

SENATE NO. 520

AN ACT INCORPORATING WETLAND STEWARDSHIP AND SCENIC RESOURCES INTO WETLAND PROTECTION

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

1 SECTION 1. Whereas: the Final Report of the National Wetlands Policy Forum made a direct
2 call for wetland stewardship on private and public lands, and gave equal weight to wetland
3 management along with protection; and whereas: the Office of the President of the United
4 States issued a Fact Sheet on Protecting America's Wetlands in August of 1991 encouraging
5 wetland stewardship, wetland mitigation banking, and facultative neutral wetland border
6 determination procedures; and whereas: 37 States of the Union now allow or have proposed
7 wetland mitigation banking programs; and whereas: the National Recreational Fisheries Policy,
8 which is supported by 63 public and private environmental agencies, supports scientific
9 management and habitat improvement efforts of our open waters; and whereas: the open water
10 bodies within the Commonwealth of Massachusetts are vital for water supply, generation of
11 electricity, transportation, aquaculture, irrigation, fisheries, flood control, and recreation; and
12 whereas: the Wetlands Protection Act presently prevents the Citizens of Massachusetts from
13 reaping the benefits of wetland stewardship through scientific resource management; it is now
14 in the best interests of the Citizens of Massachusetts to fully incorporate wetland stewardship
15 via scientific wetland resource management into the Wetlands Protection Act. The intent of this
16 Act is to allow the advances in wetland science to bring to the citizens of Massachusetts
17 enhanced values and functions for all our wetland types including open waters, and to create a

18 mechanism under which Massachusetts can take over the implementation of federal wetland
19 permit programs which the Federal Government allows.

20 SECTION 2. Section 40 of Chapter 131 of the General Laws is hereby amended by inserting
21 after the third paragraph, the following paragraph:

22 The goals of this section are to encourage land owners and land managers to practice
23 stewardship via science based resource management to protect, manage, and enhance the values
24 and functions traditionally associated with wetlands and open waters; such values being public
25 and private water supply, groundwater supply, flood control, storm damage prevention,
26 prevention of pollution, land containing shellfish, fisheries, and wetland wildlife habitat. The
27 goals of this section include the goals of the North American Waterfowl Management Program
28 and the National Recreational Fisheries Policy.

29 SECTION 3. Section 40 of Chapter 131 of the General laws is hereby amended by deleting the
30 existing definitions of "bogs, swamps, wet meadows, and marshes" and replacing those
31 definitions with the following more accurate and precise definitions.

32 The term "bogs," as used in this section, shall mean areas where hydrology is dominated
33 by direct rainfall, i.e. is ombrotrophic; and the vegetated community is dominated by Sphagnum
34 mosses and other peat forming mosses, sedges, heaths or acid tolerant trees and shrubs which
35 live on substantial peat deposits.

36 The term "swamps," as used in this section, shall mean areas where groundwater is at or
37 near the surface of the ground throughout most of a normal growing season, and where a
38 significant part of the vegetative community is dominated by trees and shrubs which are tolerant
39 of anaerobic conditions in the topsoil and uppermost subsoil caused by sustained saturation.

40 The term "wet meadows," as used in this section, shall mean areas where groundwater is

41 at or near the surface throughout most of the normal growing season, and where a significant
42 part of the vegetative community is composed of various grasses, sedges, rushes and wetland
43 herbs which are tolerant of anaerobic conditions in the topsoil and uppermost subsoil caused by
44 sustained saturation.

45 The term "marshes," as used in this section, shall mean areas where an emergent
46 vegetative community exists in standing or running water during most of a normal growing
47 season and where a significant part of the vegetative community is tolerant of sustained partial
48 submergence. Deep marshes have near continuous standing water and are dominated by aquatic
49 plants with floating leaves.

50 SECTION 4. Section 40 of Chapter 131 of the General Laws is hereby amended by inserting,
51 after the existing and revised definitions, the following additional definitions.

52 The term "at or near the surface," as used in this section, shall be twelve (12) inches or
53 less below the earth's surface; except a depth of six (6) inches or less shall apply in very well
54 drained soils, somewhat excessively drained soils, or excessively drained soils, as defined by
55 the USDA Natural Resources Conservation Service.

56 The term "bank," as used in this section, shall mean naturally occurring banks and
57 beaches; specifically excluding dug ditches, and human-made channels lined with cement,
58 paving, riprap, placed stone, or pilings.

59 The term "base flow" as used in this section, shall mean the dry weather flow in any
60 stream or river. Base flow is groundwater being released into the channel or open water bodies
61 during periods lacking direct surface runoff. Maintenance of fisheries, fisheries habitat, and
62 water quality requires preserving and enhancing as much upland groundwater recharge as much
63 as practical so that base flows are maintained or enhanced.

64 The term "median precipitation" as used in this section, shall mean the statistical median
65 monthly precipitation amount, i.e., where 50% of the time the amount of monthly precipitation
66 is exceeded, and 50% of the time the monthly precipitation amount is not exceeded. All
67 regulations based on this section shall be based on median precipitation for at least 22 years of
68 record, if that duration of record exists. 33 years of record would be even better. Going beyond
69 33 years of data is not required.

70 The term "best management practices" as used in this section are structural and land use
71 practices which can be incorporated into any proposed land use change or any existing land use;
72 and which are used to control erosion, reduce pollutant loading, reduce flooding, and enhance
73 groundwater recharge. Best management practices are commonly incorporated into flood
74 control programs and structures.

75 The term "drainage basin," as used in this section, shall mean the entire drainage basin
76 feeding an open water body or intermittent stream at any specified point.

77 The term "drought," as used in this section, shall mean any period of time starting after
78 three consecutive months with below median precipitation averaging less than 80% of median
79 monthly precipitation. Drought conditions lie outside the normal growing season for purposes of
80 verifying wetland versus upland hydrology. The term "extended drought" as used in this section
81 for the determination of the status of intermittent versus perennial streams, and to determine
82 regulatory pond size, shall mean that the precipitation for each of the preceding four months is
83 below the median precipitation value, and averages less than 80% of monthly median
84 precipitation for the four month period. A drought and an extended drought ends when
85 precipitation exceeds median precipitation for the month.

86 The term "enhancement" as used in this section shall mean any activity increasing the

87 value of one or more functions of an existing wetland. The term "enhancement project" as used
88 in this section shall mean any project undertaken to improve the quality, function or value of
89 any wetland or open water body.

90 The term "environmental model" as used in this section shall mean any descriptive or
91 numerical model used to help understand the real world. While no model can fully duplicate the
92 complexities of the real world, environmental models are useful and acceptable tools in the
93 decision making process under this Act. Environmental models can be used for, but are not
94 limited to, quantifying water resources, predicting flooding, predicting depth of scour for any
95 structure in or under a flowing water body, evaluating fisheries and wetland wildlife habitat for
96 pre- and post-development conditions, and evaluating water quality and water quality impacts.
97 Any environmental model may be used to evaluate a project or project impacts. However, if the
98 model is not a published model, then the basis and references for the model should be presented
99 with the Notice of Intent or other permit application. Preference is given to evaluations done
100 using numerical models since descriptive models can be too subjective when applied.

101 The term "normal growing season" as used in this section, shall mean the period starting
102 when local valley wetland frosts cease in spring and the wetland soil temperature at a depth of
103 0.5 meters (19.7 inches) exceeds 5°C (41°F), and ending at the first wetland valley frost in the
104 fall.

105 The term "100 year flood" as used in this section shall be based on (a) statistical
106 analyses of actual stream flows from USGS qualified gaging stations for larger streams and
107 rivers, or (b) shall be based on peak flow analyses using the climatic precipitation atlases
108 prepared by the Northeast Regional Climate Center at Cornell University, or which are
109 superseded by other federally funded climatic precipitation atlases using a longer time record

110 for rainfall analyses.

111 The term "regional" as used in this section, shall mean any group of cities or towns
112 acting as a unified body for wetland or open water body management or enhancement purposes.

113 "Regional" also applies to project impacts, beneficial or harmful, when significant impacts
114 extend beyond the limits of any single city or town.

115 The term "riparian" as used in this section, shall mean land situated on, or abutting, the
116 bank of any
117 flowing water body. The term "flowing water body" as used in this section shall mean any river
118 or stream, excluding dug ditches, gutter flow, or erosion gullies.

119 The term "significant negative impact" as used in this section, shall mean that the end
120 result of a project or proposed land use change which could result in a violation of water quality
121 standards or guidelines, or which increases downstream peak flows for rainfalls or runoff events
122 from a 5 year flood up to a 100 year flood, or which results in a negative change greater than
123 10% in some other wetland or open waterbody character or function. Significant impacts can be
124 positive or negative, and significant positive impacts are encouraged. The creation or expansion
125 of a pond, or pond dredging to remove excessive plant growth or accumulated organic
126 sediments is deemed a significant positive impact.

127 The terms "wetland banking" and "wetland mitigation banking," as used in this section,
128 shall mean activities of wetland restoration, enhancement, preservation, or creation for the
129 purpose of providing compensating credit for future proposed wetland alterations.

130 The term "wetland wildlife," as used in this section, shall mean those vertebrate animals
131 that have one or more necessary habitat requirements which consist of items found only in
132 vegetated wetlands or open waters. Examples of wetland wildlife include, but are not limited

133 to; turtles, fish, waterfowl, wading birds such as herons, and aquatic mammals such as muskrat,
134 mink, otter, and beaver. Protection, management and enhancement of the habitat for the larger
135 of such listed animals is presumed to provide habitat protection for all smaller wetland animals,
136 unless the smaller animals are federally listed endangered or threatened species on site.
137 Wetland species that are common in abutting states, or in states or Provinces of Canada abutting
138 New England states including New York, and which are merely at the limits of their range in
139 Massachusetts shall not be given special protection under this section.

140 The terms "wetland wildlife habitat," as used in this section, shall mean vegetated
141 wetland and open water areas subject to this section which, due to their plant community
142 composition and structure, hydrologic regime, or other characteristics; provide important food,
143 shelter, migratory, over-wintering areas,
144 or breeding areas for wetland wildlife. Upland floodplain areas beyond the 10 year floodplain
145 and uplands more than 25 feet from bordering wetlands are specifically excluded from this
146 definition. Any vegetated wetland less than 5% of an acre in size is presumed to be too small to
147 have significant wetland wildlife habitat value; i.e., small damp or puddled areas are to be
148 excluded from wetland wildlife habitat regulation. Any part of a vegetated wetland less than 10
149 feet in width is exempt from wetland habitat regulation except that structures allowing passage
150 of flows must also allow fish and wetland wildlife passage if applicable.

151 The term "wetland border," as used in this section, shall mean the line below which all
152 three of the following conditions are satisfied. First, the vegetative community must consist of
153 at least 50% of areal coverage of ecologically wet plant species; or wet-dry tolerant plant
154 species showing the form or vigor (enlarged size) associated with wet conditions. This is
155 equivalent to the "facultative-neutral" method used by the Federal Government. Second, the

156 soils must be wetland hydric soils. Third, anaerobic conditions must exist for a period of time
157 of at least two consecutive weeks during the growing season in the upper soil layers within 12
158 inches of the present ground surface. While the first two criteria may be used as evidence of the
159 third, if actual dissolved oxygen levels fail to drop to zero in shallow monitoring wells for the
160 required time period in non-drought high water table growing season, then the presence of
161 dissolved oxygen means that the area in question is not a "wetland." due to lack of the driving
162 force of anaerobic conditions. The jurisdictional limits of all types of vegetated wetlands are
163 determined by a wetland border.

164 The terms "ecologically wet plant species" and "wet-dry tolerant plant species," as used
165 in this section, shall refer to obligate (OBL), facultative wet (FACW), and facultative (FAC)
166 excluding facultative-minus (FAC-) plant species as specified in the latest edition of "National
167 List of Plant Species that Occur in Wetlands;" or any newer replacement document which
168 applies to the northeastern part of the United States. The forms of growth associated with plants
169 in wetland areas under the first condition above shall include the following: buttressed tree
170 trunks, pneumatophores, adventitious roots, shallow root systems, inflated stems, or basal
171 budding. Basal budding in cut areas does not apply since cutting also produces multiple stems.

172 The term "wetland hydric soils," as used in this section, shall include peat, organic
173 muck, soils with the immediately abutting uppermost portion of a subsoil layer showing gleying
174 or low chroma mottling, soils with iron or manganese concretions, or soils satisfying the
175 conditions described in the most recent edition of
176 "Field Indicators for Identifying Hydric Soils in New England" or its superseding document.
177 Soils with relict hydric features but which do not have the required wetland hydrology or
178 required anaerobic conditions are excluded as hydric soils.

179 The term "soil saturation," as used in this section, shall mean either (1) observed
180 groundwater in a monitoring well, or (2) the ability to squeeze drops of moisture from a fresh
181 soil sample using one hand compressing the soil while forming a fist. These soil saturation tests
182 must yield positive results at or near the surface for 95% of a normal growing season excluding
183 droughts and rain days, for any area to be a wetland. The field test is not a valid indicator if
184 there had been more than 0.05 inches of rainfall within the past 36 hours.

185 The term "access," as used in this section, shall mean the ability to construct a road for
186 two or more houses, or a driveway for one house or other land use. The term "water access," as
187 used in this section, shall mean the ability of a water craft to reach open water, or for a riparian
188 or lake side property owner to reach a beach or open water.

189 The term "relict wetland," as used in this section, means any area that has been
190 significantly drained or filled by the action of humans or nature, or has had substantial water
191 diverted from it, so that a functional wetland no longer exists. Relict wetlands are recognized
192 by any of the following; collapse or wasting (oxidation) of peat; failure to satisfy the soil
193 moisture requirement during the summer of a non-drought normal growing season; invasion of
194 dry herbs, shrubs or trees; or younger shrubs or trees that do not show the form or vigor of
195 wetland conditions; or by presence of dissolved oxygen in the upper soil layers within 12 inches
196 of the ground surface during the high water table season in a non-drought period. Older wetland
197 trees and shrubs are expected to retain wetland growth forms in relict wetlands due to the
198 longevity of such plants, but these long living forms are not indicative of active wetland
199 conditions in relict wetlands. Relict wetlands are not regulated as wetlands under this section;
200 however they may still be regulated as upland floodplain if they are shown by peak flow
201 calculations to be flooded during a 100 year flood. The term "hydrologic year" as used in this

202 section, shall mean the period starting on the first of October, and ending at the end of
203 September of the following calendar year.

204 The term "wetland succession," as used in this section, shall mean the following
205 generalized sequence in wetland evolution. For freshwater wetlands the sequence is pond, to
206 deep marsh, to shallow marsh, to shrub swamp, to forested swamp, to bog. For salt water
207 wetlands the sequence is open water or salt pond, to low salt marsh, to high salt marsh, to fresh
208 marsh, to fresh swamp, to bog.

209 The term "vernal pool," as used in this section, shall mean any temporary standing water
210 body outside of a bordering vegetated wetland containing at least one-quarter acre-foot of water
211 at least once per year, and which is permanently free of fish , and which is proven to breed
212 reptiles or amphibians and which stays flooded for a long enough time period to allow the
213 immature forms of these vertebrates to complete metamorphoses into land dwelling forms,
214 exclusive of drought conditions beginning after October first until the end of April. Regulated
215 vernal pools exclude man-made test holes, basement foundation holes, human made detention
216 and retention basins; or other areas less than 1,000 square feet in size which at their deepest at
217 average annual high water are less than 18 inches deep and thus are subject to drying up and
218 killing tadpoles and other young aquatic stages of vertebrates in most years. Vernal pools can be
219 enhanced as long as the work occurs outside the breeding and aquatic maturation seasons of
220 reptiles and amphibians. Vernal pools can be replicated by relocation to distances of up to 600
221 feet from the existing pool as long as there is one overlapping spring season to confirm
222 successful replication and as long as 50% of the edge of the relocated replication pool has an
223 undisturbed forest or shrub edge. Then the pre-existing vernal pool can be filled after the
224 completion of the aquatic vertebrate maturation season. Relocation of egg masses and

225 immature animals is encouraged from the pre-existing pool to the replicated pool during the
226 overlap season.

227 SECTION 5. Section 40 of Chapter 131 of the General Laws is hereby amended by inserting
228 after the expanded list of definitions, the following paragraphs related to protection,
229 management and enhancement of vegetated wetlands and open waters.

230 For upland areas that are adjacent to vegetated wetlands and open waters, and which are
231 not in floodplains and riverfront areas, jurisdiction under this section is limited to sediment and
232 erosion control, water quality maintenance using best management practices, and flood control.
233 Beyond those three values, the use of adjacent uplands lying outside the floodplain or riverfront
234 area may not be constrained by this section.

235 For access to uplands or isolated uplands under a single ownership; the ability to
236 construct a road with sidewalks, or a driveway, shall not be infringed on, nor impaired, by this
237 section. That is, this section does not deny reasonable access for use of uplands with a road
238 width of normal size, Planning Board approved radius of curves, and standard construction.
239 Standard construction includes the paved roadway; safety strips between roadway and sidewalk;
240 one or more sidewalks as requested or required by the Planning Board, Fire Department, or
241 Police Department; and a reasonably sloped bank. The use of retaining walls may not be
242 mandated for any access, unless state-listed or federally listed endangered species are at risk.
243 Two access roads or ways are allowed for any project with over ten residential units, and under
244 all circumstances where the Planning Board, Fire Department or Police Department shall
245 require or request such double access for the public safety, well being, or welfare. This section
246 acknowledges that upland access may sometimes result in a loss of on-site wetlands, especially
247 in areas where the amount of isolated upland is small. In these cases, where on-site wetland

248 replication is constrained, the difference can be made up by purchasing wetland banking credits
249 from previously constructed wetlands in the same city or town or within the same drainage
250 basin in an abutting city or town.

251 Removal of accumulated organic sediments in existing ponds is to be routinely allowed
252 providing there is an adequate erosion and sediment control program, and providing that there
253 are no state-listed or federal endangered species on site. Maintenance of ponds including weed
254 harvesting; and use of short lived chemical pesticides, herbicides, or nutrient inactivators such
255 as alum or potassium permanganate; are procedures exempt from this section providing there
256 are no federal or state listed species which would be impacted. If the timing of dredging or
257 pond maintenance allows work when no federal or state listed animal species are present, then
258 dredging or maintenance can be permitted. Wildlife management programs and activities
259 conducted by, or funded by, the U.S. Fish and Wildlife Service; or which are part of, or which
260 meet the standards of the North American Waterfowl Management Plan, are exempt from this
261 section.

262 Any cranberry bog or wetland crop area expansion shall be approved with reasonable
263 conditions as long as there is a net increase in wetland area; the cranberry bog or wetland crop
264 land and associated ponds counting as a wetlands; as long as flood control is enhanced, as long
265 as there is a reasonable effort to enhance wetland wildlife habitat; and as long as agricultural
266 best management practices and integrated pest management programs are part of the cranberry
267 bog or wetland crop management program. Portions of cranberry bogs or wetland crop areas
268 which were constructed in uplands, or which no longer have wetland hydrology without the
269 application of irrigation water, are to be treated as uplands under this section.

270 The creation of salt ponds in coastal wetlands is allowed providing that the bottom of the

271 proposed pond will be sand or gravel, and providing that there is to be an excavated meandering
272 stable channel to a nearby major salt water body. A created salt pond may not be so large that it
273 creates erosion problems which will affect the structural stability of surrounding marshes.

274 Any project that can be projected, by use of modern environmental data, models, or
275 evaluation techniques, to improve a majority of wetland values that apply to a given wetland
276 type, must be approved with reasonable conditions, providing that flood control and wetland
277 wildlife habitat values are two of the improvements. Since enhancement of a majority of
278 wetland values and functions is to be a goal for any wetland alteration to be permitted, there is
279 no area limitation to be applied to a wetland alteration/enhancement project.

280 Replacement of wetlands is not restricted to exact replication, but rather replacement is
281 encouraged when an earlier wetland succession stage is offered as a replacement. The creation
282 of ponds is allowed in vegetated wetlands and ponds may be used to replace or replicate other
283 wetland types.

284 Any project that is projected to reduce the amount of tannic acid or dissolved iron or
285 manganese released from a wetland shall be deemed to be an improvement to the prevention of
286 pollution value under this section.

287 Increased flood detention is always allowed in wetlands providing that water elevations
288 are not permanently raised or lowered within the flooded area. Berms or other flood control
289 structures are allowed in wetlands without wetland replication but they must accommodate
290 passage of wetland wildlife, and fish if applicable. Temporary increases in depth and duration of
291 flooding from flood control activities are not considered to be a significant negative import or
292 alteration of a wetland, as long as the increase in flooding of 0.25 feet does not last for over five
293 days after a 100 year 24-hour rainfall event, and as long as the projected long term normal

294 groundwater elevation is not changed by more than one-quarter foot.

295 Retention and detention basins frequently have wetlands form at the bottom and sides of
296 these flood control structures. Because retention and detention basins require routine
297 maintenance, especially where best management practices are employed, the wetlands within
298 the flood control basins shall not be regulated as jurisdictional wetlands under this section, and
299 routine maintenance does not require an Order of Conditions nor a Notice of Intent as long as
300 the flood control basin is not made smaller and as long as the hydraulics of the outlet structure is
301 replaced but not significantly altered.

302 Any person may create a wetland mitigation banking project. After creation, the function
303 of the wetland shall be evaluated by a natural scientist with at least a master's degree in botany,
304 ecology, geology, geophysics, hydrology, wildlife management, zoology; or oceanography in
305 the case of coastal wetlands. The value of the created wetland can be charged or credited
306 towards proposed wetland alterations on-site or off-site in lieu of replication on a
307 project-by-project or site-by-site basis. After completion of construction and evaluation, the
308 completed mitigation banking value or credit can be sold or transferred. Mitigation banking can
309 be charged or credited to any project in the same town or within five miles of the site within the
310 same river basin. The Department of Environmental Protection shall keep a record of mitigation
311 banking deposits and withdrawals, or may assign this duty to another state agency, or may
312 contract such record keeping to a non-profit or profit making organization. There may be a
313 charge for wetland banking record keeping, fees not to exceed cost of record keeping plus a
314 10% profit. The final decision on record keeping shall be made on a cost-effective basis, by
315 qualified persons at the lowest billable cost to the public.

316 Wetland management using procedures classed as Open Marsh Water Management

317 (OMWM) and Integrated Marsh Management (IMM) are to be routinely allowed as wetland
318 management, and for creating enhanced wetland values for mitigation banking.

319 Water access to open waters from adjacent uplands is not to be prohibited by this section
320 and wetland replication shall not be required for small boat channels.

321 The filing fee to be paid to the Commonwealth with any Notice of Intent shall not
322 exceed \$1,000. because the initial state review and assignment of a file number is not
323 anticipated to involve over \$1,000 of manpower and related costs. The filing fee paid to any
324 city or town under this section shall not exceed \$2,000. These upper limits of permitting cost
325 can be adjusted for inflation every five years.

326 The provisions of this section shall not apply to normal maintenance and cleaning of
327 existing ditches, farm ponds, existing culverts, and flood control structures; nor to relocation of
328 farm ditches and farm ponds, nor to any continuous or intermittent land use or water use
329 practice which has been on-going for over a decade, nor to plowing of wetland fingers which
330 protrude into upland farm fields. Relocation of non-farm man-made ditches and ponds is
331 allowed, but filing a Notice of Intent an Order of Conditions is required. The removal of beaver
332 dams which flood farm fields or any building, road, driveway or septic field is also allowed,
333 however, the technique for removal of a beaver dam may not send a flood wave downstream
334 which exceeds a two year flood peak, and a review of the removal method shall be expedited
335 under emergency provisions of this section.

336 New waterfowl impoundments and pond creation are encouraged in wetlands as long as
337 at least one-third of the pond edge is sloped and planted for waterfowl habitat.

338 Private gardens are of benefit to society at large. Existing private gardens; and new
339 private gardens

340 covering less than one-tenth of an acre of wetlands are exempt from the provisions of this
341 Section as long as there is no change in elevation of the land surface in excess of one-half foot
342 in any existing wetland.

343 SECTION 6. Section 40 of Chapter 131 of the General Laws is hereby amended by inserting
344 the following paragraphs at the end of the last paragraph.

345 Within one year of passage of this bill, the department shall apply to take over federal
346 wetland and dredging permits and incorporate them within the state wetland permit process.

347 This is to eliminate duplication of federal and state regulations and the months of delay typical
348 of federal permits which start after state permits have been issued. Water quality permits to be
349 issued by the department shall address only water quality issues because wetlands and wetland
350 impacts are being addressed by the Order of Conditions in the wetland permitting process.

351 Water quality permit reviews require detailed water quality studies only when filling or
352 dredging of permanent freshwater bodies is proposed at a volume to exceed 20,000 cubic yards,
353 or for salt water bodies when the volume exceeds 10,000 cubic yards; or in water bodies proven
354 or known to contain significant amounts of man-made pollutants, or for projects discharging
355 industrial wastes, which includes but is not limited to 5,000 gallons per day or more of heated or
356 cooled water.

357 If a conservation commission or other board acting under Section 40 of Chapter 131 has
358 failed to hold a hearing within the twenty-one day period as required, or if a commission or
359 board, after holding and closing such hearing, has failed within twenty-one days therefrom to
360 issue an order of conditions, then the project applicant may request that the department take
361 over the permit process. Given the time lost by delay on the part of the local permitting agency,
362 the department shall conduct a hearing and site inspection within four weeks of receipt of an

363 appeal due to inaction on the part of the reviewing agency, and shall issue an Order of
364 Conditions within 21 days of the site inspection or within 21 days of receipt of all requested
365 information.

366 If there is a legal challenge to a decision by the department, any party has the option of
367 taking this
368 matter before the land court, rather than through the district or superior court system. Such a
369 land court trial may be de novo.

370 SECTION 7. Section 40 of Chapter 131 of the General Laws is hereby amended by inserting
371 the following paragraphs at the end of the last paragraph.

372 A wetland or open water enhancement project may be undertaken by any city or town,
373 or by any group of cities or towns, or by a riparian land owner, or by any public action group
374 which has acquired a riparian easement and right of access. If a city or town, or any group of
375 cities and towns, desires to implement a wetland or open water body enhancement project, the
376 project may be paid for by the cities or towns via routine taxing, or via a proposition two-and-a-
377 half over-ride. The project must be approved by simple majority of the cumulative regional vote
378 on a referendum held within cooperating cities and towns.

379 A possible enhancement project could be the Charles River Restoration Project, which
380 shall have as its cornerstone the dredging of Cedar Swamp Pond in Milford. Reducing the
381 nutrient load and improving the water quality of the outflow from this highly eutrophic
382 wetland/pond system will benefit the entire Charles River and the bordering communities. The
383 cost of this project can be funded by a state or federal agency, a non-profit organization, or shall
384 be shared by the communities of Milford, Sherborn, Wellesley, Needham, Bellingham,
385 Franklin, Millis, Norfolk, Medfield, Dover, Dedham, Weston, and Waltham after a regional

386 vote to approve the project and its funding. The Mass. Division of Environmental Management
387 in cooperation with the Division of Fisheries and Wildlife shall review the full scope of the
388 project and shall review project implementation and management.

389 SECTION 8. Section 43B of the General Laws is hereby amended by inserting the following
390 paragraphs at the end of the last paragraph.

391 Any city or town which creates or has created a bylaw that affects or regulates work in
392 or near wetlands, said local bylaw must have its definitions and time tables compatible with this
393 section within two years of the signing or adoption of this law, and such local bylaw shall not
394 exclude wetland mitigation banking, nor the enhancement and management goals of Chapter
395 131, Section 40 as revised. Local wetland bylaws and regulations shall not have jurisdiction
396 over the positioning of utilities or buildings in upland areas long as the building or the section of
397 utility line does not intrude into wetland areas or lies more than fifteen feet from the wetland
398 border.

399 For upland areas that are adjacent to vegetated wetlands and open waters, and which are
400 not in floodplains and riverfront areas, jurisdiction under this section for any existing or new
401 local wetland bylaw is limited to sediment and erosion control, water quality maintenance using
402 best management practices, and flood control. Beyond those three values, the use of adjacent
403 uplands lying outside the floodplain or riverfront area may not be constrained by any local
404 town wetland bylaw, nor by local wetland regulation, nor written or unwritten local wetland
405 policy. If a town or city wishes to impose local regulations on uplands adjacent to wetlands and
406 open water bodies, or wishes to impose regulations in upland floodplains beyond that of erosion
407 control, water quality maintenance, and flood control; via a local wetland bylaw, regulation, or
408 written or unwritten policy; then the city or town must purchase land use easements on each site

409 at full cost of lost or restricted land use value.

410 For access to uplands or isolated uplands under a single ownership; the ability to
411 construct a road with sidewalks, or a driveway, shall not be infringed on, nor impaired, by any
412 local wetland bylaw unless the local government pays for full cost of the lost land value at full
413 market value. That is, unless paid for by the local government, this section does not deny
414 reasonable access for use of uplands with a road width of normal size, Planning Board approved
415 radius of curves, and standard construction. Standard construction includes the paved roadway;
416 safety strips between roadway and sidewalk; one or more sidewalks as requested or required by
417 the Planning Board, Fire Department, or Police Department; and a reasonably
418 sloped bank. The use of retaining walls may not be mandated for any access, unless state-listed
419 or federally listed endangered species are at risk. Two access roads or ways are allowed for any
420 project with over ten residential units, and under all circumstances where the Planning Board,
421 Fire Department or Police Department shall require or request such double access for the public
422 safety, well being, or welfare. This section acknowledges that upland access may sometimes
423 result in a net loss of wetlands, especially in areas where the amount of isolated upland is small.
424 In these cases, wetland replication is limited to an area of less than 20% of the isolated upland
425 under a single ownership if adjacent non-isolated upland is not available for wetland replication.
426 The difference can be made up by purchasing wetland banking credits in the same city or town
427 or within the same drainage basin in an abutting city or town.

428 Portions of cranberry bogs or wetland crop areas which were constructed in uplands, or
429 which no longer have wetland hydrology without the application of irrigation water, are to be
430 treated as uplands under all local wetland bylaws and regulations.

431 Flood control structures including detention and retention basins and their maintenance

432 may not be regulated as wetlands under any local wetland bylaw, regulation, or written or
433 unwritten policy.

434 Regional enhancement projects permitted under Chapter 131, section 40, are exempt from all
435 local wetland bylaws.

436 If a Conservation Commission or other town board acting under a local wetland bylaw,
437 shall fail to issue its local Order of Condition with 21 days of the closing of the hearing, such
438 failure to act shall be deemed an approval of the application using the conditions of approval in
439 the Superseding Order of Conditions issued under Chapter 131, section 40.

440 If there is a legal challenge to a decision under any local wetland bylaw, any party has
441 the option of taking this matter before the land court, rather than through the district or superior
442 court system. Such land court trial may be de novo. The local bylaw trial should be combined
443 with any appealed Adjudicatory Decision under Chapter 131, Section 40.

444 SECTION 9. Section 3AA is hereby added to Chapter 143 of the General Laws.

445 Maintenance of base flow is critical to fisheries and water quality. Reduction of runoff
446 rates and volumes are important for purposes of flood control. Water and water quality impacts
447 of new buildings and related impervious surfaces, regardless of their distances to wetlands and
448 open water bodies, may have a negative impact on the public well being. To maintain the base
449 flow to open water bodies, to reduce downstream flooding, and to reduce pollutant transport to
450 wetlands and open water bodies, the following new performance standards are to be added to
451 the state building code.

452 For all new one and two family dwellings or private garages, or where the roof area is to
453 be expanded for such existing buildings, there shall a dry well volume of 50 cubic feet for every
454 400 square feet of roof surface or it must be demonstrated that soil permeability will recharge at

455 least 100% of the runoff from a 5 year rainfall. All roof runoff must have direct access to these
456 dry wells. Dry wells shall not be filled with sand or broken stone, but shall be a void space
457 defined by uncemented dry well blocks, plastic recharge structures, or pre-cast concrete
458 recharge galleys. Multi-family, commercial and industrial buildings, or expansion of the roof
459 area thereto must also recharge roof runoff, but in lieu of the dry well volume required above,
460 standard hydrological or engineering calculations and techniques may be required for site
461 specific design of larger recharge structures. The design criteria for more than six unit multi-
462 family, or for commercial and industrial buildings is to recharge at least a volume of two inches
463 of runoff from the total roof and other impervious areas in a two year 24 hour rainfall.

464 The discharge of animal waste into wetlands and open water bodies is a significant water
465 quality problem affecting public health, recreation, fisheries, water quality, and shellfish. Thus
466 above-ground disposal of animal fecal wastes needs to be curtailed statewide. Thus each new
467 residential structure is required to provide an underground structure for the disposal of pet
468 wastes. The State Board of Building Regulations and Standards in cooperation with the
469 Department of Environmental Protection shall specify the required size and character of these
470 underground fecal waste disposal facilities in 780 CMR within one year of signing of this
471 legislation. In addition, each existing one or two family dwelling where a dog resides for
472 a period of over two months, and all multi-family residential buildings allowing dogs to live on
473 the premises, have two years from the date of adoption of the final regulations to install the
474 required underground animal fecal disposal structures. Existing one and two family dwellings
475 are exempt from this provision as long as there is no dog in residence for more than two months.
476 New and renewal dog licenses require proof of installation of the required animal fecal disposal
477 structures. Existing residential structures exempt from this provision are only in areas with

478 permanent high water table within two feet of the surface of the land or where shallow bedrock
479 or bedrock outcrops preclude such below ground structures.

480 SECTION 10. Section 137 of Chapter 140 is hereby amended by adding the following
481 paragraphs at the end.

482 The discharge of animal waste into wetlands and open water bodies is a significant water
483 quality problem affecting public health, recreation, fisheries, water quality, and shellfish. Thus
484 above-ground disposal of animal fecal wastes needs to be curtailed statewide. Therefore it is a
485 civil infraction for any individual to place fecal animal waste into a storm water catch basin,
486 storm drain, or any ditch, or open water body because such an action results in direct nutrient
487 and bacterial pollution of receiving waters. Any such disposal carries a \$50. fine for the first
488 offense, with fines increasing by \$50. for each subsequent offense within two years up to a
489 maximum of \$250. Disposal or leaving of dog fecal waste on any paved road or sidewalk, or
490 on any impervious surface tributary to an open water body via direct runoff, or via a storm
491 water catch basin, storm drain or ditch feeding an open water body; or within 25 feet uphill of
492 any impervious surface tributary to an open water body via direct runoff or via a storm drain or
493 ditch feeding an open water body is hereby prohibited except for seeing-eye dogs, and other
494 medical service dogs whose owners are physically unable to pick up fecal dog waste. Any such
495 disposal or leaving carries a \$50. fine for the first offense, with fines increasing by \$50. for each
496 subsequent offense within two years up to a maximum of \$250. 80% of the fecal disposal or
497 leaving fines go to the general fund or animal control
498 funds within the cities and towns issuing the violation document, and 20% go to the courts
499 imposing such fines. Fine fees going to the court system can be used to improve any aspect of
500 the court buildings or system, including new equipment or purchase of supplies or services.

501 The magnitude of the fines in the two paragraphs above are to be adjusted for inflation every
502 five years.

503 In addition, each existing one or two family dwelling where a dog resides for more than
504 two months, and all multi-family residential buildings in which dogs reside have two years from
505 the date of adoption of the final building code regulations to install the required underground
506 fecal disposal structures. Existing one and two family dwellings are exempt from this provision
507 as long as there is no dog in residence for more than two months. New dog licenses and
508 renewal of dog licenses require proof of installation of the required animal fecal disposal
509 structures. Existing residential structures exempt from this provision are only in areas with
510 permanent high water table within two feet of the surface of the land, or where shallow bedrock
511 or bedrock outcrops preclude such below ground structures.

512 Sixty days prior to the required time of issuing or renewing a dog license, each license
513 holder shall be notified in writing of these animal fecal waste control requirements.

514 SECTION 11. Section 13 of Chapter 21A of the General Laws is hereby amended by adding
515 the following paragraphs at the end.

516 The use of hydrogen peroxide in industrial strength of up to 52% concentration by
517 weight is allowed as a septic field restorative measure. Application of hydrogen peroxide is to
518 be done only under the supervision of experienced professionals who have worked on hydrogen
519 peroxide treatment of 25 or more septic fields and who are approved System Inspectors. Septic
520 trench pumping is recommended but not required before hydrogen peroxide application to
521 septic fields. Distribution box cleaning and pumping is mandatory prior to hydrogen peroxide
522 application.

523 SECTION 12. Chapter 131A. Section 1, has the following definitions added or amended.

524 "Significant portion" as used in this Section shall mean 40% of the range of the species
525 as of 1990.

526 "Extirpation," as used in this section shall mean extinction or elimination over a
527 significant portion of the range of any species. This means that species not threatened or
528 endangered, or of special concern over a significant part of their entire range may not acquire
529 special listing or protection in Massachusetts under Chapter 131A. For example, there are
530 species that are cold climate species that will naturally become extirpated in Massachusetts if
531 the climate warms, and there are species which are warm climate species that will naturally
532 become extinct in Massachusetts if the climate turns colder. Efforts to protect these species
533 under Chapter 131A will be futile in prevention extinction or extirpation in Massachusetts and
534 will result in significant economic harm to land owners with no long term benefit to society.

535 Examples are as follows. The blue-spotted salamander *Ambystoma laterale* is a sub-
536 arctic species with a range from Massachusetts to northern Illinois, to Manitoba to James Bay to
537 southern Labrador to Nova Scotia. It is described as a relatively common species in many areas
538 of its range. The marbled salamander *Ambystoma opacum* is a warm climate species ranging
539 from southern New Hampshire, to northern Florida to east Texas to central Indiana. The species
540 is common in much of its range. Species with such wide ranges and common occurrence are
541 not to be classed as endangered, threatened, of special concern in Massachusetts under Chapter
542 131A unless federally listed. The director of the Massachusetts Division of Fisheries and
543 Wildlife is to review the list of endangered, threatened or special concern species in
544 Massachusetts within two years of passage of this law, and to remove all species from the
545 species list which are just at or near the limits of the natural range in Massachusetts and which
546 are not at risk for a significant portion of their natural range.

547 The definition of the term "Species of special concern" as defined, shall be amended by
548 changing the last three words "within the commonwealth" to "over a significant portion of the
549 range."

550 The term "state-listed species" shall mean any species assigned the status of endangered,
551 threatened or species of special concern within the Commonwealth of Massachusetts.

552 Animal species are to be removed from the list of state listed species when the number
553 of known habitat areas exceeds 300 for any species, or when the total estimated habitat area
554 exceeds one-percent of the area on the state. New animal species cannot be added to the state-
555 listed species if the animal is not at risk over a significant part of its present range, or if the
556 animal is moving into Massachusetts due to climate change associated with global warming or
557 global cooling.

558 Habitat improvement for all state-listed species is allowed. Habitat improvement for
559 species which are federally listed is also allowed after review and approval of the enhancement
560 project by the U.S. Fish and Wildlife Service.

561 SECTION 13. Massachusetts General Laws, Chapter 30, §§ 61 through 62H are hereby
562 amended as follows.

563 Since it is intended to encourage private citizens to enhance wetland functions and
564 values, it is intended that permitting costs be reduced for modest size projects. Thus, alteration
565 of freshwater wetlands and water bodies is exempt from this Act as long as the total area of
566 wetland and waterbody alteration is less than five acres and as long as the length of altered bank
567 is less than 2,000 feet in length. Alteration of saltwater wetlands are exempt from this section
568 as long as the total area of salt water wetland and salt water body alteration is less than two
569 acres. Wetland Projects using OMWM, IMM, or doing their wetland replication via wetland

570 banking, are exempt from this Act unless wetland alterations exceed ten acres.