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H.606

2 Introduced by Representative Sheldon of Middlebury

3 Referred to Committee on

4 Date:

5 Subject: Conservation and development; land use; land and water

6 conservation; biodiversity; community resilience

7 Statement of purpose of bill as introduced: This bill proposes to establish State

8 goals of conserving 30 percent of the land and aquatic systems of the State by

9 2030 and 50 percent by 2050.

10 An act relating to community resilience and biodiversity protection

11 It is hereby enacted by the General Assembly of the State of Vermont:

12 Sec. 1. SHORT TITLE

13 This Act may be cited as the “Community Resilience and Biodiversity

14 Protection Act” or “CRBPA”.

15 Sec. 2. FINDINGS

16 The General Assembly finds that:

17 (1) Nature is facing a catastrophic loss of biodiversity, both

18 globally and locally.

Commented [BGB1]:

Blue text = suggested additions to the text as proposed.

Blue text with pale yellow highlight = suggested additions specific to aquatic conservation, as of 2 Feb 22

Blue text with bright yellow highlight (p.4 and p.7) = suggested additions specific to aquatic conservation, addressing committee questions on 10 Feb 22

19 (2) According to the United Nations, a million species of plants and
20 animals are threatened with extinction. (<https://ipbes.net/global-assessment>)

21 (3) In addition to its intrinsic value, biodiversity is essential to
22 human survival.

23 (4) Human activity has altered almost 75 percent of the Earth's
24 surface, squeezing wildlife and nature into ever-smaller natural areas of the
25 planet, according to the United Nations.

26 (5) Further, the United Nations found that the health of ecosystems
27 on which humans and all other species depend is deteriorating more rapidly
28 than ever, affecting the very foundations of economies, livelihoods, food
29 security, health, and quality of life worldwide.

30 (6) Freshwater vertebrate populations have declined by 84% globally
31 since 1970; twice the rate of decline of biodiversity in terrestrial or marine
32 biomes. Almost one in three freshwater species are threatened with
33 extinction.
34 (<https://files.worldwildlife.org/wwfmsprod/files/Publication/file/279c656a>
35 32_ENGLISH_FULL.pdf)

36 (7) Approximately 75% of all river miles assessed in Vermont have
37 lost connection with their floodplains, indicating degradation and
38 exacerbating flood-related damages.

39 <https://floodready.vermont.gov/sites/floodready/files/documents/Protecting>
40 [River Corridors in VT.pdf Page 4.](#)

41 (8) The United Nations ranks the causes of the drivers of changes in nature
42 as: (1) changes in land and sea use, (2) direct exploitation of organisms, (3)
43 climate change, (4) pollution, and (5) invasive alien species.

44 [\(9\) Drivers of change in freshwater systems also include fragmentation and](#)
45 [flow modification of rivers and streams.](#)

46 <https://files.worldwildlife.org/wwfmsprod/files/Publication/file/279c656a>
47 [32 ENGLISH FULL.pdf](#)

48 (10)The 2021 Vermont Climate Assessment highlights an increase in
49 extreme weather events such as droughts and floods as a significant
50 impact of climate change in Vermont and recommends nature-based
51 solutions as a proven, low-cost strategy for climate adaptation and
52 resilience.

53 (11)The 2017 Vermont Forest Action Plan found that fragmentation and
54 parcelization represent major threats to forest health and productivity
55 and exacerbate the impacts of climate change.

56 (12)The Nature Conservancy has developed the Resilient and Connected
57 Landscapes [project](#) and found that Vermont plays a key role in the
58 conservation of biodiversity regionally, [serving as an essential habitat](#)

59 [corridor for species migration in a changing climate.](#)
60 [61 \[62 \\[63 \\\[64 \\\\[65 \\\\\[66 \\\\\\[67 \\\\\\\[68 \\\\\\\\[69 \\\\\\\\\[70 \\\\\\\\\\[71 \\\\\\\\\\\[72 \\\\\\\\\\\\[73 \\\\\\\\\\\\\[74 \\\\\\\\\\\\\\[75 \\\\\\\\\\\\\\\[76 \\\\\\\\\\\\\\\\[77 \\\\\\\\\\\\\\\\\[78 \\\\\\\\\\\\\\\\\\[\\\\\\\\\\\\\\\\\\\(13\\\\\\\\\\\\\\\\\\\) The Vermont Fish and Wildlife Department, working within the Agency of Natural Resources and with Vermont conservation organizations, has developed the Vermont Conservation Design, a vision to sustain the State’s ecologically functional landscapes into the future. \\\\\\\\\\\\\\\\\\\(<https://vtfishandwildlife.com/conserve/vermont-conservation-design>\\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\\(https://www.conservationgateway.org/ConservationByGeography/No</p></div><div data-bbox=\\\\\\\\\\\\\\\\\\)\\\\\\\\\\\\\\\\\]\\\\\\\\\\\\\\\\\(https://www.conservationgateway.org/ConservationByGeography/No
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(13) While Vermont Conservation Design is robust for terrestrial systems, refined guidelines are required to direct the effective conservation of 30% of Vermont’s aquatic systems by 2030 and 50% by 2050. Guidelines for aquatic conservation should identify mechanisms required to conserve “essential aquatic attributes”.

(14) The initial Vermont Climate Action Plan calls for investing in strategic conservation to increase the pace of permanent conservation towards 30 by 30 targets, with Vermont Conservation Design acting as the guiding plan for prioritization of efforts.

79 (15)Intact and connected ecosystems that are permanently protected and
80 passively managed to increase in age and complexity support
81 Vermont’s native biodiversity, reduce flood risks, mitigate drought,
82 and sequester and store carbon.

83 (16)Vermont’s most effective and efficient contribution to conserving
84 biological diversity and maintaining a landscape resilient to climate
85 change is to conserve an intact and connected landscape and aquatic
86 systems.

87 Sec. 3. 10 V.S.A. chapter 89 is added to read:

88 Chapter 89. COMMUNITY RESILIENCY AND BIODIVERSITY

89 PROTECTION

90 § 2801. DEFINITIONS

91 As used in this section:

92 (1) “Biodiversity reserve” means an area having permanent
93 protection from conversion of natural land cover and a mandated
94 management plan in operation to maintain a natural state.

95 (2) “Ecological conservation area” means an area having
96 permanent protection from conversion of natural land cover and a
97 mandated management plan in operation for specific habitat
98 improvement projects to maintain a primarily natural state.

99 (3) “Sustainable resource management area” means an area
100 having permanent protection from conversion of natural land cover for
101 the majority of the area but subject to long-term forest management.

102 (4) “Aquatic system under conservation” means a watershed sized 12 or
103 larger within the USGS Hydrologic Unit Code system which meets criteria
104 indicating that conservation efforts are established and functional for essential
105 aquatic attributes.

106 (5) “Essential aquatic attributes” are attributes essential to maintaining the
107 resilience of freshwater systems and the ecosystem services they provide,
108 including: community engagement, water quality, native species
109 representation, river connectivity, river flow, wetlands, and lakes and ponds.

110 (6) §2802. CONSERVATION GOALS

111 (1) Thirty percent of Vermont’s total land area and 30 percent of
112 Vermont’s aquatic systems shall be conserved by 2030, and 50 percent of the
113 State’s total land area and 50 percent of the state’s aquatic systems by 2050.
114 The Secretary of Natural Resources shall assist the State in achieving these
115 goals. The lands and waters conserved shall include State, federal, municipal,
116 and private lands and waters.

117 (2) For lands, reaching 30 percent by 2030 and 50 percent by 2050 shall
118 include a mix of biodiversity reserves, ecological conservation areas, and

119 sustainable resource management areas. In order to support an ecologically
120 functional landscape with sustainable production of natural resources and
121 recreational opportunities, the percentages of each type of conservation area
122 shall be determined by the goals within Vermont Conservation Design,
123 including the use of biodiversity reserves to protect highest priority natural
124 communities and maintain or restore old forests across at least nine percent of
125 Vermont forestland.

126 (3) For waters, reaching 30 percent by 2030 and 50 percent by 2050 shall
127 involve designating watersheds as “aquatic systems under conservation” based
128 on criteria set forth in the conservation plan indicating that conservation efforts
129 are established and functional for “essential aquatic attributes”.

130 §2803. CONSERVATION PLAN

131 (1) On or before July 15, 2023, the Secretary shall develop a plan to
132 meet the goals established in
133 section 2802 of this title. The plan shall be submitted to the House
134 Committees on Natural Resources, Fish, and Wildlife, Agriculture and
135 Forestry, and Energy and Technology and the Senate Committee on Natural
136 Resources and Energy.

137 (2) The plan shall include:

- 138 (A) an initial inventory of the amount of land and
139 water in Vermont that is permanently conserved, including
140 public and private land and water;
- 141 (B) an evaluation of the impact of intergenerational
142 land transfer trends;
- 143 (C) an assessment of how the goals of this chapter
144 can be achieved and how State lands will be used to increase
145 biodiversity reserves;
- 146 (D) an actionable conservation plan establishing
147 how the goals will be achieved,
- 148 i. For land conservation, using Vermont
149 Conservation Design as a guide, and
- 150 ii. For aquatic conservation, meeting criteria that
151 conservation efforts are established and functional for
152 “essential aquatic attributes” within each watershed under
153 conservation.
- 154 (2) an inventory and assessment of existing programs that
155 will be used to meet the goals of this chapter and recommendations for
156 new programs and funding that will be needed to meet the goals.
- 157 (3) In developing the plan, the Secretary shall hold not less
158 than three public meetings on the plan and accept public comments.

159 The Secretary shall receive input from various stakeholders, including
160 land trusts, conservation organizations, the Vermont Housing and
161 Conservation Board, and other State agencies.

162 (4) The conserved land and waters inventory shall be
163 updated annually to track progress toward meeting the goals of this
164 chapter.

165 Sec. 4. EFFECTIVE DATE

166 This act shall take effect on July 1, 2022.