipalities conducting climate vulnerability
150 assessments; (iii) a demonstrated understanding of regional characteristics, including regional
151 environmental and socioeconomic characteristics; and (iv) prioritization of protecting identified
152 inland and coastal vulnerable locations not yet built upon. The grants shall advance statewide,
153 regional and local efforts to adapt land use, zoning, infrastructure, policies and programs to
154 reduce the vulnerability of the built and natural environment to changing environmental
155 conditions as a result of climate change.

156 SECTION 3. The executive office of energy and environmental affairs, in consultation
157 with the division of capital asset management and maintenance, may acquire by purchase from
158 willing sellers land abutting or adjacent to areas subject to the ebb and flow of the tide or on
159 barrier beaches or in velocity zones of flood plain areas, on which structures have been
160 substantially and repeatedly damaged by severe weather, for conservation and recreation
161 purposes.

162 Prior to the acquisition of any land under this section, the executive office shall develop a
163 conservation and recreation management plan for any such land after consultation with the
164 municipality in which the land is located. The plan shall set forth the priority, description and
165 location of lands to be acquired and any land management agreement reached between the
166 agency and municipality that provides for local responsibility to carry out the development and
167 management of the property. Land acquisitions under this section shall contain a deed restriction
168 stating that the land shall be used for conservation and recreation purposes only.

169 No land shall be acquired under this section until after a public hearing has been held by
170 the executive office in the municipality in which the land is located to consider the management
171 plan. The executive office shall notify the mayor and city council in a city or the board of
172 selectmen, planning board and conservation commission, if any, of a town not later than 10 days
173 prior to any such hearing.

174 If the executive office deems it necessary to make appraisals, surveys, soundings,
175 borings, test pits or other related examinations to obtain information to carry out this section, the
176 executive office or its authorized agents or employees may, after due notice by registered mail,
177 enter upon lands, water and premises, not including buildings, to make such appraisals, surveys,
178 soundings, borings, test pits or other related examinations and such entry shall not be a trespass.
179 The executive office shall provide reimbursement for any injury or actual damages resulting to
180 the lands, waters and premises caused by any act of the executive office or its authorized agents
181 or employees and shall, so far as possible, restore the lands to the same condition as prior to
182 making such appraisals, surveys, soundings, borings, test pits or other related examinations.

183 SECTION 4. (a) The executive office of energy and environmental affairs, acting for and
184 on behalf of the commonwealth, may lease to a municipality, on a form approved by the attorney
185 general, for not more than 25 years, certain property acquired by the commonwealth pursuant to
186 section 3 or by the federal emergency management agency under 42 U.S.C. § 4001, as amended,
187 for use as conservation and recreation areas. Leases shall be in such form and contain such
188 provisions as the secretary of energy and environmental affairs, in consultation with the division
189 of capital asset management and maintenance, shall determine, including such terms and
190 conditions as necessary to comply with laws relative to the protection of barrier beaches. Lands
191 shall be leased upon the express conditions that the land shall be used for conservation and

192 recreation purposes only, that no permanent structures shall be erected and a reversionary clause
193 that requires the lease to be terminated if the leased land is used in violation of this act.

194 (b) In consideration for the granting of a lease authorized in subsection (a), the lessee
195 municipality shall agree to maintain the acquired land as a clean, safe and orderly conservation
196 or recreation area.

197 SECTION 5. Pursuant to its authority under section 40 of chapter 131 of the General
198 Laws, the commissioner of environmental protection shall promulgate rules regulating the
199 dredging, filling or altering of land subject to coastal storm flowage.

200 SECTION 6. The executive office of energy and environmental affairs and the executive
201 office of public safety and security may expend such sums as may be available from any source
202 to carry out chapter 21P of the General Laws, including expenses in connection with the
203 department's responsibilities under that chapter and the cost of planning and for the
204 development, redevelopment or improvement of land under that chapter.

205 SECTION 7. The regulations required pursuant to section 5 shall be promulgated not
206 later than 180 days after the effective date of this act.

207 SECTION 8. The comprehensive adaptation management action plan advisory
208 commission shall complete the first report required under subsection (b) of section 3 of chapter
209 21P of the General Laws not later than January 1, 2017 and shall revise said report at least once
210 every 10 years.

211 SECTION 9. The first comprehensive adaptation management action plan required under
212 section 2 of chapter 21P of the General Laws shall be completed not later than January 1, 2018.