

HOUSE No. 845

The Commonwealth of Massachusetts

PRESENTED BY:

Kathleen R. LaNatra

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act establishing an ecologically-based mosquito management program in the Commonwealth to protect public health.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Kathleen R. LaNatra</i>	<i>12th Plymouth</i>	<i>1/13/2023</i>
<i>Lindsay N. Sabadosa</i>	<i>1st Hampshire</i>	<i>1/26/2023</i>
<i>Jessica Ann Giannino</i>	<i>16th Suffolk</i>	<i>1/27/2023</i>
<i>Vanna Howard</i>	<i>17th Middlesex</i>	<i>2/2/2023</i>
<i>Adrian C. Madaro</i>	<i>1st Suffolk</i>	<i>2/6/2023</i>
<i>Margaret R. Scarsdale</i>	<i>1st Middlesex</i>	<i>2/10/2023</i>
<i>Colleen M. Garry</i>	<i>36th Middlesex</i>	<i>2/13/2023</i>
<i>Denise C. Garlick</i>	<i>13th Norfolk</i>	<i>2/15/2023</i>
<i>Paul McMurtry</i>	<i>11th Norfolk</i>	<i>2/15/2023</i>
<i>Joanne M. Comerford</i>	<i>Hampshire, Franklin and Worcester</i>	<i>2/21/2023</i>
<i>James K. Hawkins</i>	<i>2nd Bristol</i>	<i>2/23/2023</i>
<i>David Paul Linsky</i>	<i>5th Middlesex</i>	<i>3/6/2023</i>

HOUSE No. 845

By Representative LaNatra of Kingston, a petition (accompanied by bill, House, No. 845) of Kathleen R. LaNatra and others relative to establishing an ecologically-based mosquito management program in the Commonwealth to protect public health. Environment and Natural Resources.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Third General Court
(2023-2024)**

An Act establishing an ecologically-based mosquito management program in the Commonwealth to protect public health.

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

1

2 SECTION 1. Section 2 of chapter 21A of the General Laws is hereby amended by
3 inserting after paragraph 30 the following paragraph:- (31) consistent with their statutory
4 responsibilities, implement the ecologically-based mosquito management program established
5 pursuant to Chapter 252A.

6 SECTION 2. Chapter 252 of the General Laws is hereby repealed.

7 SECTION 3. The General Laws are hereby amended by inserting after chapter 251 the
8 following chapter:

9 CHAPTER 252A. ECOLOGICALLY-BASED MOSQUITO MANAGEMENT.

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

12 “Adulticiding”, the use of pesticides intended to kill adult mosquitoes.

13 “Biodiversity survey”, an accounting of the diversity, evenness, and richness of species
14 relevant to mosquito management in a given area.

15 “Board”, the mosquito management board under section 4.

16 “Breeding history”, the level of larval and adult mosquito abundance in a given area.

17 “Council”, the governing body of a mosquito management district under section 7.

18 “Disease vector”, any species of mosquito which contributes to the amplification or
19 transmission of any disease, including Eastern Equine Encephalitis or West Nile Virus, among
20 human or non-human populations by injection of salivary gland fluid during biting.

21 “District”, a mosquito management district under section 7.

22 “Ecologically-based mosquito management” or EBMM, an ecologically sustainable
23 approach to the management of mosquito populations combining cultural, physical, biological,
24 and, when strictly necessary to protect public health, least-toxic chemical control strategies.
25 EBMM prioritizes preventative measures, including surveillance, monitoring, and public
26 education on eliminating breeding sites and taking personal protective action. EBMM involves
27 the selection, integration, and implementation of mosquito control strategies based on predicted
28 ecological, epidemiological, and economic consequences. EBMM seeks maximum use of
29 naturally occurring mosquito controls, including weather, disease agents, predators, and
30 parasitoids. In addition, EBMM utilizes various biological and physical controls and habitat

31 modification techniques. Under EBMM, chemical controls are imposed as a last resort and only
32 as required to keep a pest from surpassing tolerable population levels predetermined from
33 accurate assessments of the ecological, public health, and economic costs of the control
34 measures.

35 “Ecologically-based mosquito management plan” the long term plans developed by the
36 mosquito management board and councils under sections 5 and 8.

37 “EEE”, Eastern Equine Encephalitis.

38 “Habitat manipulation”, an approach to reducing mosquito abundance by naturally
39 altering the landscape. Habitat manipulation aims to create unfavorable conditions for mosquito
40 populations, and favorable conditions for mosquito predators.

41 “Habitat quality”, the ability of the environment to provide conditions appropriate for the
42 persistence of mosquito predators at the individual and population level.

43 “Larviciding”, the use of pesticides intended to kill larval or pupal mosquitoes.

44 “Low impact development”, development that incorporates best management practices to
45 reduce impervious surfaces; preserve natural vegetation, soils, and hydrology; and reduce
46 stormwater volumes and pollution. Low impact development practices include, but are not
47 limited to, project designs that reduce the amount of impervious cover and retain natural
48 drainage patterns. Low impact development practices are designed to infiltrate water into the
49 ground or disperse it slowly through vegetation, avoiding ponding or other water retention that
50 may create mosquito habitat.

51 “Nuisance”, mosquitoes which may cause irritation or discomfort to humans, but do not
52 pose and are not expected in the immediately predictable future to pose a significant risk to
53 public health.

54 “Pesticide”, a substance or mixture of substances intended for preventing, destroying,
55 repelling, or mitigating any pest, and any substance or mixture of substances intended for use as
56 a plant regulator, defoliant, or desiccant; provided, that the term “pesticide” shall not include any
57 article that is a “new animal drug” within the meaning of section 201(w) of the federal food, drug
58 and cosmetic act (21 U.S.C. Section 321 (v)), or that has been determined by the secretary of the
59 United States Department of Health and Human Services to be a new animal drug by a regulation
60 establishing conditions of use for the article, or that is an animal feed within the meaning of
61 section 201(x) of such act (21 U.S.C. Section 321(w)).

62 “PFAS”, a class of fluorinated organic chemicals containing at least one fully fluorinated
63 carbon atom.

64 “Secretary”, the secretary of the executive office of energy and environmental affairs.

65 “Sentinel species”, an animal species that may contract an arbovirus before the arbovirus
66 spreads to the human population, or a species in which an arbovirus outbreak may be more
67 widespread than it is in the human population. A sentinel species may serve as an indicator of the
68 presence of the arbovirus in area mosquito populations.

69 “Source reduction”, a method of managing mosquitoes that relies on reducing or
70 eliminating the ability of larval habitats to support the development of larvae, including removal
71 of artificial sources of standing, stagnant water or the restoration of natural flows and wetland
72 systems to improve access by predators, water quality, and overall aquatic health.

73 “Wetlands or wildlife ecologist”, an expert with a master’s or doctorate degree in wetland
74 ecology, wildlife ecology, or a closely related field of ecological study.

75 Section 2. When it is necessary for the purpose of protecting public health or for other
76 purposes to control or abate mosquitoes or greenhead flies, measures shall be taken as specified
77 in this chapter. Nothing in this chapter shall prohibit a municipality from conducting its own
78 mosquito or greenhead fly management program, except that no municipality shall conduct aerial
79 spraying of adulticides or larvicides. Nothing in this chapter shall prohibit any resident from
80 controlling or abating mosquitos or greenhead flies on his or her property.

81 Section 3. There is hereby established within the executive office of energy and
82 environmental affairs a mosquito management office that shall be administered by the secretary.
83 The secretary shall appoint all necessary employees within the mosquito management office,
84 except as may be otherwise provided by law. The secretary shall direct the mosquito
85 management office, consistent with state law and policies and directives of the board, to adopt,
86 and from time to time amend, rules, regulations, procedures, standards, guidelines, and policies
87 that shall constitute the Massachusetts ecologically-based mosquito management program.

88 Section 4. (a) There shall be in the mosquito management office a mosquito management
89 board. The function of the board shall be to regulate and oversee all disease vector mosquito and
90 related nuisance organism management activities in the commonwealth; to prepare an
91 ecologically-based mosquito management plan and a state emergency arbovirus response plan; to
92 review and certify ecologically-based mosquito management plans submitted by councils; to
93 create policies and procedures for ecologically-based mosquito management to control vector-
94 borne diseases; to authorize and carry out investigations and keep records; to carry out mosquito

95 management programs in areas of the commonwealth outside of any mosquito management
96 district; and to develop policies and procedures to insure that all mosquito management activities
97 comply with the intent of section 5 of chapter 40; sections 1 through 63, inclusive, of chapter 91;
98 section 105 of chapter 130 and sections 40 and 40A of chapter 131 as applicable; provided,
99 however, the usual and customary activities associated with the state emergency arbovirus
100 response plan or the ecologically based mosquito management plan of the state or of a council,
101 as certified, shall not require filings or hearings under section 40 of chapter 131, but rather
102 simple notice to the conservation commission of a municipality of proposed actions in any
103 regulated wetland; and to carry out all other powers and functions granted to the board by this
104 chapter.

105 (b) The board shall consist of (1) the following members or their designees: the
106 commissioner of the department of environmental protection, who shall serve as chair; the
107 commissioner of the department of public health; the commissioner of the department of
108 agricultural resources; the commissioner of the department of fish and game; the director of the
109 natural heritage and endangered species program of the division of fisheries and wildlife; and the
110 director of the division of ecological restoration of the department of fish and game. (2) the
111 following 5 members designated by the secretary: one person representing a statewide land
112 conservation organization or a regional or statewide river protection organization; one person
113 representing beekeepers; one person representing groups concerned about native pollinators; an
114 expert in pesticides and mosquito control and an ecological risk assessor with a background in
115 ecotoxicology. Each of these five designated members shall be designated for a term of four
116 years, except for persons designated to fill vacancies, who shall serve for the unexpired term.

117 Any member appointed under this clause shall be eligible for reappointment, so long as no
118 specific member shall serve for more than 2 terms.

119 (c) The board members shall receive no additional compensation for service on the board,
120 but shall be entitled to their reasonable traveling and other expenses incurred in the performance
121 of their duties. The board may draw staff support from the departments represented with the
122 consent of the respective commissioners.

123 (d) The board shall meet at the call of any 2 members or at the call of the board chair, but
124 not less than 6 times annually. The board may elect a secretary and other officers as it finds
125 necessary.

126 (e) The board may purchase, lease, or rent equipment and supplies to be used in
127 performance of the board's duties and to facilitate the ecologically-based management of
128 mosquitoes. Such supplies may be made available to councils by petition to the board, but shall
129 remain the property of the board.

130 (f) No member of the board shall have current or reasonably foreseeable conflicts, as
131 defined by chapter 268A.

132 Section 5. (a) The board shall prepare a state ecologically-based mosquito management
133 plan. Any action taken under this chapter shall be included in the state plan, in a district plan
134 certified by the board pursuant to section 8, or in the state emergency arbovirus response plan
135 pursuant to section 9. Before adoption of the state ecologically-based mosquito management
136 plan, a public hearing shall be held by the board in each mosquito control district. The state
137 ecologically-based mosquito management plan shall prioritize preventive action and non-
138 pesticide control measures and shall include the management activities under this section.

139 (b) (1) The state ecologically-based mosquito management plan shall establish a public
140 education and outreach campaign aimed at informing residents and businesses how to reduce
141 mosquito breeding sites in and around their properties and the community at large, preventive
142 measures individuals can take to protect themselves, and proper use of larvicides. The campaign
143 shall be overseen by the board, with assistance from mosquito management councils. (2) The
144 public education and outreach campaign shall inform residents of how mosquito-borne diseases
145 are transmitted and the difference between nuisance and disease vector mosquitoes, inform
146 residents of the environmental and health hazards associated with mosquito adulticides and
147 larvicides, and advise residents how they can opt-out of adulticide applications. The public
148 education and outreach campaign may include, but not be limited to, the following methods
149 of public outreach: (i) a publicly accessible website and social media pages; (ii) campaign
150 branded pamphlets, infographics, and fact sheets; (iii) public meetings and open houses; (iv)
151 videotaped and digital presentations; (v) advertisements in public spaces; (vi) local public access
152 television or other local media sources; (vii) inserts in utility bills; (viii) posting on the apiary
153 program website of the division of agriculture resources; and (ix) in-state registration
154 notifications for pesticide applicators.

155 (c) (1) The state ecologically-based mosquito management plan shall establish a program
156 for trapping adult mosquitoes. Within mosquito management districts, trapping shall be overseen
157 by the mosquito management councils. In areas of the commonwealth not within mosquito
158 management districts, the board shall oversee trapping and testing of adult mosquitoes, pursuant
159 to section 6. (2) Trapping shall occur during a time period corresponding with mosquito activity.
160 The acting authority, whether the board or a mosquito management council, may, at its own
161 discretion, change these dates based upon climatic conditions or other outstanding factors. Traps

162 shall be placed at locations based on risk of disease spread. Mosquito counts from mosquito traps
163 shall be recorded at regular intervals in a publicly accessible location, such as the board or
164 council's website. (3) Trapped mosquitoes may be tested for the following mosquito-borne
165 diseases: (i) West-Nile Virus; (ii) Eastern Equine Encephalitis; (iii) Jamestown Canyon Virus;
166 or (iv) other arboviruses of local or regional concern. (4) Based on positive findings of a
167 mosquito-borne disease in tested mosquitoes, or at the discretion of the board, the board may test
168 sentinel host species for the presence of mosquito-borne disease.

169 (d) (1) The state ecologically-based mosquito management plan shall establish a program
170 for monitoring and mapping larval breeding sites. Within mosquito management districts,
171 monitoring and mapping shall be overseen by the mosquito management councils. In areas not
172 within mosquito management districts, the board shall oversee monitoring and mapping,
173 pursuant to section 6. (2) The acting authority, whether the board or a mosquito management
174 council, shall oversee the creation of a map of larval mosquito breeding sites within the
175 commonwealth or mosquito management district that classifies breeding sites based on habitat
176 quality and breeding history. The following classifications may shall be used: (i) Low quality
177 ecological habitat and low breeding history; (ii) High quality ecological habitat and low breeding
178 history; (iii) Low quality ecological habitat and high breeding history; and (iv) High quality
179 ecological habitat and high breeding history. (3) The acting authority shall monitor larval
180 mosquito populations on a regular interval using a diptest. Particular attention is to be paid to
181 sites where known vector mosquitoes breed, and sites with low quality ecological habitat and
182 high breeding history. The monitoring period shall correspond with mosquito activity in the area
183 monitored. The acting authority may, at its own discretion, change these dates based upon
184 climatic conditions or other outstanding factors. The map of larval mosquito breeding sites, their

185 classification, and larval monitoring data shall be maintained in a publicly accessible location,
186 such as the board or council's website. (4) The acting authority shall regularly conduct an
187 ecological analysis and biodiversity survey in mosquito larval breeding sites. Such a survey shall
188 be conducted in consultation with a wetlands or wildlife ecologist. The acting authority shall
189 work with the wetlands or wildlife ecologist to classify breeding sites based on habitat quality
190 and breeding history, using the classifications listed in subsection (2) to characterize ecological
191 health in the context of mosquito abundance and mosquito-borne disease transmission in the
192 area. The assessment shall aim to further develop non-pesticidal management approaches to
193 reduce mosquito populations. (5) The acting authority shall make all data and analysis analyses
194 under this section available in a publicly accessible location, such as the board or council's
195 website within 10 business days of acquiring data, and completing analyses, classifications, and
196 plans.

197 (e) (1) The state ecologically-based mosquito management plan shall employ source
198 reduction and wetlands restoration as the preferred methods of managing mosquito populations.
199 Within mosquito management districts, source reduction and wetlands restoration shall be
200 overseen by the mosquito management councils in coordination with a wetlands or wildlife
201 ecologist. In areas of the commonwealth not within mosquito management districts, the board
202 shall oversee source reduction and wetlands restoration, pursuant to section 6. (2) Source
203 reduction may include, but not be limited to, removal of tires, trash, abandoned containers or
204 structures, and other sources of artificial standing water, and water management strategies to
205 avoid and eliminate artificially created mosquito breeding areas such as use of low impact
206 development techniques for stormwater management. (3) Wetlands restoration shall be designed
207 to restore natural flows, improve water quality and fish access, mosquito predator access, and

208 increase overall wetland ecosystem diversity and function. Wetlands restoration may include, but
209 not be limited to, upgrading culverts, removing dams, and otherwise restoring degraded
210 wetlands. All wetlands restoration must comply with applicable federal, state, and local laws.
211 The state ecologically-based mosquito management plan shall include the involvement of local
212 conservation commissions and the division of ecological restoration in wetlands restoration
213 projects.

214 (f) (1) The state ecologically-based mosquito management plan shall provide for the
215 mitigation activities described in this subsection. Within mosquito management districts,
216 mitigation activities shall be overseen by the mosquito management councils. In areas of the
217 commonwealth not within mosquito management districts, the board shall oversee the provision
218 of these mitigation activities, pursuant to section 6. (2) (i) The state ecologically-based mosquito
219 management plan shall establish scientifically based and quantifiable thresholds for larvicide use
220 and shall provide for the application of larvicides based on the monitoring of breeding sites.
221 Particular attention is to be paid to sites where known vector mosquitoes breed, and sites with
222 low quality ecological habitat and high breeding history. (ii) Larvicides shall not be used to
223 manage nuisance mosquito populations and may be used only when source reduction and
224 wetlands restoration have not been effective in abating disease risk. When applying larvicides,
225 the applying authority, whether the board or a mosquito management council, shall select the
226 larvicide that poses the least risk to human health and the environment, while remaining
227 effective. Preference is given to larvicides that are certified by the Organic Materials Review
228 Institute or classified under the Environmental Protection Agency's minimum risk pesticide
229 program. (iii) Aerial application of any larvicide is prohibited. (3) (i) The state ecologically-
230 based mosquito management plan shall provide that mosquito adulticides are considered the

231 most dangerous and least effective method of reducing nuisance and vector mosquito
232 populations. Adulticides shall not be used to manage nuisance mosquito populations, and shall
233 only be considered following the detection of a mosquito-borne pathogen in mosquito or sentinel
234 species. (ii) The state ecologically-based mosquito management plan shall establish
235 scientifically based and quantifiable thresholds for adulticide use based on the risk of mosquito-
236 borne disease transmission. (iii) Following the detection of a mosquito-borne pathogen in an
237 adult mosquito or sentinel species, the acting authority, whether the board or a mosquito
238 management council, shall take the following actions: (A) notify the public and increase public
239 education and outreach, emphasizing personal protection measures; (B) begin or increase the
240 trapping of adult mosquitoes in the area of detection; (C) begin or increase larval monitoring and
241 management in the area of detection; (D) prioritize further testing for mosquito-borne diseases in
242 the area of detection; and (E) consider non-pesticidal management approaches to reduce
243 mosquito populations in the area of detection. (iv) Following the detection of a mosquito-borne
244 pathogen in an adult mosquito or sentinel species, if the established threshold has been met, the
245 acting authority may consider the ground application of adulticide using a backpack applicator,
246 provided that the backpack-applied adulticide application occurs only within the immediate area
247 of detection and the backpack-applied adulticide is the least toxic adulticide available. Preference
248 shall be given to adulticides that are certified by the Organic Materials Review Institute or
249 classified under the Environmental Protection Agency's minimum risk pesticide program. (v) If
250 monitoring and trapping data indicate a broader concern of mosquito-borne disease in the
251 community, and education, prevention, habitat manipulation, larviciding, and backpack-applied
252 adulticiding have all been attempted and determined insufficient to address an immediate threat
253 to public health from mosquito-borne disease, the acting authority may, based on alignment with

254 an established threshold, consider the truck-mounted ground application of a mosquito
255 adulticide, provided the application occur within the most limited area possible to achieve
256 effective reduction in adult vector mosquitoes. If necessary to protect public health, the truck-
257 applied adulticide need not be certified by the Organic Materials Review Institute or be classified
258 under the Environmental Protection Agency's minimum risk pesticide program, but it shall be
259 the least toxic adulticide that will be effective in mitigating disease risk. (vi) The acting
260 authority shall increase monitoring and trapping following the application of a mosquito
261 adulticide, and shall work with a wetlands or wildlife ecologist to characterize the impacts
262 adulticide use had on the ecological health of the habitat where the adulticide was applied. (vii)
263 Aerial application of any adulticide is prohibited. (viii) Any application of a mosquito adulticide
264 shall be performed by a certified pesticide applicator.

265 (g) (1) The ecologically-based management plan shall include: (i) a determination by the
266 Natural Heritage and Endangered Species Program in the department of fish and game that the
267 plan proposed will result in no alteration, as defined under chapter 131A, to any priority habitat
268 or take of rare, threatened, endangered, or species of special concern state or federally listed
269 species; and (ii) reasonable measures by the board to assure that the plan proposed will avoid
270 hazardous effects on human health and the environment, including effects to soils, sediments,
271 surface waters, groundwater or any ocean sanctuary under sections 13 through 16 and 18 of
272 chapter 132A. (h) The board shall review and revise the state ecologically based mosquito
273 management plan whenever useful or necessary, but no less frequently than every 3 years.

274 Section 6. (a) (1) In carrying out the provisions of this chapter, the board may employ
275 necessary engineers, scientists, assistants, or other agents, who may enter on premises that the
276 board desires to survey or examine. The board may provide technical assistance to any council in

277 the development and implementation of an ecologically-based mosquito management program.
278 (2) The board shall carry out field investigations and other determinations of the need, method,
279 and procedures for managing mosquitoes as deemed advisable, including all significant potential
280 health and environmental impacts of the proposed management measures. Board members and
281 their agents are authorized to enter or examine at any reasonable time those premises which the
282 board considers necessary to carry out its responsibilities.

283 (b) (1) The board shall provide a menu of services to municipalities that are not members
284 of mosquito control districts, with reasonable fees for each service selected by the municipality.
285 This menu shall include public education and outreach, surveillance of adult mosquitoes,
286 monitoring and mapping of larval breeding sites, source reduction and wetlands restoration, and
287 larviciding and aduictiding services, subject to the state ecologically-based mosquito
288 management plan. (2) A municipality may opt in to receiving any of the services under clause
289 (1) by approval of its legislative body and notification to the board and the municipality's
290 conservation commission. In opting in to larviciding or aduictiding services, a municipality may
291 impose additional restrictions not included in the state ecologically-based mosquito management
292 plan on the timing, location, or manner of application of larviciding or aduictiding. A
293 municipality that has opted in to receiving any service may opt out at any time by approval of its
294 legislative body. The fee charged for each service shall pay the full cost of the service. Any
295 funds received for this purpose in excess of those required to provide the requested services shall
296 be returned to the purchasing municipality. At least once per year, or more frequently if
297 requested by a municipality, the board shall provide each municipality an accounting of the fees
298 charged to the municipality that year. (3) All amounts for which a municipality may be liable in

299 connection with the above may be contributed by persons or bodies politic benefited by the
300 services in proportion to their respective benefits or otherwise.

301 Section 7. (a) Any municipality or 2 or more municipalities, may, by obtaining
302 certification of the board, become a mosquito management district. The district shall be titled the
303 mosquito management district. Notice of the formation of a district must be filed with the
304 secretary of state and the board with a description of the proposed boundaries of the district.

305 (b) A council shall be established for each district and shall be called the mosquito
306 management council. The council is declared to be the corporate authority of the district and
307 shall exercise all the powers and control all of the affairs and property of the district. Any
308 mosquito management council shall be composed of at least 5 members, all of whom must either
309 live or work in the district. The members of the council are to be appointed by the mosquito
310 management board and shall comprise: 1 person who represents an environmental protection or
311 conservation organization or a municipal conservation commission; 1 person who is a member of
312 a municipal board of health or a health care provider; 1 person who represents the executive
313 office of a municipality; and 2 citizens at large preferably with some background in engineering,
314 law, chemistry, biology, or any other experience or education that would have relevance to
315 mosquito control and management.

316 (c) The mosquito management board shall monitor the operations of the councils and
317 shall require adherence to this act and to each council's certified ecologically-based mosquito
318 management plan.

319 (d) (1) Each district council shall appoint a superintendent who shall be a person of skill
320 and experience or knowledge in the field of mosquito management and who shall be committed

321 to the use of ecologically-based mosquito management. The district superintendent, with the
322 approval of the council, shall be empowered to hire sufficient staff and employees and purchase
323 materials to fulfill the requirements of the council's certified ecologically based mosquito
324 management plan. Employees and staff of the council shall not be subject to the provisions of
325 section 9A of chapter 30, and chapter 31. (2) The superintendent shall keep regular records of all
326 proceedings and financial affairs, which shall be open to inspection by the board or by the
327 council at all times; and by the public at reasonable hours. The council shall have ultimate
328 responsibility for the efficient financial and sound environmental management of the district and
329 shall be required, at the discretion of the board, to audit its finances and submit said audit to the
330 board for its review and oversight.

331 (e) The federal government, the commonwealth or its municipalities, or their
332 administrative agencies, not members of a mosquito management district, may request mosquito
333 or greenhead fly management services from the district, which the council may provide at a fee,
334 which shall pay the full cost of the mosquito or greenhead fly management services. The
335 recipient of the services shall pay the full fee. Any funds received for this purpose in excess of
336 those required to provide the requested services shall be returned to the purchaser.

337 (f) (1) The council shall provide a menu of services to participating municipalities, with
338 reasonable fees for each service selected by the municipality. This menu shall include public
339 education and outreach, surveillance of adult mosquitoes, monitoring and mapping of larval
340 breeding sites, source reduction and wetlands restoration, and larviciding and aduictiding
341 services to all municipalities within the district, subject to the district's certified ecologically
342 based mosquito management plan. (2) A municipality may opt in to receiving any of the above
343 services by approval of its legislative body and notification to the council and the municipality's

344 conservation commission. In opting in to larviciding or adulticiding services, a municipality may
345 impose additional restrictions not included in the district ecologically based mosquito
346 management plan on the timing, location, or manner of application of larviciding or adulticiding.
347 A municipality that has opted in to receiving any service may opt out at any time. The fee
348 charged for each service shall pay the full cost of the service. Any funds received for this
349 purpose in excess of those required to provide the requested services shall be returned to the
350 purchasing municipality. At least once per year, or more frequently if requested by a
351 municipality, the council shall provide each municipality an accounting of the fees charged to the
352 municipality that year. (3) All amounts for which a municipality may be liable in connection
353 with the receipt of services under this section may be contributed by persons or bodies politic
354 benefited by the services in proportion to their respective benefits or otherwise. (4) The cost of
355 district services may be shared by the board if the board deems, and in proportion as the board
356 determines, that the service is in the larger interest of the commonwealth.

357 Section 8. (a) Within 90 days from the formulation of the board's ecologically-based
358 management plan, or from the establishment of a district, the council shall develop and submit to
359 the board an ecologically-based mosquito management plan. The district's ecologically-based
360 plan shall be constituted either by adopting the board's ecologically-based mosquito management
361 plan, or the board's plan with modifications. The district's ecologically-based plan shall not
362 authorize the use of adulticides, larvicides, or other pesticides when such use is prohibited by law
363 or by the state ecologically-based mosquito management plan. The board shall be allowed 30
364 days to approve, disapprove, or modify the district's plan. If the board disapproves or requires
365 amendment of the plan submitted by the council, the council shall have 30 days to make those
366 amendments and resubmit the plan to the board for certification. In disapproving or requiring

367 amendment of the plan submitted by the council, the board shall clearly state the areas of the
368 plan that were deficient and what the deficiencies of the plan were. The plan shall be adopted for
369 the district upon certification by the board. Thereafter the plan shall be reviewed, amended if
370 necessary, and submitted for recertification no less than every 3 years, or more frequently if the
371 council chooses.

372 (b) With the prior written certification of the board of the district's ecologically-based
373 mosquito management plan, as provided for in this section, the council shall have the power to
374 take all necessary or proper steps for the management of mosquitoes within the district subject to
375 the provisions of this chapter; to purchase supplies and materials and to employ labor, assistants,
376 scientists, or consultants as may be necessary or proper in furtherance of the objectives of the
377 same; and generally to do all things, subject to the provisions of this chapter, necessary or
378 incident to powers hereby granted and to carry out the objectives specified herein.

379 (c) (1) Any action taken under this chapter shall be included in the district's ecologically-
380 based mosquito management plan. Before adoption of a district ecologically-based mosquito
381 management plan, a public hearing shall be held by the council. A hearing required by a federal,
382 state, or municipal agency on the program shall be sufficient for purposes of this section. In
383 addition to the details of management activities the ecologically-based management plan shall
384 include: (i) A determination by the Natural Heritage and Endangered Species Program in the
385 department of fish and game that the plan proposed will result in no alteration, as defined under
386 chapter 131A, to any priority habitat or take of rare, threatened, endangered, or species of special
387 concern state or federally listed species; and (ii) reasonable measures by the council to assure
388 that the plan proposed will avoid hazardous effects on human health and the environment,

389 including effects to soils, sediments, surface waters, groundwater or any ocean sanctuary under
390 sections 13 through 16 and 18 of chapter 132A.

391 Section 9. (a) The board shall complete an emergency arbovirus response plan to be
392 exercised by the commissioner of the department of public health under this section. The
393 emergency response plan shall specify scientifically based and quantifiable thresholds for
394 determining the existence of an ongoing arbovirus public health emergency. The emergency
395 arbovirus response plan shall specify the mosquito management measures to be used in case of
396 an ongoing arbovirus public health emergency and shall specify procedures for coordination
397 among state agencies, municipal governments, the board, and the mosquito management
398 districts. The emergency arbovirus response plan shall not authorize the aerial application of any
399 adulticide or larvicide.

400 (b) Before adoption of the emergency response plan, a public hearing shall be held by
401 the board in each of the existing mosquito control districts. The emergency response plan shall
402 be reviewed and revised whenever useful or necessary, but no less than every 3 years.

403 (c) The state emergency response plan shall be exercised only after a public health
404 emergency is declared by the governor of the commonwealth on the recommendation of the
405 commissioner of the department of public health and the board that the thresholds of the
406 emergency response plan have been met. Such recommendation shall be accompanied by a
407 public document detailing the evidence and the basis for the judgment that a public health
408 emergency exists, the target organism, the expected management agents or chemicals and
409 procedures to be used, and the areas to be so treated.

410 (d) Following a declaration of a public health emergency by the governor of the
411 commonwealth, the emergency response plan shall be exercised by the commissioner of the
412 department of public health. The board and the district councils shall act under the direction of
413 the commissioner of the department of public health during the state of public health emergency.
414 The costs incurred by the board or any councils due to the exercise of the emergency response
415 plan shall be paid by the commonwealth.

416 (e) The state of public health emergency shall be terminated automatically after 60 days,
417 or by a declaration by the governor of the commonwealth. If the public health emergency is not
418 resolved within 60 days, a subsequent declaration of public health emergency may be made,
419 pursuant to the requirements of this section for making such declaration.

420 (f) In exercising the emergency arbovirus response plan, the notification and opt-out
421 provisions of sections 10 and 11 shall continue to apply.

422 (g) (1) Following any declaration of an arbovirus public health emergency under this
423 section and within 30 days after termination of the emergency, the commissioner of the
424 department of public health shall complete and make available on the department's website for
425 the public record a report of actions taken during the emergency, including, at a minimum: (i)
426 the target organism or organisms, their estimated population size, records of EEE or other
427 mosquito-borne disease prevalence and infection rate, rainfall and temperature data, and an
428 analysis of the geographic patterns indicated by these data, both prior to and following
429 management activities; (ii) agents, chemicals, or source reduction activities used in the
430 treatment, and times, rates and means of application; (iii) records of incidence of EEE or other
431 mosquito-borne diseases and the effectiveness of the treatment in preventing the disease or

432 diseases, the total number of confirmed human cases of EEE or other mosquito-borne diseases,
433 the total number of horses and other animals confirmed as having been affected by EEE or other
434 mosquito-borne diseases, the number of deaths in humans and other animals, the kinds of illness
435 and disabilities, noting term and nature of sickness, recuperation, and rehabilitation in humans;
436 (iv) effects of the treatments on soils and water, and on flora and fauna of the areas treated
437 including pesticide incidents reported to apiary program of the division of agriculture resources
438 and at their apiary and pesticide locator map and other areas affected; (v) maps of the area
439 treated with indications on the maps of localities treated; and (vi) any recommendations for
440 changes in regulations or procedures for future interventions. All actions taken under the
441 authority of this section shall be designed to protect public health while minimizing any adverse
442 effect to the environment.

443 Section 10. (a) At least 72 hours prior to the application of any adulticide, the authority
444 overseeing such application, whether the board, a district council, or the commissioner of the
445 department of public health, shall provide notice of the methods to be employed, including: the
446 product to be applied; the locations, dates, and times of application; and any health risks and
447 adverse environmental impacts associated with the product.

448 (b) Notice shall be provided to all residents within ½ mile of the planned adulticide
449 application. Notice shall be provided through, at a minimum, any municipal emergency
450 notification or community alert service, such as “CodeRED,” announcements in local
451 newspapers or other press, and the website and social media feeds of the affected municipalities.
452 Direct notice shall also be provided to: (i) the executive office of the affected municipality or
453 municipalities; (ii) appropriate local and regional boards and commissions, including boards of
454 health and conservation commissions; (iii) schools, child care centers, and school age child care

455 programs within ½ mile of the planned adulticide application; (iv) property owners within ½
456 mile of the planned adulticide application who have opted out of spraying based on exclusions
457 pursuant to applicable regulations governing pesticide application; (v) agricultural entities
458 including beekeepers, cranberry growers, certified organic farms and aquaculture facilities within
459 ½ mile of the planned adulticide application; and (vi) any other person within ½ mile of the
460 planned adulticide application who informs the board through a form made available on the
461 board’s website that they wish to be informed of adulticide spraying in their region.

462 (c) Notice shall include, or direct recipients to the online location of, an educational fact
463 sheet about the planned spraying, including the adulticide’s label and Material Safety Data Sheet,
464 further information about the risks posed by the adulticide, specific precautions residents may
465 take to avoid exposure to the adulticide or deposition of the adulticide on sensitive private
466 property, including gardens and children’s play equipment, as well as personal protective
467 measures and other preventative actions residents can take to reduce mosquito-borne disease
468 transmission.

469 (d) If adulticide application must be postponed due to weather conditions, notice
470 provided before application shall remain in effect for 48 hours following the improvement of
471 such weather conditions if postponement of spraying would extend beyond the dates indicated in
472 the initial notice; provided, however, that, to the extent reasonably possible, the board shall make
473 a good faith effort to inform the public of any changes to the application schedule.

474 Section 11. (a) The board shall maintain a “no spray list” and provide an online form on
475 its website allowing residents to opt out of the application of adulticides. Residents on the “no

476 spray list” shall be notified via reasonable means that they are on the list, and shall be reminded
477 each year following, via reasonable means, that they remain on the “no spray list.”

478 (b) State registered beekeepers and certified organic farms shall be automatically placed
479 on the “no spray list”, and shall be notified through reasonable means that they are on the list.

480 (c) Residents on the “no spray list” shall not have an adulticide applied within 300 feet of
481 their property line.

482 (d) Any municipality may opt out of adulticide application conducted under section 9 by
483 approval of its legislative authority, provided that the municipality opts in to receiving public
484 education and outreach and surveillance of adult mosquitoes from either the board or a mosquito
485 management district.

486 Section 12. Each year, the board and each council shall work alongside a wetlands or
487 wildlife ecologist and other relevant experts to review the effectiveness of the board or council’s
488 mosquito control program and publish the findings in a report. The report shall include successes
489 and failures of the past year; a survey of the experience of state registered beekeepers and
490 certified organic farms; records of the location, rates, and time of application of any chemical or
491 biological pesticides applied that year; and additional steps the board or council will consider to
492 further reduce reliance on pesticide use and improve local ecological capacity to naturally
493 manage nuisance and vector mosquitoes. Findings in the report are to be made available in a
494 publicly accessible location, such as the board or council’s website.

495 Section 13. (a) A district council that determines it is necessary to control greenhead flies
496 within the district shall create a greenhead fly management plan. The plan shall specify the
497 monitoring and mitigation activities that will be undertaken to control greenhead flies. The plan

498 shall specify how the costs of controlling greenhead flies are to be allocated among the member
499 municipalities of the district. All greenhead fly control activities shall be carried out according to
500 the district's plan.

501 (b) Before adoption of a district greenhead fly management plan, a public hearing shall
502 be held by the council. A hearing required by a federal, state, or municipal agency on the
503 program will suffice for purposes of this section. In addition to the details of management
504 activities the greenhead fly management plan shall include: (i) a determination by the Natural
505 Heritage and Endangered Species Program in the department of fish and game that the plan
506 proposed will result in no alteration, as defined under chapter 131A, to any priority habitat or
507 take of rare, threatened, endangered, or species of special concern state or federally listed
508 species; and (ii) reasonable measures by the council to assure that the plan proposed will avoid
509 hazardous effects on human health and the environment, including effects to soils, sediments,
510 surface waters, groundwater or any ocean sanctuary under sections 13 through 16 and 18 of
511 chapter 132A.

512 (c) The greenhead fly management plan shall not authorize the use of any chemical
513 pesticide other than attractants, such as octenol, used to bait traps.

514 Section 14. (a) No pesticide containing PFAS shall be used as part of any mosquito or
515 greenhead fly control activity conducted pursuant to this chapter. This prohibition includes
516 pesticides that contain PFAS as an inactive or inert ingredient.

517 (b) No pesticide shall be used as part of any mosquito or greenhead fly control activity
518 conducted pursuant to this chapter unless the department of environmental protection has tested a
519 sample of the pesticide and certified that the pesticide does not contain PFAS. This testing

520 requirement shall not apply to a pesticide used during an arbovirus public health emergency
521 pursuant to section 9 as long as (1) the commissioner of the department of public health
522 determines that it is infeasible to test the pesticide prior to application in response to the
523 arbovirus public health emergency and (2) there are no equally or more effective pesticides
524 available for use that the department of environmental protection has already tested and certified
525 as not containing PFAS.

526 Section 15. (a) Any person aggrieved by a determination by the board or any council,
527 including any party to a complaint and investigation under section 17, may request an
528 adjudicatory hearing before the board under the provisions of chapter 30A. The determination
529 shall contain a notice of right to request a hearing and may specify a time limit, not to exceed 21
530 days, within which persons may request a hearing before the board under the provisions of
531 chapter 30A. If no such request is timely made, the determination shall be deemed assented. If a
532 timely request is received, the board shall within a reasonable time hold a hearing and comply
533 with the provisions of chapter 30A. In a hearing so held the board shall designate a hearing
534 officer to preside over the hearing, to assemble an official record thereof, and to render a
535 tentative decision as provided in paragraph (7) of section 11 of chapter 30A. The board shall
536 make the final decision on the basis of the official record and tentative decision so rendered.

537 (b) If in making a determination which may be the subject of an adjudicatory hearing the
538 board finds that an imminent hazard or an unreasonable adverse effect on the environment could
539 result pending the conclusion of adjudicatory hearing, the board may order that the determination
540 shall become provisionally effective and enforceable immediately upon issuance, and shall
541 remain so notwithstanding and until the conclusion of any adjudicatory hearing procedures

542 timely requested. In the event that the department has thus made a determination provisionally
543 effective, it may later, at its discretion, shorten the duration of or waive the order.

544 (c) A person aggrieved by a final adjudicatory determination of the board may obtain
545 judicial review thereof pursuant to the provisions of chapter 30A.

546 Section 16. Whenever any council commences any mosquito management activity not
547 permitted by the certified district ecologically-based mosquito management plan, including the
548 use of pesticides when not permitted by the certified district ecologically-based mosquito
549 management plan, or violates any rule or regulation of the board, the board shall have the power
550 by written notice to order the violator to cease and desist immediately. If the violator does not
551 conform to the board's order, the board may bring prosecution in the district court of the state.
552 The board, without being required to enter into any recognizance or to give surety for cost, may
553 institute proceedings in the name of the state. It shall be the duty of the attorney general to
554 conduct the prosecution of the proceedings brought by the board. The board may obtain relief in
555 equity or by prerogative writ whenever that shall be necessary for the proper performance of
556 those duties.

557 Section 17. The board shall establish a process by which residents of the commonwealth
558 may file complaints alleging violations of the provisions of this chapter or of the provisions of
559 the ecologically-based mosquito management plan of the board or any district. The process for
560 filing complaints shall, at a minimum, include a telephone hotline and allow for the submission
561 of written complaints. Within 60 days of receiving a complaint, the board shall investigate and
562 make a determination as to whether any violation has occurred and whether any action is
563 required to remedy the violation or prevent such violation from occurring again. The board shall

564 maintain a publicly accessible online docket of complaints received, the outcome of its
565 investigations, and any actions taken.

566 Section 18. Any municipality not a part of an existing district may be annexed by
567 approval of the municipality's legislative body to a district upon approval by the district's
568 council.

569 Section 19. Any municipality or subdivision thereof which lies within a district may be
570 disconnected from the district in accordance with the district's separate governing enabling act,
571 voluntary trust, or other legal instrument, by the decision of its legislative body.

572 Section 20. Any district organized under the provisions of this act may be dissolved and
573 discontinued by appropriate action of either the board or the council, or as provided in the
574 district's governing enabling act, voluntary trust, or other legal instrument. Notice of dissolution
575 shall be filed with the secretary of the commonwealth and the board.

576 Section 21. All meetings of the board or councils shall comply with the provisions of the
577 open meeting laws under sections 18 through 25, inclusive of chapter 30A. All regular board or
578 council meetings shall be open to the public and all resolutions, actions, and records of its
579 proceedings shall be open to public view.

580 Section 22. The board shall provide a report to the house and senate committees on ways
581 and means and the committee on environment, natural resources and agriculture by April first
582 each year detailing all encumbrances, expenditures, and projected expenditures of funds and
583 providing projections for needs and associated costs for the next fiscal year.

584 SECTION 4. The current mosquito control projects known by their identifying names as
585 the Berkshire county mosquito control project, the Bristol county mosquito control project, the
586 Cape Cod mosquito control project, the central Massachusetts mosquito control project, the
587 Dukes county mosquito control project, the east Middlesex mosquito control project, the Norfolk
588 county mosquito control project, the northeast Massachusetts mosquito control and wetlands
589 management district, the Pioneer Valley mosquito control district, the Plymouth county mosquito
590 control project, and the Suffolk county mosquito control project may remain in existence if a
591 project obtains certification from the mosquito management board that the project fulfills the
592 provisions of section 7 of chapter 252A of the General Laws, inserted by this act. Existing
593 superintendents, and existing staff and employees of the projects may continue in their present
594 capacity, subject to adherence to the regular conditions of workplace and employment, provided
595 that the superintendents, staff and employees shall meet the conditions of subsection (d) of said
596 section 7. Commissioners of these projects and their employees may continue in their capacity
597 under their existing terms of appointment, as members or employees of the newly formed
598 councils, and may be reappointed as members of the councils, provided they meet the criteria for
599 membership established by said section 7. The board shall arrange for an orderly transition of
600 such mosquito control districts and mosquito control projects in compliance with said chapter
601 252A.

602 SECTION 5. The mosquito management board shall complete the state ecologically-
603 based mosquito management plan under section 5 of chapter 252A of the General Laws and the
604 emergency arbovirus response plan under section 9 of said chapter 252A within 6 months of the
605 enactment of this act.

606 SECTION 6. Section 14 of chapter 252A of the General Laws shall be effective 1 year
607 from the passage of this act.

608 SECTION 7. The remainder of this act shall take effect upon its passage.