

[Note: This is a preliminary draft report of the Lake Shoreland Protection Commission. The draft report may be revised based on input the Lake Shoreland Protection Commission receives at the planned public hearing of the Commission on January 8, 2014.]

Lake Shoreland Protection Commission

Report to the Vermont General Assembly
Pursuant to No. 50, Section E.126.1 of the Acts of 2013

Prepared by the Office of Legislative Council

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Draft 12/11/13: Subject to Revision

A. Statutory Charge of the Lake Shoreland Protection Commission

Sec. E.126.1 LAKE SHORELAND PROTECTION COMMISSION

(a) There is created a Lake Shoreland Protection Commission to:

(1) provide information regarding current laws or regulations in place to protect the waters of the State that are held in trust for the public.

(2) take testimony regarding the regulation of disturbance, clearing, and creation of impervious surfaces in the shorelands of lakes.

(b) The Commission shall be composed of:

(1) The current members of the Senate Committee on Natural Resources and Energy; and

(2) Five members from the House Committee on Fish, Wildlife and Water Resources, two of whom shall be the Chair and Vice Chair of the Committee and three of whom shall be appointed by the Chair of the Committee on Fish, Wildlife and Water Resources, provided that the Chair shall appoint different committee members to attend different meetings of the Commission in order to provide Commission membership that reflects the geographic region of the State where a public meeting of the Commission will be held under subsection (c) of this section.

(c) The Commission may conduct five public meetings in the State to provide information and collect public input regarding the proposed regulation of activities in the shorelands of lakes. The Commission shall collaborate with regional and municipal planning organizations. The Commission shall hold four of the five meetings in different regions of the State. The fifth meeting shall be held in Montpelier.

(d) The Commission, with the assistance of the Agency of Natural Resources, shall:

(1) summarize the scope and requirements of existing regulation of activities that preserve and improve water quality and avoid degradation, including a summary of the proposed rules to implement the anti-degradation policy and the programs and requirements the State may need to implement in order to meet the Total Maximum Daily Load plan for Lake Champlain;

(2) summarize the findings of the Agency of Natural Resources' State Water Quality Remediation, Implementation, and Funding Report of 2012, as required by 2012 Acts and Resolves No. 138, Sec. 19, including how Vermont ranks in relation to other states with regard to clean water protection;

(3) summarize the need for regulation in the shorelands of lakes as part of an integrated policy to preserve and protect clean water in the State;

(4) summarize how other states regulate activities in shoreland areas of lakes, including:

(A) what activities are regulated;

(B) how development, construction, or creation of non-vegetated surface in shoreland areas of lakes is regulated;

(C) whether activities in shoreland areas of lakes are regulated by the state, a local authority, or some combination of state and local authority;

(D) whether a buffer or other area of vegetated surface is required within a specified distance of a lake; and

(E) what activities in shoreland areas of lakes are exempt from regulation.

(5) provide educational materials regarding shoreland protection, including copies of the Agency of Natural Resources' draft standards for the regulation of the shorelands of lakes and vegetation management; and

(6) solicit and hear input and proposals from the public regarding, in response to the information provided under subdivisions (1)-(5) of this subsection, how the State of Vermont should protect water quality, aquatic habitat, and shoreland habitat while also preserving reasonable use of the property.

(e) For purposes of fulfilling its charge under this section, the Commission shall have technical services of the Agency of Natural Resources. The Office of Legislative Council shall provide legal and administrative services to the Commission. The Commission may request financial services from the Joint Fiscal Office.

(f) The Commission shall consider the public input and proposals provided under subsection (d) of this section and shall publish a report of the Commission's recommendations for legislative action for the protection of the shorelands of the lakes of the State. The Commission may make recommendations for consideration by the General Assembly. The report of the Commission shall be posted to the website of the General Assembly on or before January 15, 2014.

(g) In addition to the public meetings required under subsection (c) of this section, the Commission may meet no more than three times, and shall cease to exist on July 1, 2014.

(h) For attendance at meetings during adjournment of the General Assembly, legislative members of the Commission shall be entitled to compensation and reimbursement for expenses as provided in 2 V.S.A. § 406.

(i) There is created a Lake Shoreland Protection Commission Working Group to develop, prior to July 15, 2013, the information and educational materials to be presented or provided at the public meetings of the Lake Shoreland Protection Commission under subsection (d) of this section. The Working Group shall consist of the Chair and Vice Chair of the Senate Committee on Natural Resources and Energy, the Chair and Vice Chair of the House Committee on Fish, Wildlife and Water Resources, and the Commissioner of Environmental Conservation or his or her designee. The Working Group shall have the same services as provided to the Lake Shoreland Protection Commission under subsection (e) of this section.

B. History of Lake Shoreland Protection Commission; Initiation and Purpose

1. Background: General Assembly Review of Water Quality Needs

The State of Vermont faces multiple existing and pending water quality issues that will pose significant challenges to address and fund. The water quality of Lake Champlain is impaired due to elevated levels of phosphorus, which have facilitated the growth of invasive species and toxic algae. To address the phosphorus impairment in Lake Champlain, the U.S. Environmental Protection Agency (EPA) has developed and will soon reissue a total maximum daily load (TMDL) plan required under the federal Clean Water Act. The water quality of Lake Memphramagog is also impaired due to phosphorus, and the State will need to develop a TMDL to attempt to remediate this impairment.

Similarly, the Connecticut River watershed in Vermont will be subject to the multistate, EPA-issued TMDL for Long Island Sound. Additional waters, such as the 15 rivers or streams in the State impaired due to stormwater, also face water quality issues and will require cleanup. Other water quality issues likely will arise in the future.

In addition, climate data indicate that the State of Vermont is facing more extreme storm events. These storm events result in more frequent flood events, increased intensity of flooding, and threats to personal safety, infrastructure, and the environment. These storm events have substantial and sometimes catastrophic economic consequences for municipalities and businesses. The State need only look to the impacts of Tropical Storm Irene and the spring 2011 flooding of Lake Champlain as examples of the devastating effects of flood events. In fact, data indicate that there has been at least one reportable, emergency flood event every year for the past 10 years.

In 2012, the Vermont General Assembly initiated discussions on strategies or methods for a coordinated State response to address and fund water quality improvement, increase flood resiliency, and improve flood response. Multiple State agencies, experts, and interested parties were consulted. Ultimately, the discussions led to the enactment of Act No. 138 of 2012 (Act 138), an act relating to regulation of flood hazard areas, river corridors, and stream alteration.

Act 138 addressed many issues, including bringing the State into compliance with the Federal Emergency Management Agency requirements for the National Flood Insurance Program and amending the State stream alteration requirements to allow for coordinated and improved response during flood events and other emergencies. In addition, Act 138 required the Agency of Natural Resources to submit a report (Act 138 Report) to the General Assembly regarding how to improve the water quality of the State's surface waters, how to implement improvement of water quality, and how to fund water quality improvement.

As part of the Act 138 Report, the General Assembly required the Agency of Natural Resources (ANR) to recommend how the State should work toward the restoration and protection of the shorelands of lakes. The General Assembly required the ANR recommendation to address how the State should regulate development in the shorelands of lakes, including whether the State should enact statewide regulation for activities within lake shorelands and

whether any regulation of activities within lake shorelands should be based on site-specific criteria.

2. *Act 138 Report on Lake Shoreland Protection and Restoration Management Options*

On January 14, 2013, ANR submitted the Act 138 Report to the General Assembly. Part II of the Act 138 Report specifically addressed Lake Shoreland Protection and Restoration Management Options (Lake Shoreland Report). In the Lake Shoreland Report, ANR first discussed the status of the lakes of Vermont. ANR described the State's lakes as natural jewels that serve multiple diverse purposes and that must be protected.

However, ANR reported that recent studies indicated that clearing shorelands of natural vegetation results in the degradation of aquatic habitat.¹ Specifically, ANR cited research conducted by ANR and the U.S. Environmental Protection Agency (USEPA), which concluded that 82 percent of lakes in Vermont are in poor or fair condition because of excessive disturbance such as clearing or impervious surface.² Moreover, ANR concluded that there is a strong correlation between cleared shoreland and loss of shallow water habitat for fish and other organisms.³ In addition, ANR has found that in terms of shoreland disturbance, Vermont lakes rank worse than the lakes in the northeast region and the nation.⁴ In sum, ANR and the USEPA concluded that the most widespread stressor to Vermont's lakes is lakeshore disturbance.⁵

ANR asserted that for lakes to be resilient to human activity and to climate change, the first line of defense in terms of cost and ease of implementation is a well-vegetated shore.⁶ According to ANR, naturally vegetated shores protect lake water quality, ecology, and bank stability.⁷ Naturally vegetated shorelands also promote recreation and tourism, provide pollution filtration, provide habitat for fish and other aquatic species, prevent problem plant growth, and greatly contribute to the economy.⁸

ANR further contended that when a lake's natural vegetation or woodland is removed and replaced by lawns and impervious surfaces, shores erode and phosphorus pollution and sediment pollution to the lake increase. Consequently, fish and wildlife habitat degrade and the lake is more vulnerable to water quality problems such as algae blooms.⁹ Likewise, ANR stated that cleared shores are also more susceptible to erosion during flood events.¹⁰

ANR concluded in the Lake Shoreland Report that the current shoreland management approach in Vermont was not adequately protecting Vermont's lakes and that the State lacked the necessary authority to address the issue. Specifically, ANR summarized the current lake shoreland management approach as one based on education, outreach, technical assistance, and

¹ Agency of Natural Resources, Water Quality Remediation, Implementation and Funding Report. Part II: Lake Shoreland Protection and Restoration Management Options, p.3 (Jan. 14, 2013).

² Vermont Department of Environmental Conservation, Gauging the Health of Vermont Lakes: Results of the 2007 National Lake Assessment p. 10, 39-41 (March 14, 2013).

³ Id.

⁴ Id.

⁵ Id at 50, 52.

⁶ Id.

⁷ Id.

⁸ Id. at 1, 4-5.

⁹ Id. at 1.

¹⁰ Id.

voluntary municipal participation.¹¹ Unlike all other northeastern states, Vermont has no statewide lakeshore protection rule,¹² and other regulatory programs, such as stormwater regulation and Act 250, are not generally applicable to lake shorelands or do not specifically address lakeshore management.¹³

Instead of relying on statewide lakeshore standards, Vermont relies on municipal adoption of local shoreland regulation. However, ANR reported that municipal adoption of effective local shoreland zoning has progressed very slowly over the last 40 years,¹⁴ and less than 20 percent of Vermont towns have shoreland zoning that provides some lake protection.¹⁵ Consequently, according to the Lake Shoreland Report, the majority of shoreland development occurs without any guidance or requirements addressing lake protection.¹⁶

To address the environmental issues and fill in the regulatory gaps identified by the Agency, ANR concluded in the Lake Shoreland Report that new approaches are needed to ensure the long-term health of Vermont lakes and shorelands. As options for the consideration of the General Assembly, ANR provided both regulatory options and nonregulatory options. The regulatory options offered were: (1) an ANR implemented statewide permit program, under which ANR would adopt standards via rulemaking; (2) an enhanced local option, under which the State establishes minimum standards that the municipalities can choose to administer themselves; and (3) a municipally administered option, under which the State establishes minimum standards that municipalities must incorporate into their zoning ordinances, and the State would administer the minimum standards in the 94 towns which have no zoning.¹⁷

Although ANR concluded that a shoreland management program relying solely on education, outreach, and assistance does not adequately protect Vermont's lakes, the Agency recommended retaining nonregulatory programs as a necessary part of a regulatory program.¹⁸ ANR offered multiple nonregulatory options. The Agency suggested that the State encourage shoreland conservation projects that preserve undeveloped lakeshores. ANR also proposed that the General Assembly evaluate a tax credit for establishing or protecting a wooded lakeshore or for maintaining a naturally vegetated shore.¹⁹

The Agency also recommended the nonregulatory option of establishment of a "green" certification program to train contractors on water resource protection measures. The Agency also proposed supporting continued education and outreach efforts, such as the ANR's Lake Wise Program. Similarly, ANR proposed that the Agency continue individual site visits, as requested, to provide recommendations regarding shoreland management or restoration. Moreover, ANR proposed continued support of the Vermont League of City and Towns' lake protection technical assistance program. Last, ANR proposed to continue to fund lake events

¹¹ Id at 1, 7-10.

¹² Id. at 12.

¹³ Id at 11.

¹⁴ Id. at 1.

¹⁵ Id.

¹⁶ Id.

¹⁷ Id. at 16.

¹⁸ Id. at 17.

¹⁹ Id. at 17.

and technical assistance projects that promote and demonstrate shoreland restoration and protection.²⁰

In concluding the Lake Shoreland Report, ANR stated “there has never been a better time, or a greater need, to rethink how Vermont manages its lake shorelands.” The Agency asserted that the Vermont General Assembly has an opportunity to enact and to implement a fair and effective program for lakeshore management and protection. According to ANR, such a program would help ensure that the State’s economic, social, and ecological values are protected for current and future generations.²¹

3. *Legislative Review and Establishment of Lake Shoreland Protection Commission*

After receipt of the Act 138 Report from ANR, the General Assembly held multiple committee hearings in the beginning of the 2013 session to review the substance of the report and consider options to address future water quality issues.²² Subsequent to these meetings, the House Committee on Fish, Wildlife and Water Resources decided in late February to address the options in the Act 138 Report related to the management of lake shorelands. To this end, the Committee began review of a shorelands bill, H.223, that had been introduced in early February.

The House Committee on Fish, Wildlife and Water Resources held 12 meetings to address H.223. In addition, the Committee held a public hearing on March 12, 2013 to hear input from the public regarding the proposed regulation of lake shorelands. At the public hearing, the Committee on Fish, Wildlife and Water Resources heard from 43 persons in approximately two and one-half hours. Generally, there was both opposition from the public and support from the public to the proposed shoreland regulation in H.223.

Subsequent to the public hearing on H.223, the Committee on Fish, Wildlife and Water Resources decided it wanted to pursue the concept of lake shoreland regulation, but that the concepts and proposal in H.223 should be abandoned. Instead, the Committee began drafting a bill in committee. The Committee held eight meetings over the course of the 12 legislative days it was afforded under an extension of the customary crossover deadline for passage of a bill out of committee. On March 22, 2013, the Committee on Fish, Wildlife and Water Resources voted 8 to 1 to recommend to the entire House that the bill be enacted as passed out of committee.

The House of Representatives began debate on H.526 on March 26, 2013. After significant debate, the House of Representatives voted by a margin of 105 to 42 to read the bill a second time—i.e., to pass preliminarily the bill and recommend that the Senate pass the bill. On March 27, 2013, the House of Representatives voted to read the bill a third time—i.e., to finalize its vote. H.526 was read for the first time in the Senate on April 2, 2013 and referred to the Senate Committee on Natural Resources and Energy.

The Senate Committee on Natural Resources and Energy met several times to address H.526. However, it became apparent that there was not sufficient time on the legislative

²⁰ Id.

²¹ Id. at 2.

²² A search of the legislative history of the 2013 session of the General Assembly indicated that 23 committee meetings were held to review the substance of the Act 138 Report. The majority of those meetings were conducted by the House Committee on Fish, Wildlife and Water Resources and the Senate Committee on Natural Resources and Energy.

schedule for the Committee to address the bill.²³ The Committee did not take final action on H.526 and it remains in the Senate Committee on Natural Resources and Energy. If the Committee elects to address H.526 again, it may be acted upon in 2014. If the Committee passes the bill out favorably and the Senate votes to approve the bill, the House will need to vote on the Senate's recommendations.

However, to inform future legislative action addressing shorelands and water quality, the General Assembly established a study committee to review the issue of regulation of lake shorelands. Specifically, in section E.126.1 of Act No. 50 of 2013, the Vermont General Assembly established a Lake Shoreland Protection Commission (Commission) to: (1) provide information regarding current laws or regulations in place to protect State waters; and (2) take testimony regarding the regulation of disturbance, clearing, and creation of impervious surfaces in the shorelands of lakes. The Commission was composed of the members of the Senate Committee on Natural Resources and Energy and five members from the House Committee on Fish, Wildlife and Water Resources. The Commission was authorized to conduct public meetings in the State to provide information and collect public input regarding the proposed regulation of activities in the shorelands of lakes.

C. Summary of Lake Shoreland Protection Commission Action and Response to Comments

The Commission met six times in Newport, Fairlee, Lake Bomoseen, Middlebury, North Hero, and Burlington. Over 700 persons attended the Commission meetings.²⁴ At those meetings, approximately 290 comments were provided to the Commission.²⁵ In addition, 27 comments were submitted to the Commission by e-mail or postal mail. In total, the Commission received at least 320 comments from the public.

Attachment A to this document summarizes the common questions or themes in comments submitted to the Commission. From the submitted comments, it is clear that citizens of the State understand and support the goal of clean State waters. Similarly, the submitted comments indicate support for the cleanup and prevention of degradation of State waters. However, it is clear from the comments submitted to the Commission that there is varying public opinion as to how the State should pursue improving and protecting the water quality of State waters.

Generally, a major category of comments addressed the commenters' beliefs that the State should address other water quality issues prior to regulating lake shorelands. More specifically, commenters recommended that the State address such issues as agricultural water quality, boats, septic systems, and multiple other issues prior to regulating shorelands. The Commission notes that many of the activities or areas for which commenters requested regulation are already regulated by the State under existing programs. Attachment B to this

²³ Senate committees that meet in the mornings stop meeting several weeks before the end of the legislative session so that the committee members can fulfill their responsibilities for afternoon Senate committees, which typically are the committees with jurisdiction over financial and monetary issues, such as taxes or the State budget. In 2013, the Senate morning committees stopped meeting in late April.

²⁴ Approximately 180 persons attended at Newport; 70 at Fairlee; 140 at Lake Bomoseen; 120 at Middlebury; 170 at North Hero; and 50 at Burlington.

²⁵ At Newport, 54 comments were submitted. At Fairlee, 50 comments were submitted. At Lake Bomoseen, 64 comments were submitted. At Middlebury, 46 comments were submitted. At North Hero, 51 comments were submitted. At Burlington, 28 comments were submitted.

report includes a brief description of how these other areas of need are already regulated by the State.

In addition, a majority of the comments received addressed the content of H.526 or contemplated shoreland standards. For example, numerous comments questioned how the proposed bill and the contemplated standards would affect or regulate certain property or activities. However, because H.526 or any other shoreland bill is not final, the Commission believes that it is unwise to attempt to answer these questions formally, because, depending on what action is taken on a shorelands bill in 2014, the answer could change. Answering questions now could create false expectations regarding future regulation.

Similarly, the Commission chose not to respond directly to other categories or themes of questions because of the pending nature of a shoreland bill. To the extent that a general answer based on existing law could be provided, the Commission has provided a response. The Commission's responses to comments or questions can be found in Attachment B of this report.

D. Lake Shoreland Protection Commission Recommendations

The lakes of Vermont are integral to the State's environment, wildlife, the economy, recreation, and general quality of life. Preserving the lakes of Vermont, protecting shorelands, and ensuring that the quality of lakes improves, or at least does not degrade further, is a duty that the General Assembly, ANR, and the citizens of the State all share. This duty is neither a light burden nor an easy burden, and there are many options or alternatives that the State could explore in fulfilling its duty to improve and preserve the water quality of the lakes of Vermont.

The Lake Shoreland Protection Commission recognizes that regulation of lake shorelands is one alternative that the State could pursue in improving or preserving the water quality of the State. Yet, there are many issues and alternatives inherent in any decision to regulate lake shorelands. The Vermont House of Representatives has made some of those decisions in the passage of H.526. However, the Vermont Senate has not formally acted on the question of the regulation of lake shorelands.

Consequently, the Lake Shoreland Protection Commission recommends that legislative review of possible lake shoreland regulation continue in the Vermont Senate according to the legislative process contemplated by the Vermont Constitution. Further review of the question of lake shoreland regulation will allow the Vermont Senate to debate the issues, alternatives, and public input related to the regulation of shorelands. The Senate can then make an informed decision regarding whether or how to pursue the regulation of lake shorelands.

The continuation of the legislative process also allows for further input and participation from interested parties. The Lake Shoreland Protection Commission recommends and values such input. It is clear that the citizens of the State, and most notably lakeside property owners, recognize the beauty, functions, and values of the State's lakes. Preserving these lakes and their beauty, functions, and values is a goal that the Lake Shoreland Protection Commission recommends that the Vermont General Assembly continue to pursue for the benefit of the State as a whole.

**Attachment A: Summary of Public Comments Submitted to the Lake Shoreland
Protection Commission**

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ATTACHMENT A: SUMMARY OF PUBLIC COMMENTS SUBMITTED TO THE LAKE SHORELAND PROTECTION COMMISSION

A. GUIDE TO NOTATIONS

This Attachment A summarizes the common questions or themes in comments submitted to the Lake Shoreland Protection Commission. This Attachment does not summarize every comment submitted to the Commission. Similarly, this document does not exactly replicate every comment submitted to the Commission. Certain comments are not summarized or categorized in this document because staff could not read the comment or because the comment did not fit within relevant categories.²⁶ This document condenses, summarizes, and categorizes the comments provided to the Commission. A copy of the complete text of all comments submitted to the Commission is available from the Office of Legislative Council in the document entitled *Appendix A: Public Comments Submitted to the Lake Shoreland Protection Commission*.

The comments submitted by the public were organized by the Commission hearing at which they were submitted with an additional grouping for those comments submitted by e-mail or postal mail. Each comment in each category was scanned into an electronic document and numbered. Below is a guide to the annotations used for each category of public comments.

N=Comment from Newport Meeting

M=Comment from Middlebury Meeting

F=Comment from Fairlee Meeting

NH=Comment from North Hero Meeting

B=Comment from Lake Bomoseen Meeting

BTV=Comment from Burlington Meeting

EM=Comment submitted by e-mail or post

B. MAJOR THEMES IN COMMENTS SUBMITTED TO LAKE SHORELAND PROTECTION COMMISSION

1. Other water quality issues are more pressing or harmful to water quality than development of lake shorelands—62 comments

Comments stated that the following activities or issues were of a greater threat to water quality than shoreland development and should be addressed before regulating shorelands:

- Beavers.
- Pesticide spraying.
- Strip clearing under power lines.
- Management of water depth.
- Boats, wakes from or with invasive species attached.
- Agriculture, including cows entering lakes, irrigation ditches, runoff, and lack of buffers between crops and lakes.
- Road construction, including better back road projects that increase pollution.

²⁶ For example, uncivil comments were not categorized.

- Preservatives and chemicals in wood.
- Stormwater runoff from ridgeline wind development.
- Entire watersheds—i.e., pollution to lakes from rivers, streams, and brooks.
- Sewage spills, from treatment plants and from lakefront septic systems.
- State of Vermont activities; State-controlled property (e.g. Button Bay cottages).
- Use of fertilizer.
- Lots with rock ledges that are subject to erosion.
- Fireworks.

See Comments: N27, N30, N32, N39, N40, N42, N43, N45, N46, N47, N50, N51, N52, F4, F6, F9, F19, F29, F34, F50, B3, B4, B10, B13, B22, B23, B25, B30, B31, B33, B36, B48, B52, B57, M13, M14, M21, M26, M36, M38, M40, NH8, NH9, NH14, NH17, NH18, NH19, NH22, NH23, NH24, NH48, NH49, BTV7, BTV13, BTV15, BTV23, EM4, EM5, EM10, EM12, EM19, EM23.

2. How do shoreland standards affect specific property or activities on shoreland property?—47 comments

The following questions or comments were submitted regarding how shoreland regulation, including H.526, would affect the commenter's property:

- If you own lots and don't build for several years, how will the lot be affected?
- If you have a small lot, how can you build on it?
- How will the standards apply to an existing dwelling located more than 100 feet but less than 250 feet from a lake shoreland?
- How will standards apply to an existing dwelling that is less than 100 feet from a lake?
- What percentage of lake frontage owners' property will be 100 percent controlled by the State?
- How will standards apply to landowners who desire to remove an existing cabin and rebuild a new cabin if the impervious surface is not expanded by more than 500 feet?
- Will there be restrictions on construction of buildings on rocks and fill placed in a lake?
- How will mowing be regulated, and how will preexisting lawns be addressed?
- How will an undeveloped lot without a conforming building envelope be handled?
- Will nonconforming properties be addressed? What about nonconforming properties destroyed by fire or natural disaster. Can they rebuild?
- How will tree cutting be regulated?
- What if you are expanding by 600 feet?
- Will State lands or activities be subject to the regulation?

- Will you need a permit for a second story on an existing building?
- Will you need a permit for a foundation when an existing building is in place?
- Will you need a permit to tear down a structure?
- Will new homes be allowed to be constructed within 250 feet?
- How will H.526 deal with site-specific differences in property?
- Will the shoreland buffer be considered a wetland requiring a 50 foot buffer?
- Are there different rules for commercial property vs. noncommercial?
- Is there a minimum size water body that H.526 does not apply to?
- Will property owners be able to clear vegetation to address mosquitos?
- As duff and vegetation are defined in H.526, will I need a permit to remove leaves?
- How do you measure lake frontage when your house is on a cliff?
- How would standards address stabilizing land on an eroding shale cliff?
- Will standards apply to the removal of the old railway break wall at Carry Bay?
- How will regulation apply to lakeshore property on a bluff?
- How will beaches and recreational areas be affected, will the regulation preclude them?
- H.526 or shoreland standards should allow for reasonable maintenance of vegetation around existing structures.
- Will the shoreland standards allow construction in lake shorelands that uses methods or measures other than buffers, such as low-impact design?

See Comments: N10, N11, N12, N14, N35, N50, F17, F24, F27, F30, F37, F47, F49, B4, B6, B9, B15, B16, B17, B28, B29, B37, B38, B42, B49, B53, B54, B61a, M1, M20, M24, M29, M31, M32, M41, NH25, NH26, NH27, NH28, NH29, NH38, BTV1, BTV18, BTV19, BTV21, BTV22, EM27.

3. Enforcement of shoreland standards and whether ANR has the capacity to enforce and administer the program—32 comments

Questions on enforcement and administration included:

- How will the Commission or H.526 address enforcement when ANR has difficulty enforcing current laws and programs?
- Who will enforce? How will it be enforced?
- Will the agency hire more staff? How many more employees will be needed?
- How will ANR run the program when it cannot effectively administer the existing water quality programs?
- ANR should focus on enforcing existing laws.

- Does the State have enough staff or engineers available to property owners to meet the requirements of the proposed regulation?
- Does ANR have enough engineers to properly monitor and enforce the program?
- Can anyone conduct the review of shorelands now?

See Comments: N1, N3, N4, N5, N6, N9, N15, N28, N47, N49, F4, F7, F10, F14, F28, B16, B43, B57, M8, M9, M10, M12, M26, NH31, NH42, BTV10, BTV14, EM11, EM12, EM13, EM18, EM26.

4. Support for the proposed standards or stronger standards—23 comments

The following comments expressed support for the proposed shoreland standards or argued for additional requirements:

- Vermont needs strong, statewide lake shoreland protection legislation.
- The Commission should be thanked for holding the meetings.
- The law should apply to rivers and streams too.
- There should be stronger protection for shallow bays, emergent wetlands, and other high quality habitat areas.
- H.526 should limit shoreland development, instead of requiring a permit.
- There should be at least a 100-foot buffer.

See Comments: N20, N36, F2, F26, B31, M17, M23, M43, NH1, NH20, NH21, NH44, NH45, EM8, EM11, EM14, EM15, EM16, EM17, EM20, EM22, EM24, EM25.

5. Municipal regulation of shorelands—20 comments

The following comments addressed municipal authority to regulate shorelands:

- Shoreland regulation should be left to municipal zoning.
- Was there consideration of a town level regulation with minimum State standards?
- Will municipalities with shoreland zoning be exempted or grandfathered? How will towns know if they meet the standard for delegation?
- Will delegated towns preempt State law?
- How will shoreland standards address a lake with multiple towns bordering it?
- What has the State appropriated or otherwise done to encourage municipal adoption of shoreland standards?
- If a town is not delegated, who will be accountable for enforcement and oversight and possible legal action against the town?
- Is a town required to seek delegation, or is it the town's own decision?
- Shoreland permitting authority should be delegated to municipalities, but the State should retain some residual authority over enforcement.

- The standards for delegation should be sufficiently articulated so that municipalities will know in advance whether they qualify.
- Municipalities were not consulted in the drafting of H.526 or other regulation.
- How will takings claims be handled in towns that have accepted delegation?
- H.526 recognizes the work done by some municipalities to protect their water resources with local shoreland regulations.
- Burlington's shoreland regulations provide context sensitive standards for shoreland development, and the city has ample capacity to administer and enforce its shoreland regulations.
- Any regulation should allow for appropriate, sustainable development or redevelopment standards in many lakeside downtowns and village centers.

See Comments: N38, F3, F17, F20, F38, F41, F43, F45, B13, M7, M24, M25, M45, NH6, NH41, BTV14, BTV28, EM18, EM24, EM25

6. The State or ANR should focus or fund invasive species control activities instead of regulating shorelands—18 comments

The following comments addressed invasive species:

- Why is the General Assembly not focused on aquatic invasive species?
- Why does ANR not provide more invasive species assistance to lake shoreland owners?
- What can lake property owners do to get more funding for invasives?
- What is the best way to remove invasives?
- Do weevils work?
- How does shoreland regulation impact invasives?

See Comments: N26, N51, F1, B11, B22, B25, B26, B27, B32, B35, B50, M36, M42, NH24, NH36, EM5, EM10, EM23.

7. The effect of shoreland standards on property values—14 comments

The following comments addressed the effect of shoreland standards on property values:

- How will any regulation affect property values?
- How has implementation of shoreland standards in other states affected property values?
- How will the State replace the tax value lost due to shoreland regulation—i.e., what is the tax impact of H.526?
- Property values surrounding wetlands and untouched lake areas are low—is this what you want Vermont to look like?
- Will property owners be compensated for loss in property value?

- What will happen to tax base if property owners donate to the State land within the shoreland area?

See Comments: N7, F46, B5, B6, B7, B13, B21, B27, B39, M20, M30, NH16, BTV20, EM12.

8. Public participation format of the Lake Shoreland Protection Commission Hearings—14 comments

Multiple comments questioned the public participation process used at Commission hearings:

- All of the comments on the public participation process used in the Commission hearings expressed disappointment that the audience was not allowed to make statements or provide input.
- Many of the comments on participation asked when the Commission would allow for public testimony.

See Comments: N25, N53, F36, B47, M46, NH43, NH46, NH47, EM3, EM5, EM6, EM7, EM10, EM23.

9. Questions regarding the content of H.526 or proposed standards—13 comments

Many comments questioned the existing content of H.526 or the future content of shoreland standards:

- Will the shoreland standards require engineered systems like the stormwater rules do? Underground detention systems should not be required.
- Will the standards encourage or require the revegetation of already developed shorelines?
- H.526 and LSPC members refer to performance measures. What are performance measures? There is no evidence that the standards are performance based.
- Explain in plain English what restrictions will the standards put on me?
- Nothing in the presentation provided the specifics of H.526 or regulation.
- What would a property owner's appeal process entail?
- Name three specific examples of vegetation management standards?
- How will H.526 or any regulation provide high quality wildlife habitat? Is "muck" a habitat or a water quality problem?
- How does the regulation differ from the current Class I Wetlands requirements?
- How will people be able to certify that lake properties are in compliance with the law?

See Comments: B1, B8, B12, B16, B23, B64, N31, N34, F27, F31, N44, EM19, NH13.

10. Basis of the 250 foot and 500 square foot thresholds in H.526—12 comments

The following comments were offered regarding the 250 foot and 500 square foot thresholds:

- Why does H.526 propose the use of a 250 foot area?

- What is the basis of the 250 feet or a 100 foot vegetated buffer?
- What is the basis for the 500 square foot threshold in H.526?
- The 500 square feet allowance is too small, especially considering the difference in lot sizes.
- The exemption should be 500 square feet per acre of protected shoreland area on a lot.
- The ANR Lake Wise Program recommends a 15 foot buffer, why does H.526 include 250 feet? The Lake Wise Program should be the model used, not H.526.

See Comments: N14, N18, B19, B21, B56, M11, NH12, BTV11, BTV12, BTV17, EM23, EM27.

11. What is the impact of shoreland regulation on lake water quality and property owners—12 comments

Many comments questioned or made statements regarding the impact of shoreland regulation on lake water quality and on shoreland owners:

- Define “impaired” as it relates to lake health?
- What waters in Vermont do not meet the water quality standards?
- What percentage of lakes are impaired?
- How much phosphorus loading is attributable to lakeshore development?
- What percentage of pollution to Lake Champlain is attributable to shoreline property?
- What degree of phosphorus reeducation is needed to clean up Lake Champlain?
- How do you quantify the effect of shoreland regulation on phosphorus reduction?
- Lakes are public trust resources, and should be managed for the public. Property owners don’t have the right to pollute public trust waters. If they are public, who is responsible for cleaning the lakes?
- How many miles of shoreland exist around the 812 lakes in the State?
- How many properties will be exempt from H.526 as agriculture or municipally controlled?
- What costs calculations have been done on the impact of these shoreland standards on individual lakefront owners?
- How many property owners will be impacted?

See Comments: N52, M2, M4, M5, M6, M31, NH11, NH37, BTV6, EM5, N29, B55.

12. Whether H.526 is a one-size-fits-all regulation—10 comments

-The following comments addressed whether H.526 is one-size fits-all:

- H.526 is one-size-fits-all.
- Provide examples that it is not one-size-fits-all.

- The legislation acknowledges that there are different types of lakeshores and a variety of solutions need to protect the lakes and water quality.

See Comments: N16, N37, F39, B13, M3, M22, BTV28, EM12, EM19, EM25.

13. H.526 or any shoreland standards should include certain alternatives, additional provisions, or content.—10 comments

Many comments recommended alternatives, changes, or additional provisions to H.526 or any future standards:

- There should be an expedience clause to ensure permitting within a certain time frame.
- Explain why this bill does not mandate an environmental impact statement prior to going into effect.
- Why doesn't the public participation in H.526 require workshops and focus groups instead of encouraging them?
- Shoreland standards should protect undeveloped area and areas with infrastructure should be considered by a different standard?
- H.526 should be amended to clarify that the new or expanded impervious surface and new cleared area would only be measured for what already existed on any particular "lot."
- Would you consider a precertification of site work contractors, similar to Maine, that would allow qualified professionals to have expedited permitting for immediate needs such as stabilization of banks? The protection plan from Maine is easy to understand and should be used in Vermont.
- Why doesn't the State develop a comprehensive, specific action plan for each lake that includes a funding formula based on lake acreage that is not dependent on lakeside property owners, who cannot afford to pay additional amounts for lake cleanup.
- MS4 communities should be exempt from any state shoreline standards.

See Comments: B16, B44, B46, B60, B61, BTV28, EM27, BTV4, EM21, BTV28.

14. The need to address septic systems around lakes—9 comments

The following comments addressed the issue of septic systems around lakes:

- How H.526 or shoreland standards address septic systems around lakes?
- Will H.526 or a final act address failing septic systems?
- Will there be more stringent septic rules around lakes?
- The current ANR septic rules do not allow a best fix at lakefront properties unless the system fails.

See Comments: N2, F8, F32, F35, M17, NH10, NH15, EM8, EM12.

15. Regulation of roads and driveways—8 comments

The following comments addressed the regulation of road and driveways in shorelands:

- How will roads, private roads, and driveways be addressed under any shoreland regulation?
- What about land bisected by a road?

See Comments: N33, F23, F25, F34, F35, B15, B20, M12.

16. Increased clearing or development of shorelands in anticipation of shoreland regulation—8 comments

The following comments addressed increased clearing or development of shorelands:

- There is a concern that more shorelands will be cleared or developed prior to enactment of shoreland standards under H.526.
- Has there been increased clearing or development in shorelands?
- How will ANR or the State address increased clearing or development in shorelands?
- There has been anecdotal evidence of clearing and development has occurred as a result of the delay in implementation of shoreland standards.

See Comments: N21, F44, F48, B41, NH33, BTV25, EM24.

17. Education, information, incentives, and assistance for shoreland protection should be pursued instead of regulation—7 comments

Many comments stated that education information and State assistance to municipalities is a better approach than regulation:

- ANR should focus on education of towns.
- Why not enact a property tax rebate program or tax incentive to launch the program?
- Why not continue to use the voluntary Shoreline Management Plan within ANR permits, instead of a new regulatory program?
- ANR should work with towns that don't have shoreland standards to develop standards, instead of the State imposing the standards statewide.

See Comment: F1, F11, F12, M44, BTV26, EM10, EM26.

18. H.526 has unintended or negative consequences—7 comments

Several comments argued that H.526 or proposed regulation would have unintended or negative consequences:

- The permit required by the shoreland standards could cause an issue in the transfer of title?
- H.526 will affect closings on real estate transactions?
- H.526 is a taking of private property.

- H.526 won't improve water quality. Not requiring grandfathered properties that are nonconforming to improve means the State will not improve water quality.
- The proposed shoreland standards do not address water quality issues and do not adequately protect lakes from pollution.

See Comments: F17, M15, F5, B23, F13, B21, BTV28.

19. Off-site mitigation—6 comments

Multiple comments questioned how the off-site mitigation proposed in H.526 would work:

- How will off-site mitigation under H.526 work? Is off-site mitigation similar to pollution trading?
- How will off-site mitigation monies be administered?
- Will off-site mitigation benefit the wealthy who can pay for the mitigation?
- Will H.526 provide for grant funding to allow property owners to mitigate existing problems?

See Comments: N32, F17, B45, M8, BTV16, BTV19.

20. Funding of shoreland regulation program—6 comments

Several comments questioned how the State will pay for the shoreland regulation program:

- How will the State pay for the Shoreland Regulation Program?
- What will permit fees be?
- What if fees don't cover expenses?

See Comments: N15, F16, B57, M10, NH41, EM10.

21. Vested rights—i.e., impact of shoreland regulation on existing permits to build—6 comments

Several comments questioned how the shoreland standards would affect the ability of a person with an existing municipal permit to build in a shoreland:

- If a person has a municipal permit to build, new or with a variance for an addition, will the permit survive and allow construction if the shoreland standards are enacted?
- Will the shoreland standards be retroactive?

See Comments: F5, F42, F44, B4, B42, M31.

22. Retaining walls and riprap—5 comments

Several comments questioned whether retaining walls and riprap would be authorized under the shoreland standards:

- How will shoreline retaining walls be addressed under the regulation?
- Will retention walls be allowed?

- Will riprap be allowed?
- Riprap should be allowed to control erosion.

See Comment: N24, N48, F18, B21, EM27.

23. Standards should be in place prior to permit regulation—5 comments

Several comments indicated that the shoreland standards should be in place prior to a permit program or enactment of legislation:

- State is proposing to adopt a permit process without shoreland standards yet in place.
- Rules or standards should be established prior to centralizing control at State level?

See Comment: N17, B6, B13, M27, NH2.

24. Public opportunity to comment on shoreland standards—5 comments

Many comments questioned whether and how public participation will be solicited regarding the shoreland standards:

- Will the public have the opportunity to review and comment on the rules before the permit process is implemented?
- Will ANR or others meet with property owners on individual lakes?
- How will the public learn of opportunity to comment?

See Comments: N17, N54, F21, F22, NH4.

25. Commission response to comment or public input—5 comments

Several comments questioned how the Lake Shoreland Protection Commission would respond to input and comments received from the public:

- If the Commission finds that the majority of citizens oppose H.526, will you respect the public input and vote against H.526?
- How would you characterize the response the Lake Shoreland Protection Commission received from the public at the hearings held?
- Have you taken any polls of the public or the persons attending the Commission meetings?
- Opposition to the legislation is well funded. Has the Commission attempted to engage the funders of the opposition?

See Comments: M19, M28, M46, NH34, BTV2

26. Impetus or basis of H.526 or standards—4 comments

Several comments questioned the impetus or basis of H.526 or standards:

- Why is H.526 being proposed now?
- Is H.526 or similar legislation being driven by federal requirements?

- What scientific study supports the assertion that shoreland regulation improves water quality?
- What are the specific goals of the legislation—not just “clean up the lake,” something more specific.

See Comments: B18, B40, NH5, NH50.

27. Timing of H.526 or the standards--4 comments

Several comments questioned when H.526 or its standards would go into effect or be available:

- What is the timing of H.526?
- What is the time frame for H.526 and its standards going into effect?
- When is the earliest any regulation would go into effect?
- When will the shoreland standard be available?
- When can we find a list of recommended native vegetation?

See Comment B37, BTV25, EM2, M26

28. Questions regarding implementation of shoreland regulation in other states—3 comments

Several comments questioned how shoreland regulation has been implemented in other states:

- If Maine’s shoreland regulations are used as a model in Vermont, nearly all Vermont sites will be noncompliant. What is the implication for lake shoreland owners?
- Have New Hampshire and Maine shoreland programs and regulation been thoroughly evaluated?
- Have other New England states done this sort of regulation? If so, how has it worked?

See Comments: N23, N34, B34.

**Attachment B: Lake Shoreland Protection Commission Response to Public Comments
Submitted to the Lake Shoreland Protection Commission**

Draft 12/11/13: Subject to Revision

Attachment B: Lake Shoreland Protection Commission Response to Public Comments Submitted to the Lake Shoreland Protection Commission

This Attachment includes The Lake Shoreland Protection Commission's (Commission's) responses to the general categories of questions submitted during the public comments period. Because H.526 or any other shoreland bill has not been enacted into law, the Commission believes that it is unwise to attempt to answer many of these questions formally or in detail, because, depending on what action is taken on a shoreland bill in 2014, the response provided in this document could ultimately be inaccurate depending on the substance of enacted legislation. Moreover, providing detailed answers to questions now could create false expectations regarding what the future, ultimately enacted legislation will require. However, many of the questions or comments offered are based on existing law or process. Thus, to the extent that the Commission could provide a general answer based on existing law, the Commission has provided a response.

1. Other water quality issues are more pressing or harmful to water quality than development of lake shorelands—62 comments

Multiple comments submitted to the Lake Shoreland Protection Commission stated that the following activities or issues were of a greater threat to water quality than shoreland development and should be addressed before regulating shorelands. Generally, these activities are already regulated by the State, and the State regulation is often directly related to water quality. A short statement regarding the existing State regulation follows each issue identified by commenters as requiring attention.

- Beavers.

The Vermont Department of Fish and Wildlife has the authority under 10 V.S.A. § 4138 to take wild animals and to authorize others to take wild animals, including beaver, that are doing damage. A person can apply to the Commissioner of Fish and Wildlife to take beavers doing damage. The Department of Fish and Wildlife also publishes a best management practices document, which provides guidance to the public regarding interactions with and management of problem beavers. The best management practices can be found here: [http://www.vtfishandwildlife.com/library/reports_and_documents/Furbearer/Best Management Practices for Human-Beaver Conflicts.pdf](http://www.vtfishandwildlife.com/library/reports_and_documents/Furbearer/Best_Management_Practices_for_Human-Beaver_Conflicts.pdf)

In addition, the Agency of Transportation has the authority under 19 V.S.A. § 37 to remove impoundments of water created by beavers when such an impoundment threatens a highway, railroad, or airport.

- Pesticide spraying.

Pesticide spraying is regulated by the Agency of Agriculture, Food and Markets under 6 V.S.A. chapters 81 and 87. In addition, under the authority of 10 V.S.A. chapter 47, the Vermont Agency of Natural Resources' (ANR's) Pesticide General Permit provides coverage for residential discharges from the application of pesticides in, above, or at the edge of waters of the State for control of mosquitoes, weeds, algae, animal pests, and forest canopy pests. The Pesticide General Permit can be found here: http://www.vtwaterquality.org/lakes/docs/pgp/lp_2011%20FINAL%20VT-NPDES%20PGP.pdf

- Strip clearing under power lines.

The Public Service Board (PSB) regulates utilities, such as VELCO or other power line owners, and the rights-of-way for power lines. Under PSB rules, utilities are required to maintain a vegetation management plan regarding the appropriate management of vegetation in the right-of-way. The PSB rule can be found here:

http://psb.vermont.gov/sites/psb/files/rules/OfficialAdoptedRules/3600_Maintenance_of_Utility_Rights-of-Way.pdf

- Management of water depth.

ANR regulates surface water levels under 10 V.S.A. § 1424. The rule governing the surface levels of lakes and ponds can be found here:

http://www.watershedmanagement.vt.gov/rulemaking/docs/wrprules/wsmd_surfacelevelrules.pdf#zoom=100

- Boats, wakes from or with invasive species attached.

ANR regulates the use of public waters under 10 V.S.A. § 1424. Rules regarding use of waters address boat wakes. The use of public waters rule can be found here:

http://www.watershedmanagement.vt.gov/rulemaking/docs/wrprules/wsmd_upw2012.pdf#zoom=100

ANR regulates the control of aquatic nuisances under 10 V.S.A. chapter 50. Specifically, 10 V.S.A. § 1454 prohibits a person from transporting “an aquatic plant or aquatic plant part, zebra mussels (*Dreissena polymorpha*), quagga mussels (*Dreissena bugensis*), or other aquatic nuisance species identified by the Secretary [of Natural Resources] by rule to or from any Vermont waters on the outside of a vehicle, boat, personal watercraft, trailer, or other equipment.” ANR enforces this provision under its authority in 10 V.S.A. chapter 201.

In addition, the U.S. Environmental Protection Agency is expected to issue its Small Vessel General Permit (sVGP) within the next 12 months. This permit would be the first under the Clean Water Act, National Pollutant Discharge Elimination System regulations to address discharges by small commercial vessels of gray water, bilge water, or fish hold effluent capable of spreading aquatic nuisance species. It would require, for example, that a charter fishing boat operating on a water body infested with spiny water flea or zebra mussel veligers take measures to ensure that contaminated fish hold water is not discharged in another water body. Additional information regarding the sVGP is available at:

<http://cfpub.epa.gov/npdes/vessels/vgpermit.cfm>.

- Agriculture, including cows entering lakes, irrigation ditches, runoff, and lack of buffers between crops and lakes.

Agricultural water quality is regulated in many ways in Vermont. Under 10 V.S.A. chapter 47, any direct discharge from a farm to a water must be permitted or shall be subject to enforcement. However, agricultural stormwater—i.e., runoff from fields—is not a direct discharge. To address agricultural stormwater, large farms and medium farms are required to obtain a permit under 6 V.S.A. chapter 215. Under these permits, farms are prohibited from directly discharging to State waters and they must maintain a nutrient management plan for the application of manure and other nutrients. Small farms are also subject to regulation under 6 V.S.A. chapter 215. Specially, the accepted agricultural practices (AAPs) rules

adopted by the Agency of Agriculture, Food and Markets prohibit direct discharges from small farms and require small farms to apply manure and other nutrients according to site-specific conditions.

In addition, the AAPs prohibit livestock from trampling the top of a bank of a river or lake. Similarly, there is a requirement in the AAPs that all farms maintain at least a 10-foot vegetated buffer between waters and crops. The buffer can increase depending on the size of the farm or the conditions of the land.

- Road construction, including better back road projects that increase pollution.

The water quality impacts of road construction are regulated in multiple ways in Vermont. Any construction of new roads or expansion or redevelopment of existing roads that exceeds an acre of impervious surface is required to obtain a stormwater permit from ANR under 10 V.S.A. § 1264. In addition, the town road and bridge standards issued by the Agency of Transportation include best management practices for water quality. The water quality standards in the road and bridge standards were developed by ANR.

- Preservatives and chemicals in wood.

The use of preservatives and chemicals in wood is regulated at the federal level by the U.S. Environmental Protection Agency. Generally, these preservatives and chemicals are considered pesticides subject to the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act.

- Stormwater runoff from ridgeline wind development.

Stormwater runoff from wind development is regulated by ANR under 10 V.S.A. chapter 47.

- Entire watersheds—i.e., pollution to lakes from rivers, streams, and brooks.

ANR regulates discharges of pollutants to all waters of the State under 10 V.S.A. chapter 47. In addition, the General Assembly required ANR to adopt rules by 2015 for activities in proximity to rivers when municipalities are exempt under State law from regulating the activity. For example, municipalities are exempt from regulating agriculture in proximity to State waters. The ANR rules required under 10 V.S.A. § 754 shall address these activities.

- Sewage spills from treatment plants and from lake front septic systems.

ANR regulates discharges of pollutants to all waters under 10 V.S.A. chapter 47. Wastewater treatment plants, or pollution abatement facilities as they may be referred to in statute, are required to obtain a discharge permit from ANR under 10 V.S.A. § 1263. In addition, all pollution abatement facilities are required under 10 V.S.A. § 1278 to have an operations, management, and emergency response plan to prevent and address sewage spills. ANR also regulates the construction, replacement, modification, and operation of potable water supplies and wastewater systems (soil-based disposal systems of less than 6,5000 gallons per day or sewage connections of any size) under 10 V.S.A. § 1971. Finally, under 10 V.S.A. § 1278, ANR is required to post notice of an illegal discharge within 24 hours of notice of the discharge. To fulfill this requirement, ANR posts information about recent discharges and discharges since 2007. The list of recent discharges can be accessed here: <http://www.vtwaterquality.org/ww/om/Overflows/ReportedSewageOverflows.pdf>. The list

of discharges since 2007 can be accessed here:

<http://www.vtwaterquality.org/ww/om/Overflows/ReportedSewageOverflowsSince2007.pdf>.

- State of Vermont activities; State-controlled property.

State facilities and property are subject to the same standards as private activity unless State statute or rule exempts the activity or property from regulation.

- Use of fertilizer.

The agricultural use of fertilizer is regulated by the Agency of Agriculture, Food and Markets under 6 V.S.A. chapter 28. For purposes of water quality, the application of fertilizers for agricultural use is regulated under 6 V.S.A. chapter 215 and the rules adopted under that chapter for large farms, medium farms, and accepted agricultural practices. In addition, ANR regulates the use of phosphorus fertilizer and nitrogen fertilizer for nonagricultural purposes under 10 V.S.A. § 1266b.

- Lots with rock ledges that are subject to erosion.

Unless a lot is subject to an Act 250 permit or a specific activity is permitted under ANR's authority to regulate encroachments on lakes and ponds under 29 V.S.A. chapter 11, there currently is no State regulatory authority addressing the erosion of lots with rock ledges. To the extent that new authority is needed beyond ANR's ability to regulate encroachments, this is an issue that could conceivably be addressed in shoreland management standards.

- Fireworks.

The use of fireworks in the State is regulated by the Department of Public Safety under 20 V.S.A. chapter 177. With regard to water quality and the use of fireworks, there has been recent national debate regarding whether fireworks over a water require a discharge permit. The federal Clean Water Act and how it is applied by states is unsettled on the matter at this time. Regardless of the unsettled nature of the law at the federal level, if a firework display in the State constituted a direct discharge of waste, ANR could require a permit under existing authority in 10 V.S.A. chapter 47.

2. How do shoreland standards affect specific property or activities on shoreland property?—47 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, the Lake Shoreland Protection Commission cannot answer questions regarding the application of the standards to certain activities or property uses. If a shoreland bill is enacted by the General Assembly, the Lake Shoreland Protection Commission will post a summary of an enacted bill and its application to the Commission's website.

3. Enforcement of shoreland standards and whether ANR has the capacity to enforce and administer the program—32 comments

The majority of ANR's enforcement authority is currently consolidated in one existing chapter of law—10 V.S.A. chapter 201. Under 10 V.S.A. chapter 201, ANR has multiple tools

for enforcement of the subject matter areas within its jurisdiction. If a shoreland bill is enacted, the bill likely would specify that shoreland requirements be enforced by ANR under 10 V.S.A. chapter 201.

ANR has an enforcement division with personnel specifically dedicated to enforcement. However, if a shoreland bill is enacted, additional personnel may be necessary to implement and administer the program. The General Assembly would seek the recommendation from ANR as to whether and to what extent additional personnel were needed for a shoreland program.

4. Support for the proposed standards or stronger standards—23 comments

See the Commission response to number 24 of this Attachment related to future opportunities to provide comments on proposed shoreland regulation.

5. Municipal regulation of shorelands—20 comments

The Lake Shoreland Protection Commission recommends that the General Assembly engage municipalities and their representatives, such as the Vermont League of Cities and Towns, if legislative consideration of a shoreland bill continues. Representatives of municipalities were consulted in the drafting and consideration of H.526.

6. The State or ANR should focus or fund invasive species control activities instead of regulating shorelands—18 comments

ANR regulates the control of aquatic nuisance species under 10 V.S.A. chapter 50. Under the aquatic nuisance control program, ANR receives and responds to aquatic nuisance complaints; works with municipalities, local interest organizations, private individuals, and agencies of the State to develop long-range programs regarding aquatic nuisance controls; and works with federal, State, and local governments to obtain funding for aquatic nuisance control programs. Pursuant to 10 V.S.A. § 1456, ANR also has the authority to respond to new invasions of aquatic nuisance species under an intra-agency species rapid response general permit.

In addition, ANR administers a grant-in-aid program under 10 V.S.A. § 1458, which provides financial and technical assistance to municipalities and lake associations for the control of aquatic nuisance species. This grant program is funded by 25 percent of motorboat registration receipts and, when available, additional federal funding. As new invasions of aquatic nuisance species occur, more municipalities compete for the limited funding available from the Grant-in-Aid program for both control and critically needed spread prevention programs. In 2013, requests exceeded \$1.1 million and \$244,000.00 in grant funds were available to award.

7. The effect of shoreland standards on property values—14 comments

Because the General Assembly has not enacted a shoreland bill and because no shoreland standards have been implemented, the Lake Shoreland Protection Commission cannot respond to how shoreland regulation would impact property values. ANR did provide information from neighboring states describing how property values are affected by the impacts of shoreland

development. More specifically, using water clarity as a measure, a study from Maine showed that property values fall as water clarity diminishes, but property values stay steady or increase as water clarity increases. This study is available at: http://www.umaine.edu/mafes/elec_pubs/miscscrepts/mr398.pdf. However, the degree to which property values would be affected negatively or positively in Vermont will not be known until a bill is enacted and implemented.

8. Public participation format of the Lake Shoreland Protection Commission Hearings—14 comments

The Lake Shoreland Protection Commission selected the public participation format it used in order to maximize the number of comments or questions received and to allow for the Commission to respond to the comments and questions. At a previous public hearing on a shoreland bill, the same scripted questions or comments—both in support and in opposition to the bill—were repeated by numerous witnesses. As a result, not everyone who wanted to comment had the time to comment. In addition, there was no opportunity for members of the Committee to respond to the questions. The format used in the Lake Shoreland Protection Commission meetings allowed all persons to submit comments and the Commission attempted, to the best of its ability, to answer or respond to as many of the questions and comments as it could.

However, because the public has expressed a desire for a traditional public hearing with a specified amount of time for comment, the Commission has scheduled a public hearing at the State House in Montpelier on January 8, 2014. Interested parties will be provided up to two minutes to testify and provide their comments regarding proposed shoreland regulation. The Lake Shoreland Protection Commission shall post notice of the meeting, time, and location on the Commission website.

9. Questions regarding the content of H.526 or proposed standards—13 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, the Lake Shoreland Protection Commission cannot answer questions regarding the content of a shoreland bill. If the Senate elects to address a shoreland bill in 2014, the content of the bill will likely change from the current content of H.526.

10. Basis of the 250 foot and 500 square foot thresholds in H.526—12 comments

The 250 foot and 500 square foot thresholds were developed in the legislative process used to draft H.526 in the House of Representatives. As the committee with primary jurisdiction, the House Committee on Fish, Wildlife and Water Resources heard testimony from numerous witnesses and experts, and, on the basis of this testimony, made policy decisions regarding the regulatory thresholds in H.526. Because the Senate has not fully addressed a shoreland bill, the issue of regulatory thresholds will be revisited by the Senate.

11. What is the impact of shoreland regulation on lake water quality and property owners—12 comments

The Water Quality Remediation, Implementation and Funding Report authored by ANR in response to Act 138 of 2012 includes Part II: Lake Shoreland Protection and Restoration Management Options. Part II includes a summary of the impacts of shoreland development on lakes and also discusses how the regulation of shoreland property benefits a lake and its water quality. Part II: Lake Shoreland Protection and Restoration Management Options can be accessed here: <http://www.leg.state.vt.us/reports/2013ExternalReports/285836.pdf>.

ANR notes that two separate studies of Vermont lakes were released in 2013, demonstrating the impact lakeshore development is having on Vermont lakes. U.S. EPA and ANR concluded in the National Lake Assessment that the most widespread stressor to Vermont lakes is lakeshore disturbance conducted by lakeshore property owners. That Lake Assessment can be found at: http://www.anr.state.vt.us/dec/waterq/lakes/docs/lp_GaugingtheHealthofVermontLakes.pdf.

Results from a Vermont Department of Environmental Conservation and Maine Department of Environmental Protection joint study concluded that the scope of clearing in lake shorelands is adversely impacting water quality. This same study found that it is possible to develop a lakeshore in a manner that does not adversely impact water quality. That study is available at: http://www.anr.state.vt.us/dec/waterq/lakes/docs/lp_mainezoning.pdf.

12. Whether H.526 is a one-size-fits-all regulation—10 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland Protection Commission to respond to questions or comments regarding whether H.526 is a one-size-fits-all regulation.

13. H.526 or any shoreland standards should include certain alternatives, additional provisions, or content.—10 comments

The Lake Shoreland Protection Commission recommends that the Senate review the comments in this category if the Senate chooses to address a shoreland bill. Several comments in this category could be helpful in further drafting of a shoreland bill.

14. The need to address septic systems around lakes—9 comments

Under 10 V.S.A. chapter 64, ANR is authorized to regulate soil-based wastewater treatment systems, also known as septic systems. Under the current ANR potable water supply and wastewater treatment system rules, a septic system's leachfield is generally prohibited from being sited within 50 feet of lakes, ponds, or impoundments. It should be noted that ANR did not assume statewide jurisdiction over septic systems until 2007, and prior to 2007, municipalities regulated these systems under varying regulatory schemes. When ANR becomes aware of any failed septic system, actions are taken to ensure improvements are made to the problem system as quickly as possible.

15. Regulation of roads and driveways—8 comments

See response number 1 above regarding how roads are regulated. Further legislative action regarding shoreland regulation in the Senate likely will address the issue of driveways and private roads.

16. Increased clearing or development of shorelands in anticipation of shoreland regulation—8 comments

The Lake Shoreland Protection Commission heard some anecdotal evidence that increased clearing was occurring. ANR also received reports of preemptive clearing and development around lakes in response to the passage of H.526. However, Agency staff have not quantified the extent to which this increase in clearing or development is based on H.526.

17. Education, information, incentives, and assistance for shoreland protection should be pursued instead of regulation —7 comments

The State and a variety of other organizations currently provide education, information, and assistance to municipalities encouraging the adoption of municipal shoreland ordinances. However, as discussed in Part B.1 of this report regarding the history and background of proposed shoreland regulation and as discussed in ANR's Part II: Lake Shoreland Protection and Restoration Management Options report, ANR concluded that education, information, and assistance have not adequately addressed the need for shoreland regulation. ANR's Part II: Lake Shoreland Protection and Restoration Management Options report is available at: <http://www.leg.state.vt.us/reports/2013ExternalReports/285836.pdf>.

In support of this assertion, ANR further notes that the joint study with Maine's Department of Environmental Protection released in 2013 found that less than one percent of lakeshore residences on 17 lakes studied, including almost 2,000 camps, met Maine's minimum standards for development.

Education and outreach has also been provided to owners of lakeshore properties through Septic Social events. These events now fall under the new ANR shoreland education and outreach Lake Wise Program, which provides technical assistance to landowners, including State parks, towns, businesses, and private landowners regarding the siting of septic systems, driveways, and other improvements. Lake Wise provides solutions for living and developing in a lake-friendly manner.

18. H.526 has unintended or negative consequences—7 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland Protection Commission to respond to questions or comments regarding whether H.526 has unintended consequences. However, the Commission recommends that the Senate review this category of comments in 2014 when it reviews a shoreland bill.

19. Off-site mitigation—6 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland

Protection Commission to respond to questions or comments regarding how off-site mitigation would work under H.526.

20. Funding of shoreland regulation program—6 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland Protection Commission to respond to questions or comments regarding how the State will pay for a shoreland program. Generally, regulatory programs are funded from a mix of sources, including permit fees, general fund dollars, and federal funds. Under the State Constitution and State Statute, the Vermont General Assembly must approve all State appropriations. Similarly, the General Assembly must approve and set the fee for a permit in legislation. Thus, any proposal to fund shoreland regulation shall be considered and approved by the General Assembly. However, until the Senate addresses a shoreland bill, questions regarding of funding sources cannot be answered.

21. Vested rights—i.e., impact of shoreland regulation on existing permits to build—6 comments

Generally, in Vermont, a person who has obtained all necessary permits for construction prior to the enactment of a law that affects the construction is still authorized to go forward with the proposed construction. However, this position regarding vested rights is a minority position nationally among the states. Consequently, in order to avoid confusion regarding what standards of vested rights apply to shorelands, the Lake Shoreland Protection Commission recommends that the issue of vested rights be clarified when the Senate addresses a shoreland bill in 2014.

22. Retaining walls and riprap—5 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland Protection Commission to respond to questions or comments regarding whether and how riprap and retaining walls would be addressed under a shoreland bill. ANR notes that it currently has authority to regulate encroachments below mean water level under 29 V.S.A. chapter 11, including but not limited to shoreline stabilization projects that encroach via the use of rip rap or retaining walls.

23. Standards should be in place prior to permit regulation—5 comments

Generally, when a new regulatory program is enacted, statute usually authorizes an agency to adopt rules to implement the program by a certain date in the future. Consequently, the standards for regulation are in place prior to the requirement for a permit. For example, H.526 as it passed the House authorized ANR to adopt shoreland standards prior to a permit program going into effect in January 2015.

24. Public opportunity to comment on shoreland standards—5 comments

Because the General Assembly has not enacted a shoreland bill and because ANR has not been authorized to adopt shoreland standards by rule, it is premature for the Lake Shoreland Protection Commission to respond to the question of specific opportunities for public

participation regarding the shoreland standards. However, if shoreland standards are authorized, it is very likely that they will be authorized for adoption by rule under the requirements of the Vermont Administrative Procedure Act (APA). The APA requires an agency to provide the public with the opportunity to review and comment on a proposed rule.

The APA also requires that a proposed rule be reviewed by the Legislative Committee on Administrative Rules (LCAR). Four members of the Lake Shoreland Protection Commission are also members of LCAR. Consequently, review of any proposed shoreland rule will be informed by the public comments received by the Commission members on LCAR. In addition, H.526, as it passed the House, included an additional public participation requirement, including submission of a draft to the General Assembly, prior to ANR filing shoreland rules with LCAR.

25. Commission response to comment or public input—5 comments

The Lake Shoreland Protection Commission will review and take all comments into consideration.

26. Impetus or basis of H.526 or standards—4 comments

See Part 1 of this report regarding the history and background of the General Assembly's consideration of shoreland regulation.

27. Timing of H.526 or the standards—4 comments

The General Assembly has not enacted a shoreland bill, and, when the Senate reviews a shoreland bill in 2014, the content of the bill is likely to change from the content of H.526 as it passed the House. A key component of any shoreland bill will be the required timing for standards and for a permit program. Because no bill has passed the General Assembly and because the Senate likely would address the timing of a bill during its review, the Lake Shoreland Protection Commission cannot respond specifically to questions regarding timing.

28. Questions regarding implementation of shoreland regulation in other states—3 comments

See the ANR report Part II: Lake Shoreland Protection and Restoration Management Options report available at <http://www.leg.state.vt.us/reports/2013ExternalReports/285836.pdf>. This report discussed how shoreland regulation operates in other states. In addition, the website of the Lake Shoreland Protection Commission has links to materials discussing how shoreland regulation works in other states. Those materials can be accessed here: <https://leg2.vermont.gov/sites/legislature/LSP/Shared%20Documents/Forms/AllItems.aspx>.

Appendix A: Link to Full Copy of the Comments Submitted to the Lake Shoreland Protection Commission

[The full copy of the comments submitted to the Lake Shoreland Projection Commission is not reproduced in this published report due to size—246 pages. The full copy of the comments is available for review on the Lake Shoreland Protection Commission website at:
<http://www.leg.state.vt.us/WebAgenda/Commissions/990008.pdf>]

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Appendix B: Response to Information Required in the Statutory Charge of the Lake Shoreland Protection Commission

Pursuant to section E.126.1, subsection (d) of Act No. 50 of 2013, the Lake Shoreland Protection Commission was charged with summarizing information for Vermont residents and businesses during the Commission's meeting process, including: (i) a summary of existing regulations that protect and improve water quality; (ii) a summary of the Agency of Natural Resources' (ANR's) recommendations under the State Water Quality Remediation, Implementation, and Funding Report of 2012; (iii) the need for shoreland regulation as part of the integrated policy to protect clean water in Vermont; (iv) models for shoreland regulation used in other states; and (v) educational materials regarding shoreland protection. In addition, the Commission was charged with soliciting and hearing input and proposals from the public regarding shoreland protection.

The Commission, with technical assistance from ANR, has assembled the materials delineated in **bold type** below in response to each of the specific Act 50 mandates, also set forth below.

Section E.126.1, subsection (d) of Act No. 50 of 2013, required the Commission, with the assistance of the Agency of Natural Resources, to:

(1) Summarize the scope and requirements of existing regulation of activities that preserve and improve water quality and avoid degradation, including a summary of the proposed rules to implement the anti-degradation policy and the programs and requirements the State may need to implement in order to meet the Total Maximum Daily Load plan for Lake Champlain.

In response to this charge, the Commission's working group prepared a video presentation that was shown at each of the Commission's public meetings during the summer and fall of 2013. In addition, ANR has provided links to information available on the web page of the Department of Environmental Conservation's (DEC's) Watershed Management Division.

- *See Lake Shoreland Protection Commission Presentation, available at:* <http://www.youtube.com/watch?v=HVnxoNPMC7M&feature=youtu.be>
- *See LSPC Presentation Script, available at:* https://leg2.vermont.gov/sites/legislature/LSP/Shared%20Documents/LSPC%20Presentation%20Script_081413.pdf
- *See the DEC Watershed Management Division page "Restoring Lake Champlain," available at:* <http://www.watershedmanagement.vt.gov/erp/champlain/>
- *See the DEC Watershed Management Division page "Vermont Surface Water Management Strategy," available at:* <http://www.watershedmanagement.vt.gov/swms.html>

(2) Summarize the findings of ANR's State Water Quality Remediation, Implementation, and Funding Report of 2012, as required by 2012 Acts and Resolves No. 138, Sec. 19, including how Vermont ranks in relation to other states with regard to clean water protection.

A summary of ANR's State Water Quality Remediation, Implementation, and Funding Report of 2012, as required under Section 19 of Act 138, is provided in Section B.2 of this Report, at pages 6–8.

(3) Summarize the need for regulation in the shorelands of lakes as part of an integrated policy to preserve and protect clean water in the State;

The need for regulation of shorelands as part of an overall strategy to protect Vermont's surface waters is discussed in the ANR Act 138 Report, and it is also documented in the DEC Watershed Management's Surface Water Strategy.

- *See ANR Act 138 Report, pages 19, 109–141, available at:*
http://www.anr.state.vt.us/dec/waterq/lakes/docs/lp_act138shorelandreport.pdf
- *See the DEC Watershed Management Division page "Vermont Surface Water Management Strategy," available at:*
<http://www.watershedmanagement.vt.gov/swms.html>

(4) Summarize how other states regulate activities in shoreland areas of lakes, including:

- (A) what activities are regulated;
- (B) how development, construction, or creation of nonvegetated surface in shoreland areas of lakes is regulated;
- (C) whether activities in shoreland areas of lakes are regulated by the State, a local authority, or some combination of State and local authority;
- (D) whether a buffer or other area of vegetated surface is required within a specified distance of a lake; and
- (E) what activities in shoreland areas of lakes are exempt from regulation.

Different models for shoreland regulation, as implemented in other states, are discussed in Part II of the ANR Act 138 Report.

- *See ANR Act 138 Report, at pages 126–129, 135–136, available at:*
http://www.anr.state.vt.us/dec/waterq/lakes/docs/lp_act138shorelandreport.pdf

(5) Provide educational materials regarding shoreland protection, including copies of the Agency of Natural Resources' draft standards for the regulation of the shorelands of lakes and vegetation management.

The Commission worked with ANR to assemble numerous reports and technical documents for distribution to Vermont residents and business owners at the Commission's public meetings in the summer and fall of 2013. Those materials are available as links from the Commission's web page:

<https://leg2.vermont.gov/sites/legislature/LSP/Shared%20Documents/Forms/AllItems.aspx>

(6) Solicit and hear input and proposals from the public regarding, in response to the information provided under subdivisions (1)–(5) of this subsection, how the State of Vermont should protect water quality, aquatic habitat, and shoreland habitat while also preserving reasonable use of the property.

Attachments A and B of this Report detail the comments solicited by the LSPC and the response of the Commission to those comments.

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