

FEDERAL EMERGENCY MANAGEMENT AGENCY

**VERMONT AGENCY OF NATURAL RESOURCES
FISH AND WILDLIFE DEPARTMENT
FIRST APPEAL OF THE DENIAL OF \$4,435,543 (FEDERAL SHARE \$3,991,988)
DISASTER NUMBER FEMA-4022-DR-VT**

**MEMORANDUM IN SUPPORT OF THE APPEAL
AND PROJECT WORKSHEET # 02738
REQUEST FOR SCOPE CHANGE FOR THE ROXBURY FISH HATCHERY**

I. INTRODUCTION

For the sake of clarity and brevity, a Statement of Facts, Exhibit List and Exhibits are attached and incorporated into this Memorandum.

In August-September of 2011, Tropical Storm Irene destroyed the fish culture pond system at the Roxbury Fish Culture Station (Hatchery) in Roxbury, Vermont. The Hatchery is a vital part of the economy, recreation and tourism of the State. It is the oldest fish culture facility in Vermont, dating back to 1891. The Vermont Fish and Wildlife Department (Department) subsequently applied for, and received, FEMA approval for the architecture and engineering project worksheet (PW) for reconstruction of the destroyed Hatchery. The scope of work for Project Worksheet #02738 set the design costs for architecture and engineering at \$359,035. FEMA substantially funded these design costs. Exhibit (Exh.) 1. After consulting with architect HDR, Inc., the Department submitted a Public Assistance program grant application to FEMA containing a preliminary estimate for construction costs to replace the Hatchery at \$2,385,000. On January 30, 2013, the Department submitted a scope change request (SCR) for the reconstruction of the Roxbury Hatchery with reconstruction costs totaling \$4,435,543 to FEMA. On February 1, FEMA's Public Assistance Officer forwarded the request to FEMA. Exh. 2-1 to 2-3.

On March 17, 2014, FEMA unjustifiably denied the reimbursement for repair and replacement of the Roxbury Hatchery reversing the course of several years of consultation and correspondence with the State of Vermont in a Denial Letter and Determination Analysis. Exh. 3-1 to 3-3. FEMA claims that the federal Clean Water Act (CWA) standards and the Vermont Water Pollution Control Act which require the proposed Roxbury Hatchery to be upgraded are not “codes and standards” under the agency’s regulations, are unreasonable, and were not uniformly applied, enforced, in writing, and formally-adopted at the time of Tropical Storm Irene.

FEMA’s position represents a fundamental misunderstanding of the implementation and application of the federal CWA, a federal law which has been administered and enforced by both the United States Environmental Protection Agency (EPA) and the State of Vermont for more than 40 years. Further, FEMA’s interpretation of its regulations and policies essentially forecloses reimbursement for legitimate replacement projects that are required by federal and state law to protect state and federal waters. FEMA’s approach is out of step with well-established, consistently-applied, site-specific environmental laws, such as the effluent treatment standards and technologies under the federal CWA and the Vermont Water Quality Standards (VWQS). Finally, the denial by FEMA Region 1 leaves out key facts and portions of FEMA regulations which, when considered objectively, support the approval of the Department’s application for Public Assistance.

II. THE ECONOMIC IMPORTANCE OF THE ROXBURY FISH HATCHERY

The Roxbury Fish Hatchery is critically important to the economy of the State of Vermont. Working with the U.S. Fish and Wildlife Service and employing the USFWS’s

modeling data, the Department has demonstrated to FEMA, at FEMA's request, that the net economic value of the Roxbury Fish Hatchery is \$2.4 million dollars annually. *See*, Exh. 4-1 to 4-7. USFWS estimated the average net economic value of trout fishing as \$29/day for resident anglers in the State of Vermont in 2006; using the consumer price index, the value is currently \$32/day. Further data from neighboring states indicates that out-of-state anglers spend even more money to visit Vermont to fish its waterways. Exh. 4.4, Table 5, Page 10. In 2009, before Tropical Storm Irene, 75,000 residents and 33,000 nonresidents fished in the State of Vermont's waters each year. Respondents to a survey conducted at the time by Cornell University further indicated that 91% of Vermont residents used the fishing licenses they purchased from the Department. Nonresident numbers were higher, with 97% using their licenses. Respondents who had fished Vermont's waters in the three years prior to the survey listed brook trout and rainbow trout as among their preferred species, both of which were species raised at the Roxbury Hatchery. Exh. 4-3, Executive Summary Pages ii-iii. The Roxbury Hatchery was an integral component of the Vermont fish stocking program. Exh. 4-2. Fish production at Roxbury was an important source of ecotourism revenue which has since been lost because of the delays associated with funding the Roxbury Fish Culture Station.

III. ELIGIBILITY FOR REPAIR AND REPLACEMENT UNDER THE STAFFORD ACT

Pursuant to 42 U.S.C.A. § 5189 (a), the Department has the right to appeal the March 17 FEMA Region 1 denial of its application for Public Assistance funding for restoration of the Roxbury Fish Culture Station. "Any decision regarding eligibility for, from, or the amount of assistance under this subchapter may be appealed within 60 days after the date on which the applicant for such assistance is notified of the award or denial of award of such assistance."

FEMA is obligated to reply to the appeal within 90 days of receiving it. 42 U.S.C.A. § 5189 (b). The Department has filed a timely appeal.

The Roxbury Hatchery is eligible for replacement under the “50% Rule” codified in 44 C.F.R. § 206.226(f). The facility is a “public facility” as it includes “public buildings, structures and systems,” and is used for “recreational purposes.” 44 C.F.R. § 206.226 (h). Further, the project as designed meets FEMA’s “codes, specifications or standards” requirement under 44 C.F.R. § 206.221 (i) and 44 C.F.R. § 206.222 (d). FEMA’s denial of the Roxbury Hatchery scope change request (SCR) is legally and factually incorrect and violates the plain language of FEMA’s own regulations, the federal CWA, and the Vermont laws that implement the CWA.

In accordance with 40 C.F.R. § 206.226(d), in order to be eligible for reimbursement the costs of “repair or replacement standards which change the pre-disaster construction” of a facility must:

- (1) Apply to the type of repair or restoration required (standards may be different for new construction and repair work);
- (2) Be appropriate to the pre-disaster use of the facility;
- (3) (i) Be found reasonable, in writing, and formally adopted and implemented by the State or local government on or before the disaster declaration date or be a legal Federal requirement applicable to the type of restoration.

(ii) This paragraph (d) applies to local governments on January 1, 1999 and to States on January 1, 2000. Until the respective applicability dates, the standards must be in writing and formally adopted by the applicant prior to project approval or be a legal Federal or State requirement applicable to the type of restoration.
- (4) Apply uniformly to all similar types of facilities within the jurisdiction of owner of the facility; and
- (5) For any standard in effect at the time of a disaster, it must have been enforced during the time it was in effect.

The proposed replacement design of the Roxbury Hatchery requested by the Department is necessary to meet standards “applicable to the type of restoration,” required by state and federal law. Specifically, the effluent treatment system that was destroyed by Irene and is clearly mandated by the federal CWA and Vermont’s federally-delegated National Pollutant Discharge Elimination System (NPDES) program. These standards and legal requirements were in place more than three years before Tropical Storm Irene and were applied to other similarly-situated facilities throughout Vermont through the issuance of NPDES permits. FEMA’s denial of the proposed replacement of the Roxbury Hatchery ignores the federal EPA’s standards as well as its own regulations that recognize codes and standards. The end result of FEMA’s interpretation is that no site-specific science-based environmental standard, no matter how well-established under federal and state law, is eligible for funding under 40 C.F.R. § 206.226(d). As a matter of policy, FEMA is denying reimbursement for an environmental requirement mandated by Congress and the Vermont State Legislature.

IV. THE VERMONT WATER QUALITY STANDARDS APPLY TO THE REPAIR AND RESTORATION REQUIRED AT THE ROXBURY HATCHERY

FEMA’s application and interpretation of the codes and standards in this matter fails to recognize that compliance with the CWA and the VWQ effluent standards is mandatory and, by its very nature, requires the construction of an effluent treatment system that meets the effluent standards. In its March 17 denial, FEMA asserts that the water quality standards do not apply to the repair and restoration required at the Roxbury Hatchery. FEMA suggests that the VWQS are “different and distinct from specific engineering design upgrades or changes under a standard.” *See, Exh. 3-2.* This is a meaningless distinction. The fact of the matter is that the effluent

standards under the CWA and the VWQS are applicable to all jurisdictional facilities that discharge to state waters. These standards require sufficient effluent treatment for each facility discharge and as such, determine the level of treatment and technology required for each facility. In this case, Tropical Storm Irene destroyed the Roxbury Fish Hatchery effluent treatment system, specifically the settling ponds. Here, the Department is merely requesting reimbursement for the replacement of the effluent treatment system and facility components, in accordance with state and federal standards and legal requirements under the CWA and the Americans with Disabilities Act (ADA).

The Roxbury Fish Hatchery became subject to federal CWA jurisdiction and oversight in years 2009 and 2010, when fish production at the facility increased over previous levels. Exh. 5-5 and 5-6. A NPDES permit is required for concentrated aquatic animal production facilities which discharge fish station effluent at least 30 days a year, and produce more than 20,000 pounds of cold water fish. 40 C.F.R. § 123.25; 40 C.F.R. § 122.24 (a)(b); Appendix C (a)(1). *See*, Exh. 6.

In 2006, when the Vermont Department of Environmental Conservation (DEC) issued the final amended discharge permit #3-0362, the Hatchery was producing less than 20,000 pounds of fish. However, in 2009 the Roxbury Fish Hatchery exceeded 20,000 pounds of cold-water fish production. As a consequence, the Hatchery became subject to the requirements of the federal CWA in addition to those of the Vermont Water Pollution Control Act (10 V.S.A. Chapter 47), the Vermont Water Pollution Control Regulations (VWPCR) and the VWQS. Permit #3-0362 expired on March 31, 2011, prior to Tropical Storm Irene. Exh. 7-1. The Roxbury Fish Hatchery filed a timely renewal permit application before September 30, 2010 in accordance with 3 V.S.A. § 814. Exh. 7-2. The renewal of the permit is pending.

In accordance with the CWA, discharge permits must be renewed every five years. 33 U.S.C. § 1342(a)(3), (b)(1)(B); 40 C.F.R. § 122.46(a), (b); and 10 V.S.A. § 1263(d)(4); *see also*, *Upper Blackstone Water Pollution Abatement Dist. v. United States EPA*, 690 F.3d 9, 22 (1st Cir. 2012). “[P]ermit expiration and reissuance is an important mechanism for providing regular scrutiny of permit compliance and updating of permit conditions.” EPA, Consolidated Permit Procedures, 45 Fed. Reg. 33,280, 33,308 (May 19, 1980) (cited by Karl S. Coplan, *Of Zombie Permits and Greenwash Renewal Strategies: Ten Years of New York’s So-Called Environmental Benefit Permitting Strategy*, 22 PACE ENVTL. L. REV. 1, 7 n.42 (2005)). The review of discharges to state waters every five years is conducted to ensure that advances in scientific knowledge and technology are continually applied to existing discharges to surface waters. *In re Entergy Nuclear Vermont Yankee Discharge Permit 3-1199*, 187 Vt. 142, 989 A.2d 563, ¶ 27 (2009); *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 553 (Envtl. App. Bd. 2006); *In re Montpelier WWTF Discharge Permit*, No. 22-2-08 Vtec, at 9-10 (Vt Env. Div June 30, 2009); *see also*, Exh. 6.

The plain language of the applicable Vermont statute specifically provides that NPDES direct discharge renewal permits are subject to the same review criteria as new permits. “A renewal permit shall be issued following all determinations and procedures required for initial permit application.” 10 V.S.A. § 1263(e). Similarly, the applicable regulations state that the reissuance of a discharge permit shall ensure that “the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements.” VWPCR § 13.5 b. In addition, VWPCR § 13.4 requires the DEC to assess and apply state and federal requirements to a renewal permit, including effluent limitations, standards of performance, and any conditions or limitations necessary to meet the VWQS.

The plain language of the FEMA policy states: “Codes may contain various types of thresholds, often referred to as ‘triggers,’ which, when reached, require that upgrades work be performed in conjunction with the repair of damaged elements . . . A trigger may mandate different types of upgrades. For instance, a trigger may require that the entire structural system be upgraded or, in addition to upgrading the entire structural system (e.g., mechanical, electrical) be brought into conformance with current codes for new construction.” FEMA Disaster Assistance Policy 9527.4, Construction Codes and Standards, Feb. 05, 2008. There is no definition of the term “trigger” in the FEMA regulations. Though the policy language focuses on whether the standards trigger an upgrade, FEMA Region 1’s Denial Letter uses the term in multiple and disjointed contexts. Under FEMA regulations a public building with an outdated electrical system will require electrical rewiring to comply with current codes and standards in place at the time of a disaster. Although the State of Vermont recognized that the Roxbury Fish Hatchery was subject to more restrictive effluent standards before Tropical Storm Irene hit, it had not yet undertaken these upgrades and the facility was not in violation of its permit. As such, when the Roxbury Hatchery effluent treatment system was destroyed by Irene, it became eligible for an upgrade to comply with the requirements of state and federal law in place at the time of Irene, rather than its out-of-date, ‘grandfathered’ condition.

The discussion of the revocations and administrative orders as triggers in FEMA’s Letter and Denial is not applicable to this matter because there was no violation of the applicable VWQS and CWA standards prior to Irene or after Irene. The Department has voluntarily and responsibly reduced fish production at the Hatchery. This action has been detrimental to the State; in that the reduction in production of trout has reduced stocking rates to 40% of their former levels in small brooks and beaver ponds statewide. Exh. 4-6. Overall, production at the

Roxbury Hatchery is less than 2% of its former level, thereby reducing the effluent discharge level so as not to run afoul of state and federal law. All of the information provided to FEMA regarding revocation and administrative orders was provided to FEMA at the request of FEMA staff, in spite of the fact that it is wholly irrelevant. Essentially, the State of Vermont has lost fish production capacity and all of its attendant economic benefits since Irene occurred in 2011. The State continues to lose the production and economic benefits associated with the Hatchery because of delays associated with FEMA funding and decision making.

V. THE USE OF THE ROXBURY HATCHERY IS APPROPRIATE TO THE PREDISASTER USE OF THE FACILITY

The State of Vermont can clearly demonstrate that it seeks to restore the Roxbury Fish Culture Station to the same capacity as before Tropical Storm Irene. The Hatchery triggered NPDES permitting in 2009 & 2010, when cold-water fish species rose above 20,000. The number fluctuated just slightly below in 2011, due to storms. The numbers of fish during these years represent the maximum capacity of the facility, which cultures fish and distributes them in large trucks to waterways throughout the State of Vermont pursuant to annual *Management Requests for Cultured Salmonid Fish and Fish Culture Production Goals and Egg Requirements*. Exh. 8-1 to 8-11. These documents set forth the annual fish production needs and goals for Vermont. Prior to Tropical Storm Irene, the Hatchery was achieving success in meeting the needs of state fisheries managers. In addition to culturing fish for the rivers and streams of the State of Vermont, the Roxbury Hatchery is also a well-known tourist destination, welcoming visitors, school groups and scouts to view stocked fish, feed fish, picnic, and BBQ. These uses would neither change nor expand with the upgrades, which are tied to compliance with Clean Water Act standards and the ADA.

VI. THE VWQS AND THE FEDERAL CWA ARE REASONABLE, WRITTEN, FORMALLY ADOPTED STANDARDS AND STATE AND FEDERAL LEGAL REQUIREMENTS THAT WERE EFFECTIVE PRIOR TO TROPICAL STORM IRENE AND REQUIRE THE PROPOSED DISCHARGE TREATMENT UPGRADE

In its letter, the FEMA Region 1 Office includes only half of the text of the required “five criteria” of codes and standards, stating that a standard must be found “reasonable, in writing and formally adopted and implemented by the state or local government on or before the disaster declaration date.” FEMA, however, leaves out the second half of the regulation, “*or be a legal federal requirement applicable to this type of restoration.*” 44 C.F.R. § 206.22 (d). FEMA’s regulations clearly provide for the alternative of mandated state and federal requirements. The scope of work for the replacement of the effluent treatment system at the Roxbury Hatchery is irrefutably a “legal requirement” of the Clean Water Act and the VWQS. Prior to Tropical Storm Irene, both federal and Vermont law required that the Roxbury Hatchery facility meet specific regulations enforced through effluent discharge limitations in the Vermont-administered NPDES permit. The NPDES standards were set forth in the VWQS, which were adopted as formal rules on January 1, 2008, in accordance with 40 C.F.R. § 131.2 and the Vermont Administrative Procedures Act codified in 10 V.S.A Chapter 25. Exh. 9. Contrary to the assertions in FEMA’s letter, these rules were in writing, formally adopted, and had been implemented more than three years before Irene destroyed the Roxbury Hatchery.

The requirements of the Clean Water Act are specific and highly detailed. Section 3-04.B.4.d of VWQS articulates a narrative standard for nutrients as the attainment of biological integrity, specifically that there shall be “no change from reference conditions that will have an undue adverse effect on the composition of the aquatic biota, the physical or chemical nature of the substrate, or the species composition or propagation of fishes.” Both total phosphorus and

nitrate nutrient discharges “shall be limited so that they will not contribute to the acceleration of eutrophication or the stimulation of the growth of aquatic biota in a manner that prevents the full support of uses.” VWQS §§ 3-01 B. 2.a and 3-01 B. 3.a. Similarly, toxic substance discharge limitations must be sufficient to protect human health and aquatic biota or wildlife. VWQS § 3-01 B. 10. Formalin is a biocide which contains approximately 37% of the toxic chemical formaldehyde and is a toxic compound regulated under VWQS § 3-01.B.10.d. Formalin is used at the Roxbury Fish Hatchery to control certain fish diseases and parasites. Section 3-01.B.10 of the VWQS articulates narrative and numeric criteria for toxic substances defined in § 3-01.B.10.a. Exh.9.

FEMA has misinterpreted the operation of the CWA, administered by its sister federal agency, EPA. The purpose of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” CWA § 101(a), 33 U.S.C. § 1251(a). The CWA prohibits the discharge of a pollutant into waters of the United States except in compliance with specified sections of the Act that allow for discharges to be permitted through the NPDES program. 33 U.S.C. §§ 1311(a) and 1362(7), (12). Title 33 U.S.C. § 1342 sets forth the requirements for the NPDES program. The NPDES program is codified in section 402 of the CWA, 33 U.S.C. § 1342, and implementing regulations at 40 C.F.R. part 122, and consists of water quality standards and effluent limitations. *See*, CWA §§ 301, 303, 304(b); 33 U.S.C. §§ 1311, 1313, 1314(b); 40 C.F.R. parts. 122, 125, 131. The EPA may delegate the NPDES permitting authority to a state agency. 33 U.S.C. § 1342(a), (b). Since 1974, authority for the administration of the federal CWA has been delegated by the EPA to the State of Vermont in accordance with Vermont statutes, codified in 10 VSA Chapter 47. As a delegated State, Vermont must implement a NPDES program with requirements at least as restrictive as the

federal program. CWA § 510; 33 USC § 1370. The Vermont NPDES program remains subject to EPA oversight, which includes permit review and assessment of DEC's compliance and enforcement programs. *See*, 40 C.F.R. §§ 122.2 and 123.44 (requiring DEC to submit a copy of the proposed permit to EPA and allowing EPA to object to a permit and issue an EPA permit); *see also*, Exh. 6, 10-1, 18-1 and 18-2.

In accordance with 33 U.S.C. § 1342(b)(1)(A) of the CWA, the State must require compliance with 33 U.S.C. §§ 1311 and 1312 regarding effluent and water quality based effluent standards. When a numeric effluent limitation has not been established under the VWQS or there is the potential for the discharge to cause or contribute to a violation of the VWQS, the Vermont DEC must set a Water Quality Based effluent limitation (WQBEL). A NPDES discharge permit must meet or exceed the VWQS, and ensure that the discharge does not have the potential to cause or contribute to any impairment of the water quality of the receiving waters. *See*, VWQS § 1-04 and 40 C.F.R § 122.44 (d)(1)(ii)(requiring the permitting authority to determine “whether a discharge causes, has the reasonable potential to cause, or contributes to” a violation of water quality standards). Controls on point sources, like the proposed upgrades to Roxbury Hatchery, are required by the effluent limitations and are incorporated into the terms and conditions of NPDES permits. These legal requirements mandate the construction of an effluent control system to ensure that the facility meets the current effluent standards.

As such, a permit must include water quality based effluent standards and any conditions necessary to “control all pollutants or pollutant parameters . . . which will cause, have the reasonable potential to cause, or contribute to . . . a violation of a water quality standard, including state narrative criteria.” 40 C.F.R. § 122.44(d)(1)(i); *see also*, *In re Stormwater NPDES Petition*, 180 Vt. 261, ¶ 10 – 12 (requiring DEC to exercise residual designation authority for stormwater

permitting where a discharger or category of discharges contributes to more than a de minimus violation of the water quality standards); *In re Montpelier WWTF Discharge Permit*, Decision on Cross-Motions for Summary Judgment, Docket No. 22-2-08 Vtec., Environmental Division Vermont Superior Court, page 3 (June 30, 2009)(finding that DEC cannot rely on a 2002 TMDL to determine WQBELs but must instead conduct a site specific WQBEL analysis for each discharge).

The Reasonable Potential Determination (RPD) procedure is a *guidance document* setting forth the procedure and methodology for ensuring compliance with the applicable nutrient standards under the CWA and the VWQS. The RPD is not a rule enacted in accordance with the Vermont Administrative Procedures Act. The RPD *is not a code or standard* applicable to the Roxbury Fish Hatchery, or to any point source, and Vermont has never represented it as such. DEC implemented the VWQS by creating RPDs prior to Tropical Storm Irene. Exh. 10-1 to 10-4. RPDs were utilized as mechanisms for imposing consistent effluent limitations that comply with federal regulations, VWQS and establish WQBELs for each discharge. This RPD guidance was established, in part, because of increased EPA scrutiny and oversight. Exh. 10-1 to 10-3.

At the time of each permit reissuance, DEC is required to make a RPD and must develop WQBELs as necessary to control the discharge of pollutants. RPDs are site-specific analyses and follow specific processes, beginning with assessing the biological condition of the receiving water, based on upstream-downstream macro invertebrate sampling, and water chemistry testing. The requirement for a reasonable potential analysis is set forth in in federal regulation, 40 C.F.R. § 122.44(d)(1)(i). This section states that effluent limitations “must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) . . . discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above

any [s]tate water quality standard, including [s]tate narrative criteria for water quality.” The RPD is the methodology for making these determinations and is set forth in the EPA permit writer’s guidance. *See, EPA 2010 NPDES Permit Writer’s Manual*, Chapter 6, § 6.1.1., pages 6-3 to 6-9. Section 6.3.

In the Roxbury matter, the DEC performed an RPD and found that in order to meet VWQS § 3-04.B.4, the Roxbury Hatchery’s effluent discharges of phosphorous and nitrogen must be limited to protect receiving waters. DEC conducted a RPD for formalin as well, relying on published studies from USEPA and the States of Maine and Massachusetts in the development of the acute and chronic limits for formalin. Exh. 7-3. Vermont DEC applied the same VWQS and methodology for RPDs that it applied to Roxbury to other NPDES- permitted facilities prior to Tropical Storm Irene. The VWQS are rules that were “effective” and consistently applied before the storm, as required by FEMA. In order to satisfy the requirements of the federal CWA and VWQSs, the Roxbury Hatchery now requires a similar upgrade to fall into line with rules that existed prior to Tropical Storm Irene.

Contrary to FEMA Region 1’s assertions, Vermont’s regulatory framework is established, well-accepted and entirely consistent with the legal requirements of the CWA, accompanying federal regulations, EPA guidance documents and EPA appeals. *See, EPA 2010 NPDES Permit Writer’s Manual*, Chapter 6, § 6.1.1., pages 6-3 to 6-9. Also contrary to FEMA’s characterization, “discharge limit decisions” are not made at the “discretion of DEC.” The Vermont DEC, as the administrating regulatory agency, must determine whether the discharge causes, has the reasonable potential to cause, or contributes to a violation of any numeric or narrative water quality criteria. This requirement is set forth in EPA’s federal regulations at 40

C.F.R. § 122.44(d)(1); *See also*, Exh. 6 for a link to the EPA 2010 NPDES Permit Writers Manual.

VII. THE WATER QUALITY STANDARDS WERE UNIFORMLY APPLIED AND ENFORCED AT THE TIME OF TROPICAL STORM IRENE

VWQS were uniformly applied and enforced prior to Tropical Storm Irene. FEMA's argument in its Denial that "these new effluent discharge limitations...are not set for all hatcheries" is patently untrue. No two Vermont hatchery discharges are identical, however, all hatcheries in Vermont must meet the requirements of the VWQS and the CWA. Ed Weed Fish Hatchery in Grand Isle was constructed with effluent treatment elements similar to the proposed Roxbury Hatchery design to ensure compliance with the VWQS. These elements included influent water filtration, ultraviolet disinfection, solids collection, solids storage, and chemical retention capabilities. Though the amount of effluent discharged and the size and characteristics of a water body may change, the standards remain consistent. Furthermore, these requirements and standards are applicable to all facilities which discharge to state waters.

Two reasonable potential determinations (RPDs) were issued to other facilities by the DEC, prior to the Irene disaster date. The effluent limitations from these determinations were set forth in permits that were subsequently issued by DEC. An RPD was conducted in January, 2010, for the Manchester Wastewater Treatment Facility and the NPDES permit was ultimately issued in March, 2011. The RPD process identified the need to insert permit requirements for monitoring of biological condition and nutrient concentrations to ensure compliance with the Vermont Water Quality Standards. Exh. 11-1 and 11-2. The second permit issued under the process was for the Pownal WWTF. The determination memo was completed 6/1/2011 and the final permit was issued 9/29/2011. Exh. 12-1 and 12-2.

Post-disaster, and to date, the DEC has continued to employ the reasonable potential determination in the issuance of NPDES discharge permits. This has been evidenced by the RPDs completed for the following facilities:

- Bennington WWTF
 - Determination 10/2/2011, Permit 11-29-2011 (Exh. 13-1 to 13-3)
- Woodstock-Taftsville WWTF
 - Determination 1/11/2012, permit in draft (Exh. 14)
- Fibermark Paper Company
 - Determination 8/3/2102, Permit 10/2/2012 (Exh. 15-1 to 15-3)
- Hartford - White River Junction WWTF
 - Determination 1/24/2012, Permit 4/12/2012 (Exh. 16-1 to 16-3)
- Hartford-Quechee WWTF
 - Determination 10/22/2012, Permit in draft (Exh. 17)

Under the Clean Water Act, the federal EPA maintains oversight of the state NPDES programs. This oversight includes the review of state water quality standards, permits and reports, as well as program audits. *See* 40 C.F.R. §§ 122.2 and 122.44. Thus, EPA ensures that the minimum federal requirements and the water quality standards are reviewed and enforced. For example, on December 18, 2009, EPA notified the DEC that it had concerns regarding the draft permit for the Hartford-White River Junction Waste Water Treatment Facility. Exh. 18-1. On February 12, 2010, EPA indicated its formal objection to the DEC NPDES permit for Hartford White River Junction WWTF. *See*, Exh. 18-2. In response to EPA's objection, the Vermont responded and imposed more stringent permit language in cooperation with the federal government. *See*, Exh. 16-3. Given the fact that Vermont has applied these standards to similar facilities within the state of Vermont, there is no basis for FEMA's assertion that the requirements of 40 C.F.R. § 206.226(d) (4) and (5) have not been met.

VIII. THE COSTS OF UPGRADING THE ROXBURY HATCHERY ARE REASONABLE

The Change of Scope request for the Roxbury Hatchery is reasonable in order to reconstruct the facility to meet the requirements of federal and state law. FEMA DAP 9527.4 provides guidance to the agency in determining the reasonableness of a project, including “whether the codes and their thresholds are technically defensible from an engineering perspective,” and “whether the method of quantifying the damage and cost of the work is reasonable.” *FEMA Disaster Assistance Policy 9527.4*, Page 5. Full text at http://www.fema.gov/pdf/government/grant/pa/9527_4.pdf. The Change of Scope request for the Roxbury Hatchery is based on the cost estimates of HDR, Inc., an architectural and environmental engineering firm with extensive experience and expertise in designing fish hatcheries with effluent treatment systems. HDR has designed numerous hatcheries that, like Roxbury, discharge effluent and must meet the standards of the Clean Water Act. The Department relied upon an expert engineering firm and set the bounds of the firm’s design as discharge limitations mandated by state and federal law. Exh. 19.

The Roxbury Hatchery also meets the DAP’s requirements of “general reasonableness.” *FEMA Disaster Assistance Policy 9527.4*, Page 5. Available at http://www.fema.gov/pdf/government/grant/pa/9527_4.pdf. After receiving design plans for the Hatchery from HDR, the Department presented a scope of work to FEMA for \$2,385,000 and specifically noted that this was a “preliminary figure only.” In its March 17 Denial, FEMA incorrectly uses other numbers to describe work at the Hatchery – first \$212,612, then \$359,035, but these are not, and never were, presented to FEMA as “construction costs” of the project. Rather, the figures were “architectural and engineering costs for the design” of the Hatchery.

FEMA was aware that design costs and construction costs were separate, having paid a portion of the design work when the project began.

The Change of Scope request for the Roxbury Fish Hatchery is wholly in line with the costs of systems requiring effluent control technologies at comparable facilities. For example, the State of Maine's fish culture facility in Embden produces similar effluent discharges including phosphorous and formalin, and must adhere to water quality standards under the federal Clean Water Act and Maine's federally-delegated NPDES permitting authority. In 2005, the Emden Hatchery, also located within EPA Region 1, underwent a \$3.7 million upgrade to meet applicable state and federal standards to control effluent discharge. When adjusted for inflation, costs associated with the Embden project are comparable to those of Roxbury. Exh. 20-1. The Embden Hatchery was also designed by HDR, Inc., required similar technological upgrades to properly control formalin, phosphorous and other nutrient discharges, and is subject to the requirements of the federal Clean Water Act and state-administered NPDES program. As noted by Superintendent of Hatcheries, Todd Langevin, "the design [of the Roxbury Hatchery] is sufficient to meet the defined effluent limits," and the "cost is also reasonable." Exh. 20-2. The Embden Hatchery is demonstrative of the reasonableness of the Department's present request.

Ken Gillette, Project Leader of U.S. Fish and Wildlife's National Fish Hatchery at White River, Vermont, recently indicated in a letter that FEMA had visited the White River Hatchery post-Irene and requested his professional opinion on the plans for the Roxbury reconstruction. After reviewing the plans for the Roxbury Hatchery, Mr. Gillette found them both "fiscally reasonable and functionally necessary to meet the effluent limitations directed under the Clean Water Act." Exh. 21. Since Tropical Storm Irene deposited tons of sediment into the White River Hatchery's system and did "substantial damage," Mr. Gillette has been overseeing a restoration

of the federally-managed hatchery, which, like Roxbury, releases nutrients into water bodies and is subject to the Clean Water Act and Vermont Water Quality Standards. The nearby White River Hatchery and Maine's Embden Hatchery establish that fish hatcheries must be constructed or upgraded in conformity with the federal Clean Water Act.

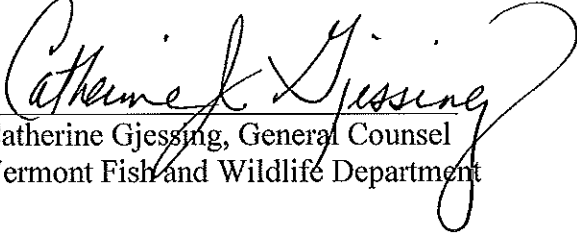
IX. CONCLUSION

Prior to Tropical Storm Irene, the Roxbury Fish Hatchery was a vital part of the history, tradition, and the economy of State of Vermont. The Hatchery generated \$2.4 million a year in revenue for the State; cultured and stocked fish in waterways statewide, produced trophy trout, implemented the popular Children's Fishing Program, and was visited by thousands of schools groups and tourists annually. The Roxbury Fish Culture Station was devastated by Tropical Storm Irene. In spite of compelling evidence, after years of delay, FEMA has arbitrarily denied funding for the replacement of the Roxbury effluent treatment system destroyed by the storm. The effluent treatment system is legally required by state and federal law in accordance with written, reasonable standards clearly set forth in the federal CWA, Vermont statutes and the VWQS. These legal requirements and standards were uniformly applied and enforced in Vermont prior to Irene, and are subject to robust federal oversight by EPA.

For the foregoing reasons, the Vermont Agency of Natural Resources Fish and Wildlife Department respectfully requests that FEMA reverse the determination of March 17, 2014 and award \$4,435,543 (federal share \$3,991,988) in codes and standards upgrades. In addition, the Department requests that FEMA rewrite or amend the Project Worksheet Disaster Number FEMA-4022-DR-VT, in accordance with the applicable state and federal codes and standards and legal requirements under the CWA and the VWQS.

Respectfully submitted this day of May 15, 2014 at Montpelier, Vermont.

Vermont Agency of Natural Resources


Catherine Gjessing, General Counsel
Vermont Fish and Wildlife Department

Statement of Facts

1. The Roxbury Fish Culture Station (Hatchery) is a fish culture facility that raises cold water fish species of the salmonidae family specifically, trout and salmon. The facility is located in Roxbury, Washington County, Vermont. The facility discharges fish culture effluent to the Third Branch of the White River on a year-round basis.
2. Prior to Tropical Storm Irene, in 1998 and 2006, the Hatchery was damaged on two separate occasions by flood events. FEMA provided assistance for the repairs associated with the 1998 event. *See*, FEMA DR-1228; <http://www.fema.gov/disaster/1228>, Exh 22-1 to 22-6.
3. The following is the yearly production of fish at the Hatchery between 2006 and 2013:

2006:	Yearling brook trout (YBKT): 62,750 fish, weighing: 18,150 lbs. Exh. 5-2.
2007:	YBKT: 36,150 fish, weighing: 11,746 lbs. ¹ Exh. 5-3.
2008:	YBKT: 69,457 fish, weighing: 17,150 lbs. Trophy brook trout (TBRT): 1,886 fish, weighing: 1,461 lbs. Combined Total 2008: 71,343 fish, weighing: 18,611 lbs. Exh. 5-4.
2009:	YBKT: 80,224 fish weighing 19,068 lbs, TBKT: 8,107 fish, weighing 5,155 lbs. Combined Total 2009: 88,241 fish, weighing: 24,223 lbs. Exh. 5-5.
2010:	YBKT: 44,665 fish, weighing: 11,105 lbs. Yearling Rainbow Trout (YRBT) diploids: 19,150 fish, weighing: 7,195 lbs. YRBT triploids: 26,100 fish, weighing: 6,865 lbs. TBKT: 7,166 fish, weighing: 5,819 lbs. Combined Total 2010: 97,081 fish weighing: 30,984 lbs. Exh. 5-6.
2011:	YBKT: 37,745 fish, weighing: 9,107 lbs. YRBT diploids: 20,175, weighing: 4,384 lbs. YRBT triploids: 18,550 fish, weighing: 4,338 lbs. TBKT: 3,335 fish, weighing: 2,115 lbs. Combined Total 2011: 79,805 fish, weighing: 19,944 lbs. ² Exh. 5-7.

¹ Reduced fish production due to December 2006 flood event.

² Reduced fish production due to Spring 2011 flood event.

2012: ATS (FRY): 160,000 fish, weighing 49 lbs. Exh. 5-8.

2013: BKT fingerlings: 120,018 fish, weighing 219 lbs. ATS (FRY) 205,000 fish, weighing 63 lbs. Combined Total 2013: 325,018 fish, weighing 282 lbs. Exh. 5-9.

4. On October 23, 2006, the Wastewater Management Division of the Vermont Department of Environmental Conservation (DEC) issued final amended NPDES discharge permit #3-0362 for the Roxbury Fish Hatchery. The permit contained the following conditions:

- a. This discharge shall not cause a violation of the water quality standards of the receiving water. Condition B.1. page 2.
- b. Use of the following chemicals shall be in accordance with the U.S. Food and Drug Administration for the prevention and control of fish pathogens and disease. Concentrations and treatment durations shall not exceed specific product label or authorized Investigative New Animal Drug (INAD authorization): sodium chloride, Formalin, Romet-30, Terramycin, and hydrogen peroxide. Condition C.1. page 3.
- c. The permit required monthly monitoring and reporting. Condition A, page 1 and Condition F.2., page 4.

Exh. 7-1.

5. On March 25, 2009, a memo was sent from the Waste Water Management Division Director to the DEC Commissioner, Deputy Commissioner, and the Water Quality Division Director. This memo was written as a result of increased scrutiny from the EPA and environmental groups regarding NPDES permitting. The memo identified the need for a different, more coordinated approach when it came to NPDES permitting. The State of Vermont responded promptly to address these concerns. Exh. 10-1.

6. In response to the March 2009 memo, the DEC promulgated several drafts of a reasonable potential procedure in 2010 and finalized a draft in November of 2010. The procedure articulated an existing methodology for the application of Vermont Water

Quality Standards (VWQS) and provided guidance to staff regarding the performance of Reasonable Potential Determinations (RPDs) for Vermont facilities subject to NPDES requirements. Exh. 10-2 and 10-4. An RPD is performed for each facility either seeking a new or renewed permit to discharge under the Clean Water Act, in order to determine the appropriate effluent limitations. The procedure was applied well before Tropical Storm Irene:

- a. Exh. 11-1 & 11-2 - Manchester Wastewater Treatment Facility (WWTF) - A RPD was conducted in January, 2010 and the NPDES permit was issued in March, 2011.
 - b. Exh 12-1 & 12-2 - Pownal WWTF - The RPD determination memo was completed June 1, 2011 and the NPDES permit was issued on September 29, 2011. The draft permit was put on thirty-day public notice on August 1, 2011, before Irene.
7. Between November 2009 and December 2012, DEC continued to apply the RPD to the following WWTFs:
- a. Exhibits 13-1, 13-2, & 13-3- Bennington WWTF – The RPD was completed on October 2, 2011 and the permit was issued on November 29, 2011.
 - b. Exhibit 14 - Woodstock-Taftsville WWTF - The RPD was completed on January 11, 2012 and the permit is currently in draft form.
 - c. Exhibits 15-1, 15-2 & 15-3 - Fibermark Paper Company - The RPD was completed on August 3, 2012 and the permit was issued on October 2, 2012.
 - d. Exhibits 16-1, 16-2 & 16-3- Hartford White River Junction WWTF - The RPD was completed on January 24, 2012 and the permit was issued on April 12, 2012.
 - e. Exhibit 17 - Hartford-Quechee WWTF - The RPD was completed on October 22, 2012 and the permit is currently in draft form.
8. On December 3, 2012, the DEC Commissioner signed the reasonable potential procedure. Exh. 10-3.
9. DEC conducted an RPD for the Roxbury Fish Hatchery and confirmed that the proposed facility discharge treatment system must be upgraded in order to comply with the federal CWA and applicable Vermont State law. Exh. 7-3.

10. The Hatchery's existing permit, Permit #3-0362, expired on March 31, 2011. In order to continue to operate after the expiration of the permit, the Hatchery was required to apply for a renewal permit at least 180 days prior to the expiration date, no later than September 30, 2010. The Hatchery timely filed an application to renew its permit. Exh. 7-2.
11. In August 2011, while a new permit was pending for the Roxbury Hatchery, Tropical Storm Irene destroyed the fish aquaculture pond system. Floodwaters during Irene damaged various structures at the Roxbury Hatchery, including the rearing pond system and auxiliary facilities. With respect to non-building portions, damages included an estimated 4,153 cubic yards of sand, gravel and other debris deposited in fish ponds; 310 linear feet of concrete outlet walls and structures that were overtopped or destroyed, two low head oxygenators washed away; 500 linear feet of 4-inch ductile iron water supply pipe damaged; 1,000 linear feet of 6-inch PVC water supply pipe damaged, 3 electrical outlets and 500 linear feet of underground power lines destroyed.
12. On May 31, 2012, FEMA approved an architecture and engineering (A&E) project worksheet (PW) for the reconstruction of the Roxbury Hatchery to meet applicable "codes and standards" at the time of the disaster. The original A&E PW specified a general construction estimate of \$2,385,000. The cost of the design work was \$359,035.68 and FEMA has reimbursed the Department for the A&E aspect of the project in the amount of \$234,000. Exh. 1.
13. The Department contracted with HDR, Inc. for the engineering and design of the Roxbury Hatchery restoration. In operation for more than 90 years, the company is an expert in the construction of fish hatcheries across the United States and has completed

more than 500 facility studies, feasibility studies for new facilities, facility renovations, and complete design and construction of new facilities. Exh. 19.

14. HDR, Inc. explored numerous design options, including upgraded ponds, raceways and circular tanks, but none of these options achieved acceptable results to meet the effluent limitations within the Reasonable Potential Determination. HDR's final design called for Roxbury's four rearing ponds to be replaced with 12 tanks and the function of a fifth rearing pond to be replaced with a sludge storage and clarifier tank. Based upon its communications with the DEC, the Department selected the final design in order to meet the effluent limitations set for the discharge of nitrogen, phosphorous and formalin from the Roxbury Hatchery into the Third Branch of the White River. *See*, Exh. 2-3 and 7-3.
15. While awaiting a renewed permit and FEMA review of its application for Public Assistance funding, the Roxbury Hatchery voluntarily reduced its fish production to approximately 2% of its former output, so as to not violate the Reasonable Potential Determination and to not pollute the Third Branch of the White River. Exh. 5-8 and 5-9.
16. On January 30, 2013, the Department submitted a scope change request for the construction of the Roxbury Hatchery to Public Assistance Officer Ben Rose. The SCR was forwarded to the FEMA-JFO in Essex Junction, Vermont. Under the SCR, cost estimates were \$4,435,543 for construction and \$140,000 for a Clerk of the Works, totaling \$4,575,543. Exh. 2-1 and 2-3.
17. The Department received a Denial Letter and Determination Analysis from FEMA Region 1 on March 17, 2014 regarding its application for funding under the Public Assistance grants program. Exh. 3-1 to 3-3.

18. Under the Clean Water Act, the federal Environmental Protection Agency maintains oversight of State water quality standards and the State's enforcement of those standards through permitting. For example, on December 18, 2009, EPA notified the Vermont Department of Environmental Conservation (DEC) that it had concerns regarding the draft permit for the Hartford-White River Junction Waste Water Treatment Facility. On February 12, 2010, EPA indicated its formal objection to the DEC NPDES permit for Hartford White River Junction WWTF. Exh. 10-1, 18-1 and 18-2.

EXHIBIT LIST

Exhibit 1	FEMA AE PW Application Award for Roxbury Hatchery
Exhibit 2-1	Scope Change Request for Roxbury Hatchery, 01/30/13
Exhibit 2-2	Scope Change Request for Roxbury Hatchery, 02/01/13
Exhibit 2-3	Roxbury Scope Change Request Package
Exhibit 3-1	FEMA Letter re Determination Roxbury Fish Hatchery PW-2738, 03/17/14
Exhibit 3-2	Analysis_Roxbury Fish Hatchery PW-2738, 03/17/14
Exhibit 3-3	Index_Roxbury Fish Hatchery PW-2738 03.17.14
Exhibit 4-1	E-mail from Vermont Fish and Wildlife Division to FEMA Re: Net Economic Value of Roxbury Hatchery, 11/14/13
Exhibit 4-2	2009 Fish Distribution Report
Exhibit 4-3	2010 Vermont Angler Survey Report
Exhibit 4-4	USFWS Net Economic Values of Wildlife-Related Recreation in 2006
Exhibit 4-5	Roxbury Fish Hatchery NEV Letter
Exhibit 4-6	Stocking 2013-RXFCS Contribution-DL-20131029
Exhibit 4-7	FEMA what-is-a-benefit
<i>Exhibits 5-1 to 5-9:</i>	<i>Documentation of Fish Production at the Roxbury Hatchery</i>
Exhibit 5-1	2005-F31-D14
Exhibit 5-2	2006-F31-D15
Exhibit 5-3	2007-F31-D16
Exhibit 5-4	2008-F31-D17
Exhibit 5-5	2009-F31-D18
Exhibit 5-6	2010-F31-D19

Exhibit 5-7	2011-F31-D20
Exhibit 5-8	2012-F31-D21
Exhibit 5-9	2013-F31-D22
Exhibit 6	Links to Relevant Resources
Exhibit 7-1	Roxbury Fish Hatchery NPDES Permit #3-0362
Exhibit 7-2	Title 3 Ltr 3-0362
Exhibit 7-3	RPD -VTFW Roxbury Hatchery_04032013
<i>Exhibits 8-1 to 8-11: Documentation of Management Requests for Cultured Fish in Vermont</i>	
Exhibit 8-1	Table 1 - Roxbury Hatchery Production- Requested vs. Produced
Exhibit 8-2	MRCF PY2004
Exhibit 8-3	MRCF PY2005
Exhibit 8-4	MRCF PY2006
Exhibit 8-5	MRCF PY2007
Exhibit 8-6	MRCF PY2008
Exhibit 8-7	MRCF PY2009
Exhibit 8-8	MRCF PY2010
Exhibit 8-9	MRCF PY2011
Exhibit 8-10	Trout Production Planning in Vermont Fish Culture Stations
Exhibit 8-11	Vermont Trout Management Plan 1993
Exhibit 9	Vermont Water Quality Standards
Exhibit 10-1	Memo from WWMD to DEC 03.25.09
Exhibit 10-2	Final Reasonable Potential Determination Procedure 11.05.10
Exhibit 10-3	Signed Reasonable Potential Determination Procedure 12.03.12

Exhibit 10-4	DEC Commissioner Letter
Exhibit 11-1	Manchester WWTF RPD Fact Sheet
Exhibit 11-2	Manchester WWTF NPDES Permit #3-1153
Exhibit 12-1	Pownal WWTF RPD Memo
Exhibit 12-2	Pownal WWTF NPDES Permit #3-1493
Exhibit 13-1	Bennington WWTF RPD Evaluation
Exhibit 13-2	Bennington WWTF RPD Fact Sheet
Exhibit 13-3	Bennington WWTF NPDES Permit #3-1261
Exhibit 14	Woodstock-Taftsville WWTF RPD Evaluation
Exhibit 15-1	Fibermark Paper Company RPD Fact Sheet
Exhibit 15-2	Fibermark Paper Company RPD Evaluation
Exhibit 15-3	Fibermark Paper Company NPDES Permit #3-1136
Exhibit 16-1	Hartford-White River Junction WWTF Fact Sheet
Exhibit 16-2	Hartford-White River Junction WWTF Letter from EPA 11.10.11
Exhibit 16-3	Hartford-White River Junction WWTF NPDES Permit #3-1125
Exhibit 17	Quechee-Hartford WWTF RPD
Exhibit 18-1	EPA Objection to Hartford Permit 12.18.09
Exhibit 18-2	EPA Objection to Hartford Permit 02.12.10
Exhibit 19	HDR Qualifications
Exhibit 20-1	Maine Bond Appropriation Estimates for Embden FH
Exhibit 20-2	Maine DIFW letter
Exhibit 21	K Gillette USFWS WRNFH Letter
Exhibit 22-1	Memo RX-FEMA98

Exhibit 22-2 Tomco Excavation Invoice 01 05 07
Exhibit 22-3 W B Rogers Contract 2007
Exhibit 22-4 Roxbury Accounting Pull 2006
Exhibit 22-5 Staff Time Spent on Roxbury – 2006
Exhibit 22-6 Ralph Barber Journal