

STATE OF VERMONT

2024

LIST OF PRIORITY SURFACE WATERS

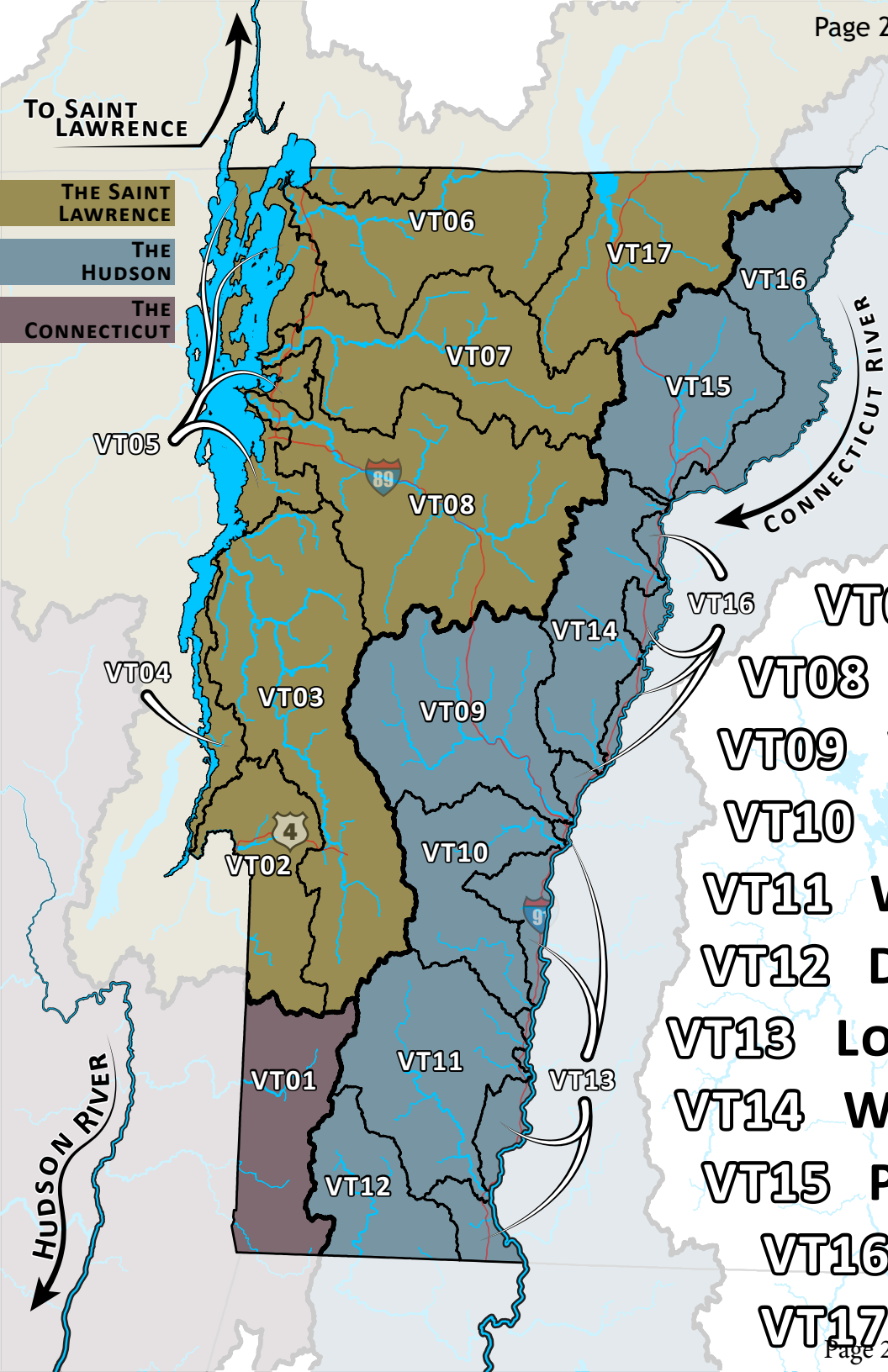
PART F. SURFACE WATERS ALTERED BY FLOW REGULATION

-draft-
April 11, 2024

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Watershed Management Division
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VERMONT WATERSHED PLANNING BASINS



- VT01** BATTENKILL
- VT02** POULTNEY-METTAWEE
- VT03** OTTER CREEK
- VT04** SOUTH LAKE CHAMPLAIN
- VT05** NORTH LAKE CHAMPLAIN
- VT06** BATTENKILL
- VT07** LAMOILLE
- VT08** WINOOSKI
- VT09** WHITE
- VT10** OTTAUQUECHEE
- VT11** WEST
- VT12** DEERFIELD
- VT13** LOWER CONNECTICUT
- VT14** WELLS, WAITS, OMPOMPANOOSUC
- VT15** PASSUMPSIC
- VT16** UPPER CONNECTICUT
- VT17** MEMPHREMAGOG

Waters appearing in Part F of the Vermont Priority Waters List are assessed as “altered.” Alterations arise from flow fluctuation, obstructions, or other manipulations of water levels that originate from hydroelectric facilities, dam operations or water withdrawals for industrial or municipal water supply or snowmaking purposes. These waters correspond to Category 4c of EPA’s Consolidated Assessment Listing Methodology. ** Identify new listings.

- Waterbody ID - The two digits following VT identifies the MAJOR VERMONT RIVER BASIN illustrated above and the two digits following - identifies the sub basin or mainstem within the major basin.
- Code - If the code contains an L the listing is a Lake within the sub basin and if the code is two digits the listing is a river reach within the sub basin or mainstem.
- Altered Use(s) - (AB) Aquatic biota and wildlife that may utilize or are present in the waters; (AH) Aquatic habitat to support aquatic biota, wildlife, or plant life; (CR) The use of waters for swimming and other primary contact recreation; (RF) The use of waters for fishing and related recreational uses; (RB) The use of waters for boating and related recreational uses; (AES) The use of waters for the enjoyment of aesthetic conditions

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
VT01-03	02	Basin Brook	AB	Possible lack of minimum flow below water supply withdrawal point	WSID #5017 - North Bennington Water Department; serves as back up supply source to gravel well field, permit down to 3.0 mgd from 4.0 mgd	
	03	Bolles Brook/Roaring Branch, Intake to City Stream Confluence	AB	Possible lack of minimum flow below water supply withdrawal point	WSID #5016 - Bennington Water Department; assessment of water withdrawal impact difficult given low productivity & low pH effect	
	10	South Stream, mouth upstream to Coleville Road**	AB	Insufficient conservation flow downstream of Bennington fish hatchery withdrawal	Listing based on data submitted as part of Act 135 Surface Water Withdrawal Program	
VT01-05	02	Hopper Brook	AB	Artificial flow regime and condition by hydroelectric operations may alter aquatic habitat	Unlicensed hydroelectric project	2030
	L02	Lake Madeleine	AB, AH	Water level fluctuation alters aquatic habitat	Unlicensed hydroelectric project	2030
VT02-03	02	Lake Bomoseen Outlet Stream (0.4 Mi)	AB	Flow fluctuation and no minimum flow below the Lake Bomoseen dam used to manage water level	Engage DEC dam safety program on the management on downstream flows from the dam	

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
VT03-04	01	Leicester River, from Lake Dunmore Dam to 6 miles downstream, including Salisbury Dam	ALL USES	Artificial flow regulation & condition by hydroelectric dam	GMP needs 404 ACOE to complete work on the dam; DEC trigger section 401 to address flow and water level issue; Project currently delayed	2026
	L05	Lake Dunmore (Salisbury)	AB, AH	Water level management by hydro alters aquatic biota	GMP needs 404 ACOE to complete work on the dam; DEC trigger section 401 to address flow and water level issue; Project currently delayed	2026
VT03-12	03	South Branch, Middlebury River (1.4 Miles)	AB	Artificial flow condition, insufficient flow below Snow Bowl snowmaking water withdrawal	Partial support 1.4 mi (6.0 mi total length)	
VT03-14	06	East Creek Below Patch Dam	ALL USES	Artificial flow regulation & condition by hydro; possible downstream fish passage problem at dam (threat)	Unlicensed facility	2030
	05	East Creek Below Glen Dam	ALL USES	Artificial flow regulation & condition by dam; only local drainage below; possible fish passage problem at dam (threat)	Unlicensed facility	2030
	02	East Creek Below Chittenden Reservoir	ALL USES	Artificial flow regulation & condition by dam; only local drainage below; possible fish passage problem at dam (threat)	Unlicensed facility	2030
	07	East Creek Hydro Bypass Tributary	AB	Low dissolved oxygen downstream of hydro facility	Unlicensed facility	2030
	L03	Chittenden Reservoir (Chittenden)	AB, AH	Water level fluctuation by hydro alters biological community & wetlands	Unlicensed facility	2030
	L05	Patch Pond (Rutland)	AB, AH, RB	Water level fluctuations alter biological community	Unlicensed facility	2030
VT06-01	01	Missisquoi River, Mouth to Swanton Dam	AB, RB	Artificial flow fluctuating and condition by hydropower production	FERC license expires 2024	2024

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
	02	Missisquoi River Between Swanton Dam and Highgate Falls	AB, RB	Artificial flow fluctuating and condition by hydropower production	FERC license expires 2024	2024
	03	Missisquoi River Between Sheldon Springs and Highgate Falls	AB, RB	Artificial flow fluctuating and condition by hydropower production	FERC license expires 2024; Owner has proposed to operate in a run-of-river mode under a new license	2024
VT06-02	01	Missisquoi River, Below Enosburg Falls Dam (0.1 Mile)	AB	Artificial flow fluctuating and condition by hydropower production	FERC license expires 2023; Owner in the process or going through the FERC relicensing process	2024
VT06-04	05	Stanhope Brook	AB	Possible lack of minimum flow below water supply withdrawal point	Richford water supply	
VT06-08	08	Jay Branch, rm. 7.3 to rm 4.6	AB	Artificial & insufficient flow below Jay Peak snowmaking water withdrawal	Partial support 4.7 mi (8.7 mi total length); Jay Peak evaluating expansion/alternatives	
	01	Jay Branch, rm. 9.1 to rm 7.3	AB	Artificial & insufficient flow below Jay Peak snowmaking water withdrawal		
	13	Jay Branch, rm. 9.3 to rm 9.1	AB	Artificial & insufficient flow below Jay Peak snowmaking water withdrawal	Partial support 4.7 mi (8.7 mi total length); Jay Peak evaluating expansion/alternatives	
VT07-04	01	Mid-Lamoille River, Immed. Below Cadys Falls Dam (0.3 Miles)	AB, AES	Artificial dewatering of falls by hydroelectric facility	Environmental court reinstated ANRs 401 conditions; FERC license still pending	2025
VT07-07	01	Upper Lamoille River Below Morrisville Lake Dam	AB, AES, RB	Below Morrisville dam: no flow in bypass impairs aesthetics, recreation, habitat	Environmental court reinstated ANRs 401 conditions; FERC license still pending	2025
	02	Upper Lamoille River Below Wolcott Dam	AB, AES, RB	Wolcott Dam: artificial & poor flow regime downstream (threat)	Unlicensed facility	2030
	03	Upper Lamoille River Below Hardwick Lake Dam	AB, AES, RB	Hardwick Lake Dam: artificial flow regime downriver	Supreme court remanded issues back to environmental court; FERC license still pending	2026
	L01	Lake Lamoille (Morristown)	AB, AH	Water level fluctuation by hydroelectric facility may alter aquatic habitat	Environmental court reinstated ANRs 401 conditions; FERC license still pending	2025
VT07-08	02	Elmore Pond Brook-From Dam to 2.2 Miles Downstream	ALL USES	Artificial flow regulation & condition by dam	Environmental court reinstated ANRs 401 conditions; FERC license still pending	2025

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
	L02	Lake Elmore (Elmore)	AH	Water level fluctuation by hydroelectric facility may alter aquatic habitat	Environmental court reinstated ANRs 401 conditions; FERC license still pending	2025
VT07-13	02	Unnamed Brook, Trib to Brewster River (1 Mile)	AB	Artificial flow regime, insufficient flow below Morse Reservoir, used for domestic water	Non-support 1.0 mi (2.7 mi total length); domestic water use; Removal of the dam is being considered	
VT07-18	01	Green River, Downstream from Reservoir 4.7 Miles	AB	Artificial flow regime and condition by hydroelectric operations alters aquatic biota	Environmental court reinstated ANRs 401 conditions; MWL is exploring the option of decommissioning the project; FERC process still pending	2025
	L03	Green River Reservoir	AB, AH	Water level fluctuation and winter drawdown alters aquatic habitat	Environmental court reinstated ANRs 401 conditions; MWL is exploring the option of decommissioning the project; FERC process still pending	2025
VT07-21	L05	Hardwick Lake (Hardwick)	AB, AES, AH	Water level fluctuation by hydroelectric facility alters aquatic habitat & wetlands	No longer managed for hydroelectric production; lake drained during fall/winter for ice control	2026
VT08-01	05	Winooski River, from No 19 Dam down 0.1 miles	AB, AES	Artificial & inadequate flow in bypass reach	FERC licences expires in 2025	
VT08-04	01	Joiner Brook (2.9 Miles)	AB	Artificial & insufficient flow below Bolton Valley snowmaking water withdrawal	Non-support 2.9 mi (5.7 mi total length)	
VT08-06	01	Tyler Brk (0.1 Mi) & Merriam Brk (0.1 Mi), Thatcher Brook Tribs	ALL USES	Artificial & inadequate flow condition below Waterbury Village public water supply withdrawal point	WSID #5284 - Waterbury Village Water	
VT08-11	01	Lower Little River Below Hydro Dam (2.6 Miles)	ALL USES	Artificial flow regime in the winter	New turbine runner and bypass flow valve will be operational in may 2018; winter drawdown will continue until tanner gates are replaced; DEC Dam Safety in consultation with USACE	2028

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
	L02	Waterbury Reservoir (Waterbury)	ALL USES	Winter drawdown alters all uses	New turbine runner and bypass flow valve will be operational in may 2018; winter drawdown will continue until tanner gates are replaced; DEC Dam Safety in consultation with USACE	2028
VT08-16	03	Benjamin Falls Brook (Pond Brook) from Berlin Pond to Mouth	AB, AES	Artificial dewatering of brook by Montpelier & Berlin water supply withdrawals	WSID #5272	
VT08-20	02	Mill Brook (2.1 Miles)	AB	Artificial & insufficient flow below Mad River Glen snowmaking water withdrawal	Partial support 2.1 mi (5.9 mi total length)	
	03	Slide Brook (0.8 Mile)	AB	Artificial & insufficient flow below Mt. Ellen snowmaking water withdrawal	Non-support 0.8 mi (3.4 mi total length)	
VT10-01	02	Lower Ottauquechee River, Below Ottauquechee Woolen Mill Dam (0.1 Mi)	AES	Artificial flow condition, dewatering of falls by hydroelectric facility		2032
	01	Lower Ottauquechee River, Below No. Hartland Dam (0.9 Mile)	AB, AES, RB	Artificial flow regulation & condition	USACE dam; no conservation flow based on any biological/wq criteria; 401 WQC issued for operation of the hydroelectric project in Oct. 2021; FERC license still pending	
VT10-02	L01	North Hartland Reservoir (Hartland)	AB, AH, RB	Annual water level fluctuations alter aquatic habitat	USACE dam; no conservation flow based on any biological/wq criteria; 401 WQC issued for operation of the hydroelectric project in Oct. 2021; FERC license still pending	
VT10-11	02	Lower Black River	AB	Artificial flow regulation & condition by dam	USACE dam; no conservation flow based on any biological/wq criteria	
VT10-13	L02	North Springfield Reservoir (Springfield)	AB, AH	Water level fluctuation alters aquatic habitat	USACE dam; no conservation flow based on any biological/wq criteria	
VT10-16	L03	Stoughton Pond (Weathersfield)	AB, AH	Water level fluctuation alters aquatic habitat	USACE dam; no conservation flow based on any biological/wq criteria	
VT11-07		West River, Mouth to Grassy Brook	AH, RB	Wide shallow channel, loss of riparian vegetation, USACOE dam operation	Wide shallow channel, loss of riparian vegetation, USACOE dam operation	

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
	01	Retreat Meadows	AH, RB	Unique habitat impacted by Vernon Dam water level fluctuations	Agreement on operation of Vernon Dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2024
VT11-08	01	Stickney Brook Mouth upstream to Langlie Brook (1.4 miles)	AB, RB	Artificial flow condition, seasonally devoid of flow below diversion dam; dredging	WSID # 5290 - Brattleboro Water Department; water supply reservoir above dam	
	02	Stickney Brook, confluence with Langlie Brook upstream 1.1 miles	AB, RB	Artificial flow condition, seasonally devoid of flow below diversion dam; dredging	WSID # 5290 - Brattleboro Water Department; water supply reservoir above dam	
VT11-10	02	West River, Townshend Dam to Grassy Brook	AH, RF	USACOE dam operation, impounded waters release results in elevated temperatures downstream		
	01	West River, Below Ball Mountain Dam to Townshend Dam (9 Miles)	AB, AH, CR	Artificial flow regime at dam	No minimum flow by USACE based on any biological/wq criteria. structural study complete, no action planned	
	L02	Townshend Reservoir (Townshend)	AB, AH	Water level fluctuation alters aquatic habitat	USACE dam; no conservation flow based on any biological/wq criteria	
VT11-16	02	Mill Brook (1.6 Miles)	AB	Artificial & insufficient flow below Bromley Snowmaking water withdrawal	Partial support 1.6 mi (8 mi total length)	
	03	Trib to Mill Brook (2.2 Miles)	AB	Artificial & insufficient flow below Bromley Snowmaking water withdrawal	Non-support 0.7 mi, partial support 1.5 mi (2.5 mi total length).	
VT11-18	L01	Hapgood Pond (Peru)	AB, AH	Annual drawdowns alter aquatic habitat		
VT12-01	01	Lower Deerfield River Below Harriman Reservoir (3.5 Miles)	AB	Low temperature hypolimnetic water release from reservoir affect fishery	401 certification issued (1/95); FERC license issued (4/97); DFW evaluating the effects of release.	
VT13-01		CT River, Wilder Dam to Ascutney Village	AB	Artificial flow condition, fluctuating flows associated with hydropower production	Agreement on operation of Wilder dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
VT13-02	03	CT River, Hoyts Landing	AB	Water level fluctuation at dam; dewatered shorelines/wetlands	Agreement on operation of Bellows Falls dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
	01	Connecticut River Above Bellow Falls Dam in Springfield	AB, AES	Water level fluctuation at dam; dewatered shorelines/wetlands; unstable/eroding streambanks	Agreement on operation of Bellows Falls dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
	02	Connecticut River Above Bellow Falls Dam to Hoyts Landing Area, Rockingham	AB	Water level fluctuation at dam; dewatered shorelines/wetlands	Agreement on operations of Bellows Falls dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
VT13-03		CT River, Below Bellows Falls Dam	AB	Artificial flow condition, fluctuating flows by hydropower production	Agreement on operation of Bellows Falls dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2023
VT13-04		Vernon Impoundment	AB	Water level fluctuation at dam; dewatered shoreline/wetlands	Agreement on operation of Vernon dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
VT13-05		Lower Connecticut River, Below Vernon Dam	AB	Artificial flow condition, fluctuating flows by hydropower production	Agreement on operation of Vernon dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
VT13-10	02	Ellis Brook, Farr (?) Brook Below Minards Pond	AB	Possible lack of minimum flow below water supply withdrawal point (threat)	WSID #5298 - Bellows Falls Water Department	
VT14-04	01	Waits River, Below Bradford Dam (0.3 Mile)	AB, AES	Artificial flow condition, poor flow regime in dam's bypass segment	FERC exemption	2026
VT14-07	01	Wells River, Below Dam at Boltonville (0.4 Mi)	AB, AES, RB	Artificial flow condition, poor flow and physical alterations in hydroelectric dam bypass segment	FERC exemption	2028

Waterbody ID	Code	Waterbody Name	Altered Use(s)	Problem	Status	Compliance Year
VT14-09	01	South Peacham Brook and Stevens River below Harveys Lake	AB	Dam management alters aquatic biota	Town is working with NGO and consultants on feasibility analysis of dam removal	
	L05	Harveys Lake (Barnet)	AB, AH	Water level management may alter aquatic habitat	Town is working towards dam removal and placement of weir to stabilize water level	
VT15-08	03	Bean Brook, from the Bald Hill Fish Culture Station water withdrawal downstream 1 mile**	AB	Insufficient conservation flow downstream of Bald Hill fish hatchery withdrawal	Listing based on data submitted as part of Act 135 Surface Water Withdrawal Program	
	04	Kelsey Brook, from the Bald Hill Fish Culture Station water withdrawal downstream to mouth**	AB	Insufficient conservation flow downstream of Bald Hill fish hatchery withdrawal	Listing based on data submitted as part of Act 135 Surface Water Withdrawal Program	
VT16-07	01	Connecticut River, Wilder Dam upstream 1 mile	AB	Reservoir water level fluctuation at dam; unstable/eroding streambanks upstream	Agreement on operations of Wilder dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
	02	Connecticut River, 1 mile upstream of Wilder Dam to Bradford (Waits River)	AB	Reservoir water level fluctuation at dam; unstable/eroding streambanks upstream	Agreement on operation of Wilder dam was reached in 2020 that will meet VWQS; FERC license and 401 WQC still pending	2025
VT17-01	L01	Lake Memphremagog	AB, AH	Water level fluctuation by hydroelectric facility may alter aquatic habitat and dewater wetlands and shoreline	DEC is a party to regular meetings which includes international joint commission, Canadian environmental regulatory authorities and municipalities to discuss ways to improve the water quality of the lake	
VT17-05	01	Brook #2 below Brighton water supply withdrawal	AB	Possible lack of minimum flow below water supply withdrawal point	WSID #5105; Brighton	
	03	Brook #1 below Brighton water supply withdrawal	AB	Possible lack of minimum flow below water supply withdrawal point	WSID #5105; Brighton	
VT17-08	L03	Shadow Lake (Glover)	AB, AES, AH	Water level fluctuation (seasonal drawdown) may alter aquatic habitat and aesthetics		2025