STATE OF VERMONT

AGENCY OF NATURAL RESOURCES

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ORDER APPROVING APPLICATION TO ALTER A DAM

10 V.S.A Chapter 43

Applicant: Village of Enosburg Falls

Application Number: DS2025-3

Dam Name: Trout Brook Reservoir Dam

Dam ID Number: 19.02

Hazard Classification: LOW Hazard Potential

Waterbody: Trout Brook, Missisquoi River Basin

Town: Berkshire

Project: Remove Trout Brook Reservoir Dam

Note: Please be aware that other VT Agency of Natural Resources (ANR) permits may be needed for your project, and it is your responsibility to secure any other required permits. To help assist in determining other VT ANR permits that might be needed, use VT ANR's Permit Navigator Tool by going to the VT Department of Environmental Conservation website (dec.vermont.gov). Please be aware that your project may require other local, state, or federal permits outside of VT ANR's jurisdiction which are not covered by the VT ANR Permit Navigator Tool. Failure to secure all necessary permits in advance of construction can result in significant impacts to your project's final scope and can take additional processing time

FACTS

On March 31, 2025, an application under 10 V.S.A. Chapter 43 was filed with the Department of Environmental Conservation, Dam Safety Section (Department) by Village of Enosburg for alteration (removal) of a dam known as Trout Brook Reservoir Dam, located in Berkshire, Vermont. The application was considered complete on April 1, 2025.

On April 21, 2025, a public notice of the application and project was made available to State and local officials along with other interested persons, providing an opportunity to file written comments or request a public informational meeting. The end of the comment period was on May 2, 2025. The comment period for this order was shortened from thirty to ten (30-10) days per ADDENDUM 5 TO EXECUTIVE ORDER 03-23. No comments were received.

The Department reviewed the documents filed by the applicant and others and finds it has sufficient information to determine that this project will serve the public good and should be approved as provided in 10 V.S.A. §1086.

FINDINGS AND CONCLUSIONS

- 1. **Jurisdiction:** Trout Brook Reservoir Dam is in Berkshire, Vermont and is owned by the Village of Enosburg (applicant). The proposed project involves the alteration (removal) of a dam that is capable of impounding more than 500,000 cubic feet of water/sediment. The dam or project does not relate to and is not incident to the generation of electric energy for public use or as a part of a public utility system. The Department has jurisdiction over this project pursuant to 10 V.S.A. §1081(a); and the Department's authorization to perform this alteration is necessary under 10 V.S.A. §1082.
- 2. **Project Description:** The project is the removal of the Trout Brook Reservoir Dam, an approximately 16-foot high by 128-foot-long concrete gravity structure that is classified as having a LOW hazard potential. The reservoir is no longer used as a water supply and the dam has deteriorated. Approximately 15,700 cubic yards of sediment will be removed to restore a brook bed through the existing reservoir. A section of the dam at the left end will remain to protect the bank from erosion. Any remaining portions of the dam not removed will not impound water during the 100-year storm event (or during lessor storms). The completed project will result in removal of the dam and restoration of a free-flowing stream in this location. The newly re-exposed floodplain upstream of the dam will be stabilized and planted with native species. Woody debris will be placed and driven posts installed in and along the restored channel to slow water velocities as the area stabilizes. The restoration work was submitted to the Department's Rivers Program for review and any necessary authorization.
- 3. **Plans and Specifications:** The project is to be constructed in accordance with plans and specifications entitled Trout Brook Reservoir Dam Removal, dated May 2, 2025. The Engineer of Record for the project is Jessica Louisos, PE, of SLR International Corporation, 1 South Main Street, Waterbury, Vermont, 05676.

- 4. **Project Purpose:** The purpose of the project is to remove Trout Brook Reservoir Dam, a LOW hazard potential dam and restore the area to a free-flowing stream and a more natural condition.
- 5. Public Good Determination 10 V.S.A. §1086(a)

Impact to public safety; The project will result in the removal of a LOW hazard potential dam which results in a reduction of risk to public safety due to an incident at the dam or dam failure. Based on modeling provided by the applicant, the removal of the dam will result in lower upstream flood water elevations and does not have any adverse flood impacts downstream. The plans entitled Trout Brook Reservoir Dam Removal, dated May 2, 2025, are adequate to provide for public safety.

- 1) The quantity, kind and extent of cultivated agricultural land that may be rendered unfit for use by the project, including both the immediate and long-range agricultural land use impacts; No cultivated agricultural lands will be rendered unfit for use by the project, including both the immediate and long-range agricultural use impacts.
- 2) **Impact to scenic and recreational values**; The change to scenic and recreational values will be positive as removing the dam and restoring the flowing channel will allow the area to return to a more natural state and diverse area.
- 3) Impact to fish and wildlife; In accordance with 10 VSA §1084, the Department of Fish & Wildlife investigated the potential effects on fish and wildlife habitats for the proposal to remove Trout River Reservoir Dam and restore the riverine habitat in this location. Dams and instream impoundments degrade riverine habitats, alter sediment transport, increase water temperatures, and isolate aquatic populations. The permanent removal of this dam and elimination of an artificial impoundment will result in an overall improvement of aquatic habitat.
 - Erosion prevention and sediment control measures should be employed to prevent discharge of sediment to State waters.
 - To protect the health and population of Vermont's fisheries, the capture and transport of live fish to other waters must not be allowed.
 - Downstream flows must not be interrupted.
 - Monitor the riparian area of the project yearly during the growing season to ensure success of plantings.
- 4) **Impact to forests and forest programs;** There will be no adverse impact or change in forests or forest programs from removing the existing dam.
- 5) [Repealed, Minimum Flows, see 10, below];
- 6) The existing uses of the waters by the public for boating, fishing, swimming and other recreational uses; The project will enhance existing public uses by restoring the natural flow regime.

- 7) The creation of any hazard to navigation, fishing, swimming or other public uses; The project will not create any hazards to navigation, fishing, swimming or other public uses.
- 8) The need for cutting clean and removal of all lumber or tree growth from all or part of the flowage area; The project does not involve the cutting clean and removal of all lumber or all trees in the existing flowage area.
- 9) **The creation of any public benefits;** Removing the dam will create public benefits by the restoration of the original riverine flow pattern and resulting improvements to aquatic habitat and recreational uses. Other public benefits include the elimination of the potential damage threat of a LOW hazard potential dam.
- 10) Attainment of the Vermont Water Quality Standards; The project, with the conditions imposed through this Order, will be done in a manner that meets the Vermont Water Quality Standards. The completed project will result in a natural free-flowing riverine system.
- 11) **Impact to any applicable state, regional or municipal plans;** Removing the dam and restoring the area to a more natural state will not have a negative impact on any state or regional plans or municipal plans. The reservoir is no longer used as a public water source.
- 12) **Impact to municipal grand lists and revenues;** The project will not impact the value of the property on the municipal list and revenues related thereto. The reservoir is no longer used as a public water source.
- 13) **Hydroelectric potential;** Trout Brook Reservoir Dam was not related or incident to the generation of electric energy for public use or as part of a public power utility system. There is not significant hydroelectric potential at this site.

The Department concludes that this project satisfies and will serve the public good requirements of 10 V.S.A. §1086.

SPECIAL CONDITIONS

- 1. The applicant shall notify the Department's Dam Safety Section (Steven Hanna, 802-490-6123) and the Town of Berkshire a minimum of **72 hours prior** to commencement of construction and provide the name and telephone number of the contact person for the construction project.
- 2. A preconstruction meeting between the applicant or representative, the applicant's engineer or supervising representative, the selected contractor, and the Dam Safety Program shall be held prior to starting construction to review control of water plans, project schedule, and Order Conditions. The Dam Safety Section shall be provided with meeting minutes. In addition, if not already submitted to the Department, proof that the Order has been filed in the land records of the Town of Berkshire shall be provided to the Department.

- 3. The Dam Safety Section shall be invited to a final completion meeting. The Dam Safety Section shall be provided with meeting minutes.
- 4. The project is to be constructed in accordance with plans and specifications entitled Trout Brook Reservoir Dam Removal, dated May 2, 2025. The Engineer of Record for the project is Jessica Louisos, PE, of SLR International Corporation, 1 South Main Street, Waterbury, Vermont, 05676.
- 5. Full-time construction monitoring by the applicant's engineer shall be provided during the dam removal work in the water and at such times as the engineer may consider appropriate, such as other work within the water.
- 6. The applicant's engineer monitoring construction shall submit via email on a weekly basis to the Dam Safety Program, a brief summary with observations and representative photographs that document the work.
- 7. Any construction problems or unanticipated circumstances encountered during removal work shall be immediately brought to the attention of the Dam Safety Program (Steven Hanna, 802-490-6123).
- 8. During removal of the dam, inflow shall be passed, and flow shall not be interrupted or otherwise stopped completely. The flow regime shall be run-of-river and allow for free movement of aquatic organisms to upstream reaches once the project is complete.
- 9. The removal shall be completed by October 15, 2027, unless other dates are approved in writing by the Department. The applicant shall notify the Department at least 14 days prior to a deadline if an extension appears necessary.
- 10. Work in the water, defined as, work requiring water control, flow manipulation, manipulation of water levels, work directly in the water, or work below the normal water level in the reservoir, shall only occur during the period from June 1 to October 1 of any year. Requests to work outside of these dates must be made to the Dam Safety Program at least 14 days prior and include the following in a written narrative and plans (if applicable).
 - Documentation there is no reasonable alternative and/or the task is an emergency.
 - Updated construction schedule with a list of tasks to be completed outside of the period with their anticipated duration, completion date, and winter shutdown date, if applicable.
 - A discussion of necessary water control measures and how this work will be sequenced to minimize the release of turbid waters.
 - A plan of improved erosion and sediment controls and site stabilization measures to minimize the release of turbid waters, including a plan for the timely containment of sediment discharges should the improved measures fail in any way.
 - A monitoring plan to observe, document, and report ambient and receiving water turbidity.

- Work in the water before June 1 or after October 1 shall not be performed unless approved in writing by the Department after consultation with the Department of Fish & Wildlife.
- If requested by the Department, a site visit to observe site conditions and review work requirements shall be held. Work performed during this period may be subject to additional inspection by State personnel and may be subject to immediate work stoppage if Order or extension requirements are not being met.
- 11. Work not in the water in upland areas is limited to the period May 1 through October 31 of any year.
- 12. The applicant shall ensure that every reasonable precaution is taken to prevent the discharge of petrochemicals and debris into waters of the State. Machinery shall be fueled away from waters of the State and shall be maintained in good mechanical condition in terms of integrity of hoses, seals, and gaskets.
- 13. Erosion prevention and sediment control (EPSC) measures shall be employed as necessary to prevent discharge of sediment to State waters. Disturbed soil shall be effectively stabilized by October 1st. Stone check dams or rock filter berms installed to catch sediment shall be cleaned out weekly, before and after storm events, and as required by the applicant's engineer. If elevated turbidity is observed, work shall stop immediately until corrective measures are employed. Post construction remediation measures shall be required if deemed necessary by the Agency.
- 14. Any water quality problems shall be immediately brought to the attention of the Dam Safety Program (Steven Hanna, 802-490-6123).
- 15. Live fish shall not be captured and transported to other waters in order to protect the health and population of Vermont's fisheries.
- 16. Debris and excess material associated with the project and operation shall be transported and used or disposed of properly in accordance with State law.

GENERAL CONDITIONS

- 1. This Order may be appealed to the Environmental Court by an aggrieved person within thirty (30) days from its date (10 V.S.A. §1099).
- 2. The applicant shall file this Order with the land records of the Town of Berkshire within 10 days of the issuance of this Order. Proof of such filing shall be submitted to the Department within 10 days of the filing or at the preconstruction meeting, and prior to the start of construction.

- 3. Any proposed modifications to the approved plans and specifications shall be submitted in writing to the Department. Such proposed modifications shall not be made unless approved in writing by the Department.
- 4. Applicant shall engage a professional engineer registered under Title 26 V.S.A. who has experience in the design, investigation, and removal of dams to monitor the construction, alteration or other action authorized by this Order. (10 V.S.A. § 1090). The engineer shall:
 - a. Submit construction status reports with photographs or other reports required by the Special Conditions **weekly** to the Department;
 - b. Submit, within one month of completion of the project, record drawings of the completed work to the Department; and
 - c. Certify in writing to the Department that the project has been completed in accordance with the approved plans and specifications and that in the Engineer's opinion, the dam has been completely and satisfactorily removed and site stabilized.
- 5. The project shall not be considered complete and in compliance with this Order until:
 - a. the record drawings, certification, and items required by Conditions 4(a) through (c) have been received and accepted by the Department;
 - b. the Department has inspected and approved the completed project; and
 - c. the Department has given its written acknowledgment that the project has been satisfactorily completed in accordance with this Order. The written acknowledgement shall be filed with the land records of the Town of Berkshire. Proof of the filing shall be provided to the Department.
- 6. This Order does not grant exclusive rights or privileges, which would impair any rights possessed by other riparian or littoral owners or the State of Vermont. It does not grant any right, title or easement to or over any land not owned in fee simple by the applicants. Nor does it authorize any violation of Federal, State, or local laws or regulations.
- 7. Nothing in this Order shall relieve the owner or operator of the authorized dam and impoundment from their legal duties, obligations and liabilities resulting from such ownership or operation.
- 8. The applicant shall allow the Commissioner of the Department, or a duly authorized representative, at reasonable times and upon presentation of credentials to enter upon and inspect the property and the project to determine compliance with this Order.
- 9. The terms and conditions of this Order shall run with the land.

10. This Order may be suspended or revoked at any time after reasonable notice and opportunity to be heard upon failure of the Applicant to comply with any condition of this Order, applicable rule, or law. Continuing jurisdiction is reserved for these purposes.

ORDER APPROVING APPLICATION

Based on due consideration of the factors that must be considered under the law and with the conditions contained herein, the Department hereby approves the project as applied for and authorization is hereby granted to carry out the proposed project in strict accordance with the approved plans and specifications entitled Trout Brook Reservoir Dam Removal, dated May 2, 2025, and the Special and General Conditions that are contained in this Order

Signed 7/11/2025

Jason Batchelder, Commissioner Department of Environmental Conservation

By: Emily Bird

Emily Bird, Director

Water Investment Division

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