1	H.543
2	Introduced by Representatives Dolan of Waitsfield, Anthony of Barre City,
3	Bluemle of Burlington, Bos-Lun of Westminster, Brumsted of
4	Shelburne, Campbell of St. Johnsbury, McCarthy of St. Albans
5	City, McCullough of Williston, Mrowicki of Putney, Ode of
6	Burlington, Sheldon of Middlebury, Squirrell of Underhill, and
7	Yantachka of Charlotte
8	Referred to Committee on
9	Date:
10	Subject: Conservation and development; wetlands protection and water
11	resources management; State policy; net gain of wetlands
12	Statement of purpose of bill as introduced: This bill proposes to establish as
13	State policy that wetlands shall be regulated and managed by the State to
14	produce a net gain of wetlands acreage. The bill would require the Secretary
15	of Natural Resources to amend the Vermont Wetlands Rules to incorporate the
16	net gain policy. In addition, the bill would require the Vermont Significant
17	Wetlands Inventory maps to be updated and revised annually.

An act relating to regulation of wetlands in the State

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1	It is hereby enacted by the General Assembly of the State of Vermont:
2	Sec. 1. FINDINGS
3	The General Assembly finds:
4	(1) Wetlands provide critical environmental, public safety, and
5	economic benefits. Because of the critical importance of wetlands to people
6	and the natural environment on which we depend, the goal of the State of
7	Vermont must be the protection and restoration of wetlands.
8	(2) Wetlands, whether natural, restored, or created, serve a variety of
9	functions and values beneficial to the general public and to the environment,
10	including climate resilience in terms of flood resiliency and carbon storage,
11	water quality protection, wildlife and aquatic vegetation habitat, groundwater
12	recharge, erosion control, carbon storage, and recreational and educational
13	opportunities.
14	(3) Wetlands comprise just four percent of Vermont's land area, but
15	they offer critical habitat for 35 percent of Vermont's threatened and
16	endangered plant species and 21 percent of imperiled animals. Restoring
17	wetlands in the Vermont portion of the Lake Champlain Basin could achieve
18	15 percent of the pollution reduction goals required for the Lake by the U.S.
19	Environmental Protection Agency.
20	(4) A study by the Trust for Public Land found that Vermont's wetlands
21	provide an estimated \$590.00 per acre annually in natural goods and services,

1	such as flood protection, water quality enhancement, and wildlife habitat. The
2	same study found that for every State dollar invested in conservation of our
3	forests and wetlands, \$9.00 worth of natural goods and services is returned to
4	Vermonters.
5	(5) Wetlands buffer human communities from environmental threats,
6	such as more intense and more frequent weather events due to climate change.
7	The 2018 Vermont State Hazard Mitigation Plan highlights the importance of
8	wetlands for reducing flood risks to communities.
9	(6) State policies and funding programs should set a baseline of
10	regulatory protections while also incentivizing farmers, foresters, and other
11	landowners to restore wetlands and compensate them for maintaining and
12	restoring the extensive ecosystem services that wetlands provide.
13	(7) The greatest threats to wetlands are development, draining and
14	clearing, invasive species, timber harvesting without best management
15	practices, and climate change that may alter hydrologic cycles and ecosystem
16	<u>functions.</u>
17	(8) Since European colonization, scientists estimate that Vermont has
18	lost at least one-third of its wetlands.
19	(9) Alterations to wetlands disturb their natural ability to store water and
20	carbon, adversely affect flood resiliency, reduce their value as habitat, limit

1	their ability to retain nutrients and sediment, and impact public health and
2	welfare.
3	(10) Any changes to the State statutes, rules, or guidelines for wetland
4	protection and restoration must be guided by science and have a net
5	environmental benefit.
6	(11) The Department of Environmental Conservation has adopted
7	National Wetlands Inventory (NWI) Plus mapping, which uses the best
8	available technology and relies on trained image analysts to identify and
9	classify wetlands and deep-water habitats from aerial imagery. NWI Plus
10	enhances traditional wetlands inventory mapping by using hydrogeomorphic
11	attributes for identifying landscape position, landform, water flow path, and
12	waterbody type. These enhancements increase the functionality of NWI data
13	for better characterizing wetlands, for predicting wetlands functions at the
14	landscape or watershed level, and for assessing the impact of wetland changes
15	and functions.
16	Sec. 2. 10 V.S.A. § 901 is amended to read:
17	§ 901. WATER RESOURCES <u>AND WETLANDS</u> MANAGEMENT
18	POLICY
19	It is hereby declared to be the policy of the State that:

1	(1) the water resources of the State shall be protected, regulated, and,
2	where necessary, controlled under authority of the State in the public interest
3	and to promote the general welfare;
4	(2) the wetlands of the State shall be protected, regulated, and restored
5	so that Vermont achieves a net gain of wetlands acreage; and
6	(3) regulation and management of the water resources of the State,
7	including wetlands, should be guided by science, and authorized activities in
8	water resources and wetlands should have a net environmental benefit to the
9	State.
10	Sec. 3. 10 V.S.A. § 916 is amended to read:
11	§ 916. REVISION UPDATE OF VERMONT SIGNIFICANT WETLANDS
12	INVENTORY MAPS
13	The Secretary shall revise the Vermont significant wetlands inventory maps
14	to reflect wetland determinations issued under section 914 of this title and
15	rulemaking by the panel under section 915 of this title.
16	(a) On or before January 1, 2024 and annually thereafter, the Agency of
17	Natural Resources shall update the Vermont Significant Wetlands Inventory
18	(VSWI) maps and the Wetlands Advisory mapping layers for the Agency of
19	Natural Resources' Natural Resources Atlas and as a shapefile on the Vermont
20	Geodata Portal. The annual updates to the VSWI shall include integration of
21	georeferenced shapefiles or similar files for all verified delineations performed

1	within the State and submitted to the Agency of Natural Resources as part of a
2	permit application. The Wetland Advisory layer shall include integration of
3	any additional town specific inventories performed by consultants on the
4	Agency's Wetland Consultant List if the consultant has presented the map to a
5	municipality or the Agency of Natural Resources.
6	(b) The Secretary of Natural Resources shall provide public notice of
7	changes to the VSWI map in the watershed where changes to the map are
8	made by posting notice in each town clerk's office in the municipality where
9	wetland map changes are proposed and by publishing notice of the changes in
10	local newspapers and other media sources within the municipality. The
11	Secretary shall not be required to provide notification to individual persons.
12	(c) On or before January 1, 2028, the Secretary of Natural Resources shall
13	complete High Quality National Wetlands Inventory (NWI) Plus level
14	mapping for all of the tactical basins in the State. The high-quality mapping
15	shall include a ground truthing component that is the best available practice but
16	shall not be less accurate than the methodology currently applied by the
17	Secretary.
18	(d) The NWI Plus level mapping shall be compiled in the form of an
19	FGDC-compliant GIS shapefile with supporting attributes, and this data shall
20	be uploaded to the Agency of Natural Resources' Natural Resources Atlas for
21	public access and viewing. The results of each NWI Plus Basin Mapping

1	Project, including additional acres mapped, will be detailed in the annual
2	Wetlands Program Report required under section 919 of this title.
3	(e) Once all tactical basins are mapped, NWI Plus mapping updates would
4	occur on a five-year cycle simultaneously with updates to the corresponding
5	tactical basin plan.
6	(f) To assist in funding the mapping, the Secretary of Natural Resources
7	shall seek to leverage State funds with federal funds and private funding, with
8	assistance from nongovernmental partners if possible. If the Secretary of
9	Natural Resources does not obtain funding from federal funds or private
10	funding, the Secretary shall document any effort prior to ongoing effort to
11	obtain federal or private funding.
12	Sec. 4. 10 V.S.A. §§ 918 and 919 are added to read:
13	§ 918. NET GAIN OF WETLANDS; STATE GOAL; RULEMAKING
14	(a) On or before July 1, 2023, the Secretary of Natural Resources shall
15	amend the Vermont Wetlands Rules to clarify that the goal of wetlands
16	regulation and management in the State is the net gain of wetlands to be
17	achieved through protection of existing wetlands and restoration of previously
18	developed wetlands. As a condition of a permit for activity in a wetland, the
19	Secretary shall require the net gain of wetlands.
20	(b) The Vermont Wetlands Rules shall prioritize the protection of existing
21	intact wetlands. Where permitted activity within a wetland will cause adverse

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for wetlands.

1	effects that cannot be avoided, the Secretary shall mandate that the permit
2	applicant restore, enhance, or create wetlands or buffers to compensate for
3	adverse effects on a wetland. The amount of wetlands to be restored,
4	enhanced, or created shall be calculated, at a minimum, by determining the
5	acreage or square footage of wetlands adversely affected by the permitted
6	activity and multiplying the number of adversely affected acres or square feet
7	by two, to result in ratio of 2:1 restoration to disturbance. Establishment of a
8	buffer zone contiguous to a wetland shall not substitute for the restoration,
9	enhancement, or creation of wetlands. Adverse effects on wetland buffers
10	shall also be restored, enhanced, or created at a ratio of 2:1 restoration to
11	disturbance, provided that restoration, enhancement, or creation of a wetland
12	buffer shall not substitute for adverse effects on a wetland. Restoration,
13	enhancement, or creation of adverse effects to a wetland or wetland buffer
14	shall be managed separately.
15	(c) At a minimum, the modifications to the Wetlands Rules shall:
16	(1) Require an applicant for a wetlands permit to restore and enhance
17	any loss of wetlands caused by the project that is subject to the permit
18	application.
19	(2) Incorporate the net gain rule into existing permitting requirements

1	(3) Establish a set of parameters and ratios for the permittee-designed
2	restored wetlands, at not less than a 2:1 ratio, which shall include, at a
3	minimum, the following factors:
4	(A) the existing level of wetland function at the site prior to
5	mitigation or restoration of wetlands;
6	(B) the amount of wetland and wetland function lost as a result of the
7	project;
8	(C) how the wetland amounts and functions will be restored at the
9	proposed compensation site;
10	(D) the length of time before the compensation site will be fully
11	functional;
12	(E) the risk that the compensation project may not succeed;
13	(F) the differences in the location of the adversely affected wetland
14	and the wetland subject to compensation that affect the services and values
15	offered; and
16	(G) the requirement that permittees conduct five years of
17	postrestoration monitoring for the restored wetlands, at which time the Agency
18	can decide if further action is needed.
19	(d) When amending the Vermont Wetlands Rules under this section, the
20	Secretary shall establish a Vermont in-lieu fee (ILF) compensation program for
21	wetlands impacts that may be authorized as compensation for an adverse effect

on a wetland when the permittee cannot achieve restoration. The Secretary
may implement a Vermont ILF compensation program through agreements
with third-party entities such as the U.S. Army Corps of Engineers or
environmental organizations, provided that any ILF monetary compensation
authorized under the rules shall be expended on restoration or conservation
projects within the State and within the same watershed of the adversely
affected wetland when possible.
§ 919. WETLANDS PROGRAM REPORT
On or before January 1, 2023 and annually thereafter, the Agency of Natura
Resources shall submit to the House Committee on Natural Resources, Fish,
and Wildlife and to the Senate Committee on Natural Resources and Energy a
report on the status of the wetlands in the State. The report shall include:
(1) the acreage, location, and vegetative composition of Class II
wetlands and buffers impacted, the Class II wetlands and buffers that were
restored, the Class II wetlands converted to other uses, including permanent
development and cropland, and an assessment of the functionality of any
created wetlands over the past year compared with the previous five-year
period;
(2) an updated mitigation summary of the extent of wetlands restored
on-site compared with compensation performed off-site, in-lieu fees paid, or
conservation;

1	(3) the number of site visits and technical assistance calls conducted by
2	the Agency of Natural Resources, the number of permits processed by the
3	Agency, and any enforcement actions that were taken by the Agency or the
4	Attorney General's Office in the previous year;
5	(4) an analysis of historical trends of wetlands, including data showing
6	sectors of wetland impact, including fill, land clearing for structures, land
7	clearing for access, and renewable energy development;
8	(5) the results of each NWI Plus Basin Mapping Project, including
9	additional acres mapped, dominant vegetative composition, connected
10	tributaries, locations of confirmed ground truthing, if applicable, and any other
11	hydrologic soil or vegetative observations or trends noted; and
12	(6) relevant updates related to Class I and Class II wetlands to include
13	additional wetlands identified under these categories, their composition and
14	general characteristics, potential threats, patterns of use, and other unique
15	<u>features.</u>
16	Sec. 5. 10 V.S.A. § 1274(a) is amended to read:
17	(a) Notwithstanding any other provision or procedure set forth in this
18	chapter, if the Secretary finds that any person has discharged or is discharging
19	any waste or damaging the ecological functions of wetlands in violation of this
20	chapter or chapter 37 of this title, or that any person has failed to comply with
21	any provisions of any order or permit issued in accordance with this chapter or

of violation.

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1	chapter 37 of this title, the Secretary may bring suit in the Superior Court in
2	any county where the discharge, damage to wetlands, or noncompliance has
3	occurred to enjoin the discharge and to, obtain compliance, and mandate
4	restoration of damaged wetlands. The suit shall be brought by the Attorney
5	General in the name of the State. The court may issue a temporary injunction
6	or order in any such proceedings and may exercise all the plenary powers
7	available to it in addition to the power to:
8	(1) Enjoin future discharges.
9	(2) Order the design, construction, installation, or operation of pollution
10	abatement facilities or alternate waste disposal systems.
11	(3) Order the restoration of damaged wetlands. Wetlands damaged in
12	violation of chapter 37 of this title may be ordered restored, enhanced, or
13	<u>created.</u>
14	(4) Order the removal of all wastes discharged and the restoration of
15	water quality.
16	(4)(5) Fix and order compensation for any public property destroyed,
17	damaged, or injured. Compensation for fish taken or destroyed shall be
18	deposited into the Fish and Wildlife Fund.
19	(5)(6) Assess and award punitive damages.
20	(6)(7) Levy civil penalties not to exceed \$10,000.00 a day for each day

1	(7)(8) Order reimbursement to any agency of federal, State, or local
2	government from any person whose discharge caused governmental
3	expenditures.
4	Sec. 6. APPROPRIATIONS
5	In addition to other funds appropriated to the Agency of Natural Resources
6	in fiscal year 2023, the amount of \$1,000,000.00 shall be appropriated from the
7	General Fund, of which \$500,000.00 shall be used to fund wetlands mapping
8	required under this act, and \$500,000.00 shall be used to hire additional
9	Agency of Natural Resources staff as necessary to comply with the
10	requirements of this act.
11	Sec. 7. EFFECTIVE DATE
12	This act shall take effect on passage.