

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION LEGISLATIVE REPORT

## **Report on Act 135 Surface Water Withdrawals Registration and Reporting**

**Year: 2024**

**Date reported: February 14, 2024**

**Authorizing statute: 10 V.S.A. § 1045**

**Committees: House Committees on Environment and Energy and on Agriculture, Food Resiliency, and Forestry and Senate Committees on Natural Resources and Energy and on Agriculture**

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## **Executive Summary**

This is the second annual report submitted pursuant to 10 V.S.A. § 1045, which requires the Secretary of Natural Resources, after consultation with the Secretary of Agriculture, Food and Markets, to provide the data submitted to the Secretary pursuant to 10 V.S.A. § 1042 (a) and (b), the Surface Water Withdrawal Registration and Reporting Program, and data submitted to the Secretary of Agriculture, Food, and Markets under 6 V.S.A. § 4927, Agricultural Surface Water Withdrawal Reporting. Act 135 took effect on July 1, 2022 and required any person withdrawing 10,000 gallons or more within a 24-hour period or 150,000 gallons or more of surface water over any 30-day period for farming (as defined in 6 V.S.A. § 4802) to file a report with the Secretary of Agriculture, Food and Markets by January 15, 2023. Additionally, the Act required other surface water users withdrawing water at the same volumes to register their water withdrawal with the Secretary of Natural Resources beginning January 1, 2023, and report total water withdrawn the following year.

In the initial year of the Department of Environmental Conservation (Department) Surface Water Withdrawal Registration and Reporting Program, 36 registrations were received for 38 water withdrawals. Three registered withdrawals were determined not to be withdrawals of surface water (as defined in 10 V.S.A. § 1002(20)) and were removed. The most common uses reported for the registered withdrawals were for golf course irrigation, industrial and construction use, and snowmaking.

The Agency of Agriculture, Food and Markets received reports from three entities as part of the Agricultural Surface Water Withdrawal Reporting Program. The most common uses reported for the water withdrawals were crop irrigation and aquaculture.

## Key Takeaways

- A total of 36 entities registered 38 surface water withdrawals with the Department of Environmental Conservation in 2023. Three registrations were withdrawn as it was determined not to be withdrawing surface water. Of the remaining 33 registrations, 27 reports were received withdrawing a total of 788 million gallons of surface water.
- The Agricultural Surface Water Withdrawal Reporting Program administered by the Agency of Agriculture, Foods, and Markets received surface water withdrawal reports from three entities which reported a total 1.86 billion gallons of water withdrawn, with the vast majority being used for aquaculture. Additionally, the number of farms reporting surface water use was lower in 2023 than in 2022.
- Vermont experienced anomalous environmental conditions in 2023, with hydrologic conditions varying significantly between the first and second half of year. These conditions ranged from greater than 75% of the State reported to be abnormally dry to moderate drought conditions in mid-June to catastrophic flooding occurring across the State during the month of July.
- There continues to be a need for outreach to surface water users about the requirements of both the Surface Water Registration and Reporting Program and the Agricultural Surface Water Reporting Program to increase compliance and ensure surface water users understand applicable water withdrawals must be reported annually. Additionally, technical assistance remains a priority to assist surface water users to ensure accurate data is correctly reported.

## Discussion

The Department of Environmental Conservation Surface Water Registration and Reporting Program began on January 1, 2023, as required by Act 135. During the initial year of the Program 36 registrations were received and are outlined in Table 1. Surface water users were able to register their water withdrawal via an online form on which registrants were required to provide the location of each water withdrawal and impacted surface water, frequency and rate of each withdrawal in gallons per minute, a description of the use or uses of the water to be withdrawn, the capacity of the withdrawal system, and a schedule for the withdrawal. Of the 36 registered withdrawals, three were determined not to be withdrawing water from a surface water as defined by the Act. Of the remaining registrations, 27 surface water withdrawal reports were received totaling 788 million gallons, with five registrants reporting withdrawal of no surface water during 2023.

A summary of agricultural surface water withdrawal reports filed with the Secretary of the Agriculture, Food, and Markets, pursuant to 6 V.S.A. § 4927 for 2023, are provided in Table 2. A total of two farms filed water withdrawal reports for two withdrawals, reporting total withdrawals of 652,000 and 1,109,593 gallons for irrigation and frost protection purposes. This was five fewer farms than reported using surface water withdrawals in 2022. It's unclear whether the five farms that previously reported surface water use were still in business during 2023. Additionally, the Vermont Fish and Wildlife Department filed surface water withdrawal reports for five surface water sources providing water to four of their fish culture stations. These facilities withdrew between 14,690,000 and 986,210,000 gallons.

There was significant variation in the hydrologic conditions experienced in Vermont during 2023 with widespread abnormally dry to moderate drought conditions persisting in 75% of the State in mid-June followed by extensive statewide flooding in July. As expected, the anomalous environmental conditions during 2023 had a substantial effect on the quantity of water withdrawn. With those sectors whose water use is closely tied to environmental conditions, withdrawing significantly more water before July as

compared to after the July flooding events. Additionally, registrants indicated to Department staff that the estimated quantity of water used during 2023 was about a quarter to a third of the volume withdrawn during a normal year.

For the upcoming year, outreach, education, and technical assistance will remain a priority for the Department to ensure that surface water users are aware of the requirement and that data being collected and reported is accurate. The Department spent a significant amount of time this reporting season following up with individual registrants to ensure timely and accurate reporting. This is and will continue to be essential for the registration and reporting program to generate a robust data set for the Department to consider when setting thresholds and other requirements for any future permitting program. Additionally, the Department will increase its effort to reach water users who may not be aware of the new registration and reporting requirements for surface water withdrawals. Finally, the Department plans to further refine the online registration and reporting forms and process based on knowledge gained over the last year.

Table 1. Summary of Surface Water Withdrawal Registration and Reports filed with the Department of Environmental Conservation for January 1 – December 31, 2023.

Registration Number	Registration Name	Description of Use	Total Withdrawals	Surface Water	Rate (Gallons per Minute)	Total Water Withdrawn (gallons)	Notes
1000-100	Dwight D. Eisenhower National Fish Hatchery / US Fish and Wildlife Service	Aquaculture	1	001 - Furnace Brook	001 - 1200 gpm	389,412,000	
1001-100	Burlington Country Club Irrigation	Golf Course Irrigation	1	001 - Stormwater Pond located on property	001 - 500 gpm	N/A	Withdrawn - Determined not to be withdrawing surface water
1002-100	Ekwanok Country Club	Golf Course Irrigation	1	001 - Lake Davs	001 - 1000 gpm	3,237,000	
1003-100	Ryegate Associates	Industrial	1	001 - Connecticut River	001 - 11000 gpm	84,202,000	
1004-100	Bromley Mountain	Snowmaking	1	001 - Tributary of Mill Brook	001 - 1500 gpm	65,225,003	
1005-100	Brattleboro - Newfane STP 2940 (1) / Northeast Paving	Construction	1	001 - West River	001 - 100 gpm	0	Withdrawal Not Used
1006-100	Columbia Forest Products	Other	1	001 - Lake Mempoemagog	001 - 500 gpm	1,479,782	
1007-100	Brattleboro - Newfane STP 2940 (1) / Northeast Paving	Construction	1	001 - West river	001 - 100 gpm	0	Withdrawal Not Used
1008-100	Brattleboro - Newfane STP 2940 (1) / Northeast Paving	Construction	2	001 - West river 002 - West river	001 - 100 gpm 002 - 100 gpm	126,000	Only one withdrawal used
1009-100	Westminster - Springfield IM 091-1 (86) - 191 NB / Pike Industries	Construction	1	001 - Connecticut River	001 - 400 gpm		No report received at time of submittal
1010-100	Stockbridge- Bethel STP SURF (79) / Pike Industries	Construction	1	001 - White River	001 - 400 gpm	48,500	
1011-100	Wilmington Brattleboro	Construction	1	001 - Whetstone Brook	001 - 319 gpm		No report received at time of submittal
1012-100	Isovolta, Inc Manufacturing Facility	Industrial	1	001 - The Cold River	001 - 513 gpm		No report received at time of submittal
1013-100	Vermont National Country Club	Golf Course Irrigation	1	001 - Pond	001 - 900 gpm	N/A	Withdrawn - Determined not to be withdrawing surface water
1014-100	Williston Golf Club	Golf Course Irrigation	1	001 - Golf Cours Pond / Tributary to Allen Brook	001 - 300 gpm	2,484,429	
1015-100	Montpelier NH PC24 (2)(3) / Pike Industries	Construction	1	001 - Winooski River	001 - 295 gpm		No report received at time of submittal
1016-100	Rutland Country Club	Golf Course Irrigation	1	001 - East Creek	001 - 200 gpm	2,866,505	
1017-100	Newport Country Club	Golf Course Irrigation	1	001 - Lake Mempoemagog	001 - 260 gpm	3,279,240	
1018-100	Marshfield-Danville NH PS19(1) / Pike Industries	Construction	1	001 - Winooski River	001 - 75 gpm		No report received at time of submittal
1019-100	Fox Run Golf Club	Golf Course Irrigation	1	001 - Black River	001 - 120 gpm	6,189,808	
1020-100	Ralph Myhre Golf Course	Golf Course Irrigation	1	001 - Otter Creek	001 - 300 gpm	2,484,000	
1021-100	Randolph Town Pool	Other	1	001 - Third Branch of White River	001 - 100 gpm	20,000	
1022-100	Woodstock Nordic Center Snowmaking	Snowmaking	1	001 - Kedron Brook / Golf Course Pond	001 - 27 gpm	0	Withdrawal Not operated in 2023
1023-100	Sunderland Hill Road	Other	1	001 - Battenkill Rlver	001 - 75 gpm	60,000	
1025-100	Cobble Creek Nursery, LLC	Nursery Irrigation	1	001 - Lewis Creek	001 - 60 gpm	676,800	
1026-100	William E Dailey, Inc. - Shaftsbury Facility	Industrial	2	001 - Paran Creek 002 - Paran Creek	001 - 500 gpm 002 - 500 gpm	46,530,000 150,768,000	
1027-100	William E. Dailey, Inc. - Manchester Facility	Industrial	1	001 - West Branch Battenkill	001 - 900 gpm	0	Withdrawal Not operated in 2023
1028-100	William E. Dailey, Inc. - Wilmington Facility	Industrial	1	001 - Heather Brook	001 - 20 gpm	0	Withdrawal Not operated in 2023
1029-100	Mad River Glen Co-Op	Snowmaking	1	001 - Mill Brook	001 - 350 gpm	10,369,501	
1030-100	Jay Peak Golf Course	Golf Course Irrigation	1	001 - Jay Branch / Pond	001 - 500 gpm	4,760,055	
1031-100	Hinesburg Sand and Gravel	Industrial	1	001 - recycle pond (private)	001 - 1500 gpm	N/A	Withdrawn - Determined not to be withdrawing surface water
1033-100	Stowe Country Club	Golf Course Irrigation	1	001 - West Branch of Little River / Pond	001 - 400 gpm	5,482,797	
1034-100	Stowe Mountain Club	Golf Course Irrigation	1	001 - West Branch of Little River / Pond	001 - 1000 gpm	6,959,957	
1035-100	Westrock Converting LLC	Industrial	1	001 - Missisquoi River	001 - 200 gpm	97,582,628	
1038-100	Soundview Holding Vermont LLC	Industrial	1	001 - Sacketts Brook	001 - 165 gpm	84,616,163	
1039-100	Saskadena Six Ski Area	Snowmaking	1	001 - Barnard Brook	001 - 800 gpm	16,269,065	

Table 2. Summary of the Surface Water Reports filed with the Secretary of Agriculture, Food, and Markets for the period of January 1 – December 31, 2023.

Surface Water User Name	Description of Use	Total Withdrawals	Surface Water	Rate (Gallons per Minute)	Total Water Withdrawn (gallons)
Lewis Creek Farm	Frost Protection / Irrigation	1	Lewis Creek	001 - 430 gpm	1,109,593
River Berry Farm	Frost Protection / Irrigation	1	Lamoille River	NA	652,000
Vermont Fish and Wildlife Department - Bald Hill Fish Culture Station	Aquaculture	2	Bean Brook Kelsey Brook	001 - 1050 gpm 001 - 160 gpm	557,010,000
Vermont Fish and Wildlife Department - Bennington Fish Culture Station	Aquaculture	1	South Stream	001 - 715 gpm	305,070,000
Vermont Fish and Wildlife Department - Ed Weed Fish Culture Station	Aquaculture	1	Lake Champlian	001 - 3000 gpm	981,210,000
Vermont Fish and Wildlife Department - Roxbury Fish Culture Station	Aquaculture	1	Flint Brook	001 - 100 gpm	14,690,000