CONFIDENTIAL

LEGISLATIVE BILL REVIEW FORM: 2015-2016

Bill Number: S. 232 **Name of Bill:** An act relating to municipally owned hydroelectric plants

Agency/ Dept: ANR/DEC **Author of Bill Review:** Neil Kamman / Mike Kline / Jeff Crocker / Leslie Welts

Date of Bill Review: 1/13/16 **Related Bills and Key Players:** H517 (Deen)

Status of Bill: (check one): X Upon Introduction ___As passed by 1st body ___As passed by both

Recommended Position:

___Support X Oppose ___Remain Neutral ___Support with modifications identified in #8 below

Analysis of Bill

1. **Summary of bill and issue it addresses.** *Describe what the bill is intended to accomplish and why.* The purpose of the bill is to facilitate the development and operation of municipally owned hydroelectric plants of no more than 1MW generating capacity, by requiring amendments to the Vermont Water Quality Standards that create designated uses of "existing renewable energy production" and "flood protection" and require the Agency to balance these uses with the current designated uses in the Vermont Water Quality Standards when establishing flow requirements for municipal hydroelectric plants.

2. **Is there a need for this bill?** *Please explain why or why not.* No. This bill conflicts with the Clean Water Act in the following ways:

    a. **The bill requires the Agency to revise the water quality criteria for existing municipally owned hydroelectric plants that would likely not protect designated and existing uses in violation of the Clean Water Act.** The bill requires drought-condition conservation flows and allows large drawdowns in the reservoirs of existing municipally owned hydroelectric plants. *See* page 4 for proposed 10 V.S.A. § 8002(f)(1)-(2). Although the statute does not expressly require revision of the VWQS, the State may only issue a Section 401 water quality certification if the State has a reasonable assurance that a hydroelectric project will comply with the VWQS.[1] Because the proposed statutory criteria would result in limits that do not provide a reasonable assurance of compliance with the current VWQS, the State would be forced to revise the VWQS in order to implement the proposed statutory criteria for hydroelectric projects. In the case of new or revised criteria, Vermont must demonstrate that the standards protect designated uses.[2] Here, the proposed statutory criteria would likely not support designated and existing uses, and the Environmental Protection Agency (EPA) would not approve the revisions to the VWQS.

    b. **The bill revises the state water quality policy and the Vermont Water Quality Standards to include the management of the economic impact of utility rates to the public, which inherently conflicts with the goals of the Clean Water Act.** The bill amends the state water quality policy to include an additional

[1] *See* 33 U.S.C. § 1341; 10 V.S.A. § 1004.

[2] *See* 33 U.S.C. § 1313; 40 C.F.R. Part 131; Letter from Stephen Perkins, EPA to Michael O'Grady, House of Representatives Re Committee Bill H. 675, An Act Relating to Facilitating the Development of Electricity from Small Hydroelectric Projects (Jan. 30, 2008).

policy goal to "manage the economic impact of utility rates to the public." *See* S.232 at page 6 for proposed 10 V.S.A. § 1250(a)(8). The bill also amends the VWQS's general policy to acknowledge "the economic impact to the public of utility rates." *See* S.232 at page 3 for proposed 10 V.S.A. § 8002(e)(2). The Clean Water Act's policy goals do not include any consideration of economic interests, including the impact of utility rates to the public. Rather the CWA policy goals include an explicit declaration to provide for the "protection and propagation of fish, shellfish, and wildlife..." 33 U.S.C. § 1251(a)(2). Moreover, in the context of water-quality based effluent limits, EPA has made clear that the CWA does not recognize an exception for costs or technological infeasibility.[3]

c. **The bill requires that the Agency add "renewable energy production" and "flood protection" as existing and designated uses and mandates that the Agency balance all existing and designated uses when setting flow requirements.** These requirements are on page 3 of the bill in proposed 10 V.S.A. § 8002(e)(1). When establishing water quality standards, Vermont may consider the use of waters for "public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other purposes. . . ."[4] However, if Vermont adopts new or revised designated uses other than "protection and propagation of fish, shellfish, and wildlife, and recreation," the State "must submit documentation justifying how their consideration of the use and value of water for th[ese] uses" supports the new or revised use.[5] In other words, Vermont must justify how renewable energy production and flood protection support the protection and propagation of fish, shellfish, and wildlife, and recreation.

   Moreover, the requirement that the Agency balance all uses, including renewable energy production and flood protection, when setting flow limits will likely create confusion regarding whether economic considerations may be considered when the State sets water-quality based limits. When setting flow limits for a Section 401 water quality certification, the State must ensure compliance with the VWQS and may not utilize a "balancing test" or consider economic factors.[6]

3. **What are likely to be the fiscal and programmatic implications of this bill for this Department?**
   Fiscal implications are minimal for the Department. However, the programmatic ramifications are significant. The bill as drafted establishes new designated uses, requires a balancing test when establishing flow limits, and would effectively require revision of the VWQS to implement the flow and drawdown limits or force the Agency to issue a 401 certification that does not comply with the VWQS. Substantial time and resources would be spent balancing the full support of the proposed "existing renewable energy production" use in situations where there is currently non-attainment of one or more uses currently protected by the federal Clean Water Act and VWQS. Additionally, the bill shifts the burden of proof from a municipal hydroelectric plant operator to the Agency to demonstrate non-compliance with the water quality standards, specifically stream flow and water level management, before operational changes can be conditioned in a water quality certification, thereby putting additional resource strain on the Department. On appeal, courts are likely to find that the federal Clean Water Act requires that the Agency manage waters to protect existing uses, such as fish habitat, and may not issue a water quality certification without reasonable assurance that hydropower operations will protect those existing uses. If the Agency issues a water quality certification without such

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[3] *In Re: City of Attleboro, Ma Wastewater Treatment Plant*, NPDES Appeal No. 08-08, 2009 WL 2985479, at 25 (EAB Sept. 15, 2009) (Order Denying Review) (citing *In Re: New Eng. Plating Co.*, NPDES Appeal No. 00-7, 9 E.A.D. 726 at 738 (E.P.A. Mar. 29, 2001) ("In requiring compliance with applicable water quality standards, the CWA simply does not make any exceptions for cost or technological feasibility.").

[4] 33 U.S.C. § 1313(c)(2)(A).

[5] 40 C.F.R. § 131.10(a); 33 U.S.C. § 1251(a)(2).

[6] *See* 33 U.S.C. § 1341; *In Re: City of Attleboro, Ma Wastewater Treatment Plant*, NPDES Appeal No. 08-08, 2009 WL 2985479, at 25 (EAB Sept. 15, 2009) (Order Denying Review) (citing *In Re: New Eng. Plating Co.*, NPDES Appeal No. 00-7, 9 E.A.D. 726 at 738 (E.P.A. Mar. 29, 2001) ("In requiring compliance with applicable water quality standards, the CWA simply does not make any exceptions for cost or technological feasibility.").

reasonable assurance, there is a high risk that the Environmental Protection Agency will de-delegate Vermont's authority to implement the federal Clean Water Act. If the Agency revised the VWQS to implement the flow and drawdown limits, EPA would likely not approve the revised standards.

4. **What might be the fiscal and programmatic implications of this bill for other departments in state government, and what is likely to be their perspective on it?**
Creating a framework such as is envisioned by this bill may conflict with the criteria assessed by the Public Service Board in their evaluation of public good when hydro generating facilities are proposed. Additionally, the bill may interfere with PSB evaluation of regulation of utilities rates since the bill requires the Agency of Natural Resources to manage the economic impact of utility rates to the public. The bill will also shift the appeals of water quality certification from Environmental Court to the PSB which may have implications for the Court and the Board. The bill as proposed may also create a conflict between the support of statewide energy policy by the Public Service Department, and the support of statewide water quality policy by the Agency of Natural Resources.

5. **What might be the fiscal and programmatic implications of this bill for others, and what is likely to be their perspective on it?** (*for example, public, municipalities, organizations, business, regulated entities, etc)*
Municipalities that operate or desire to develop hydroelectric generation will support this bill. This could also encourage the formation of new municipalities (a.k.a. Fire Districts) if there is a perception that the statute now facilitates a pathway to new hydroelectric generation.

6. **Other Stakeholders:**
   6.1 Who else is likely to support the proposal and why?
   Certain proponents of clean energy may support this bill. This bill appears to be aimed at providing economic relief to the Morrisville Water & Light ("MW&L") hydroelectric project, which is nearing the end of its relicensing process and will need to increase conservation flows and reduce water level fluctuations to receive certification from ANR. However, the bill as drafted would not apply to the MW&L project because the bill defines "hydroelectric plant" as "a plant or conduit planned or operated for the generation of water-power electricity that has a generation capacity of no more than one megawatt and does not create a new impoundment" and each of the three plants that comprise the MW&L project have a generation capacity that exceeds 1 MW. *See* page S.232 at page 2 for proposed amendments to 10 V.S.A. § 1006(a)(3).

   6.2 Who else is likely to oppose the proposal and why? Environmental advocates are likely to oppose this bill, as it sets up a scenario whereby water quality can be lessened or impaired to provide for hydroelectric generation.

7. **Rationale for recommendation:** *Justify recommendation stated above.* There are numerous areas in the bill as drafted that conflict with or over-complicate existing statute, rule, or policy. The intent of this bill seems to be to circumvent existing water quality protections, and allow for the weakening of these protections, to support hydroelectric generation. This support would come at the expense of aquatic biota and fishery quality, and in certain instances, an increase in fish mercury contamination in reservoirs. The intentions run counter to the policy stated in Act 64 in the Purpose and Findings section of that Act, and the stated policy of maintaining equilibrium as articulated by Acts 110 and 138.

8. **Specific modifications that would be needed to recommend support of this bill***: Not meant to rewrite bill, but rather, an opportunity to identify simple modifications that would change recommended position.*
There are many corrections needed to make this bill supportable. However, there is no fix to the basic flaw that this bill as drafted conflicts with existing state and federal statute and rules intended to protect water quality, and the designated uses of aquatic biota and habitat. After potentially much litigation, the state would either end up back where we are now protecting or restoring designated uses or de-delegated.

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Nevertheless, the underlying intent of this bill appears to be aimed at bringing economic relief to municipalities that operate existing hydroelectric projects for their local electrical departments. Many of these hydroelectric projects have deferred maintenance due to limited financial resources of the municipalities. Since FERC licenses last from 30 to 50 years, operators believe that maintenance can be deferred until the relicensing process. This sets up a situation during the environmental review of the FERC relicensing process where a municipality (or other small hydro operators) needs to implement upgrades that they cannot afford to bring the project into compliance with current operational and environmental standards. If the State deems these existing facilities important to the overall energy goals of the State, a possible way of accomplishing the objective of this bill is to provide financial incentives or funding sources to help the municipal and small hydro operator ensure their existing projects are operating efficiently, and in a way that protects the water quality and aquatic habitat of the State.

Additional Environmental Concerns:

P3., Line 20: The Department is unaware of any local, quantifiable "water quality benefits" of renewable energy production. Production of energy requires manipulation of flows, but the quality is irrelevant, and water quality is not improved by the installation of hydroelectric facilities as defined by the proposal.

P 4., (f)(1). Requirement to pass no more than 7Q10 flows will not allow for a flow regimen that even closely approximates a natural condition. Bypass reaches will by definition fail to support aquatic biota or habitat. Additionally, under these flow conditions waters could potentially fail other numerical criteria, such as dissolved oxygen. So doing also runs counter to the equilibrium policy established by Acts 110 and 138.

P 4. (2)(B). This is an alarming provision that will deleteriously impact aquatic life uses in reservoirs, and promote the methylation of mercury. This latter is especially concerning. Promoting drawdowns in winter will promote the bioaccumulation of mercury into fishes and other aquatic biota, and exacerbate existing fish consumption advisories.

9. Gubernatorial appointments to board or commission? No

Commissioner has reviewed this document: _____ ***Date:*** 1/14/16

Secretary has reviewed this document: _____ ***Date:*** 1/20/16

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