WILLIAM H. SORRELL
ATTORNEY GENERAL

SUSANNE R. YOUNG
DEPUTY ATTORNEY GENERAL

WILLIAM E. GRIFFIN
CHIEF ASST. ATTORNEY GENERAL

STATE OF VERMONT
OFFICE OF THE ATTORNEY GENERAL
109 STATE STREET
MONTPELIER, VT
05609-1001

TEL: (802) 828-3171
FAX: (802) 828-3187
TTY: (802) 828-3665

http://www.atg.state.vt.us

June 20, 2014

Penelope Carrier, COM
Vermont Superior Court
Orleans Unit – Civil Division
247 Main Street
Newport, VT 05855

Re: *Seymour Lake Assoc. v. State*
Docket No.: 108-4-14 Oscv

Dear Ms. Carrier:

Enclosed for filing please find the State of Vermont's Motion to Dismiss and Memorandum of Law in the above-referenced matter.

Sincerely,

Bonnie Boyce
Administrative Secretary

Enc.
cc: David Kelley, Esq.

STATE OF VERMONT

SUPERIOR COURT
Orleans Unit

CIVIL DIVISION
Docket No. 108-4-14 Wncv

Seymour Lake Association	)
	)
Plaintiff	)
	)
v.	)
	)
State of Vermont, acting by and through its Agency of Natural Resources, and its Department of Environmental Conservation	)
Defendants	)

STATE OF VERMONT'S MOTION TO DISMISS AND MEMORANDUM OF LAW

The State of Vermont hereby moves to dismiss the above-captioned matter pursuant to V.R.C.P. 12(b)(1) for lack of subject matter jurisdiction and 12(b)(6) for failure to state a claim upon which relief can be granted for the following reasons:

First, the only forum in which Plaintiff may seek to modify standards applicable to Lake Seymour's dam that have been incorporated into its federal hydropower license is a Federal Energy Regulatory Commission administrative proceeding, not this Court.

Second, to the extent that Plaintiff claims to challenge the State's agency decision with regard to the Lake Seymour dam, that decision was made long ago and, prior to its incorporation into the conditions of the dam's

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

FERC license, was appealable only to the Superior Court's Environmental Division.

Finally, the State enjoys sovereign immunity from Plaintiff's nuisance claims for exercise of its governmental functions in regulating the privately-owned Lake Seymour dam.

The State specifically reserves all other jurisdictional, affirmative, and other defenses to the underlying claims in this action.

MEMORANDUM OF LAW

Background

I. The Complaint's Allegations and Requested Relief

This matter arises from a federally-licensed electricity-generating system known as the Clyde River Hydroelectric Project ("the Project"). It involves the water levels of Lake Seymour, part of the Project.

Plaintiff Seymour Lake Association ("SLA") alleges that a Vermont statute (30 V.S.A. §§ 401-403) enacted in 1951 authorized the Public Service Commission to establish and maintain a fixed range of maximum and minimum water levels for Lake Seymour. *See* Compl. ¶¶ 5-10. The Public Service Commission determined in 1951, as affirmed by the Vermont Supreme Court in 1952, that these maximum and minimum water levels would be, respectively, six inches above and eight inches below the crest of the then-existing dam. *See id.*

In 2004, a new federal license was issued by the Federal Energy Regulatory Commission ("FERC") in connection with the Project and the

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

reconstruction of the Lake Seymour dam. *Id.* ¶¶ 14-15 & p. 8. During this re-licensing process, the Agency of Natural Resources ("ANR") and ANR's Department of Environmental Conservation ("DEC") (collectively, hereinafter, "the State") issued a state water quality certification for the Project pursuant to Section 401 of the Clean Water Act. *See id.* ¶ 15. The 401 certification included a condition addressing the possible adjustment of Lake Seymour water levels through the use of a gate in the reconstructed dam. *Id.* ¶ 17.

SLA now claims that the new privately-owned dam has caused "significant increases in water levels" including "shore land flooding." *Id.* ¶ 18. SLA alleges that the State's acts and omissions in connection with regulating the dam have created a public nuisance and a nuisance per se. *See id.* ¶¶ 27-33.

To address these purported impacts, SLA ask this Court for a "writ of mandamus" and injunction to order the State to require the current dam owner, Great Bay Hydro Corporation, to install and operate a gate mechanism to maintain Lake Seymour's water levels at the so-called "natural and normal" water levels ascertained by the Public Service Commission in 1951 in construing 30 V.S.A. §§ 401-403. *Id.* ¶¶ 20-26 and p.8.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

II. Legal Framework

FERC is responsible for regulating hydropower dams. *California v. F.E.R.C.*, 495 U.S. 490, 503 (1990) (discussing "exclusive federal regulation"

over hydropower); *Town of Springfield, Vt. v. McCarren*, 549 F. Supp. 1134, 1156 (D. Vt. 1982) (FERC's jurisdiction under "the Federal Power Act and the Supremacy Clause . . . is exclusive . . . over the improvements, works, facilities, features, and elements" of a federal hydroelectric project); *Town of Springfield, Vt. v. State of Vt. Envtl. Bd.*, 521 F.Supp. 243, 250 (Vt. 1981).

A. Interconnection of Federal Power Act and Clean Water Act

The field of hydropower is generally the domain of the federal government, 16 U.S.C. § 797(e), except for certain delegated water rights, 16 U.S.C. § 821, or when expressly delegated under another federal statute.

> There is no dispute that the FPA establishes a comprehensive scheme pursuant to which all hydroelectric projects are to be licensed and regulated by FERC, and that this legislation generally preempts the application of state law, including licensing and permitting requirements, to such projects. However, the Clean Water Act contains a narrow exception to FERC's exclusive jurisdiction, insofar as it empowers states to certify whether a project complies with its water quality requirements and makes such a state certification necessary before a license may be granted.

Niagara Mohawk Power Corp. v. New York State Dept. of Envtl. Conservation, 187 A.D.2d 7, 9 (N.Y.A.D. 3 Dept. 1993) (citing *First Iowa Hydro–Elec. Coop. v. Fed. Power Comm'n*, 328 U.S. 152, 167-68 (1946)); *see also Karuk Tribe v. California Reg'l Water Quality Control Bd.*, 183 Cal.App.4th 330, 355 (Cal. 2010) (noting that the U.S. Supreme Court cases of *First Iowa* and *California* have been interpreted "as 'field preemption' decisions, that is, with the exception of their proprietary water rights, states are excluded from interposing their law into the field of hydropower regulation.").

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

The Clean Water Act ("CWA") carves out an exception to FERC's jurisdiction, and grants states the ability to enforce their water quality standards in connection with any federally-licensed activity, including hydropower dams. 33 U.S.C.A. § 1341(a) ("Section 401").

B. Section 401 Conditions Are Federal Law

Under CWA Section 401(d), state water quality standards "shall become a condition on any Federal license or permit." 33 U.S.C.A. § 1341(d). The Supreme Court has held that state water quality standards, such as those imposed in a Section 401 water quality certification, have a "federal character" and that "the system of federally approved state standards as applied in the interstate context constitutes federal law." *Arkansas v. Oklahoma*, 503 U.S. 91, 110 (1992).

"FERC itself has recognized that the terms and conditions included in a section 401 certificate 'become terms and conditions of the license as a matter of law.'" *State Dept. of Ecology v. Pub. Util. Dist. No. 1*, 849 P.2d 646, 654 (Wash. 1993) (holding that 401 conditions become "a part of federal law"); *see also In re Pub. Util. Dist. No. 1*, 117 FERC P 61205, *62020, at ¶ 70 (Project 2042-031, 2042-086 – Nov. 17, 2006) (same).

C. As Federal Law, 401 Conditions May Only be Modified by FERC

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

"Section 401(a)(3) of the CWA sets out the exclusive manner in which state certifications may be modified and makes clear that process is to be initiated by the federal licensing or permitting agency, not the state." *In re*

Cent. Vt. Pub. Serv. Corp., 1994 WL 708786, at *6; 69 FERC P 62110, 64221 (Project No. 2489-001 – Nov. 4, 1994).

"Thus, the application of section 401(a)(3) involves a federal question that, absent satisfactory explanation, presumably must be resolved by the applicable federal licensing authority and the federal courts." *Keating v. F.E.R.C.*, 927 F.2d 616, 624 (D.C. Cir. 1991). In *Keating*, the State of California claimed that it had revoked its 401 certification in connection with an earlier FERC permit, and the dam owner appealed to FERC. FERC declined to hear the appeal, and said the recourse was in state court, but the Circuit Court of Appeals held that FERC had to decide the issue, since the earlier certification was already incorporated into the federal permit. *Id.* at 621-22 ("We have no doubt that the question posed is a matter of federal law, and that it is one for FERC to decide in the first instance.").

The court noted that state courts may review 401 challenges "*so long as they precede the issuance of any federal license or permit*," *id.* (emphasis original), but that "the picture changes dramatically once that decision has been made and a federal agency has acted upon it." *Id.* at 623. *See also Karuk Tribe*, 183 Cal.App.4th at 355 (states have "broad authority" to issue conditions in 401 certification "[b]ut the state only has [that] opportunity . . . in connection with the FERC licensing process, which occurs only when the original license is issued, the project is relicensed, or the licensee applies for a FERC license amendment.").

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

III. Additional Factual Background[1]

Between 1991 and 2003, the Clyde River Project underwent re-licensing by FERC. During the relicensing, the dam at Lake Seymour was reconstructed. In connection with FERC's relicensing, Vermont's Water Resources Board analyzed state water quality impacts under the delegated authority of the CWA Section 401. On August 1, 2002, Vermont issued a water quality certification for the Project ("401 certification"). SLA participated in those proceedings, and appealed and contested the 401 certification, including the issue of water levels at Lake Seymour. On April 2, 2003, ANR, SLA, and the dam owner (Citizens Communication Company) entered into a signed settlement agreement. *See* **Exhibit A**.

The settlement included a provision to address Lake Seymour's water levels through operation of a gate, known as Condition H.[2] Condition H states:

---

[1] The Court may consider this additional factual background based on the documents appended as **Exhibits A-F** because they are either referenced in SLA's Complaint, *e.g.*, the 401 certification, constitute matters of public record appropriate for judicial notice, or contain factual material relevant to this Court's determination of its subject matter jurisdiction, *e.g.*, the Project's FERC license and ANR's correspondence to SLA constituting its agency decision appealable to the Environmental Division. *See Kaplan v. Morgan Stanley & Co.*, 2009 VT 78 ¶ 10 n.4, 186 Vt. 605, 609 n.4, 987 A.2d 258, 264 n.4 (under Rule 12(b)(6), "the general rule is that '[w]hen the complaint relies upon a document . . . such a document merges into the pleadings and the court may properly consider it under a Rule 12(b)(6) motion to dismiss.' Similarly, it is well settled that, in ruling on a Rule 12(b)(6) motion to dismiss, courts may properly consider matters subject to judicial notice, such as statutes and regulations, and matters of public record.") (internal citations omitted); *Conley v. Crisafulli*, 2010 VT 38 ¶ 3, 188 Vt. 11, 14, -- A.3d -- (under Rule 12(b)(1), the Superior Court "may consider evidence outside the pleadings in resolving a motion to dismiss for lack of subject matter jurisdiction" and its factual findings are reviewed for clear error).

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

> The [dam] design shall also include a gate bay to enable future operation of the gate *if the Department determines* that the modified dam has significantly increased the magnitude, frequency, or duration of shoreline flooding, and this impact cannot be reasonably abated. However, the gate operator shall not be installed and the gate shall not be operated in any way without prior approval by the Department. *The need for gate operation, if any, shall be determined* after an initial period of two calendar years of data collection as provided in Condition F above.

Ex. B at 36 (emphasis added).

The settlement also stated that the purpose of Condition H was to "facilitate the ability of the parties to determine *whether operation of a gate in the reconstructed dam is necessary*, and *if so*, under what conditions it should be operated." **Ex. A** ¶ 2 (emphasis added).

On July 11, 2003, Vermont issued a final, amended 401 certification with the new conditions including Condition H. *See* **Exhibit B**. On November 21, 2003, FERC issued its license, incorporating the 401 certification. FERC license Project Nos. 2306-008 and -024. **Exhibit C** at 10-19 (discussing the 401 certification including Condition H).

As part of the FERC license, it was determined that a new dam would be installed at Lake Seymour and would be operated in a crest control, "run-of-river" mode (*i.e.*, allowing natural variations of water levels to occur). **Ex. B** at p.82 ¶ 252 ("the dam design is intended to maintain high levels that

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[2] In the April 2003 settlement, SLA agreed that "the [Water Resources] Board should issue the Section 401 with conditions F and H as attached" and that "the Parties have made compromises on specific issues to reach this stipulation." **Ex. A ¶¶ 1 & 6.**

mimic natural conditions.").[3] The new dam was installed in 2004. The dam is currently equipped with a gate and frame, but the operating mechanism for the gate has not been installed. *See* **Ex. B** (Condition H, p.36).

Between 2004 and 2013, SLA discussed various issues regarding Lake Seymour with DEC, including its water levels. *See* Compl. ¶ 19. For example, in 2007, SLA requested that DEC approve installation of flashboards to raise the levels of Lake Seymour (SLA was concerned that water levels were too low for recreation), and DEC agreed. Subsequently, SLA became concerned that water levels were too high. Rather than seek removal of the flashboards, SLA insisted that DEC install and operate a gate mechanism to artificially manipulate lake levels as had been done with the previous dam.

On December 8, 2009, DEC wrote to SLA, stating: "By this letter, the Department determines, under Condition H, that gate operations are unnecessary. The gate operator shall not be installed." **Ex. D** at 2 (letter from Jeffrey Cueto, DEC, to Ronald Kolar, SLA, Dec. 8. 2009). SLA did not challenge that decision, but rather, continued to engage DEC in letters and discussions. On August 20, 2012, SLA met with DEC. At that meeting, DEC explained that: (1) the frequency and magnitude of flooding had not increased; (2) SLA's concerns over erosion would not be addressed by gate

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[3] Prior to the FERC relicensing, Lake Seymour had been historically used as a storage facility to augment hydropower production on the Clyde River. The storage function of the lake was discontinued but the dam operator at the time continued to artificially adjust water levels until the new dam was installed in 2004.

manipulation; and (3) to best protect water quality, aquatic habitat, and recreational opportunities, Lake Seymour should be treated as "a natural system," with naturally varying water levels. *See* **Exhibit E** (handout at August 2012 meeting).

Again, SLA did not challenge DEC's decision, but instead wrote another letter in March 2013, providing more data analysis of Lake Seymour levels. DEC responded in May 2013, noting that SLA had "reiterated" the same concerns. DEC also summarized the August 2012 meeting and conclusions made at that time. Nevertheless, DEC "reviewed the analysis" that SLA provided in March 2013 and, in specific reference to Condition H, again "concluded that a significant increase [in flooding] has not occurred and installation and operation of a gate is not warranted." **Ex. F** at 1 (Letter from Peter LaFlamme, DEC to Timothy Buzzell, SLA, May 24, 2013).

SLA responded by letter in June 2013, continued to engage the agency in discussions, and pursued other options. For example, in this past legislative session, SLA participated in proposed legislation by the Vermont Senate, regarding a bill that would have ordered DEC to "exercise its authority under the CWA § 401 Certification" to manage the lake levels of Lake Seymour. *See* S.227 (Vt. Sen. Nat. Res. & Energy Comm. 2014), "Bill As Introduced" -- Sec. 1(b). The bill did not pass out of committee. In its Complaint filed April 29, 2014, SLA now alleges that ANR and DEC have violated their "duties" to adjust the water levels of Lake Seymour in accordance with Vermont statute, 30 V.S.A. §§ 401-403 (enacted 1951).

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

Argument

Accepting SLA's non-conclusory factual allegations as true, SLA has no claim for relief in this Court. Vermont (through state court processes or agency regulation) may not impose conflicting standards upon federally regulated hydro-dams. *American Rivers, Inc. v. F.E.R.C.*, 129 F.3d 99, 111 (2d Cir. 1997) (the Federal Power Act "represents a congressional intention to establish a broad federal role in the development and licensing of hydroelectric power" and "has a wide preemptive reach."). Vermont already exercised its appropriate role regarding Lake Seymour under the Clean Water Act—a process in which SLA fully participated and settled—by issuing the 401 certification and which is now part of federal law. SLA's Complaint now asks this Court to effectively modify federal law, or to ignore federal law and impose water levels established by the Vermont Public Service Commission in 1951 according to a federally-preempted state statute, 30 V.S.A. §§ 401-03. Neither request is valid. *Keating v. F.E.R.C.*, 927 F.2d 616, 622 (D.C. Cir. 1991) (altering state water quality certification adopted by FERC "is a matter of federal law, and [one that is] for FERC to decide in the first instance.").

To the extent SLA is challenging under state law DEC's discretionary decision not to install and operate a gate mechanism at Lake Seymour, such a challenge can only be brought, if at all, in the Superior Court's Environmental Division. *Northeast Resource Recovery Ass'n v. State*, No.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

595-9-13 Wncv, 2013 WL 7346946, at *3 (Vt. Super. Ct. Oct. 10, 2013) (challenges of ANR/DEC decisions must follow 10 V.S.A. § 8503).

As to SLA's nuisance claims, Compl. Counts III & IV, Defendants enjoy sovereign immunity from such claims, and thus the remainder of the Complaint must also be dismissed.

I. SLA Has No Claim for Relief in this Court

SLA asks this Court to order DEC to "return to the practice mandated by [1951] Vermont statutes" and maintain "natural and normal" water levels at Lake Seymour pursuant to those statutes. Compl. at p.8. However, Lake Seymour's 401 certification does not impose any mandatory "natural and normal" water levels. It designates a process and criteria by which DEC determined whether any dam gate operation to adjust Lake Seymour's water levels was warranted. SLA thus seeks to change the conditions of a federal license. Such a challenge to modify or alter a federal license issued under the Federal Power Act ("FPA") must be made through FERC and the federal system. To the extent SLA claims that the Public Service Commission's 1951 designation of Lake Seymour's water levels, according to 30 V.S.A. §§ 401-03, overrides the federal license conditions, such a claim would be preempted by the FPA.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

A. Requiring DEC to Maintain a Mandatory Water Level Conflicts with the Discretionary Procedures and Criteria of the Federal License

Lake Seymour is part of the Clyde River Hydroelectric Project, which is federally regulated by FERC. During FERC's relicensing of the Project,

SLA participated in Vermont's state water quality certification process. By settlement, SLA agreed: (1) to the substance of Condition H; (2) that it should be included in the 401 certification; and (3) that it "will facilitate the ability of the parties to determine *whether operation of a gate in the reconstructed dam is necessary*, and *if so*, under what conditions it should be operated." **Ex. A** ¶ 2 (emphasis added).

Condition H is unequivocally clear that DEC has no absolute duty to install or operate any gate, and that DEC's decision, if any, is discretionary at any time:

> The design shall also include a gate bay to enable future operation of the gate *if the Department determines* that the modified dam has significantly increased the magnitude, frequency, or duration of shoreline flooding, and this impact cannot be reasonably abated. . . . *The need for gate operation, if any, shall be determined* after an initial period of two calendar years of data collection as provided in Condition F above.

Ex. B at 36 (emphasis added). FERC adopted the 401 certification (including Condition H) in the final license issued November 21, 2003. The 401 certification and FERC license are now final, and thus "constitutes federal law." *Arkansas*, 503 U.S. at 110.

SLA now seeks to change federal law in this Court. By its clear terms, Condition H set forth a process and criteria by which DEC would determine, after the reconstructed dam had been in place for two years, whether operation of a gate was necessary for the adjustment of lake levels. SLA explicitly agreed to this process. **Ex. A** ¶¶ 6 & 2 (stating that "the Parties have made compromises on specific issues" and the purpose of Condition H

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

was "to determine *whether operation of a gate in the reconstructed dam is necessary*, and *if so*, under what conditions it should be operated." (emphasis added)). SLA's current characterization of DEC's duty as "ministerial," Compl. ¶ 23, and SLA's request to "return" to a mandatory practice, Compl. at p.8, are inaccurate. There is no mandatory water level set forth in Condition H or the 401 certification generally. SLA's complaint is an attempt to modify or overwrite the federal license conditions of Lake Seymour because any order mandating DEC to require gate operation would conflict with the provisions of Condition H. Any change to the 401 certification must be done by FERC through the federal process. *Keating,* 927 F.2d 622-24.

Therefore, because the 401 certification establishes only a discretionary process and criteria, any action *compelling* DEC to order the private dam owner to install and operate the gate to maintain certain water levels set in 1951, regardless of current lake conditions or their potential causes, is an irreconcilable and conflicting change to a federal license. SLA's complaint should be dismissed for seeking to modify federal law. *See City of Lowell v. ENEL North America, Inc.*, 796 F.Supp.2d 225, 230 (D. Mass. 2011) (dismissing complaint for breach of contract and holding that city's contract with dam owner conflicted with FERC's license requirements, which included a provision that no alteration could be made without FERC's approval); *Simmons v. Sabine River Auth.*, 732 F.3d 469, 476 (5th Cir. 2013) (dismissing action "[b]ecause the state law property damage claims at issue

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

here infringe on FERC's operational control, [and] we hold that they are conflict preempted."); *First Iowa*, 328 U.S. at 167.

SLA may pursue its concerns through other means. For instance, Section 401(a)(3) of the CWA allows FERC, as the authorizing agency, to modify or otherwise alter the terms of Condition H. If SLA is unhappy with the terms of Condition H, SLA may attempt to petition FERC for review.[4] However, SLA may not ask this Court to modify federal law.

B. The 1951 Vermont Statutes and Public Service Commission Determination May Not Override Federal Law

By asking this Court to issue a writ of mandamus compelling DEC "to return to the practice mandated by [1951] Vermont statutes," SLA asks for direct application of state law to Lake Seymour's water levels. Compl. at p.8. However, such an application of state law conflicts with FERC's jurisdiction and is preempted.

FERC regulates hydropower, and states may exercise authority when so delegated, such as the CWA 401 certification process. *McCarren*, 549 F. Supp. at 1156 (FERC has "exclusive jurisdiction" over federal hydroelectric projects, except where delegated to states). In this case, FERC and the State reviewed the issues of water levels at Lake Seymour. More importantly, SLA litigated those issues during the FERC permitting process and resolved them via a settlement agreement. The results of that settlement, Condition H,

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[4] SLA's current complaint is particularly infirm considering that SLA settled these issues and agreed to the exact language of Condition H, including its discretionary function. **Ex. A** ¶¶ 2 & 6. Further, DEC followed the process of Condition H (several times, as discussed *infra*). SLA simply appears to disagree with the outcome.

have now been expressly adopted into the federal license. There is no remaining state role over Lake Seymour's water levels, except as provided in the 401 certification. For SLA to seek application of the 1951 Vermont statutes and the Public Service Commission's determination of lake levels, instead of the 401 certification, would be a direct and preempted imposition of state law "over the improvements, works, facilities, features, and elements" of Lake Seymour and the Clyde River Project. *Id.*

Therefore, SLA cannot ask this Court to ignore the standards set by FERC and instead directly apply the water levels set by the Public Service Commission in1951 according to 30 V.S.A. §§ 401-403. *See California*, 495 U.S. at 506 (California was preempted from applying their minimum stream flow requirements to a federally-licensed hydro-dam: "we conclude that the California requirements for minimum in-stream flows cannot be given effect and allowed to supplement the federal flow requirements."); *Sayles Hydro Assocs. v. Maughan*, 985 F.2d 451, 456 (9th Cir. 1993) (California's entire state water permitting process preempted: "Once the [Supreme] Court made it clear that the state could control only proprietary rights to water, that established the category as 'occupy the field' preemption for everything but proprietary rights to water.").

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

In sum, because SLA's Complaint seeks either to effectively modify federal license conditions, or to interpose conflicting state requirements on top of those federal conditions, this Court cannot order such relief and the case should be dismissed for lack of subject matter jurisdiction. *See Karuk*

Tribe., 183 Cal.App.4th at 360 (states may participate during FERC permitting process but holding that "[i]t is only when states attempt to act outside of this federal context and this federal statutory scheme under authority of independent state law that such collateral assertions of state power are nullified.").

II. To the Extent There Is Any State Jurisdiction, It Lies Exclusively with the Environmental Division

SLA may claim that, despite the allegations in its Complaint, it does not seek to change or override federal 401 conditions, but only challenges DEC's interpretation and application of Condition H to Lake Seymour's conditions. To that extent, SLA's Complaint still fails, because, even assuming state jurisdiction, such a challenge must follow the state jurisdictional law procedures for appealing decisions by ANR. Vermont law delineates the matters appealable to the Superior Court's Environmental Division and provides that this Court, the Civil Division, has no jurisdiction over them. *See* 4 V.S.A. §§ 31, 34; 10 V.S.A. §§ 8503, 8504. This is just such a matter, and this Court should dismiss it on that basis.

Fundamentally, "there is no absolute right to appellate review of administrative decisions." *Mason v. Thetford Sch. Bd.*, 142 Vt. 495, 498 (1983); *Handverger v. City of Winooski*, 2011 VT 130, ¶ 8, 191 Vt. 556, 38 A.3d 1153 ("There is no general right of appeal, so the right must be derived from statute, common law, or the constitution."). In this case, Section 8503 of Title 10 provides for Environmental Division jurisdiction over "all appeals of

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

an act or decision of the secretary [of ANR], excluding enforcement actions under chapters 201 and 211," and specifically includes "chapter 41 (regulation of stream flow), chapter 43 (dams), [and] chapter 47 (water pollution control)." 10 V.S.A. § 8503(a)(1)(C)-(E); *see also* 4 V.S.A. § 31 (jurisdiction of Civil Division), § 34 (jurisdiction of Environmental Division).

Here, the act alleged to aggrieve Plaintiff is the Secretary's decision not to install and operate the gate mechanism described in Condition H. To the extent that ANR has continuing jurisdiction over Lake Seymour's dam, it can only be derived from a statutory source, such as chapter 41 regarding regulation of stream flow through dams (10 V.S.A. §§ 1001-1032), chapter 43 regarding dam structures (10 V.S.A. §§ 1080-1106), or chapter 47 regarding water quality standards (10 V.S.A. §§ 1250-1284). In particular, § 1082(a) prohibits alteration of any dam or impoundment of water without authorization by the state agency with jurisdiction; § 1252 authorizes ANR to adopt and enforce water quality standards applicable to state waters.

In this case, ANR (through DEC) has already made the discretionary decision that installation and operation of a gate at Lake Seymour dam is not warranted. First, in December 2009, DEC told SLA that "under Condition H, gate operations are unnecessary" and "[t]he gate operator shall not be installed." **Ex. D** at 2. During the August 2012 meeting, DEC again explained that flooding had not increased to justify gate manipulation, and that Lake Seymour must be maintained in "run-of-river" mode to protect water quality. *See* **Exhibit E**. In May 2013, responding to another request

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

by SLA and in reference to Condition H, DEC once again "concluded that a significant increase [in flooding] has not occurred and installation and operation of a gate is not warranted." **Ex. F** at 1.

At none of the above junctures (December 2009, August 2012, and May 2013), did SLA challenge DEC's decision under 10 V.S.A. § 8503. It instead responded via letters and by continuing to engage the agency in discussions.[5]

As noted above, Condition H describes DEC's discretionary role to decide, based on at least two years of data collected after the 2004 reconstruction of the dam, whether operation of a gate was necessary. In December 2009, DEC made its decision based on five years of data and communicated it, repeatedly, to SLA. Thus, *if* there is a state law remedy for any decision made by ANR/DEC related to dams, SLA must follow 10 V.S.A. § 8503(a)(1)(C)-(E). SLA had ample opportunity to follow those procedures and appeal to the Environmental Division. SLA chose not to, and now bears the consequences of that strategic decision. *See Northeast Resource Recovery*, 2013 WL 7346946, at *3 (dismissing complaint and holding that Superior Court Civil Division lacks jurisdiction: "all challenges to any act of the Secretary of ANR or the Commissioner of the Department of Environmental

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[5] Although not included as exhibits, SLA wrote letters to DEC acknowledging receipt of each of the letters and meetings described herein, so there can be no dispute as to SLA's knowledge of DEC's decisions.

Conservation [must] be brought in the Environmental Division"). SLA's complaint should be dismissed.

III. The State Has Sovereign Immunity For SLA's Nuisance Claims

Because SLA's claims for nuisance per se and public nuisance arise from the State's inherently governmental functions of regulating stream flows through a privately-owned dam and managing the water levels and quality of a publicly-owned lake, such claims are not comparable to a nuisance claim that could be maintained against a private person. Without such a private analog, the State retains its sovereign immunity against SLA's nuisance claims. Moreover, the State's discretionary decision-making concerning the conservation of natural resources affords an independent basis for sovereign immunity.

A. The State Cannot be Held Liable in Tort for Exercise of its Governmental and Discretionary Functions

"Under the doctrine of sovereign immunity, claims against the State are barred 'unless immunity is expressly waived by statute.'" *Kane v. Lamothe*, 2007 VT 91 ¶ 6, 182 Vt. 241, 244, 936 A.2d 1303, 1306 (quoting *Sabia v. State*, 164 Vt. 293, 298, 669 A.2d 1187, 1191 (1995)). "Under 12 V.S.A. § 5601(a), the State of Vermont has waived its immunity to lawsuits to the extent a private analog exists." *Searles v. Agency of Transp.*, 171 Vt. 562, 563, 762 A.2d 812, 813 (2000). "If no such analog to private action exists, suit against the State is precluded." *Amy's Enters. v. Sorrell*, 174 Vt. 623, 623, 817 A.2d 612, 616 (2002.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

1. Governmental Function Immunity

"This approach bars negligence actions against the State in connection with purely 'governmental functions' so as to avoid imposing 'novel and unprecedented liabilities' on the State." *Kane*, 2007 VT 91, ¶ 6, 182 Vt. at 245, 936 A.2d at 1307 (citation omitted); *see also Lafond v. Dep't of Soc. & Rehab. Servs.*, 167 Vt. 407, 409, 708 A.2d 919, 920 (1998) (holding that licensing and inspection of child day care facilities are "inherently *governmental* functions which find no private analog or duty of care in our common law"); *Andrew v. State*, 165 Vt. 252, 682 A.2d 1387 (1996) (holding that where "plaintiffs' cause of action amounts to a claim of negligent enforcement of safety standards under a regulatory statute. There is no private analog for such an action" and to hold otherwise would impermissibly impose "'novel and unprecedented liabilities'" upon the State.")(citations omitted).[6]

Instead, the proper means to compel enforcement of statutes or regulations is either a statutorily-mandated agency decision appeal, *e.g.*, 10 V.S.A. § 8503 Environmental Division appeal of an ANR decision, or in the absence of a statutory right of appeal, a V.R.C.P. 75 proceeding. *Cf. Alger v.*

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[6] *See also Dalehite*, 346 U.S. at 57 ("Of course, it is not a tort for government to govern.") (Jackson, J., dissenting); 57 Am. Jur. 2d *Municipal, Count, School, and State Tort Liability* § 171 ("Tort liability does not extend to cases where a municipality or state government or an agency thereof takes upon itself a regulatory function, that is, different from any performed by private persons or in private industry, and where, if it were held liable for failing to perform that function, it would be a new kind of tort liability.").

Dep't of Labor & Indus., 2006 VT 115 ¶¶ 19-21, 26, 181 Vt. 309, 320-23, 917 A.2d 508, 516-19 (holding that Department of Labor owed plaintiff tenants no actionable duty in tort arising from non-enforcement of housing code against their landlord, but concluding that plaintiffs instead stated a claim under V.R.C.P. 75 for review of governmental action).

2. Discretionary Function Immunity

In addition to tort claims arising from the exercise of its governmental functions, the State has also retained its sovereign immunity for "[a]ny claim . . . based upon the exercise or performance or failure to exercise or perform a discretionary function or duty on the part of a state agency or an employee of the state, whether or not the discretion involved is abused." 12 V.S.A. § 5601(e)(1).

Discretionary function immunity is assessed by means of a two- part test that examines, first, "whether the acts involved are 'discretionary in nature,' involving 'an element of judgment or choice,'" and second, "whether the judgment is of the kind that the discretionary function was designed to shield," namely, "governmental actions and decisions based on considerations of public policy." *Lane v. State*, 174 Vt. 219, 223-24, 811 A.2d 190, 194 (2002) (internal citations omitted). Such "policy considerations include[e] safety, economic, social and environmental factors." *Id.*, 174 Vt. at 228, 811 A.2d at 198.[7]

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[7] "[W]hen established governmental policy, as express or implied by statute, regulation, or agency guidelines, allows a government agent to exercise discretion,

3. The State is Immune from Liability for Nuisances Created by Private Parties Subject to State Regulation and Enforcement

States cannot be held liable for claims that exercise of their governmental functions or policy-based discretion has allowed a third party to harm plaintiffs through creation of a nuisance. For instance, in *Disappearing Lakes Association v. Department of Natural Resources*, the Michigan Court of Appeals affirmed summary judgment for the State of Michigan and its Department of Natural Resources on governmental immunity grounds in an action brought by owners of lakefront property. 328 N.W.2d 570, 572, 576 (Mich. App. 1982), *aff'd sub nom. Ross v. Consumers Power Co.*, 363 N.W. 2d 641, 654-57 (Mich. 1984). The plaintiffs alleged that the state and its agency, by issuing permits allowing a private land developer to dredge adjacent canals, had negligently or intentionally created a nuisance per se or public nuisance because the dredging caused the water levels in plaintiffs' lakes to drop, thereby destroying their recreational and aesthetic value. *Id.* at 572; *see also Ross,* 363 N.W. 2d at 654.

The *Disappearing Lakes* Court held that the state's issuance of the dredging permits was an inherently governmental function and that plaintiffs' complaint failed to allege that the state had conducted or controlled any of the actual dredging, other than through exercise of its discretionary power to grant or deny the dredging permits. *Disappearing*

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

---

it must be presumed that the agent's acts are grounded in policy when exercising that discretion." *Id.*, 174 Vt. at 225, 811 A.2d at 195.

Lakes, 328 N.W.2d at 572, 575. The appeals court concluded that "if there is a shred of protection left in the umbrella of governmental immunity, it should protect the state and its agency in this matter." *Id.* at 575.

B. The State Has Sovereign Immunity for SLA's Nuisance Claims Arising from the Discretionary Exercise of its Governmental Functions in Regulating Lake Seymour's Dam, Water Levels and Water Quality

1. SLA's Nuisance Theories Have No Private Analog

SLA's nuisance claims have no private analog because the State's alleged wrongdoing arises from its purportedly inadequate enforcement of its own statutes and regulations, in this case, those pertaining to Lake Seymour's dam, water levels and water quality. *See* Compl. ¶¶ 32-33. However, the manner in which the State interprets and applies its environmental standards is an inherently governmental function that is simply not comparable to conduct that would subject a private person to nuisance liability.

Unlike SLA's claims, actionable public nuisances and nuisances per se are characterized by their general lack of any legal justification or government authorization. Public nuisances encompass "the doing of acts not permitted by law and the failure to discharge a legal duty required by law thereby inconveniencing the public in its common rights." *Napro Dev. Corp. v. Town of Berlin*, 135 Vt. 35, 359, 376 A.2d 342, 347 (1977). Likewise, "'nuisance per se' has also been defined as that which cannot be so conducted or maintained as to be lawfully carried on or permitted to exist." 58 Am. Jur.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

2d *Nuisances* § 12.

However, "[c]ourts traditionally have been reluctant to enjoin as a public nuisance activities which have been considered and specifically authorized by the government." *New England Legal Found. v. Costle*, 666 F.2d 30, 33 (2d Cir. 1981).[8] Likewise, "no act, erection, or use of property that is lawful or authorized by competent authority can be a nuisance per se." 58 Am. Jur. 2d *Nuisances* § 14.

In contrast, SLA's theory of liability, which would convert the act of governing into a tort, bears no resemblance to a nuisance claim that could be brought against a private individual. SLA's so-called "Public Nuisance" and "Nuisance Per Se" claims have no private analog and must be dismissed on sovereign immunity grounds.

2. <u>SLA Has No Implied Private Right of Action in Tort for the State's Purported Statutory and Regulatory Violations</u>

SLA has also shown no private cause of action in tort for the State's supposed violation of statutes and regulations pertaining to the management of Lake Seymour's water levels and water quality. The Supreme Court has held that "no private cause of action exists in Vermont for failure to enforce a regulation adopted to protect the public at large" and noted "the absence in

[8] *See also Township of Neptune v. State Dep't of Envtl. Prot.*, 21 A.3d 792, 802 (N.J. Super App. Div. Apr. 26, 2012) (in dismissing township's complaint alleging that state agency's failure to dredge state navigational channels was public nuisance, noting that "[t]he courts will not declare an activity to be a public nuisance, when the activity is subject to a comprehensive legislative and regulatory scheme" and holding that "the dredging of the State's navigational channels is governed by statutes and an assortment of administrative regulations. Therefore, the DEP's failure to dredge the Bay's channels cannot be declared a public nuisance.").

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

Vermont of any general inference of a private action based on government regulations whose clear purpose is the general welfare." *Corbin v. Buchanan*, 163 Vt. 141, 144-46, 657 A.2d 170, 172-73 (1995).

Here, the 1951 enactment of the Vermont statutes granting the Public Service Board authority to set a water level range for Lake Seymour, 30 V.S.A. §§ 401-403, "was an exercise of the police power of the state to preserve a common property or to prevent its diminution or destruction" because "[n]o right can be acquired by or granted to private persons to control the height of the water of the lake or the outflow therefrom by artificial means for private purposes." *In re Lake Seymour*, 117 Vt. 367, 375, 91 A.2d 813, 818 (1952). Because this statute was enacted for the protection of the State's water resources held in trust for the general public, rather than for the special advantage of any particular group, like lakefront property owners, SLA has no private cause of action in tort for the State's alleged violation of 30 V.S.A. § 402. Likewise, the Vermont statutes and implementing regulations for the protection of navigable waters and shorelands, 10 V.S.A. § 1421 *et seq.*, that SLA claims the State is violating, *see* Compl. ¶ 32, are to be applied "in a manner to provide for the best interests of the citizens of the State," 10 V.S.A. § 1421, rather than for any particular class of persons.

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

Moreover, SLA cannot show that a private cause of action in tort for the violation of these Vermont statutes and regulations is necessary for their proper enforcement. If SLA is dissatisfied with the State's decisions with

regard to Lake Seymour's dam and water levels, the proper course is to request that FERC amend the controlling federal permit that gives DEC discretion over dam gate operations.

3. The State has Sovereign Immunity for its Policy-Based Discretionary Decisions Pertaining to the Need for Lake Seymour Dam Gate Operations

Through its incorporation into the FERC license that governs operation of the Lake Seymour dam, Condition H of the State's Section 401 certification is now part of federal law. *See supra* at __. By the plain language of Condition H, the act from which SLA claims the State's tort liability arises – its decision to not require that the dam's owner conduct gate operations -- necessarily involves an element of judgment or choice, the first of two requirements for discretionary function immunity under 12 V.S.A. § 5601(e)(1). *See Lane*, 174 Vt. at 223-24, 811 A.2d at 194.

Indeed, SLA has acknowledged that the State's decision-making role regarding gate operations is discretionary. On January 29, 2014, SLA testified on a proposed bill to require gate operation. In responding to a question about when use of a gate is required, SLA stated: "It is within the discretion of the agency right now according to the 401 certification." S.227: Hearing of Sen. Comm. on Nat. Res. & Energy, 2013–2014 Legislative Session (Vt. Jan. 29, 2014), CD 14-28, Track 1, at 16:30 (testimony of David Kelley, Esq., Member, Seymour Lake Association) (emphasis added). In response to a legislator asking "They don't need to follow the criteria of the certification?" -- SLA responded by summarizing Condition H, including the

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

requirement that "if it is determined that a gate must be used periodically to prevent significant flooding, the gate manipulation shall be limited to use for this purpose only." *Id.* at Track 1, 17:04 (emphasis added).[9]

Because Condition H expressly allows the State to exercise its discretion, it must be presumed that the State's December 8, 2009 and May 24, 2013 determinations that gate operations at the Lake Seymour dam are unwarranted, *see* Exs. D and F, were grounded in considerations of public policy, such as safety, economic, social and environmental factors, thereby fulfilling the second requirement for discretionary function immunity. *See Lane*, 174 Vt. at 223-25, 228, 811 A.2d at 194-94, 198. Even if the Court were to examine the State's 2009 and 2013 written determinations, attached as Exhibits D and F, it is clear on the face of these letters to SLA that the State's refusal to order dam gate operations was based on the very sort of environmental policy analysis and considerations that discretionary function immunity is designed to shield.

* * *

For the reasons set forth above, the State of Vermont respectfully requests that Plaintiff's Complaint be dismissed pursuant to V.R.C.P. 12(b)(1)and (b)(6).

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

[9] During the hearing one legislator also stated that "the issue here is, first, as I understood the testimony, is that the Supreme Court and the '51 law are basically superseded by 401 of the Clean Water Act certification -- and that we are governed by that and in order to change the 401 certification we need to show that the new dam has produced more flooding than the old dam..." *Id.* at Track 1, 11:40.

Dated: June 20, 2014

STATE OF VERMONT

WILLIAM H. SORRELL
ATTORNEY GENERAL

by: _____

Jon T. Alexander
Assistant Attorney General
109 State Street
Montpelier, VT 05609-1001
(802) 828-1299
jon.alexander@state.vt.us

by: _____

Justin E. Kolber
Assistant Attorney General
109 State Street
Montpelier, VT 05609-1001
(802) 828-3186
justin.kolber@state.vt.us

Office of the
ATTORNEY
GENERAL
109 State Street
Montpelier, VT
05609

BTF 4/11/03

fwd 4/9
WMCL WMC
GC VG

State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation

AGENCY OF NATURAL RESOURCES
103 South Main Street
Center Building
Waterbury, Vermont 05671-0301

401 Appeal
File: ~~Seymour Lake~~
~~Dam~~
(17)

April 8, 2003

Kristina Bielenberg, Esq.
Vermont Water Resources Board
National Life Records Center Bldg., Drawer 20
Montpelier, Vermont 05620-3201

Re: Clyde River Hydroelectric Project Appeal

Dear Tina:

The Agency is pleased to be filing one original and six copies of a Stipulation executed by the Agency of Natural Resources, the Seymour Lake Association and Citizens Communication Company regarding Seymour Lake Dam. This agreement resolves the disputed issues regarding Seymour Lake Dam's reconstruction and provides for a continuing dialogue between the parties to evaluate the performance of the new dam. Specifically, the filing includes: (1) the Stipulation signed by the parties, (2) revised Conditions F and H for the Section 401 Certificate, and (3) revised Findings 47, 60, 63, 255 and 256 for the Section 401 Certificate.

If you have any questions regarding this filing, please do not hesitate to contact me.

Sincerely,

Warren Coleman
Environmental Litigation Attorney

cc: Service List
Sen. Vincent Illuzzi
Jeff Cueto, P.E. – DEC
Larry Fitch, P.E. - DEC

[redacted]

CERTIFICATE OF SERVICE

I hereby certify that I, Warren Coleman, of the Agency of Natural Resources' Planning Division, sent a copy of the foregoing Stipulation, regarding the Clyde River Hydroelectric Project Appeal on April 8, 2003, by US mail, postage prepaid to the following:

Citizens Communication Company by
Barbara G. Ripley, Esq.
Wilson and White
PO Box 159
Montpelier, VT 05601-0159

Seymour Lake Association by
Gregory P. Howe, Esq.
5346 US Route 5
Newport, VT 05855

Kelly Lowry, Esq.
Vermont Natural Resources Council
9 Bailey Avenue
Montpelier, VT 05602

Warren T. Coleman

STATE OF VERMONT
WATER RESOURCES BOARD

Re: Clyde River Hydroelectric Project Appeal – WQ-02-08 (A) and (B)

STIPULATION OF THE VERMONT AGENCY OF NATURAL RESOURCES, THE SEYMOUR LAKE ASSOCIATION AND CITIZENS COMMUNICATION COMPANY

Now come the Vermont Agency of Natural Resources (ANR), the Seymour Lake Association (SLA) and Citizens Communication Company (CCC), with respect to the permit identified below, stipulate and agree as follows:

1. Provided that all of the terms of this Stipulation are met, ANR, SLA and CCC agree that the Board should issue the Section 401 with conditions F and H as attached.

2. The Parties agree that pursuant to its authority under 10 V.S.A. § 1024, the Board should include conditions F and H in its Order for the Section 401 Certificate under appeal, which will facilitate the ability of the parties to determine whether operation of a gate in the reconstructed dam is necessary, and if so, under what conditions it should be operated.

3. SLA has expressed a concern regarding flooding of septic systems and structures, as well as damage to docks and boats. In an effort to evaluate these concerns, SLA agrees to provide ANR with specific information with regard to those properties, areas, and structures that are susceptible to flood impacts. This will allow evaluation of the impact of preproject high water levels and assessment of alternate means of flood protection.

4. The applicant will conduct the analysis required under Condition H, namely:

The hydraulic performance of the proposed structure shall be

supported at a minimum by spillway and gate rating curves and an updated reservoir routing analysis to define the high flow lake stages with existing and proposed dams, using the new tailwater rating curve and the updated water surface relationship and analyzing appropriate events selected from the 1986-present lake water level records and simulating floods with frequencies of 2, 5, 10, 25, 50, and 100 years

Analysis of further data shall be completed by the Department. CCC will provide all Parties with the input data sets used in the modeling for the December 2002 Seymour Lake Dam Hydrology and Hydraulics Report and January 2003 Supplement (Exhibits C-13 and C-15).

5. The applicant will not be required to install recording devices pursuant to condition F that require telemetry.

6. The Parties have made compromises on specific issues to reach this Stipulation. The Parties agree that this Stipulation relates only to these Parties.

7. The Parties agree that should the Board fail to approve this Stipulation in its entirety, the Parties' agreements set forth herein shall terminate and the Parties' agreements in this Stipulation shall not be construed by any party or tribunal as having precedential impact on any testimony or positions advanced in these proceedings.

Dated this 2nd day of April, 2003, at Montpelier, Vermont.

State of Vermont
Agency of Natural Resources

BY: _____
Warren T. Coleman
Environmental Litigation Attorney

Seymour Lake Association

BY: _____
Gregory Howe, Esq.

Citizens Communication Company

BY: _____
Barbara Ripley, Esq., PhD.

F. Monitoring Plan for Water Level and Flow Management at Echo and Seymour Lakes. The applicant shall record the levels of Echo lake daily during high flow events, including spring runoff, and weekly during extended dry periods, and at Seymour lake on a daily basis, to determine if water level conditions consistent with the design projections are occurring. Data reports, in a form acceptable to the Department, for each calendar year shall be filed for the periods of June 16 to September 15 and September 16 to June 15 respectively, no later than the last day of the month for each reporting period. The Department may require changes to the data collection frequency and may suspend data collection once a sufficient record is available. At Seymour, data shall be collected both at the dam (headwater and tailwater) and at the lake so that the difference in water surface elevation between points can be determined over a range of flows, and in addition the crest elevation shall be recorded. Should gate operation be approved pursuant to Condition H below, the applicant shall also record gate setting data. If requested, data reports for Seymour Lake shall also be filed with the Seymour Lake Association.

H. Replacement of Seymour Lake Dam. Prior to the replacement of Seymour Lake Dam, the applicant shall develop, in consultation with the Department and the Seymour Lake Association, plans for the replacement structure. Final plans, along with a hydrology/hydraulics design brief, shall be submitted to the Department at least 90 days prior to the commencement of construction and shall be subject to Department review and approval with copies to the Seymour Lake Association. The final plans shall include design of the gate, frame, stem and wheel needed to operate the gate, should it be determined to be necessary. The hydraulic performance of the proposed structure shall be supported at a minimum by spillway and gate rating curves and an updated reservoir routing analysis to define the high flow lake stages with the existing and proposed dams, using the new tailwater rating curve and the updated upstream water surface relationship and analyzing appropriate events selected from the 1986-to-present lake water level records and simulating floods with frequencies of 2, 5,10, 25, 50, and 100 years.

The design shall include a feature that provides the ability to permanently adjust the crest elevation based on post-construction experience. The crest shall initially be set at an elevation that would achieve a normal summer lake level of elevation 1278.86 feet msl, based on the refined analysis. The design shall also include a gate bay to enable future operation of the gate if the Department determines that the modified dam has significantly increased the magnitude, frequency, or duration of shoreline flooding, and this impact cannot be reasonably abated. However, the gate operator shall not be installed and the gate shall not be operated in any way without prior approval by the Department.

The need for gate operation, if any, shall be determined after an initial period of two calendar years of data collection as provided in Condition F above. The two-year period will be an ongoing evaluation process. If, based on the data collected at anytime during the two-year period, the Department determines that there has been a significant adverse impact on the water levels the Department can require the operator to be installed at any time. The applicant shall schedule annual meetings in July, if requested by any party, and October of the first two calendar years (e.g. 2005 and 2006, if dam is constructed in 2004) following reconstruction of the dam and include the Seymour Lake Association and the Department.

If approval is granted and a gate operator is installed, the applicant shall draft a gate management guide, subject to Department approval, detailing the manner and circumstances under which the gate would be operated and providing for ramping if determined by the Department to be necessary to protect downstream habitat and channel integrity.

After sufficient monitoring, the permanent crest elevation shall be set so as to result in the normal summer lake level remaining at elevation 1278.86 feet msl, with any crest adjustments subject to the Department's prior review and approval.

In any event, the Department shall retain the authority to require, based on an evaluation of any data collected by the applicant, or any other available data, initiation or suspension of gate operation, modification of the gate management guide, or any other modification of the structure or operation of the dam.

47. Under the current license, the applicant maintains the existing slide gate open at least one inch to provide for continuous downstream flows. With the lake level at the dam crest, this results in an estimated flow release of 4 cfs. The Department had requested that the new dam design not incorporate a gate and that consideration be given to providing an alternate method for providing downstream conservation flows.

60. A January 2002 analysis done for Seymour Dam by Duke Engineering & Services suggested that the earlier study may have had deficiencies. Two significant factors in the outlet flood hydraulics of Seymour Lake are the effects of downstream tailwater on the dam and the existence of a water level differential between the lake and the dam. These two conditions are not factors at Echo Lake. At Seymour Dam, the dam crest is only about 4.5 feet above the downstream streambed. As a consequence, the dam crest becomes submerged on the downstream side during highwater conditions. By letter dated January 6, 1999, the Department has asked the applicant to identify the significance of submergence. The 1,200-foot stream channel between the lake and the dam also affects lake water levels. These two factors were taken into account in the applicant's January 2002 analysis.

63. A preliminary dam design done by Duke Engineering lengthens the dam crest from the current 30.6 feet to 52.0 feet. Combined with the lowering of the crest by four inches, the new design substantially increases the spillway capacity. The design also incorporates a bulkhead bay with a five-foot width equivalent to the existing gate bay. The sill elevation for the bulkhead bay was 1275.0 feel msl, or 0.3 feet lower than the existing gate sill. Although the basis of the design is to only discharge water via the spillway (crest controlled run-of-river operation), excepting for the 4 cfs conservation flow, pursuant to a stipulated agreement between the applicant, the Department, and the Seymour Lake Association, discussed below in Finding 256, the design will be revised to include a gate.

255. The Department was unable to locate any data or information on the flood history of Seymour Lake preceding the alteration of its natural outlet. The Seymour Lake Association (SLA) and the Town of Morgan had expressed an interest in the incorporation of a gate in the new dam in order to increase the dam's hydraulic capacity during severe flood events. Operation of the gate would, however, counter the effort to provide for a naturally varying lake level in Seymour Lake and would potentially cause flooding and disruption of habitat below the dam and possibly even effect Echo Lake. It would also create the potential for Seymour Lake to be drawn below down SLA's target elevation and even the low pin. As a result of the January 2002 analysis discussed in Finding 60 above, the Department requested that the applicant collect site-specific data to calibrate the hydraulic model primarily with respect to the tailwater rating and the water surface profile from the lake to the dam. The resulting analysis

suggested that an operable gate is not necessary to reduce high lake stages. Nevertheless, because of the significance of the issue to SLA, the Department has included a condition that sets forth monitoring requirements and a consultation process between the applicant, the Department, and SLA to assess the performance of the new dam and to verify the conclusions of the current analysis.

256. The current design proposal for the dam reconstruction includes a bulkhead bay, 5.0 feet wide with a sill elevation of 1275.00 feet msl. Pursuant to a stipulated agreement between the applicant, the Department, and SLA, the design will be revised to include a gate but the frame, stem and wheel will not be installed and the gate will not be operated for at least the two year period following construction of the new dam. The Department does, however, believe it is prudent to initially incorporate the non-operable gate in the new dam and consider operation of the gate should future monitoring and analysis indicate that it is necessary to prevent excessive lake levels. If it is determined that a gate must be used periodically to prevent significant flooding, the gate manipulation shall be limited to use for this purpose only.

STATE OF VERMONT

WATER QUALITY CERTIFICATION

CLYDE RIVER HYDROELECTRIC PROJECT

Vermont Agency of Natural Resources
Department of Environmental Conservation
Waterbury, Vermont
August 1, 2002

high pin, which frequently occurs in the spring but rarely in the summer.

251. Although originally it was the applicant's intent to only lower the dam crest and modify the gate, full replacement of the structure is now planned, and an engineering company has been retained to develop design plans. The licensing proposal is to construct a dam that will accommodate passive control over lake levels. This would involve providing sufficient spillway capacity to avoid the incorporation of a gate structure. Current plans are to both lengthen (from the current 30.6 feet to about 52 feet) and lower the dam crest by four inches (to elevation 1278.67 feet msl).

252. The applicant's proposal results in conditions closer to natural conditions for Seymour Lake. Aquatic habitat and use by wildlife will be protected by the institution of crest controlled run-of-river conditions and resulting stable water levels. High inflows to the lake would continue to cause it to rise, but the dam design is intended to maintain high levels that mimic natural conditions.

253. The Seymour Lake Association and the Town of Morgan have expressed an interest in maintaining the lake level 6-8 inches above the low pin during most flow conditions. The Public Service Commission had determined that the natural low level of the lake was at the low pin elevation. The dam crest could be lowered an additional four inches in order to further reduce the incidence of the lake rising above the high pin, but this would result in summer levels falling below the goal set by the lake association. The applicant's past practice has been to maintain the lake at a level averaging about 1.7 inches below the dam crest (elevation 1278.86 feet msl, or 6.3 inches above the low pin); the lake association request is fairly consistent with past operation. The average summer gate setting is five inches.

254. The Department has estimated that the average July/August inflow to Seymour Lake is about 17 cfs[26]. Subtracting the 4 cfs minimum flow and assuming a crest length of 52 feet and a water surface

---

[26]This value is similar to the Department's estimation of 18 cfs for the average flow release at the dam for the June - mid-September period based on the data contained in Table 2.

State of Vermont
WATER RESOURCES BOARD

RE: Clyde River Hydroelectric Project
Docket Nos. WQ-02-08(A) and (B) (Consolidated)

AMENDED WATER QUALITY CERTIFICATE: FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

This decision pertains to an application for a Section 401 Water Quality Certificate (Certificate) from the State of Vermont filed by Citizens Communications Company (Citizens or Applicant) in conjunction with its request for relicensure by the Federal Energy Regulatory Commission (FERC) of the Clyde River Hydroelectric Project (Project). The Applicant filed its application with the Department of Environmental Conservation (Department), Vermont Agency of Natural Resources (ANR) on January 24, 2002, and was granted a Certificate by the Secretary of ANR on August 1, 2002, pursuant to 10 V.S.A. § 1004 (Secretary's Action). This Certificate was timely appealed to the Water Resources Board (Board), which conducted a *de novo* contested case hearing with respect to the issues raised on appeal.

In order to obtain a Certificate, the Applicant was required to show that its Project complies with the Vermont Water Quality Standards (VWQS) and other state law provisions applicable under § 401 of the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.*, commonly known as the Clean Water Act (CWA). As explained more fully below, the Board concludes that there is sufficient credible evidence in the record before the Board upon which to find that the Project, as proposed by the Applicant and conditioned by the Secretary of ANR, is largely in compliance with the VWQS and other applicable law. However, the Board concludes that certain Findings and Conditions imposed by the Secretary of ANR and identified by the Appellants, must be modified to ensure that compliance with the VWQS and other applicable state law will be achieved during the period of the license with respect to the operation of the Newport 1, 2, 3 facilities and the Seymour Lake Dam. Accordingly, the Board grants the Applicant's request for a Certificate, but modifies the Secretary's Action in part, by amending certain Conditions to reflect the Board's own Findings of Fact and Conclusions of Law (Amended Certificate).

I. PROCEDURAL HISTORY AND JURISDICTIONAL STATEMENT

The parties to this appeal are the Applicant, ANR, and two sets of Appellants, the Seymour Lake Association (SLA) and the Vermont Natural Resources Council (VNRC) joined by the Northeast Kingdom Chapter of Trout Unlimited (NEKTU).

The Project is an existing hydroelectric facility on the Clyde River, a water body within the boundaries of the State of Vermont, subject to the Secretary of ANR's jurisdiction and protection under the CWA and 10 V.S.A. § 1004. The Secretary of ANR issued a Certificate to the Applicant on August 1, 2002. On August 15, 2003, timely appeals were filed by SLA and

points can be determined over a range of flows, and in addition the crest elevation shall be recorded. Should gate operation be approved pursuant to Condition H below, the Applicant shall also record gate setting data. If requested, data reports for Seymour Lake shall also be filed with the Seymour Lake Association.

....

H. **Replacement of Seymour Lake Dam.** Prior to the replacement of the Seymour Lake Dam, the Applicant shall develop, in consultation with the Department and the Seymour Lake Association, plans for the replacement structure. Final plans, along with a hydrology/hydraulics design brief, shall be submitted to the Department at least 90 days prior to the commencement of construction and shall be subject to Department review and approval with copies to the Seymour Lake Association. The final plans shall include design of the gate, frame, stem and wheel needed to operate the gate, should it be determined to be necessary. The hydraulic performance of the proposed structure shall be supported at a minimum by spillway and gate rating curves and an updated reservoir routing analysis to define the high flow lake stages with the existing and proposed dams, using the new tailwater rating curve and the updated upstream water surface relationship and analyzing appropriate events selected from the 1986-to-present lake water level records and simulating floods with frequencies of 2, 5, 10, 25, 50, and 100 years.

The design shall include a feature that provides the ability to permanently adjust the crest elevation based on post-construction experience. The crest shall initially be set at an elevation tat would achieve a normal summer lake level of elevation 1278.86 feet msl, based on the refined analysis. The design shall also include a gate bay to enable future operation of the gate if the Department determines that the modified dam has significantly increased the magnitude, frequency, or duration of shoreline flooding, and this impact cannot be reasonably abated. However, the gate operator shall not be installed and the gate shall not be operated in any way without prior approval by the Department.

The need for gate operation, if any, shall be determined after an initial period of two calendar years of data collection as provided in Condition F above. The two-year period will be an ongoing evaluation process. If, based on the data collected at any time during the two-year period, the Department determines that there has been a significant adverse impact on the water levels, the Department can require the operator to be installed at any time. The Applicant shall schedule annual meetings in July, if requested by any party, and October of the first two calendar years (e.g. 2005 and 2006, if dam is constructed in 2004) following reconstruction of the dame and include the Seymour Lake Association and the Department.

If approval is granted and a gate operator is installed, the Applicant shall draft a gate

management guide, subject to Department approval, detailing the manner and circumstances under which the gate would be operated and providing for ramping if determined by the Department to be necessary to protect downstream habitat and channel integrity.

After sufficient monitoring, the permanent crest elevation shall be set so as to result in the normal summer lake level remaining at elevation 1278.86 feet msl, with any crest adjustments subject to the Department's prior review and approval.

In any event, the Department shall retain the authority to require, based on an evaluation of any data collected by the Applicant, or any other available data, initiation or suspension of gate operation, modification of the gate management guide, or any other modification of the structure or operation of the dam.

....

L. **Upstream Fish Passage at Newport Facility.** Within two years of license issuance, the Applicant shall design, construct, and initiate the operation of a fish trap-and-truck facility at Newport 1, 2, 3. Applicant responsibility for maintenance and operation of the facility shall continue for the term of the license.

An upstream fish passage plan shall be developed by the Applicant in consultation with the Department, the Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service and shall be submitted to the Department at least 180 days prior to the commencement of construction. The plan shall be subject to Department review and approval. The Department shall provide notice to the public of receipt of the upstream fish passage plan and provide an opportunity for public comment prior to approval of such a plan. This plan shall include:

1) Design and construction plans and specifications;
2) Plans for operation and maintenance;
3) Provisions to minimize injury of fish;
4) Provisions to minimize undue delay in moving fish upstream; and
5) Provisions to convey fish safely and effectively upstream, without undue injury of fish or delay in transport.
6) A copy of any proposed contract between the Applicant and any third party for the trapping and transport of fish. A copy of any finally executed contract shall be filed with the Department.

The upstream fish passage facility shall be operated 24 hours per day, April 1 - May 21 and September 1 - December 15, with the period subject to adjustment based on knowledge gained about migration periods for migratory salmonids.

Secretary of ANR to assure Project implementation and compliance with the Certificate issued on August 1, 2002, as amended herein. The Department may add and alter the terms and conditions of this amended Certificate, when authorized by law and as appropriate to carry out its responsibilities with respect to the protection and enhancement of water quality during the license period.

Dated at Montpelier, Vermont, this 11th day of July, 2003.

WATER RESOURCES BOARD
By its Chair

/s/ David J. Blythe

David J. Blythe

Concurring:
John D.E. Roberts
Mardee Sánchez

DISSENTING OPINION, Jane Potvin and Lawrence H. Bruce, Jr.

We respectfully dissent from the Board's decision.

We do not believe that Citizens has met its burden of proof. Like the applicant in the Lamoille proceeding, Citizens must demonstrate that its proposal will comply with each of the applicable provisions within the VWQS for each of the segments of river influenced by project facilities under appeal. In re: Lamoille River Hydroelectric Project, Docket Nos. WQ-94-03 and WQ-94-05, Findings of Fact, Conclusions of Law and Order at 49 (Nov. 5, 1996).

20031121-3006 Issued by FERC OSEC 11/21/2003 in Docket#: P-2306-008

UNITED STATES OF AMERICA 105 FERC ¶ 62,119
FEDERAL ENERGY REGULATORY COMMISSION

Citizens Utilities Company Project Nos. 2306-008 and -024

ORDER ISSUING NEW LICENSE

(Issued November 21, 2003)

1. On December 23, 1991, Citizens Utilities Company (Citizens) filed an application for a new license pursuant to Sections 4(e) and 15 of the Federal Power Act (FPA)[1] to continue to operate and maintain the existing Clyde River Hydroelectric Project No. 2306, located on the Clyde River near Newport, Orleans County, Vermont.[2] As relicensed, the 4.80 megawatt (MW) project would generate an average of approximately 20.0 gigawatt hours (GWh) of energy annually. This order issues a new license for the project.

BACKGROUND

2. Public notice of Citizens' application was issued,[3] seeking comments, protests, and motions to intervene. Timely motions to intervene were filed by the Vermont Agency for Natural Resources (Vermont), Vermont Natural Resources Council (VNRC), American Whitewater Affiliation (AWA), U.S. Department of the Interior (Interior), U.S. Environmental Protection Agency (EPA), and jointly by Trout Unlimited (TU), Vermont Council of Trout Unlimited, and Northeast Kingdom Chapter of Trout Unlimited (Vermont TU). On January 10, 2001, the Commission issued a notice granting a motion for late intervention by Barton Village, Inc.

---

[1] 16 U.S.C. §§ 797(e) and 808.

[2] The original license for the Clyde River Project was issued on November 6, 1963, for a term expiring December 31, 1993. 30 FPC 1213, reh'g denied, 30 FPC 1437 (1963). The Clyde River is a navigable waterway of the United States. 23 FPC 233 at 242 (1959). Therefore, Section 23(b) of the FPA, 16 U.S.C. § 817(1), requires the project to be licensed. The project currently operates pursuant to a notice of authorization for continued operation. See 66 FERC ¶ 61,145.

[3] 57 Fed. Reg. 60182 (December 18, 1992).

interest standards of sections 4(e) and 10(a) of the FPA. In the draft EIS, staff concluded that resource agency recommendations for: (1) a West Charleston Development minimum flow; (2) a minimum flow in the Newport Nos. 1, 2, 3 bypass; (3) a minimum flow below the Newport Nos. 1, 2, 3 Development; (4) Clyde Pond water levels; (5) removal of the abandoned mill dam in the Newport Nos. 1,2,3 bypass; (6) a channel restoration plan for vegetative removal; and (7) ramping procedures, were inconsistent with Part I of the FPA. Commission staff concluded that there was no evidence that these measures would provide environmental benefits commensurate with their costs, and that the alternative measures Commission staff recommended would adequately protect fish and wildlife.

33. The Section 10(j) letters advising FWS and Vermont of the staff's preliminary determinations were issued on November 1, 1995. The letter offered a meeting or a conference call to attempt to resolve the disagreements. Interior did not respond. Vermont sent a letter dated December 14, 1995, which discussed the issues further and indicated that a meeting was not needed. Instead, Vermont included its original 10(j) recommendations or modifications that they considered appropriate as conditions of its water quality certification. Vermont's water quality certification conditions are included in the Appendix attached to this order.

WATER QUALITY CERTIFICATION

34. Under Section 401(a)(1) of the Federal Water Pollution Control Act (the Clean Water Act), 33 U.S.C. § 1341(a)(1), the Commission may not issue a license for a hydroelectric project unless the state certifying agency has either issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable time, not to exceed one year.[14]

35. On December 20, 1991, Citizens filed an application for water quality certification from Vermont. The application was withdrawn and refiled on October 5, 1992, July 7, 1993, and May 5, 1994. On July 8, 1994, Vermont denied the application for certification. Citizens filed an appeal on July 22, 1994 and again filed an application on August 30, 1996. Citizens withdrew the application on July 2, 1997 and simultaneously

---

[14]Section 401(a) requires an applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters to obtain from the state in which the discharge originates certification that any such discharge will comply with applicable state water quality standards.

reapplied for certification, an annual cycle that was repeated until 2002 when Vermont issued water quality certification on August 1.

36. On August 15, 2002, certification was appealed to the Vermont Water Resources Board (Water Board) by the Seymour Lake Association and jointly by the VNRC and Vermont TU. After a *de novo* contested case hearing with respect to the issues raised on appeal, the Water Board issued an amended water quality certification on July 11, 2003. Consistent with Commission policy for mandatory license conditions, Vermont's conditions of the amended water quality certification are set for verbatim in the Appendix to this order and are made part of the license by ordering paragraph (D).

37. In addition to standard conditions and reservations of authority to Vermont, the water quality certification includes provisions requiring Citizens to: (1) operate the Newport Nos. 1, 2, 3 development according to specified reservoir water level management schedule and a minimum bypass flow of 30 cubic feet per second (cfs); (2) operate the Seymour Lake dam in a run-of-river mode with a minimum flow of 4 cfs; (3) store up to 10 percent of inflows as needed to restore water levels after an approved maintenance drawdown; (4) file a flow management plan detailing project operations necessary to comply with minimum flow and impoundment fluctuation limits; (5) develop a plan for continuous monitoring and reporting of flow releases, pond levels, and inflows at the West Charleston and Newport developments; (6) provide turbine rating curves; (7) develop plans for replacement of Seymour Lake dam; (8) develop plans for replacement of the West Charleston penstock; (9) modify or replace two culverts to provide access to spawning habitat by rainbow smelt; (10) consult with Vermont with respect to trashrack design at the West Charleston development; (11) develop a plan for the design, construction, and operation of a fish trap-and-truck facility at the Newport Nos. 1, 2, 3 development; (12) develop a plan for installation of a downstream fish passage facility at the Newport Nos. 1, 2, 3 development, including notching or removal of an abandoned dam; (13) develop a plan for disposal of debris associated with project operation; (14) file any plans for project maintenance or repair work; (15) allow public access to project land for utilization of public resources; (16) file a recreation plan; (17) design and implement erosion control measures; and (18) allow Vermont to inspect the project area at any time. I discuss some of these conditions below.

Notching of the Abandoned Dam

38. In its water quality certification, Vermont requires that the abandoned mill dam adjacent to the Newport powerhouse be notched (adding a flume, if necessary) or removed to facilitate downstream fish passage. Vermont reasoned that notching this dam would also restore some fish habitat in the bypass reach by eliminating backwater. In the

Final EIS, staff agreed with Vermont's reasoning regarding habitat restoration above the abandoned dam, but concluded that the dam should remain in place to prevent upstream migrating fish from bypassing the recommended trap-and-truck upstream passage facility adjacent to the project powerhouse and continue up into the bypass reach. Notching of the dam would cost Citizen's approximately $4,000.

39. While some upstream migrating salmon may utilize the habitat in the reach created by notching the abandoned dam, I remain concerned about fish that may become trapped in the reach because of the inability to ascend Arnolds Falls.[15] Therefore, I have included article 410 in the license requiring Citizens to consult with the FWS and Vermont, and develop a fish recovery and monitoring plan for the Newport Nos. 1, 2, 3 bypass reach. The plan should be implemented annually whenever the upstream trap-and-truck fish passage facilities are operating and should seek to recover fish that may be stranded at the base of Arnolds Falls or Newport dam. If after 5 years of monitoring, Citizens finds that few, if any, fish are attempting to ascend Arnolds Falls, it may file, for Commission approval, a request to cease implementation of the plan.

Newport Nos. 1, 2, 3 Minimum Bypass Flows

40. Vermont requires that Citizens release a minimum flow of 30 cfs into the Newport Nos. 1, 2, 3 bypass reach. Citizens did not propose a minimum flow for this reach. In the Final EIS, staff analyzed the potential for sustainable fish habitat in this reach and concluded that the reach did not provide the contiguous habitat necessary for rearing or spawning due to the presence of Arnolds Falls and the backwater effects of the abandoned mill dam. Therefore, staff recommended a minimum flow of 5 cfs to maintain water quality in the reach. However, as stated previously, staff also concluded that, if the abandoned mill dam were removed or altered, the reach of river below Arnolds Falls could provide some fish habitat.

41. Vermont altered its Newport Nos. 1, 2, 3 minimum flow regime recommendation considerably since its original 10(j) recommendation[16] and I note that Vermont's

---

[15] Arnolds Falls is located further upstream of the abandoned dam, approximately half-way up the 1,600 foot bypass reach.

[16] In its 10(j) filing, Vermont recommended that Citizens release a continuous minimum flow to the Newport Nos. 1, 2, 3 bypass equal to the lesser of inflow to Clyde Pond or 150 cfs from April 1 through June 15, 120 cfs from September 15 through

minimum flow of 30 cfs in its water quality certification would cost Citizens approximately $123,000 less annually than its original 10(j) recommendation. While Vermont's Newport Nos. 1, 2, 3 bypass flow regime would still result in some generation losses costing Citizens $48,000 annually relative to staff's recommended 5 cfs flow, I conclude that the added value of fish habitat resulting from notching the abandoned dam and the 30 cfs minimum bypass flow is worth the associated generation losses.

West Charleston Minimum Flows

42. Vermont requires that Citizens release a continuous instantaneous minimum flow from the dam to the West Charleston bypass reach of the lesser of inflow or 50 cfs from July 1 through September 30, and 74 cfs for the remainder of the year. In its application, Citizens' recommended flows for this reach were based on the FWS's aquatic base flow methodology.[17] Using this methodology, Citizens consulted with the United States Geological Survey (USGS) in estimating unregulated flow conditions of 46 and 67 cfs in August and February, respectively. However, Vermont did not agree with Citizens' hydrologic analysis and based its West Charleston minimum flow provisions on its own estimates. In the Final EIS, staff indicated that Citizens' and Vermont's minimum flow proposals for this reach were not appreciably different and that both proposals would provide some juvenile fish habitat, support salmon spawning, and limit the potential for fish stranding. Vermont's West Charleston minimum flow regime would cost Citizen's approximately $44,800 annually.

Flows below the Newport Nos. 1, 2, 3 Powerhouse

43. Vermont requires that Citizens release a continuous minimum flow downstream of the Newport Nos. 1, 2, 3 powerhouse equal to 363 cfs from April 1 through June 7, 100 cfs from June 8 through September 30, 120 cfs from December 16 through March 31, and run-of-river conditions from October 1 through December 15. In the Final EIS, staff agreed with all aspects of the flow regime except run-of-river operation from October 1 through December 15. However, staff noted that its October to December flow recommendation of 150 cfs closely approximates the seasonal run-of-river conditions.

December 31, 120 cfs from January 1 through March 31, and 100 cfs from June 16 through September 14.

[17] The aquatic base flow methodology uses basin-wide flow information to determine a median daily unregulated flow for February and August. The assumption behind this methodology is that, in the absence of habitat-based information, these estimates would represent flows needed to protect aquatic habitat.

Regardless of this difference, staff concluded that this flow regime would maintain aquatic habitat necessary for walleye and salmon passage and spawning and would provide potential habitat for the establishment of a steelhead fishery. Vermont's minimum flow regime would cost Citizens approximately $171,000 annually.

Clyde Pond Water Levels

44. Vermont requires that Clyde Pond be maintained with a one-foot fluctuation of the reservoir level from December 16 through July 15; a two-foot fluctuation from July 16 through September 30; and no fluctuations from October 1 through December 15. Vermont also requires that these operating ranges be measured relative to the dam crest.

45. In the Final EIS, staff suggested that restricting reservoir fluctuations to 1 foot in the spring, from April 1 to July 15, would protect walleye spawning. Vermont's two-foot fluctuation from July 16 through September 30 would afford Citizens some operational flexibility. Vermont's requirement of no Clyde Pond fluctuations in the fall is consistent with its proposed run-of-river requirement for the Newport Nos. 1, 2, 3 powerhouse necessary to protect downstream aquatic habitat. Vermont's Clyde Pond water level restrictions would cost Citizens approximately $494,000 annually.

46. I have some dam safety concerns regarding the effect of Vermont's project reservoir level restrictions. Historically, Clyde Pond has operated under a maximum operational drawdown of 11 feet 2 inches, with a maximum maintenance drawdown of an additional 6 feet. In addition, the West Charleston pond, Seymour Lake, and Echo Pond have been historically drawn down. The water quality certification limits the Clyde Pond operational drawdown to 2 feet and requires stable water elevations at the others. These limited drawdowns will decrease the ponds' storage capacity, resulting in an increase over prior years in the duration of high water-surface elevations. This may, in turn, increase the likelihood the dams' embankment will be overtopped when passing flood flows. Therefore, article 305 requires the licensee to prepare a report describing the effects of limiting Clyde Pond, West Charleston, Seymour Lake, and Echo Pond drawdowns on upstream flooding and overtopping the embankment. Article 305 also precludes Citizens from implementing the water level scenarios described for Clyde Pond, West Charleston, Seymour Lake, and Echo Pond in the water quality certification until the Division of Dam Safety and Inspection's New York Regional Engineer determines that the altered project operations have no adverse impact on project safety and issues a letter indicating such.

Fish Passage at the Newport Development

47. Vermont requires that both upstream and downstream fish passage would be provided at the Newport development. A downstream passage facility would be constructed at Newport dam to pass fish from Clyde Pond to the Newport 1, 2, 3 tailrace. In its Final EIS, staff agreed with the need for downstream fish passage and recommended a passage flow of 15 cfs to provide the necessary attraction flow. Article 412 requires this operational flow for the downstream fish passage facility and requires Commission approval of functional design drawings to ensure safe passage of fish without injury.

48. Regarding upstream fish passage, Vermont requires construction of a trap and truck facility at the Newport Nos. 1, 2, 3 powerhouse. In the Final EIS, staff agreed that a trap and truck facility was the only reasonable option to ensure upstream passage past Newport dam to Clyde Pond. Finally, Vermont would require fish passage effectiveness monitoring. I agree with this water quality provision as well to ensure that the facilities are achieving the desired objectives.

49. I conclude that upstream and downstream fish passage facilities are necessary in order to restore the Atlantic salmon fishery in the Clyde River and to make use of available upstream habitat.[18] Re-establishing this fishery will also be important to local and regional recreation and the local economy. The annual cost of all these measures, including operation and maintenance is about $42,100.

HISTORIC PROPERTIES UNDER THE NATIONAL HISTORIC PRESERVATION ACT

50. Section 106 of the National Historic Preservation Act requires the Commission to take into account the effects that a new license may have on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. As part of a new license application for this project, a cultural resources inventory was conducted by Citizens to identify existing and potential historic properties within the project area, and a number of prehistoric and historic archeological sites, and elements of the hydropower facilities, were identified. The inventory and staff's analysis also

---

[18] Staff concluded that the reach of the Clyde River above Clyde Pond includes about 80 percent of the available Atlantic salmon spawning and nursery habitat in the Clyde River.

determined that there were existing and potential future project-related adverse effects that may occur on historic properties within the project area. As a result, and in order to fulfill the requirements under Section 106, the Commission executed a Programmatic Agreement (PA) with the Advisory Council on Historic Preservation and the Vermont State Historic Preservation Officer to have Citizens file for the Commission's approval a final Cultural Resources Management Plan within one year of a license issuance for this project. Article 419 of the license requires implementation of the PA.

OTHER ISSUES

Recreation

51. To improve recreation resources in the region, article 416 of the license requires that Citizens file a recreation plan. In addition to the recreational enhancements proposed by Citizens, article 416 requires that the plan include provisions for: a canoe put-in/take-out, a picnic/day use area, and parking for 12 vehicles at the Newport Nos. 1, 2, 3 dam; grading and maintaining an existing unimproved access road to Clyde Pond; access to lands designated as nature conservation areas adjacent to Clyde Pond; interpretative signs, directional signs, and fencing for safety at project facilities; a campsite at the West Charleston Development; a Clyde River recreation pamphlet; an angler access point and canoe/boat put-in and a parking area adjacent to the tailrace at the Newport Nos. 1, 2, 3 Development; and a phone number for information on existing and future flows in the lower stretch of the Clyde River. Staff estimates that these recreational measures would cost approximately $2,500 annually. Finally, I note that Condition Q of Vermont's water quality certification would also require some recreational enhancements.

Newport No. 11 Dam Removal

52. On or about May 1, 1993, the project's Newport No. 11 dam was breached in an unusual high water event. The breach involved failure and significant erosion of the steeply sloped right embankment adjacent to the dam. On July 19, 1994 the Commission ordered Citizens to repair the dam and stabilize the adjacent river embankment.[19] However, Vermont and the VNRC opposed the repair of the dam. On July 26, 1996, the Commission approved a consensus-based plan by Citizens to stabilize the embankment

---

[19] Letter from J. Mark Robinson, Director, Division of Project Compliance and Administration, to James P. Avery, Vice President, Citizens Utility Company, dated July 19, 1994.

and remove the Newport No. 11 Dam and some associated appurtenant facilities.[20] Citizens completed dam removal and embankment stabilization and remediation in May 2000.[21]

53. In the Final EIS, staff examined the environmental effects of the Newport No. 11 dam removal.[22] Staff concluded that removal of the dam would have significant benefits to local resources and to the public. Specifically, staff concluded that dam removal would result in increases in available fish spawning and rearing habitat and would greatly benefit recreational boating and fishing. Although removal of the Newport No. 11 dam cost $253,000 in lost generation and capacity, I agree with staff that the environmental benefits outweigh these costs and will not order that the Newport No. 11 dam be rebuilt under the new license.[23] Article 307 of the license requires that Citizens file a plan for the disposition of the retired Newport No. 11 powerhouse, penstock, and intake structure.

Proposed Amendments to Existing License

54. On June 16, 1999, Citizens filed an application to amend its existing license in order to repair deteriorating concrete and seepage at the Seymour Lake dam and Echo Lake dam and to make structural modifications to enable the spillways to be used to help

---

[20] Letter from J. Mark Robinson, Director, Division of Project Compliance and Administration, to James P. Avery, Vice President, Citizens Utility Company. Vermont, FWS, the Environmental Protection Agency, the U.S. Army Corps of Engineers, TU, and VNRC all agreed with Citizens' plan for Newport No. 11 dam removal and embankment stabilization.

[21] Letter from Kevin W. Perry, Citizens Utilities to Anton J. Sidoti, Director, New York Regional Office, dated June 7, 2000.

[22] Because the issue of Newport No. 11 dam removal was unresolved at the time of final EIS preparation, the staff used as a baseline the dam as it existed in place prior to the breach, with the adjacent slope stabilized.

[23] In the Final EIS, staff also examined an alternative to remove the Newport No. 11 dam but repower the Newport No. 11 powerhouse by constructing a penstock from the Newport 1, 2, 3 tailrace to the Newport No. 11 canal. Staff did not include repowering in its preferred alternative as it concluded that repowering was not cost-effective and would limit recreational boating in the Clyde River below the Newport 1,2,3 powerhouse. I agree with staff regarding repowering the Newport No. 11 powerhouse.

regulate lake levels.[24] The application was noticed on July 19, 1999.[25] Motions to intervene were filed by Vermont, Interior, and TU. Interior and TU opposed the application.[26] Comments were filed by the Seymour Lake Association (Seymour Association), Salem Lakes Association (Salem Association), and Mr. Ronald Kolar.[27]

55. In its amendment application, Citizens proposed to modify Seymour dam by lowering the spillway four inches to facilitate run-of-river operations. This proposal is identical to the proposal set forth by Citizens in its license application.[28] For this reason, I address this issue in the context of a new license which will render Citizens' amendment application of its existing license moot (see ordering paragraph (E)).

---

[24] Citizens' proposal would lower the Echo Lake dam crest eight inches from the existing crest to 1,248.33 feet msl. The remediation work at Echo was determined to be maintenance work pursuant to the Commission's regulations at 18 C.F.R. Part 12 pertaining to dam safety that does not require a license amendment. To maintain lake levels required by the current license, Citizens installed temporary flashboards. Citizens' plans and specifications, quality control and inspection program, temporary emergency action plan, and erosion and sediment control plan for the work were approved by the Commission's Division of Dam Safety and Inspections. Letter from Daniel Mahoney, Acting Director, New York Regional Office, to Kevin Perry, Citizens Utilities, dated August 6, 1999.

[25] 64 Fed. Reg. 39,976 (July 23, 1999).

[26] Neither Interior nor TU opposes the amendment proposal on its merits. They contend that the application amounts to "piecemealing" the relicensing proceeding. I agree, therefore, I am considering Citizens' amendment request in the context of this proceeding.

[27] The Seymour Association expressed concerns with the effects of dam alterations on Seymour Lake, the Salem Association expressed concern with the effects on the downstream Salem Pond, and Ronald Kolar expressed concern regarding the spillway extending onto his personal property. Regarding the latter, article 306 requires that Citizens demonstrate that it has the necessary property rights to complete its proposed dam alterations.

[28] Citizens indicated that it filed its amendment application to coincide with planned dam repairs.

56. In the Final EIS, staff concluded that lowering the Seymour Lake dam spillway, as proposed by Citizens would not result in meaningful changes in downstream flow conditions and would reduce the weekly and daily fluctuations in flows and lake elevations. However, since issuance of the Final EIS, Vermont suggests in its water quality certification that Citizens has altered its proposal for Seymour Lake dam. Vermont indicated that, in addition to lowering the spillway, Citizens would lengthen the dam crest from 30.6 feet to 52.0 feet and modify the existing gate bay with a bulkhead with sill elevation of 1275.0 feet msl. Citizens has not filed any information with the Commission indicating a change in its original proposal for modifying Seymour dam.

57. Condition H of the water quality certification requires that Citizens develop a plan for the replacement of Seymour Lake dam. Article 306 requires that Citizens consult with Vermont, FWS, Seymour Association, and Salem Association and file a plan for Seymour Lake dam alterations with the Commission. At that time, I will address the concerns of the commenters regarding the effects on the Seymour Lake shoreline, downstream aquatic habitat, and the structural integrity of the existing dam. Article 306 also states that Citizens not initiate dam remediation until final approval by the Commission.

Other Environmental Measures

58. Based on staff recommendations in the Final EIS and/or requirements in Vermont's water quality certification, I am also including provisions for: (1) run-of-river operations and minimum flows for the Seymour Lake and Echo Pond Developments (articles 404 and 406, respectively); (2) erosion monitoring (article 405); (3) water level and flow monitoring (article 407); (4) a flow management plan (article 408); (5) monitoring fish passage effectiveness (articles 411 and 413); (6) a debris disposal plan (article 414); (7) design drawings of West Charleston proposed trashrack (article 417); (8) design drawings of modified culverts for fish passage (article 418); (9) a wildlife management plan (article 421); (10) a landscape management plan (article 422) and; (11) a plan for historical documentation of the West Charleston powerhouse (article 423).

STATE AND FEDERAL COMPREHENSIVE PLANS

59. Section 10(a)(2)(A) of the FPA[29] requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving,

---

[29] 16 U.S.C. § 803(a)(2)(A).

VERMONT

Vermont Department of Environmental Conservation
Dam Safety and Hydrology Section
103 South Main Street [phone] 802-241-3758
Waterbury, VT 05671-0511 [fax] 802-244-4516
http://www.anr.state.vt.us/dec/fed/dss.htm

Agency of Natural Resources

DISTRIBUTED ELECTRONICALLY

December 8, 2009

Ronald E. Kolar
SLA Dam and Water Level Committee
Camp Winape
792 Camp Winape Rd.
West Charleston, VT 05872

[redacted]

RE: Clyde River Hydroelectric Project – FERC Project No. 2306
Water Quality Certification
Seymour Lake Dam

Dear Mr. Kolar:

On June 26, 2009 I wrote you concerning the Department's evaluation of the impact of the new dam at Seymour Lake on peak lake levels. By email of October 23, 2009, you indicated that SLA discussed dam management at its annual meeting on July 25, 2009. This letter responds to the specific proposal you have made on behalf of SLA in your email.

Condition H of the water quality certification for the Clyde River Hydroelectric Project contains three provisions related to the replacement of Seymour Lake Dam:

1) prior approval of the new dam design by the Department based on its projected hydraulic performance under flood conditions ranging from the annual flood to the 100-year flood
2) establishment of a permanent crest elevation based on post-construction experience with the objective being to perpetuate the historic normal summer water level of elevation 1278.86 feet msl; and
3) provision of a new gate, which would only be operated if there were a determination that the new dam causes a "significant adverse impact on the water levels" relative to the dam it replaced.

After approval by the Department, the dam was reconstructed in 2004, with completion in September of that year. To offset the loss of gate capacity, the design incorporated a longer spillway. The trial crest elevation (1278.67 feet msl) was also set slightly lower than the older dam, which had a sloping crest varying from 1278.73 feet to 1279.0 feet msl. On July 5, 2007, after consultation with and approval by the Department, SLA installed a board to raise the effective crest elevation by 1.5 inches to elevation 1278.79 feet msl. The purpose of the board is to increase depths in certain shallow areas of the lake for improved access and recreation. At the Department's request, SLA provided notice of the installation of the crest board to its members in its Spring 2006 newsletter.

As explained in my June letter, the peak lake levels are now higher than they were historically. With the installation of the crest board, the normal summer lake level is also higher than the target level of

1278.86 feet msl, which corresponds to about 7/8 inch of spillage over the board. The historic normal summer water level was significantly influenced by Citizens' gate management. As discussed in Finding 48 of the water quality certification, Citizens' records indicated that the gate was open more than the minimum one-inch setting about half the time during the summer. So, despite the fact that the current effective spillway elevation (1278.79 feet msl) is lower than the old dam's average spillway elevation (about 1278.87 feet msl), the summer water levels are now higher, which is consistent with SLA's stated objectives.

The Department's interest has always been in establishing crest control "run-of-river" conditions at Seymour, which simply means no active dam management and treating the lake as a natural system after there is agreement on an appropriate crest elevation. Condition H of the water quality certification, as indicated above, provided for establishment of the permanent crest elevation after a trial period. Although SLA has stated that it is satisfied with how the dam handles high flows, SLA proposes, as set forth in your email of October 23, 2009, to remove the board annually in the fall and reinstall it in the summer after the lake level has dropped to about elevation 1279.0 feet msl (8 inches above the low pin). Adjusting the crest elevation seasonally is inconsistent with the Condition H objective of establishing a permanent crest elevation that optimizes recreation without undue impacts on flooding. Raising the crest 1.5 inch basically corresponds to a similar increase in flood elevations. Since it constitutes a fairly small difference in peak levels, the Department is willing to approve this change unless there are significant objections raised by shoreline property owners. This letter is being copied to owners that previously registered concerns with the Department. Please also provide notice through your newsletter. Then the Department will reach a final decision on the crest elevation pursuant to the water quality certification. That decision will be appealable to the Environmental Court.

In your email of October 23, 2009, you proposed on behalf of SLA that SLA be allowed to draw down Seymour Lake in anticipation of extreme rainfall events, such as a hurricane induced storm. Since the gate capacity is somewhat limited[1], you put forth an example of lowering the lake one inch per day for a week after such a rainfall event is predicted and authorization is received from the Department. The water quality certification provided for consideration of use of the gate only if there was a significant loss of hydraulic capacity with the new dam in place as designed. SLA has indicated that the dam handles high flows well.[2] If that is the case, based on Condition H, there is no need for gate operations. Further, the practicality and effectiveness of such a measure are questionable, and it is important that shoreline property owners take individual protective measures, such as removal of boats and docks, in advance of predicted floods of this nature.

By this letter, the Department determines, under Condition H, that gate operations are unnecessary. The gate operator shall not be installed.

---

[1] The stream channel below the dam has limited hydraulic capacity. High flows below the dam result in elevated tailwater conditions at the dam. Flows through the gate are a function of the gate opening and the head differential across the dam. During high flows, the drop in the water surface elevation across the dam (the "head") can be less than a foot. As a consequence, the discharge capacity of the gate becomes limited.

[2] Note that, in the case that there appeared to be significant diminished hydraulic capacity with the new dam, the April 2, 2003, stipulation between SLA, the Agency of Natural Resources, and Citizens Communications provided for a review of alternatives before consideration would be given to gate operations. SLA was to provide the Agency with information on " those properties, areas, and structures that are susceptible to flood impacts." (Stipulation, Item #3) Since capacity has not been raised as an issue, such an evaluation has not occurred.

Please notify SLA members of the proposal to permanently retain the crest board with a resulting effective crest elevation of 1278.79 feet msl, or 8.5 inches below the high pin, and ask that any comments be sent to the Department (Brian Fitzgerald at brian.fitzgerald@state.vt.us or at the above postal address) within two months of the mailing of the newsletter. Please send Mr. Fitzgerald a copy of the newsletter when available. He would also be glad to review the draft notice prior to publication if SLA wishes.

Feel free to contact me or Mr. Fitzgerald if you have any questions.

Very truly yours,

Jeffrey R. Cueto, P.E.
Chief Hydrologist

c Pete LaFlamme, Director, Water Quality Division
Susan Warren, DEC Lakes and Ponds Section
Ben Copans, DEC Basin Planning
Rob Evans, DEC Rivers Management, Floodplain Mgmt. Program
Rod Wentworth, Dept. of Fish and Wildlife
Len Gerardi, Dept. of Fish and Wildlife
Lyman McWain, SLA
James McWain, SLA
Homer Selby, SLA
William Rodgers, Great Bay
Mark Hinton, Great Bay
FERC
Nancy Kilinski
Linda Broadwater
Doug Gimler
Lee Smith
Jane and John Kipp

Agency of Natural Resources Observations and Conclusions

Seymour Lake Association goals

- Maintain lake levels between the high and low pins at all times and maintain lake levels at the historic average summer level of 6.36 inches above the low pin in the summer months or 6-8 inches above the low pin by:
  - operating the gate, and
  - removing the 1.5 in flashboard from the dam in the fall to accommodate high spring flows and replace it in late spring.

Agency of Natural Resources goals

- To establish crest control run-of-river[1] conditions at Seymour, which means no active dam management and treating the lake as a natural system after there is agreement on an appropriate crest elevation:
  - naturally varying water levels
  - minimization of adverse ecological impacts
  - operator safety

ANR's Water Level Data Observations

1. Records of the highest peaks may be missing from the data prior to 2004, since those data were based on periodic observations, while the more recent data are recorded by a data logger.

2. With the old dam and periodic observations, high stages were frequently recorded in the spring but rarely in the summer and fall. After dam reconstruction, continuous monitoring of lake stages by data logger shows that high lake stages of different magnitudes occur not only in the spring, but in the summer and fall.

3. The magnitude of water levels during high flow events does not seem to be greater than it was with the old dam and active gate management.2

4. The low frequency spring lake stages (exceedance probability ≤ 5 percent, based on frequency of high flow events at the Clyde River gage) are similar in magnitude for the old dam with active gate management and the new dam.

5. With the new dam, lake stages are generally higher than they were with the old dam and active gate management.

6. With the fixed dam crest elevation, summer lake levels stay within or above SLA target summer level. With active gate management, more than 50 percent of water level records were below it.

7. After installation of 1.5 inch flashboard, lake stages seem to be higher than they were with the new dam prior to installation of the flashboard.

---

[1] "Run-of-river" is defined differently for a natural lake, like Seymour, that has a dam on the outlet than it is for a hydroelectric impoundment on a river. In the case of a lake, it means that the lake level and downstream flows are allowed to fluctuate naturally based on inflow.

[2] The extreme flood event of April 2011 was excluded from the analysis to avoid skewness.

[redacted]

ANR's Conclusions

1. The data show that the stages of the lake are now generally higher than they were with the old dam. However, with the run-of-river system about 75 percent of water level records fall between the two pins, there is smaller dispersion and only slightly higher magnitude of peaks.

2. The benefit of removing the 1.5 inch flashboard to accommodate high spring flows is questionable, because approximately the same magnitude of high water levels are observed in pre- and post-construction periods.

3. With the old dam, summer water levels were frequently below the SLA's preferred range. Today, summer water levels stay at or above the SLA target levels. This would appear to be a more desirable condition, as the increased depth in shallow areas of the lake will improve access and benefit recreation.

4. Operating the gate to artificially manipulate the lake stage in the past did not prove to be efficient in maintaining stable lake levels or preventing the lake from staging up above the high pin in the spring.

5. The ability to regulate the lake level at Seymour is constrained by the hydraulic capacity of the stream channel below the dam, and may be limited by the capacity of the outlet channel as well.

6. 30 V.S.A. § 401 states "[t]he waters of Lake Seymour shall not by any artificial means be raised higher or drawn lower, or permitted through neglect to become lower or higher, than the maximum and minimum levels established by the board." With construction of the new dam and elimination of flow regulation, the lake levels are no longer artificially being raised or lowered.

7. It was acknowledged in the Water Quality Certification that with the fixed dam crest "high inflows to the lake would continue to cause it to rise, but the dam design is intended to maintain high levels that mimic natural conditions." This finding was not contested in the appeal and the lake is functioning as a natural system, i.e., the water level rises with high inflows.

8. Condition H of the Water Quality Certification states that the implementation of a gate can be considered in case a new structure significantly increases "the magnitude, frequency or duration of shoreline flooding and this impact cannot be reasonably abated." The April 2, 2003 stipulation filed with the Water Resources Board by ANR, SLA and Citizens Communications states that SLA would "provide ANR with specific information with regard to those properties, areas, and structures that are susceptible to flood impacts." This information has not been provided to ANR.

9. The Archeological Shoreline Reconnaissance report prepared by The Lewis Berger Group (May 24, 2010) indicates there is only one area of active erosion and some parts of the shore line are geologically sensitive. This suggests that shoreline erosion is not a significant problem, but further investigation is needed before a conclusion that water level regulation is needed to abate erosion or other impacts. Other alternatives, such as establishing shoreline buffers, must be tried first.

10. Treating the lake as a natural system will provide water quality and aquatic habitat and recreational benefits, with consequent benefits for property values and recreational opportunities.

VERMONT

Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522
www.watershedmanagement.vt.gov

Agency of Natural Resources

[phone] 802.490.6153

DISTRIBUTED ELECTRONICALLY

May 24, 2013

Mr. Timothy Buzzell
16 Methodist Hill Road
Plainfield, NH 03781

[redacted]

RE: Seymour Lake Dam

Dear Mr. Buzzell:

I am responding to your letter of March 20, 2013 regarding operation of the Seymour Lake Dam and seasonal surface water level concerns on Seymour Lake. In that letter, you reiterated the Seymour Lake Association's (SLA's) contention that springtime lake water levels have been higher since the dam was replaced and gate operation was curtailed. You cite three issues that are of particular concern to SLA members: possible overtopping of the dam that could erode an unarmored berm, high groundwater levels compromising septic systems and exacerbated shoreline erosion. You also propose a "pilot study" that would involve changing the gate setting in the fall of 2013 to discharge 20 cfs (from its current setting of 4 cfs), monitoring lake levels and evaluating the results in 2014.

The question of whether water levels are higher since the dam was replaced in 2004 has been analyzed in detail by the Agency. Our technical analysis of this issue was presented to the SLA Dam Committee at our meeting on August 20, 2012 and is summarized in the attached handout from that meeting.

Since the August meeting, we have again reviewed the analysis. From 1987 through 2001, the gate was operated to lower the water level 6-8 inches below the zero datum during the winter. Even with this practice, water levels exceeded the high pin (at +6 inches) 17 times. Eleven of the high water events occurred in the late winter or spring, casting doubt on the effectiveness of a winter drawdown. Looking at the most recent data after the winter drawdown ceased and the new dam was constructed and flashboard installed the majority of high water events occurred outside of the spring period (six of eleven events). This indicates that winter drawdowns did not work in the past, and moreover many high water events are not hydrologically related to winter water levels.

The proposed pilot study will not provide sufficient information to draw any new conclusions about the effect of increasing the downstream discharge during the late fall and winter. Springtime lake levels are affected by meteorological factors such as the timing and amount of rainfall and snowfall during the fall, winter and spring, and temperatures during the spring snowmelt. These factors can be highly variable from year-to-year, so a comparison of water levels following a single winter with a 20 cfs discharge would not inform a decision about future gate operation.

As you know, Condition H of the Water Quality Certification for the Clyde River Hydroelectric Project (2003) states that a gate could be installed and operated "if the Department [of Environmental Conservation] determines that the modified dam has significantly increased the magnitude, frequency, or duration of shoreline flooding, and this impact cannot be reasonably abated." We have concluded that a significant increase has not occurred and installation and operation of a gate is not warranted.

That said, the three concerns raised by the SLA merited further attention. Regarding the concerns about dam safety, we have discussed this issue with both the State Dam Safety Engineer and the dam owner, Great Bay Hydro. The dam

is under Federal Energy Regulatory Commission (FERC) jurisdiction and is periodically inspected by that agency. The next inspection is planned for this year. We will have Agency staff attend the inspection to raise this issue and pass along your recommendation that a professional engineer investigate it further.

On the matter of shoreline erosion, Lakes and Ponds Program Manager Susan Warren and Watershed Coordinator Ben Copans conducted a site visit of the lakeshore with members of the Dam Committee on October 2, 2012. The purpose was to assess shoreline erosion and other issues relative to the effects of high water levels, and the group visited several shoreline locations experiencing erosion.

The observed erosion sites were all relatively minor in scale. Some of the erosion is probably the result of the extensive spring flooding of 2011, which was a very low frequency (1 percent probability) event. Nonetheless, it appears that the erosion is caused primarily by the lack of woody vegetation and the presence of grass or lawn as the dominant vegetation. This type of erosion, undermined sod, is very common along lakeshores where a lawn has been established down to the water's edge. A mix of woody vegetation can hold the soil and bank in place significantly more effectively than grass, and can withstand the impacts of fluctuating water levels. Often even a shrubby strip along the bank, or up to the point of expected high water, provides adequate protection from bank erosion. There are other significant advantages of woody vegetation along the shore as well, including runoff treatment and infiltration, enhancement of shallow water fish habitat, and scenery. We would be pleased to continue our ongoing work with the SLA and individual property owners to help them address the lack of woody shoreline vegetation as a way to stem further erosion and improve water quality. This approach would improve shoreline stability during all high water events, including those that occur during the summer and during spring floods such as those experienced in 2011.

Relative to the impacts of water levels on wastewater disposal systems, inundation of onsite wastewater systems occurring on a regular basis and for extended duration could be an issue that warrants further examination. Depending on periods of residence occupancy and the coincidence with inundation (i.e., seasonal vs. year-round homes), such systems may be considered failing. During the October 2 site visit, there was a boat tour of the shoreline. Dam Committee members pointed out three low-lying areas of houses and camps, with approximately 40 residences that flood occasionally, most recently during the prolonged high water of the spring of 2011. Specific information on the number and location of systems of concern is needed to be able to estimate the nutrient impact on the lake and begin addressing septic failures. Surface elevations for specific systems can be used in conjunction with frequency of high water elevations to determine the scope of the issue and estimate contaminant contribution to Seymour Lake. While the flooding of 2011 is still fresh in everyone's minds, the general infrequency of a low probability event like this may not represent a major concern to the integrity of septic systems, nor could it have been mitigated by any type of dam operation.

I realize that the Dam Committee is receiving a lot of pressure from SLA members to institute some form of more active dam operation. However we conclude that the data, field observations, and our analyses indicate that manipulation of downstream flow and the lake level would not be effective in addressing your stated concerns, and could in fact have other unintended and deleterious effects on overall water quality.

Please contact me if you would like to discuss these issues in more detail.

Sincerely,

Peter LaFlamme, Director
Watershed Management Division

Attachment

Cc: William C. Rodgers, Great Bay Hydro