



## MEMO

Date: 2 November 2023

To: Clean Water Advisory Committee

From: Brian Voigt, Senior Planner & Lincoln Frasca, Planner

Re: Draft 2023 Winooski River Tactical Basin Plan

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### ✉ **ACTIONS REQUESTED:**

- 1) Propose comments on the Draft 2023 Winooski River Tactical Basin Plan for adoption by the Board of Commissioners, and
- 2) Make recommendations to the Board of Commissioners regarding the Draft 2023 Winooski River Tactical Basin Plan's conformance with the 2016 Central Vermont Regional Plan

The Agency of Natural Resources is updating the 2018 Winooski River Tactical Basin Plan. Keith Fritschie, Department of Environmental Conservation Watershed Planner for the Winooski River Basin, presented the draft plan and discussed the planning process at the Clean Water Advisory Committee September 2023 meeting and at the Board of Commissioner's October 2023 meeting.

CVRPC has the opportunity to provide recommendations to the Agency of Natural Resources regarding tactical basin plans pursuant to 10 V.S.A §1253(d). Statute directs the Agency to "develop, in consultation with the regional planning commission, an analysis and formal recommendation on conformance with the goals and objectives of applicable regional plans." Plus, regional planning commissions are to assist the Secretary in implementing a project evaluation process to prioritize water quality improvement projects within the region to assure cost effective use of state and federal funds.

Staff reviewed the 2023 Draft Winooski River Tactical Basin Plan in June 2023 and provided detailed comments to the Department of Environmental

Conservation's Watershed Planner. The Department of Environmental Conservation considered those comments prior to releasing the October 2023 draft of the plan for public comment. Appendix A offers a detailed accounting of the June 2023 and October 2023 drafts of the Tactical Basin Plan, highlighting which CVRPC comments were / were not incorporated into the October 2023 draft plan. In general, CVRPC Staff found the October 2023 Draft Winooski River Tactical Basin Plan:

- 1) easier to read (when compared to the June 2023 draft) through better organization, language consistencies, and the removal of (some) acronyms;
- 2) integrated municipal and regional updates; and
- 3) improved figure descriptions and simplified one map.

However, there is still room for improvement, particularly in the following areas:

- 1) The document would benefit from overall data simplification and increased accessibility of maps;
- 2) More detail could be provided on wetlands in the Winooski River Basin and the surface water (re)classification process;
- 3) Incorporate data that municipalities would find useful, such as additional information on permit compliance trends and funding opportunities.

Staff also completed a conformance analysis of the Draft 2023 Winooski River Tactical Basin Plan and the 2016 Central Vermont Regional Plan. The conformance table is included in Appendix B.

The Draft 2023 Winooski River Tactical Basin Plan can be viewed on the [Department of Environmental Conservation website](#). The public comment period extends through 10 November 2023.

## Appendix A

<b>CVRPC Staff Comments Incorporated in October 2023 Draft Winooski River Tactical Basin Plan</b>
<ul style="list-style-type: none"><li>• Spelling, grammar, and mathematical corrections were integrated including:<ul style="list-style-type: none"><li>◦ language consistencies (e.g. watershed vs. basin)</li><li>◦ elimination of redundant sentences</li><li>◦ acronyms were defined and or eliminated</li></ul></li><li>• Suggested web links were added to improve accessibility</li><li>• Paragraph labels were added to correspond with various sections of the Lake Scorecard Assessment.</li><li>• Table descriptions were added to improve clarity of data represented (pg. 43)</li><li>• Simplification of Agriculture land use map (pg. 81)</li><li>• Definitions of Agency of Natural Resources terminology such as “developed lands” were added</li><li>• Inclusion of the year a town’s Stormwater Master Plan was completed in a table</li><li>• Inclusion of the completion status for CVRPC’s 2023 initial review of the Region’s flood by-laws in preparation for new FEMA maps</li></ul>
<b>CVRPC Staff Comments Not Incorporated in October 2023 Draft Winooski River Tactical Basin Plan</b>
<ul style="list-style-type: none"><li>• Data simplification recommendation to reduce redundancy of maps and tables in Lake Scorecard Assessment section (pg. 30)</li><li>• Percentage of wetlands inventoried in the Wetland Bioassessment and Vermont Rapid Assessment Method (pg. 35)</li><li>• Differentiation of surface water classification process through the Tactical Basin Plan vs. on a case by case basis (pg. 38)</li><li>• More information on wetlands in the basin, acres of land covered by various wetland designations, and changes since the 2018 Winooski River Tactical Basin Plan (pg. 45)</li><li>• Reasoning for not pursuing Outstanding Resource Waters Designation for recommended waters (pg. 46)</li><li>• Reconsider captions for Land use sector framework in figure 25 to more accurately depict land use vs. land cover (pg. 80)</li><li>• Explanation for Washington County’s low compliance with Required Agricultural Practices (pg. 84)</li><li>• Map of three-acre school sites eligible for Green Schools Block Grant (pg. 89)</li><li>• Funding sources for towns recommended to complete Illicit Discharge Detection and Elimination studies (pg. 93)</li></ul>

- Summary of results from Rethink Runoff and Storm Smart projects (pg. 94)
- Further explanation of Municipal Roads General Permit requirements (pg. 96)
- Simplification of Figure 30 Road miles by Municipal Roads General Permit improvement priority (pg. 98)
- Clarification of the goals in the Vermont Agency of Transportation's Transportation Separate Storm Sewer System general permit (pg. 99)
- Identify alternative funding to meet waste water treatment facility requirements and avoid competition for Clean Water State Revolving Fund (pg. 104)
- Explain, "Montpelier is very close to status of no combined sewer overflow, with just a hydrologic problem causing overflows." (pg. 107)
- Include a map of permitted indirect discharge systems in the basin (pg. 109)
- Define "area-weighted" reach assignment (pg. 113)
- Define "run-of-river operation" (pg. 120)
- Expand caption of Figure 31 to clarify whether mapped Use Value and Appraisal (aka Current Use) parcels include both forests and agricultural parcels or just forests (pg. 131)
- Mention Act 154 in relation to project scoring for Winooski Clean Water Service Provider program (pg. 133)

## Appendix B

<i>Draft 2023 Winooski River Tactical Basin Plan Strategies by Sector</i>	<i>2016 Central Vermont Regional Plan, amended 2020 Goals, Policies, &amp; Actions</i>
<b>AGRICULTURE</b>	
<p>Conservation practices that reduce sources of pollution from farm production areas and farm fields.</p> <ul style="list-style-type: none"> <li>• Target field Best Management Practice implementation in high priority watersheds.</li> <li>• Improve nutrient management planning (NMP) through technical support, NMP workshops, and financial support for improved nutrient utilization.</li> <li>• Implement NMPs and associated agricultural water quality practices in high priority catchments.</li> <li>• Support farm teams, conservation equipment programs, soil health assessments, and farmer participation in the Vermont Pay for Phosphorus Program.</li> </ul>	<p><u>General Land Use Goals, Policies, and Strategies:</u></p> <p><b>Goal 1:</b> To promote sound management, conservation and use of the Region's natural resources.</p> <p>Policy 3: Support the betterment of surface water quality in the Region.</p> <p>Strategy 3a: Storage and utilization of fertilizers, pesticides, petro-chemicals, herbicides, sludge, or other potentially harmful industrial, agricultural, commercial or residential materials, must be accomplished in a manner compatible with existing regulations.</p> <p><b>Goal 7:</b> To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.</p> <p>Policy 3: Acceptable Management Practices (AMP's, as defined by the Vermont Agency of Natural Resources) should be employed on all agricultural, silvicultural and earth extraction operations.</p>

**DEVELOPED LANDS - STORMWATER**

Practices that reduce or treat polluted stormwater runoff from developed lands, such as parking lots, sidewalks, and rooftops.

- Develop, design, and implement stormwater treatment projects identified in Phosphorus Control Plans, Stormwater Master Plans, stormwater mapping reports, or other assessments.
- Support the design and implementation of small-scale stormwater practices through formula grant funding.
- Provide outreach and technical support to landowners with 3-acre impervious parcels.
- Promote and, where appropriate, coordinate existing campaigns to raise awareness and adoption of simple residential stormwater management approaches and chloride application best practices.

General Land Use Goals, Policies, and Strategies:

**Goal 7:** To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

Policy 1: New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. (The strategy includes a bulleted list of recommended methods on page 2-44).

Policy 2: Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during and after construction, including plans for long term maintenance and operations. (The strategy includes a bulleted list of objectives and applications on page 2-44).

Policy 4: Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities. (The strategy includes a bulleted list of recommended methods on page 2-44).

Policy 5: Municipalities should consider adopting policies and practices to reduce the volume and impacts of storm water runoff. (The strategy includes a bulleted list of policies and practices on page 2-44).

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<p><b>DEVELOPED LANDS - ROADS</b></p>	
<p>Stormwater and roadside erosion control practices that prevent erosion and treat road-related sources of pollution.</p> <ul style="list-style-type: none"> <li>• Provide technical support and funding to towns to implement priority Municipal Roads General Permit projects and to update road erosion inventories.</li> <li>• Develop private road phosphorus reduction estimates and complete private road segmentation and assessments.</li> </ul>	<p><u>Transportation Goals and Policies:</u></p> <p><b>Goal 2:</b> To preserve and maintain the existing transportation system.</p> <p>Policy 1: Support the necessary steps for evaluating, prioritizing, and implementing preventive maintenance programs for all elements of the transportation system.</p> <p><b>Goal 5:</b> To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.</p> <p>Policy 1: Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).</p>

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<p><b>WASTEWATER</b></p>	
<p>Improvements to municipal wastewater infrastructure that decrease pollution from municipal wastewater systems through treatment upgrades, combined sewer overflow (CSO) abatement, and refurbishment of aging infrastructure.</p> <ul style="list-style-type: none"> <li>• Support municipalities pursuing wastewater treatment facility phosphorus optimization, expansion projects, and upgrades to meet total maximum daily load allotments, phosphorus optimization and combined sewer overflow requirements.</li> <li>• Support and ensure monitoring and permit compliance for waste management systems.</li> <li>• Provide technical assistance and funding to towns interested in exploring and implementing village wastewater systems and septic replacement through ANR Village Wastewater Solutions.</li> <li>• Promote septic system maintenance in communities adjacent to nutrient- or bacteria-degraded waters via Wastewater Workshops.</li> </ul>	<p><u>Facilities, Services and Utilities Goals, Policies and Strategies:</u></p> <p><b>Goal:</b> Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.</p> <p>Policy 3: Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows.</p> <p>Policy 4: Support efforts to upgrade components of aging wastewater systems to address depreciation, improve energy efficiency and increase flood resilience of the Region’s systems.</p> <p>Policy 4B: Perform outreach to municipalities whose systems are approaching 20-yr design life and connect local operators/commissions with available technical assistance.</p> <p>Policy 13: CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.</p>



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<p><b>NATURAL RESOURCE RESTORATION</b></p>	
<p>Restoration of “natural infrastructure” functions that prevent and abate pollution. Natural infrastructure includes: floodplains, river channels, lakeshores, wetlands, and forest lands.</p> <p><i>Rivers:</i></p> <ul style="list-style-type: none"> <li>• Evaluate water quality benefits of protection and restoration projects identified in state-supported plans and develop and implement priority projects.</li> <li>• Pilot the identification, development, and implementation of low-tech, process-based restoration projects to improve stream equilibrium.</li> <li>• Support municipalities in updating flood hazard bylaws and considering adoption of river corridor protections with new Federal Emergency Management Agency maps.</li> <li>• Scope, develop, and implement priority culvert upgrade and dam removal projects.</li> <li>• Encourage landowner and recreationist stewardship of riparian areas through established social marketing and signage campaigns for water quality and biodiversity benefit, e.g., Stream Wise.</li> <li>• Support outreach to towns on opportunities to reclassify waters based on recreation-fishing,</li> </ul>	<p><u>General Land Use Goals, Policies, and Strategies:</u></p> <p><b>Goal 1:</b> To promote sound management, conservation and use of the Region's natural resources. Policies 3: Support the betterment of surface water quality in the Region.</p> <p>Strategy 3d. Native vegetated buffer strips in riparian zones and shoreland areas should be protected or maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT Agency of Natural Resources Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.</p> <p>Strategy 3g. Assist landowners in identifying funding opportunities to support buffer plantings on their properties that would support stream bank and shoreland restoration.</p> <p>Strategy 5b. Encourage and provide technical assistance to municipalities in enhancing the regulatory standards in their municipal flood hazard regulations, including the incorporation of River Corridor regulations.</p> <p>Strategy 5e. Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster</p>

aquatic biota and wildlife, and aquatic habitat uses.

*Lakes:*

- Implement Next Generation Lake Assessments to rapidly assess lake stressors and evaluate the need for more detailed lake assessments.
- Evaluate community support for and implement Lake Wise assessments and Lake Watershed Action Plans in populated lake communities with fair to poor shoreland or watershed conditions.
- Develop and implement priority projects identified during Lake Wise or Lake Watershed Action Plan assessment.
- Maintain and build the capacity for existing aquatic invasive species management and prevention programs.
- Where applicable, increase protections for high-quality lakes through reclassification or evaluate reclassification potential through additional monitoring.

*Wetlands:*

- Develop a process for crediting the phosphorus reduction of wetland protection and restoration projects.
- Scope and develop small-scale (10 – 50-acre) wetland protection and restoration opportunities.
- Provide support to the Wetlands Program for publicizing updated wetland mapping and local efforts for reclassification.

design, particularly for those upstream floodplains that provide flood protection functions for the Region 's downtowns and village centers.

Policy 6: Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

Facilities, Services and Utilities Goals, Policies and Strategies – Emergency Management

**Goal 1:** To build disaster resistant communities in Central Vermont through sound emergency planning and management.

**Goal 2:** To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

Policy 6: Discourage residential, commercial, or residential development in floodplains.

*Forests:*

- Pilot forest road inventories and implement priority projects on state, municipal, and potentially private lands.
- Identify and implement feasible forest erosion projects identified with emerging forest erosion mapping tools.
- Support the use of skidder bridges through rental and incentive programs.
- Encourage land conservation and Use Value Appraisal enrollment where landowners are interested, especially in drinking water source protection areas.