



Date: October __, 2018

To: Vermont Agency of Natural Resources, Department of Environmental Conservation

From: Chittenden County Regional Planning Commission

Re: RECOMMENDATIONS REGARDING CONFORMANCE OF THE DRAFT WINOOSKI TACTICAL BASIN PLAN WITH THE 2018 CHITTENDEN COUNTY ECOS PLAN

CCRPC would like to commend Department of Environmental Conservation (DEC) Watershed Coordinator Karen Bates, on the comprehensive presentation and analysis contained in the *Draft Winooski Tactical Basin Plan (TBP)*. We appreciate the opportunity to work with her and other DEC staff to strengthen municipal and public participation in TBP development. We look forward to continued cooperation with DEC and with the Agency of Natural Resources as a whole on future TBPs, as well as water quality outreach and education and other activities.

BACKGROUND

CCRPC has the opportunity to provide recommendations to the Agency of Natural Resources regarding tactical basin plans pursuant to the following sections of Vermont Statutes Title 10, Chapter 47, §1253(d)

- (2)(G) ... *the Secretary [of Natural Resources] shall: develop, in consultation with the regional planning commission, an analysis and formal recommendation on conformance with the goals and objectives of applicable regional plans.*
- (3)(D) ... [the 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.*

The CCRPC reviewed the *Draft Winooski Tactical Basin Plan* that was issued for RPC review on August 28, 2018 and the formal draft issued on September __, 2018. The Winooski Basin includes major portions of the Chittenden County towns of Colchester, Essex, Essex Junction, Essex, Jericho, Shelburne, South Burlington, Underhill, Williston and Winooski and small portions of Burlington, Hinesburg and Westford.

The *2018 Chittenden County ECOS Plan* serves as the County's Regional Plan. The *ECOS Plan* also serves as the Metropolitan Transportation Plan (MTP) and the Comprehensive Economic Development Strategy (CEDS) for the County.

The purpose of this memorandum is to analyze the relative conformance of the *Draft Winooski Tactical Basin Plan* with the relevant Goals, Strategies and Recommended Actions of the *ECOS Plan* and to provide recommendations regarding project prioritization.

CONFORMANCE WITH THE REGIONAL PLAN

The draft *Winooski Tactical Basin Plan* is in conformance with and supportive of the *2018 Chittenden County ECOS Plan*, specifically with the following ECOS Plan Goals and Strategies:

Goals:

Natural Systems – Design and maintain a strategically planned and managed green infrastructure network composed of natural lands, working landscapes, and open spaces that conserve ecosystem values and functions, and provide associated benefits to our community.

Built Environment - Make public and private investments in the built environment to minimize environmental impact, maximize financial efficiency, optimize social equity and benefits, and improve public health.

1. *Ecological Systems (Habitats, Water Quality, Air Quality)* - Conserve, protect and improve the health of native species habitats, water quality and quantity, and air quality.

12. *Working Lands* - Support the growth and vitality of working farms and managed forests; and sustainably manage sand and gravel extraction operations.

16. *Infrastructure* - Ensure adequate infrastructure and facilities (i.e. water supply, wastewater treatment, stormwater treatment, broadband coverage and solid waste recovery and recycling) to support areas planned for growth while conserving resources.

Strategies:

#2: Strive for 80% of new development in areas planned for growth, which amounts to 15% of our land area.

#3: Improve the safety, water quality, and habitat of our rivers, streams, wetlands and lakes in each watershed.

#4 Increase investment in and decrease subdivision of working lands and significant habitats, and support local food systems.

The following table details how the *Basin Plan's* top objectives and strategies are in conformance with and supportive of specific Actions of the *ECOS Plan*.

Draft Winooski Tactical Basin Plan, Objectives and Strategies	Conformance with select Actions of 2018 Chittenden County ECOS Plan (cf. applicable section)
<i>Protect river corridors and floodplains to increase flood resilience and allow rivers to reach equilibrium</i>	<u>Strategy 3. Action 1.</u> River Hazard Protection. And multiple sub-actions.
<i>Increase knowledge of water quality conditions in the basin, including the identification of high quality lakes</i>	<u>Strategy 3. Action 2.</u> Non-point source pollution prevention and treatment. The ECOS Plan does not specifically list high priority lakes, but it does include implementation of the Winooski Tactical Basin Plan in Strategy 3, Action 1.e.
<i>Implement agricultural Best Management Practices (BMPs)</i>	<u>Strategy 3. Action 2.b.</u> includes "Incentivize best management practices for agricultural uses; and encourage the Agency of Agriculture to better enforce their required agricultural practices. "

<i>Resolve E. coli impairments in along Winooski between Plainfield and Cabot, Huntington, Mad Rivers and Allen Brook</i>	<u>Strategy 3. Action 2.</u> Non-point source pollution prevention and treatment.
<i>Manage stormwater from developed areas through the development and implementation of stormwater master plans and Flow Restoration Plans in MS4 communities</i>	<u>Strategy 3.</u> and all <u>Action 2. sub-actions</u> which include data collection of areas producing water quality pollutants, help municipalities with regulatory measures (i.e. MRGP, developed lands permit, etc.), and help municipalities and partners with non-regulatory approaches (financial assistance for stormwater facility improvements).
<i>Improve littoral zone habitat along Lake Champlain, and ponds in the Kingsbury Branch</i>	<u>Strategy 3. Action 1.f.</u> - "To protect water quality, development should be located to avoid state and local known constraints that have been field verified, and to minimize impacts to state and local possible constraints that have been field verified." These constraints include floodplains, municipal surface water setbacks, riparian areas and wildlife connectivity resources. <u>Strategy 4.</u> "Increase investment in and decrease subdivision of working lands and significant habitats, and support local food systems." <u>Strategy 4. Action 1.</u> Protect forest blocks, wildlife connectivity resources and crossings, surface waters, riparian areas and other significant habitats (e.g. wetlands) from development and fragmentation."
<i>Inventory and prioritize municipal road erosion features that discharge into surface water and implement high priority actions in existing road erosion inventoried sites</i>	<u>Strategy 3. Action 2</u> includes "CCRPC will work with the municipalities and other partners to implement these programs: Municipal Roads General Permit, Phosphorus reduction integration into the existing MS4 permit, and Developed Lands (3 or more acres of impervious). See Chittenden County's Work Plan andAll Hazard Mitigation Plan ... for more detail on these actions."
<i>Provide technical and as available, financial assistance to wastewater treatment facilities</i>	<u>Strategy 3. Action 3</u> discusses needed wastewater treatment plant upgrades. In addition, the Comprehensive Economic Development Strategies list includes specific wastewater treatment plant projects.
<i>Prioritize wetland and floodplain restoration projects</i>	<u>Strategy 3, Action 1.d.</u> "Support non-regulatory conservation and/or preservation of vulnerable areas through public and land trust investments, including identification of repetitively damaged structures and provide assistance to elevate, relocate or buy out structures, and identify where flood storage capacity may be restored and conserved."
<i>Prioritize remediation of forest roads and log landings with high erosion risk</i>	<u>Strategy 3.</u> Water Quality protection and restoration

<i>Assist municipalities in identifying areas of landslide hazards for benefit of future development</i>	Preliminary data on areas of potential landslides are located in the <i>Chittenden County Multi-Jurisdictional All Hazards Mitigation Plan</i> which is incorporated by reference into the ECOS Plan.
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PLAN CONFORMANCE CONCLUSION

The draft *Winooski Tactical Basin Plan* is in conformance with and supportive of the *2018 Chittenden County ECOS Plan*.

ADDITIONAL RECOMMENDATIONS

1. As projects are developed, DEC and other agencies and organizations that provide funding, or implement projects directly, should prioritize projects that achieve a high phosphorus removed benefit per cost ratio. Additionally, projects that also provide co-benefits such as other TMDLs (i.e. Flow Restoration Plans, *e.coli*, mercury, etc.), hazard mitigation, transportation improvement, aquatic organism passage, and/or listed in municipal comprehensive plans and capital plans should also receive additional consideration in making funding decisions.
2. Given that phosphorus-loading concerns are the most critical problem in the watershed and given the requirements in the Lake Champlain TMDL are the most pressing, the Basin Plan should make it clear that some of the 11 “Top Objectives and Strategies” are more important than others. For example, we recommend that 6 of those strategies be recast as “Secondary Objectives and Strategies,” namely: Identify and protect high quality lakes; Protect and remediate lake shorelands; Reduce the spread of Aquatic Invasive Species; Increase knowledge of water quality conditions in the Basin; Address Toxics, and Identify streams for reclassification.
3. While we respect the enthusiasm and determination of DEC to see projects implemented as can be seen in the following sections:

“(t)he Tactical Basin Plan actions are described in Chapter 5’s implementation table summary and the Watershed Projects Database and will be addressed over the five-year life of the Winooski Basin Tactical Basin Plan.” (cf. p. 3) and “(i)t is envisioned that the action items currently in the database as of the signing of the plan will be accomplished within the next five years as resources allow.” (cf. p. 134)

We recommend that the language in those sections be softened to make it clear that only a relatively small proportion of the actions can be implemented given not only the relatively low level of funds available but also the sheer human capital needed to scope, design and implement the projects within the next five-year period.

4. CRPCC recommends that more funding be allocated towards project development at this early stage so that in subsequent years it will be easier to determine which projects reduce the most

phosphorous per dollar. Development of projects in Critical Source Areas for phosphorus loading should receive priority.

5. CCRPC recommends that for project implementation, priority be given to those projects that reduce the most phosphorus per dollar spent with priority given to those projects with additional co-benefits.
6. CCRPC recommends that RPCs, through their Clean Water Advisory Committee be allowed to provide input to DEC's prioritization scoring system as intended by statute: Title 10, Chapter 47, §1253(d)(3)(D) ... [the 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.*

Additional comments regarding wastewater systems

According to the most recent Vermont Water Quality Funding 20-Year Projection developed by the “Working Group on Water Quality Funding, 2017 Act 73 Section 26 which submitted its report to the Vermont General Assembly in late 2017, below is a table that summarizes the cost by sector along with the required phosphorus load reduction:

Sector	20-Yr Cost (\$M)	P-Reduction (tons)	\$M/ton
Natural Resources	\$143	78	\$1.8M/ton
Agriculture	\$637	143	\$4.5 M/ton
Stormwater	\$708	24	\$29.5 M/ton
Municipal Water Pollution Control Infrastructure	\$1,039	23	\$45.2 M/ton
total	\$2,526	268	

CCRPC recommends that the State looks for ways for phosphorus reduction investments to be made in the most cost-effective manner possible. Providing mechanisms for municipalities and other property owners with permits to invest in Natural Resource or Agriculture sector phosphorus reduction would clearly provide for much more phosphorus reduction per dollar spent.

Similarly, while the “all-in” approach to phosphorus reduction has a certain marketing appeal, it is clear both from a financial efficiency and efficacy standpoint that requiring multi-million-dollar upgrades to municipal wastewater plants to remove a relatively low amount of phosphorus is counterproductive to achieving the targets established in the Lake Champlain TMDL. Increasing these municipal operating costs will in turn further increase already high housing costs in Chittenden County and drive development and housing sales further into greenfields and present risks to intact wetlands, streams and the watershed as a whole.

Strategy 7 [Develop financing and governance systems to make the most efficient use of taxpayer dollars and reduce costs] of the ECOS Plan notes that

Considering development and growth comes with both costs and benefits, this Plan attempts to reach a balance by directing growth in such a way that new infrastructure and long-term maintenance costs are minimized. For example: Promotion of and incentives for compact development in areas planned for growth will help keep rural areas open; this

can also minimize stormwater problems and prevent new watersheds from becoming impaired.

Simply put, the imposition of additional costs (at a poor phosphorus per pound removal rate) on municipal wastewater systems (and to some extent municipal stormwater systems) will make it difficult for Chittenden County communities to develop appropriately and to meet key Strategies outlined in the 2018 ECOS Plan, especially #1 - #4.

- 1. Improve and strengthen the economic systems of our region...*
- 2. Strive for 80% of new development in areas planned for growth..*
- 3. Improve the safety, water quality, and habitat of our rivers, streams, wetlands and lakes...*
- 4. Increase investment in and decrease subdivision of working lands and significant habitats...*

Thank you for your consideration of our recommendations. If you desire clarification on this letter, please do not hesitate to contact Dan Albrecht, dalbrecht@ccrpcvt.org or 802-846-4490, Ext. *29.

Note: The CCRPC will plan to provide additional staff level comments prior to the formal comment deadline.