

VIRGINIA ACTS OF ASSEMBLY — CHAPTER

An Act to amend and reenact §§ 15.2-961 and 15.2-961.1 of the Code of Virginia, relating to conservation and replacement of trees during development process; work group; report.

[S 589]

Approved

Be it enacted by the General Assembly of Virginia:

1. That §§ 15.2-961 and 15.2-961.1 of the Code of Virginia are amended and reenacted as follows:

§ 15.2-961. Replacement of trees during development process in certain localities.

A. For purposes of this section, "tree canopy" or "tree cover" includes all areas of coverage by plant material exceeding five feet in height and the extent of planted tree canopy at 10 or 20 years' maturity. Planted tree canopy at 10 or 20 years' maturity shall be based on published reference texts generally accepted by landscape architects, nurserymen, and arborists in the community, and the texts shall be specified in the ordinance.

B. Any locality with a population density of at least 75 persons per square mile or any locality within the Chesapeake Bay watershed may adopt an ordinance providing for the planting and replacement of trees during the development process pursuant to the provisions of this section. Population density shall be based upon the latest population estimates of the Cooper Center for Public Service of the University of Virginia.

B. C. The ordinance shall require that the site plan for any subdivision or development include the planting or replacement of trees on the site to the extent that, at 20 years, minimum tree canopies or covers will be provided in areas to be designated in the ordinance, as follows:

- 1. Ten percent tree canopy for a site zoned business, commercial, or industrial;
- 2. Ten percent tree canopy for a residential site zoned 20 or more units per acre;
- 3. Fifteen percent tree canopy for a residential site zoned more than 10 but less than 20 units per acre; and
- 4. Twenty percent tree canopy for a residential site zoned more than five but not more than 10 units or less per acre;
- 5. Twenty-five percent tree canopy for a residential site zoned more than two but not more than five units per acre; and
- 6. Thirty percent tree canopy for a residential site zoned two or fewer units per acre.

For purposes of this subsection, where a locality approves an increase in the number of units per acre through development or subdivision of existing units through a site plan approval, such site plan approval may require that the plan meet the tree canopy percentage applicable to the site in its predevelopment state.

However, the City of Williamsburg may require at 10 years the minimum tree canopies or covers set out above.

C. D. The ordinance shall require that the site plan for any subdivision or development include, at 20 years, that a minimum 10 percent tree canopy will be provided on the site of any cemetery as defined in § 54.1-2310, notwithstanding any other provision of this section. In no event shall any local tree replacement or planting ordinance adopted pursuant to this section exceed the requirements of this subsection.

D. E. The ordinance shall provide for reasonable provisions for reducing the tree canopy requirements or granting tree cover credit in consideration of the preservation of existing tree cover or for preservation of trees of outstanding age, size, or physical characteristics.

E. F. The ordinance shall provide for reasonable exceptions to or deviations from these requirements to allow for the reasonable development of farm land or other areas devoid of healthy or suitable woody materials, for the preservation of wetlands, or otherwise when the developer requests, and the locality concurs, that the strict application of the requirements would result in unnecessary or unreasonable hardship to the developer or prevent the development of uses and densities otherwise allowed by the locality's zoning or development ordinance. Such a determination may take into consideration neighborhood environmental and natural resource considerations such as stormwater management and preservation of trees of outstanding age, size, or physical characteristics. In such instances, the ordinance may provide for a tree canopy bank or fund, which bank or fund shall be consistent with subdivisions G 1 and 2 of § 15.2-961.1 whereby a portion of a development's tree canopy requirement may be met from off-site planting or replacement of trees at the direction of the locality. The following shall be exempt from the requirements of any tree replacement or planting ordinance promulgated under this section: dedicated school sites, playing fields and other nonwooded recreation areas, and other facilities and uses of a similar nature.

F. G. The ordinance may designate tree species that cannot be planted to meet minimum tree canopy requirements due to tendencies of such species to (i) negatively impact native plant communities, (ii) cause damage to nearby structures and infrastructure, or (iii) possess inherent physiological traits that cause such

57 trees to structurally fail. All trees to be planted shall meet the specifications of the AmericanHort. The
 58 planting of trees shall be done in accordance with either the standardized landscape specifications jointly
 59 adopted by the Virginia Nursery and Landscape Association, the Virginia Society of Landscape Designers
 60 and the Virginia Chapter of the American Society of Landscape Architects, or the road and bridge
 61 specifications of the Virginia Department of Transportation.

62 ~~G.~~ H. Existing trees which are to be preserved may be included to meet all or part of the canopy
 63 requirements, and may include wooded preserves, if the site plan identifies such trees and the trees meet
 64 standards of desirability and life-year expectancy which the locality may establish.

65 ~~H.~~ For purposes of this section:

66 "~~Tree canopy~~" or "~~tree cover~~" includes all areas of coverage by plant material exceeding five feet in
 67 height, and the extent of planted tree canopy at 10 or 20 years maturity. Planted canopy at 10 or 20 years
 68 maturity shall be based on published reference texts generally accepted by landscape architects, nurserymen,
 69 and arborists in the community, and the texts shall be specified in the ordinance.

70 I. ~~The ordinance may permit the locality without entering the property to monitor and assess the condition~~
 71 ~~and coverage of tree canopies at development sites approved pursuant to the ordinance during a period of~~
 72 ~~time of up to 20 years' maturity of the planted trees.~~

73 J. Penalties for violations of ordinances adopted pursuant to this section shall be the same as those
 74 applicable to violations of zoning ordinances of the locality.

75 ~~J.~~ K. In no event shall any local tree replacement or planting ordinance adopted pursuant to this section
 76 exceed the requirements set forth herein.

77 ~~K.~~ L. Nothing in this section shall invalidate any local ordinance adopted pursuant to the provisions of this
 78 section prior to July 1, 1990, which imposes standards for tree replacement or planting during the
 79 development process.

80 ~~L.~~ M. Nothing in this section shall invalidate any local ordinance adopted by the City of Williamsburg that
 81 imposes standards for 10-year-minimum tree cover replacement or planting during the development process.

82 ~~M.~~ N. Nothing in this section shall invalidate any local ordinance adopted pursuant to the provisions of
 83 this section after July 1, 1990, which imposes standards for 20-year-minimum tree cover replacement or
 84 planting during the development process.

85 ~~N.~~ O. Nothing in this section shall prohibit or unreasonably limit silvicultural practices in accordance with
 86 § 10.1-1126.1.

87 **§ 15.2-961.1. Conservation of trees during land development process in localities belonging to a**
 88 **nonattainment area for air quality standards.**

89 A. For purposes of this section, "tree canopy" or "tree cover" includes all areas of canopy coverage by
 90 self-supporting and healthy woody plant material exceeding five feet in height, and the extent of planted tree
 91 canopy at 20-years maturity.

92 B. Any locality within Planning District 8 that meets the population density criteria of subsection ~~A~~ B of
 93 § 15.2-961 and is classified as an eight-hour nonattainment area for ozone under the federal Clean Air Act
 94 and Amendments of 1990, in effect as of July 1, 2008, may adopt an ordinance providing for the conservation
 95 of trees during the land development process pursuant to the provisions of this section. In no event shall any
 96 local tree conservation ordinance adopted pursuant to this section also impose the tree replacement provisions
 97 of § 15.2-961.

98 C. The ordinance shall require that the site plan for any subdivision or development provide for the
 99 preservation or replacement of trees on the development site such that the minimum tree canopy or tree cover
 100 percentage 20 years after development is projected to be as follows:

- 101 1. Ten percent tree canopy for a site zoned business, commercial, or industrial;
- 102 2. Ten percent tree canopy for a residential site zoned 20 or more units per acre;
- 103 3. Fifteen percent tree canopy for a residential site zoned more than eight but less than 20 units per acre;
- 104 4. Twenty percent tree canopy for a residential site zoned more than four but not more than eight units per
 105 acre;
- 106 5. Twenty-five percent tree canopy for a residential site zoned more than two but not more than four units
 107 per acre; and
- 108 6. Thirty percent tree canopy for a residential site zoned two or fewer units per acre.

109 *However, the ordinance adopted by any town in Planning District 8 may also require at 10 years the*
 110 *minimum tree canopies or covers set out in this subsection.*

111 In meeting these percentages, (i) the ordinance shall first emphasize the preservation of existing tree
 112 canopy where that canopy meets local standards for health and structural condition, and where it is feasible to
 113 do so within the framework of design standards and densities allowed by the local zoning and other
 114 development ordinances; and (ii) second, where it is not feasible in whole or in part for any of the
 115 justifications listed in subsection E to preserve existing canopy in the required percentages listed above, the
 116 ordinance shall provide for the planting of new trees to meet the required percentages.

117 D. Except as provided in subsection E, the percentage of the site covered by tree canopy at the time of
 118 plan submission shall equate to the minimum portion of the requirements identified in subsection C that shall

119 be provided through tree preservation. This portion of the canopy requirements shall be identified as the "tree
120 preservation target" and shall be included in site plan calculations or narratives demonstrating how the overall
121 requirements of subsection C have been met.

122 E. The ordinance shall provide deviations, in whole or in part, from the tree preservation target defined in
123 subsection D under the following conditions:

124 1. Meeting the preservation target would prevent the development of uses and densities otherwise allowed
125 by the locality's zoning or development ordinance.

126 2. The predevelopment condition of vegetation does not meet the locality's standards for health and
127 structural condition.

128 3. Construction activities could be reasonably expected to impact existing trees to the extent that they
129 would not likely survive in a healthy and structurally sound manner. This includes activities that would cause
130 direct physical damage to the trees, including root systems, or cause environmental changes that could result
131 in or predispose the trees to structural and health problems.

132 If, in the opinion of the developer, the project cannot meet the tree preservation target due to the
133 conditions described in subdivision 1, 2, or 3, the developer may request a deviation from the preservation
134 requirement in subsection D. In the request for deviation, the developer shall provide a letter to the locality
135 that provides justification for the deviation, describes how the deviation is the minimum necessary to afford
136 relief, and describes how the requirements of subsection C will be met through tree planting or a tree canopy
137 bank or fund established by the locality. Proposed deviations shall be reviewed by the locality's urban
138 forester, arborist, or equivalent in consultation with the locality's land development or licensed professional
139 civil engineering review staff. The locality may propose an alternative site design based upon adopted land
140 development practices and sound vegetation management practices that take into account the relationship
141 between the cost of conservation and the benefits of the trees to be preserved as described in ANSI A300
142 (Part 5) — 2005 Management: Tree, Shrub, and Other Woody Plant Maintenance — Standard Practices,
143 Management of Trees and Shrubs During Site Planning, Site Development, and Construction, Annex A,
144 A-1.5, Cost Benefits Analysis (or the latest version of this standard). The developer shall consider the
145 alternative and redesign the plan accordingly, or elect to satisfy the unmet portion of the preservation
146 threshold through on-site tree planting or through the off-site planting mechanisms identified in subsection G,
147 so long as the developer provides the locality with an explanation of why the alternative design
148 recommendations were rejected. Letters of explanation from the developer shall be prepared and certified by
149 a licensed professional engineer as defined in § 54.1-400. If arboricultural issues are part of explanation then
150 the letter shall be signed by a Certified Arborist who has taken and passed the certification examination
151 sponsored by the International Society of Arboriculture and who maintains a valid certification status or by a
152 Registered Consulting Arborist as designated by the American Society of Consulting Arborists. If
153 arboricultural issues are the sole subject of the letter of explanation then certification by a licensed
154 professional engineer shall not be required.

155 F. The ordinance shall provide for deviations of the overall canopy requirements set forth in subsection C
156 to allow for the preservation of wetlands, the development of farm land or other areas previously devoid of
157 healthy and/or suitable tree canopy, or where the strict application of the requirements would result in
158 unnecessary or unreasonable hardship to the developer.

159 G. The ordinance shall provide for the establishment of a tree canopy bank or fund whereby any portion
160 of the tree canopy requirement that cannot be met on-site may be met through off-site tree preservation or tree
161 planting efforts. Such provisions may be offered where it can be demonstrated that application of the
162 requirements of subsection C would cause irresolvable conflicts with other local site development
163 requirements, standards, or comprehensive planning goals, where sites or portions of sites lack sufficient
164 space for future tree growth, where planting spaces will not provide adequate space for healthy root
165 development, where trees will cause unavoidable conflicts with underground or overhead utilities, or where it
166 can be demonstrated that trees are likely to cause damage to public infrastructure. The ordinance may utilize
167 any of the following off-site canopy establishment mechanisms:

168 1. A tree canopy bank may be established in order for the locality to facilitate off-site tree preservation,
169 tree planting, stream bank, and riparian restoration projects. Banking efforts shall provide tree canopy that is
170 preserved in perpetuity through conservation easements, deed restrictions, or similar protective mechanisms
171 acceptable to the locality. Projects used in off-site banking will meet the same ordinance standards
172 established for on-site tree canopy; however, the locality may also require the submission of five-year
173 management plans and funds to ensure the execution of maintenance and management obligations identified
174 in those plans. Any such bank shall occur within the same nonattainment area in which the locality approving
175 the tree banking is situated.

176 2. A tree canopy fund may be established to act as a fiscal mechanism to collect, manage, and disburse
177 fees collected from developers that cannot provide full canopy requirements on-site. The locality may use this
178 fund directly to plant and maintain trees on public or private property, or the locality may elect to disburse
179 this fund to community-based organizations exempt from taxation under § 501(c)(3) of the Internal Revenue
180 Code with tree planting, stewardship, or community beautification missions that benefit the community at

181 large. For purposes of establishing consistent and predictable fees, the ordinance shall establish cost units that
182 are based on average costs of two-inch caliper nursery stock trees. Any funds collected by localities for these
183 purposes shall be spent within a five-year period established by the collection date.

184 H. The following uses shall be exempt from the requirements of any ordinance promulgated under this
185 section: bona fide silvicultural activity as defined by § 10.1-1181.1 and the areas of sites included in lakes,
186 ponds, and the normal water elevation area of stormwater retention facilities. The ordinance shall modify the
187 canopy requirements of dedicated school sites, playing fields, and other nonwooded active recreation areas by
188 allowing these and other facilities and uses of a similar nature to provide 10 percent tree canopy 20 years
189 after development.

190 I. 1. In recognition of the added benefits of tree preservation, the ordinance shall provide for an additional
191 tree canopy credit of up to one and one-quarter times the canopy area at the time of plan submission for
192 individual trees or the coalesced canopy of forested areas preserved from the predevelopment tree canopy.

193 2. The following additional credits may be provided in the ordinance in connection with tree preservation:

194 a. The ordinance may provide canopy credits of up to (i) one and one-half times the actual canopy area for
195 the preservation of forest communities that achieve environmental, ecological, and wildlife conservation
196 objectives set by the locality and (ii) two times the actual canopy credits if a site developer provides a stand
197 assessment before development plans are created, for review by the local jurisdiction, and protects identified
198 trees for conservation on the submitted site plans. The ordinance may establish minimal area, dimensional
199 and viability standards as prerequisites for the application of credits. Forest communities shall be identified
200 using the nomenclature of either the federal National Vegetation Classification System (FGDC-STD-005, or
201 latest version) or the Natural Communities of Virginia Classification of Ecological Community Groups,
202 Second Approximation (Version 2.2, or latest version).

203 b. The ordinance may provide canopy credits of up to three times the actual canopy area of trees that are
204 officially designated for preservation in conjunction with local tree conservation ordinances based on the
205 authority granted by § 10.1-1127.1.

206 J. The following additional credits shall be provided in the ordinance in connection with tree planting:

207 1. The ordinance shall provide canopy credits of one and one-half the area normally projected for trees
208 planted to absorb or intercept air pollutants, tree species that produce lower levels of reactive volatile organic
209 compounds, or trees that act to reduce air pollution or greenhouse gas emissions by conserving the energy
210 used to cool and heat buildings.

211 2. The ordinance shall provide canopy credits of one and one-quarter the area normally projected for trees
212 planted for water quality-related reforestation or afforestation projects, and for trees planted in low-impact
213 development and bioretention water quality facilities. The low-impact development practices and designs
214 shall conform to local standards in order for these supplemental credits to apply.

215 3. The ordinance shall provide canopy credits of one and one-half the area normally projected for native
216 tree species planted to provide food, nesting, habitat, and migration opportunities for wildlife. These canopy
217 credits may also apply to cultivars of native species if the locality determines that such a cultivar is capable of
218 providing the same type and extent of wildlife benefit as the species it is derived from.

219 4. The ordinance shall provide canopy credits of one and one-half the area normally projected for use of
220 native tree species that are propagated from seed or tissue collected within the mid-Atlantic region.

221 5. The ordinance shall provide canopy credits of one and one-quarter the area normally projected for the
222 use of cultivars or varieties that develop desirable growth and structural patterns, resist decay organisms and
223 the development of cavities, show high levels of resistance to disease or insect infestations, or exhibit high
224 survival rates in harsh urban environments.

225 K. Tree preservation areas and individual trees may not receive more than one application of additional
226 canopy credits provided in subsection I. Individual trees planted to meet these requirements may not receive
227 more than two categories of additional canopy credits provided in subsection J. Canopy credits will only be
228 given to trees with trunks that are fully located on the development site, or in the case of tree banking projects
229 only to trees with trunks located fully within easements or other areas protected by deed restrictions listed in
230 subsection G.

231 L. All trees planted for tree cover credits shall meet the specifications of the American Association of
232 Nurserymen and shall be planted in accordance with the publication entitled "Tree and Shrub Planting
233 Guidelines," published by the Virginia Cooperative Extension.

234 M. In order to provide higher levels of biodiversity and to minimize the spread of pests and diseases, or to
235 limit the use of species that cause negative impacts to native plant communities, cause damage to nearby
236 structures, or possess inherent physiological traits that prone trees to structural failure, the ordinance may
237 designate species that cannot be used to meet tree canopy requirements or designate species that will only
238 receive partial 20-year tree canopy credits.

239 N. The locality may allow the use of tree seedlings for meeting tree canopy requirements in large open
240 spaces, low-density residential settings, or in low-impact development reforestation/afforestation projects. In
241 these cases, the ordinance shall allow the ground surface area of seedling planting areas to equate to a 20-year
242 canopy credit area. Tree seedling plantings will be comprised of native species and will be planted in

243 densities that equate to 400 seedlings per acre, or in densities specified by low-impact development designs
244 approved by the locality. The locality may set standards for seedling mortality rates and replacement
245 procedures if unacceptable rates of mortality occur. The locality may elect to allow native woody shrubs or
246 native woody seed mix to substitute for tree species as long as these treatments do not exceed 33 percent of
247 the overall seedling planting area. The number of a single species may not exceed 10 percent of the overall
248 number of trees or shrubs planted to meet the provisions of this subsection.

249 O. The following process shall be used to demonstrate achievement of the required percentage of tree
250 canopy listed in subsection C:

251 1. The site plan shall graphically delineate the edges of predevelopment tree canopy, the proposed limits
252 of disturbance on grading or erosion and sedimentation control plans, and the location of tree protective
253 fencing or other tree protective devices allowed in the Virginia Erosion and Sediment Control Handbook.

254 2. Site plans proposing modification to tree canopy requirements or claiming supplemental tree canopy
255 credits will require a text narrative.

256 3. The site plan shall include the 20-year tree canopy calculations on a worksheet provided by the locality.

257 4. Site plans requiring tree planting shall provide a planting schedule that provides botanical and common
258 names of trees, the number of trees being planted, the total of tree canopy area given to each species, variety
259 or cultivars planted, total of tree canopy area that will be provided by all trees, planting sizes, and associated
260 planting specifications. The site plan will also provide a landscape plan that delineates where the trees shall
261 be planted.

262 P. The ordinance shall provide a list of commercially available tree species, varieties, and cultivars that
263 are capable of thriving in the locality's climate and ranges of planting environments. The ordinance will also
264 provide a 20-year tree canopy area credit for each tree. The amount of tree canopy area credited to individual
265 tree species, varieties, and cultivars 20 years after they are planted shall be based on references published or
266 endorsed by Virginia academic institutions such as the Virginia Polytechnic Institute and State University and
267 accepted by urban foresters, arborists, and horticulturalists as being accurate for the growing conditions and
268 climate of the locality.

269 Q. The ordinance shall establish standards of health and structural condition of existing trees and
270 associated plant communities to be preserved. The ordinance may also identify standards for removal of trees
271 or portions of trees that are dead, dying, or hazardous due to construction impacts. Such removal standards
272 may allow for the retention of trunk snags where the locality determines that these may provide habitat or
273 other wildlife benefits and do not represent a hazardous condition. In the event that existing tree canopy
274 proposed to be preserved for tree canopy credits dies or must be removed because it represents a hazard, the
275 locality may require the developer to remove the tree, or a portion of the tree and to replace the missing
276 canopy area by the planting of nursery stock trees, or if a viable alternative, by tree seedlings. Existing trees
277 that have been granted credits will be replaced with canopy area determined using the same supplemental
278 credit multipliers as originally granted for that canopy area.

279 R. Penalties for violation of ordinances adopted pursuant to this section shall be the same as those
280 applicable to violations of zoning ordinances of the locality.

281 S. In no event shall any local tree conservation ordinance adopted pursuant to this section exceed the
282 requirements set forth herein; however, any local ordinance adopted pursuant to the provisions of § 15.2-961
283 prior to July 1, 1990, may adopt the tree conservation provisions of this section based on 10-year minimum
284 tree canopy requirements.

285 T. Nothing in this section shall invalidate any local ordinance adopted pursuant to § 15.2-961.

286 U. Nothing in this section shall prohibit or unreasonably limit silvicultural practices in accordance with
287 § 10.1-1126.1.

288 **2. That the Institute for Coastal Adaption and Resilience (the Institute) shall convene a work group to**
289 **conduct a comprehensive review of §§ 15.2-961 and 15.2-961.1 of the Code of Virginia, as amended by**
290 **this act, and § 15.2-961.3 of the Code of Virginia and all applicable state agency regulations and**
291 **guidance memorandums related to the conservation and replacement of tree canopy. The work group**
292 **shall consist of land planners; urban foresters; land use attorneys; engineers; environmental**
293 **consultants; transportation consultants; representatives from the Virginia Association for Commercial**
294 **Real Estate, Virginia Municipal League, Virginia Association of Counties, Home Builders Association**
295 **of Virginia, Chesapeake Bay Foundation, Green Infrastructure Center, Southside ReLeaf, Department**
296 **of Forestry, Virginia Chapter of the American Planning Association, and Virginia Chapter of the**
297 **Urban Land Institute; and any other relevant stakeholders. In conducting its review, the work group**
298 **shall (i) evaluate policies to increase tree canopy in the Commonwealth in a manner that balances state**
299 **and local environmental and economic development objectives; (ii) identify incentives to preserve**
300 **healthy mature trees; (iii) analyze and identify methods in which parity can be created for tree canopy**
301 **requirements across local governments; and (iv) develop recommendations to provide regulatory**
302 **assurance and cost-effective methods for tree canopy conservation and replacement for developers.**
303 **The Institute shall report the findings and recommendations of the work group to the Chairs of the**
304 **House Committee on Counties, Cities and Towns and Senate Committee on Local Government by**

305 November 1, 2026.