



AGENDA

Clean Water Advisory Committee

Thursday October 11th 4:00 – 6:00 PM

Memorial Room, Montpelier City Hall, 39 Main St., Montpelier, VT



- 4:00 PM: Welcome and Introductions
Public Comments
- 4:05 PM: Changes to agenda
- 4:10 PM: Approval 8/16/18 minutes (enclosed)
- 4:20 PM: Approval 9/20/18 minutes (enclosed)
- 5:00 PM: Follow up on CVRPC Board/Public Meeting on 10/9/18 on the Basin Plans (enclosed draft comment/conformance letters from CVRPC to ANR) - Pam
- 5:10 PM: Last minute/public comment period comments for White River Basin Plan
- 5:20 PM: Last minute/public comment period comments for Winooski River Basin Plan
- 5:30 PM: Follow up on Nat Shambaugh's presentation – where do we go from here?
- 5:45 PM: January ERP round application wish list
- 5:55 PM: Wrap-up. Next Meeting Date 11/15 /18? Topics/agenda items for next meeting. VAAFm presentation on groundwater/surface water interaction/contamination from farms? Surface water classifications?

1 **CENTRAL VERMONT REGIONAL PLANNING COMMISSION**
2 **CLEAN WATER ADVISORY COMMITTEE**
3 **AUGUST 16, 2018**
4 **Meeting Notes**

5
6 A meeting of the Central Vermont Regional Planning Commission’s Clean Water Advisory Committee
7 was held on Thursday, July 12, 2018 in the Conference Room of the Central Vermont Regional Planning
8 Commission.
9

10 Committee Members Present:

11 Ron Krauth – Middlesex/ Board of Commissioners
12 Stewart Clark – Worcester Planning Commission
13 Russ Barrett – Northfield Conservation Commission
14 Amy Hornblas – Cabot/Board of Commissioners
15 Michele Braun – Friends of Winooski River
16 Karen Bates – ANR
17 Kristen Balschunat - Winooski Natural Resources Conservation District
18 Larry Becker- Middlesex Conservation Commission
19 Dona Bate – Montpelier City Council
20 John Brabant – Calais/Board of Commissioners
21

22 Committee Members Absent:

23 Michael Gray – Woodbury/ Board of Commissioners
24 John Hoogenboom – Moretown Selectboard
25 Brian Shupe – Friends of Mad River
26

27 Others Present:

28 None
29

30 **CALL TO ORDER**

31 Pam DeAndrea called the meeting to order at 4:10 PM.
32 Welcome and introductions: Introduced Kristen Balschunat from WNRCD and she went over the work
33 that they do and their program.
34

35 **CHANGES OR AMENDMENTS TO THE AGENDA**

36 Pam: would like to announce some events and meetings.
37 John: would like a segment to address pesticides to our conversations. Tonight and future agenda items.
38 Ron - Future conversations also – pharmaceuticals. John mentioned that USGS has done an herbicide
39 and antibiotic studies in Midwest.
40

41 **PUBLIC COMMENTS**

42
43 Dona commented on what a great job Karen did at the TAC meeting.
44

45 **APPROVAL OF MAY 10 MINUTES**

46 June minutes: changes were made to the following lines as indicated in the draft circulated to the CWAC
47 per Larry Becker’s suggestions: Lines 17-21 and line 42. June minutes are approved as amended by
48 Larry’s comments.
49

50 July minutes approved as is.
51

1 **DISCUSSION ON DRAFT WINOOSKI TACTICAL BASIN PLAN:**

2
3 Stew- confused why we are going through the plan more when other agencies have needed a draft.

4 Karen - It is a work in progress and she is getting drafts to different groups at different times to get their
5 feedback. Pesticides: looking at aquatic biological markers helps to see what factors may be influencing
6 them. Urban: stormwater management will deal with the pesticides getting in. Agriculture: nutrients are
7 tested for but not pesticides. John commented that you cannot see what the impact is on the micro-level.

8
9 The group had a lengthy discussion about pesticides/herbicides and their potential impact to aquatic life:
10 Karen – understand what pesticides could do and then decide what to study. Fisheries biologists are
11 looking in the Missisquoi for impacts from pesticides/herbicides. If there can be a correlation between
12 impacts to fish biology and time of spraying then water quality monitoring and management programs
13 may change. That needs to change at the statehouse level. Need research to drive those changes.

14
15 Stew - Establishing a cause and effect link seems problematic. We should be monitoring the water
16 before the impacts are seen.

17
18 Karen- can have Rick Levy to come and talk. In terms of this Basin Plan, if there was one area that was
19 a source of pesticides where we need a study, we can put that in the Basin Plan. Small demonstration
20 projects can then be put forward for change in legislation.

21
22 Larry – could you do an analysis that shows where bugs are bad and correlate it with pesticide use?
23 Would want to look at what those vectors may be. Karen – that would be a great UVM study.

24
25 John – wetlands are waters of the state, and we should be looking at the streams that flow from the farms
26 into the wetlands to protect the wetlands as well as streams.

27 Karen - Wetlands program is currently trying to figure out their priorities so they could perhaps look at
28 runoff from farms into wetlands.

29
30 Michele - Agency of Ag did a report to the legislature – atrazine – they don't look for the specific
31 chemicals, they look for the effects. They cannot connect it to just atrazine due to all the other
32 chemicals that cause endocrine disruption. They could not attribute the fish damage alone to atrazine.
33 USGS is going to continue the research.

34
35 Karen – what can we do in the Winooski Basin?

36 Pam – can we put it in as an item in the plan?

37 Karen – if there is no tool in the plan to use for a strategy, it is difficult to put in the plan. Karen can talk
38 to Rick to see if there is anything in the works for the future. Are pesticide levels high enough that the
39 water is not healthy for us?

40 John – it would be good to know what the base levels are.

41 Karen – how do you develop a monitoring strategy?

42 John – Calais Conservation Commission and selectboard may fund a study to monitor inlet to Sodom
43 Pond and its outlet in East Montpelier.

44
45 Larry – can you have in the plan to look at DEC and agency of Ag data? Karen – yes we can have it in
46 there to look at previous data collection efforts.

1 Karen – we could perhaps get Ned Shambaugh to get involved. We could invite him to a meeting. We
2 have to have a good enough argument to monitor.

3
4 Stew – North Montpelier Pond. Pesticides may be an issue there due to the farms upstream.
5 Karen will talk to Rick about concerns and she will email us about that.

6
7 John – can we have maybe a section in the plan like an appendix?

8 Pam – we can include it as a formal recommendation from the Board.

9 Karen – She can put it in the watershed projects database.

10 Dona – would like our recommendation to come back to somewhere in the plan.

11 Larry – put in the plan that it is an objective to do more research on pesticide effects.

12 Michele – start with what they did in the Mississquoi do the same for the Winooski.

13
14 Karen - WWTF may be the big source in the Winooski vs. ag in the Mississquoi.

15
16 John – spreading sewage on ag fields is a big problem. Stew: Dog River fields also in the past.

17 Ron: we should investigate a solution to spreading the sewage more.

18 Amy – for example no till is a strategy that has unwanted repercussions

19 .
20 Kristen – basin plan brings together all the studies together. Karen – yes but we can go above that where
21 we will actually have assessments and monitoring. ANR then has a list where all the problems are and
22 also what we need to do in the future.

23 Kristen - Maybe WNRCD could be a source for monitoring through their program. How can she tap in
24 with what is needed?

25 Karen – when ANR gets info on impacts, then they will look at what data is out there and if not maybe
26 implement more monitoring.

27
28 **DRAFT WINOOSKI TACTICAL BASIN PLAN TABLE REVIEW:**

29
30 Tables review summary:

31
32 Karen: Table 4 – list of waterbodies are listed and their associated stressors. Provide me with info if we
33 have missed anything.

34
35 Table 5 – Lake Assessment – resource for folks to find information on any individual lake.

36
37 Table 11 – Monitoring and assessment needs – water quality assessment needs.

38 Larry – can we add the pesticide issue into the plan in this way?

39 Russ – having it mentioned in the plan itself it would help for funding of groups wanting to do more
40 monitoring.

41 Amy – and can we put in there monitoring the solutions.

42 Karen – since it is in our strategic plan to identify those waters that do not meet standards, and that we
43 cannot allow a waterbody to degrade, then we can have specific actions in the plan to address the
44 streams that do not meet standards.

45
46 Stew had a question about classification – Karen explained classification. Pam suggested agenda topic.
47

1 **CLEAN WATER FUND PROGRAMS:**
2

3 Pam went over the grant programs and the questions over private vs. public land and that it was still a bit
4 unclear as to whether stormwater projects on private land are fundable.

5 Karen mentioned that so many projects were not taken care of and that is why the agency is careful.

6 Pam mentioned that Ally from the ANR indicated that if there is municipal support and O&M
7 commitment for a project on private land, ANR can fund it through the ERP program.

8
9 **TOPICS FOR NEXT MEETING**

10
11 Pesticide/herbicide monitoring: invite Rick Levy and Ned Shambaugh,
12 Water Quality Classifications

13
14 **SCHEDULE**

15
16 Next meeting: Tuesday, September 18? Pam will do doodle poll to be sure.

DRAFT

1 **CENTRAL VERMONT REGIONAL PLANNING COMMISSION**
2 **CLEAN WATER ADVISORY COMMITTEE**
3 **SEPTEMBER 20, 2018**
4 **Meeting Notes**

5
6 A meeting of the Central Vermont Regional Planning Commission’s Clean Water Advisory Committee
7 was held on Thursday, September 20, 2018 in the Conference Room of the Central Vermont Regional
8 Planning Commission.

9
10 Committee Members Present:

- 11 Ron Krauth – Middlesex/ Board of Commissioners
12 Stewart Clark – Worcester Planning Commission
13 Amy Hornblas – Cabot/Board of Commissioners
14 Larry Becker- Middlesex Conservation Commission
15 Dona Bate – Montpelier City Council
16 John Hoogenboom – Moretown Selectboard
17 Joyce Manchester – Moretown TAC
18 Gianna Petito - Winooski Natural Resources Conservation District
19 Kristin Balschunat - Winooski Natural Resources Conservation District
20 Corrie Miller – Friends of the Mad River

21
22 Committee Members Absent:

- 23 Russ Barrett – Northfield Conservation Commission
24 Brian Shupe – Friends of Mad River
25 Karen Bates – ANR
26 Michele Braun – Friends of Winooski River
27 John Brabant – Calais/Board of Commissioners

28
29 Others Present:

- 30 Nat Shambaugh
31 Danielle Owczarski, ANR

32
33 **CALL TO ORDER**

34 Pam DeAndrea called the meeting to order at 4:07 PM.
35 Welcome and introductions: Introduced Danielle Owczarski and Nat Shambaugh as well as new CWAC
36 members Gianna Petito and Joyce Manchester.

37
38 **CHANGES OR AMENDMENTS TO THE AGENDA**

39
40 None.

41
42 **PUBLIC COMMENTS**

43
44 None.

45 **PRESENTATION BY NAT SHAMBAUGH –PESTICIDES AND OTHER ORGANIC**
46 **CONTAMINANTS IN THE SURFACE WATERS OF VT**

47
48 Guest Nat Shambaugh gave a presentation on pesticides and other organic contaminants.
49 Lake segment concentrations of metolachlor and atrazine. St. Albans Bay and Missisquoi Bay
50 Stew – noticed that P loading probably follows the same trend.
51 Herbicide slugs can come down after rain storms.

1 DEC also looked at golf courses. PCNB and Chlorothalonil
2 Fungicide use was seen on golf courses. Can get runoff from rain if it doesn't snow and rains instead.
3 Railroads use herbicides. Ditches can go right into streams from the railroad.
4 Dona – could the runoff be treated somehow – Nat – would have to tear up railroad bed or have
5 expensive linear treatment and it would still get into groundwater.
6
7 Atrazine and Metolachlor – 1 site was high – Jewett Brook in St. Albans
8
9 After retiring from DEC, Nat then did some work for Lake Champlain Basin Program. Looked at all
10 data out there: 187 compounds, 163 detected. LC50 and EC50. 123 of the 163 of those had toxicity data.
11 RQ value detection/LC50 or EC50 ≥ 1
12 Nine had RQ values ≥ 10 .
13 Test organisms: daphnia, duckweed.
14 Glyphosate did not exceed an RQ of 1. Has not been tested enough to have good data.
15 TFM – potential endocrine disruptor. Used for lamprey control. They have seen some changes in Bass in
16 Mississquoi Bay - ? may be due to that or something else.
17 Neonicotinoid insecticides – not good for bees, will kill anything that tries to eat it and is even put in
18 seeds. Used to treat trees. Not toxic to people but toxic to all insects. Highly water soluble (only about
19 5% stays in the plants. Irreversible and cumulative.
20 Persistence is about 1 year in the groundwater, in sunlight breaks down in a day or two.
21
22 Dona – have birds been impacted? In the sense that not enough food for them to eat.
23 Canada and Europe have put temporary bans on them.
24
25 Central VT concerns:
26 Storm drains, urban use
27 WWTF effluent
28 Ditches and streams adjacent to corn fields and railroads
29 LaRosa could be used to analyze for organics – Corrie, they have cut down the funding
30 Kristen – can we sample for organics at the same time? Yes but very expensive, all organics can be run
31 on one sample.
32

DISCUSSION ON DRAFT WHITE RIVER TACTICAL BASIN PLAN:

34
35 Danielle Owczarski from DEC came to present on the Draft White River Tactical Basin Plan. Danielle
36 presented her story map of the planning process, health of the White River Basin, water reclassification,
37 protection priorities and projects within the White River Basin.
38

39 Discussion points were:
40 The White River Trail – on White River Partnership (WRP) website. There will be campsites
41 established.
42

43 White is the longest river in VT and the basin is mostly forested.
44

45 Four main stressors: encroachments, stream channel erosion, land erosion, and pathogens.
46

47 Protection priorities:

1 Flint Brook in Roxbury, not yet in plan but will probably be by the time of the public plan release. There
2 is a dam at the intake at the fish hatchery and above there, they have found good fish communities.
3 Other streams in our region for B1 reclassification for fishing are Hart Hollow Brook and South
4 Washington Creek.

5
6 The group had a lengthy discussion on reclassification scheme for B2 to B1. Confusion was expressed
7 over the classification system because a B1 for fishing may not really be indicative of clean water if
8 there are rainbow trout for instance, which is an introduced species. Danielle and Pam explained that
9 the classifications are based on use.

10
11 Ron mentioned that you could have species not affected by a pollutant, but that doesn't mean the water
12 is clean. Danielle mentioned that the best use that indicates clean water are the macroinvertebrates that
13 are not tolerable to nutrients and other pollutants. So if something is B1 for aquatic organisms, then we
14 know it's pretty clean.

15
16 Danielle – the DEC wants to classify waters now to their use so that they can monitor how things
17 change. They would like feedback from communities on what also may be of higher quality and then
18 DEC can go out and monitor those areas if they have not been done already.

19
20 Ron - The map in the story map/plan should be made clearer so that you can tell apart the areas without
21 any recommendations for reclassification because of poor quality or because of no data. Danielle
22 thought that was a good idea.

23
24 White River is suggested as an outstanding resource water.

25 A1 – classified for 5 waters in 2017.

26 Flint Brook's flow is altered.

27 There are 9 stressed waterbodies.

28 Five are listed as impaired, 3 are impaired for pathogens.

29
30 Danielle went over the project map in the story map and how you can click on a particular project and
31 get information on it. It contains the same information as the database.

32 **APPROVAL OF AUGUST 16 MINUTES**

34 Postponed until next meeting.

35 **TOPICS FOR NEXT MEETING**

36 Did not have time to discuss.

37 **SCHEDULE**

38
39
40
41 Next meeting: Thursday, October 11



October 10, 2018

Ms. Emily Boedecker, Commissioner
Vermont Agency of Natural Resources
Department of Environmental Conservation
One National Life Drive
Montpelier, VT 05602

Re: Plan Conformance of the 2018 White River Basin, Basin-9, Tactical Basin Plan Draft and the Central Vermont Regional Plan and Project Prioritization

Dear Ms. Emily Boedecker:

The Central Vermont Regional Planning Commission has reviewed the *2018 White River Basin, Basin -9, Tactical Basin Plan Draft*. The purpose of this memorandum is to analyze the relative conformance of the Tactical Basin Plan draft with the relevant Goals, Strategies and Recommended Actions of the Central Vermont Regional Plan and to provide recommendations regarding project prioritization.

There are four municipalities in the White River Basin (Basin 9) that are part of the Central Vermont Regional Planning Commission (CVRPC); Roxbury, Washington, Williamstown, and Warren. There is only a **very** small portion of Warren, along its border with Roxbury that is in the watershed. Basin-9 is divided into 5 sub-basins of which Roxbury and Warren are in the Third Branch, a portion of Williamstown is in the Second Branch; a portion of Williamstown and Washington are in the First Branch. CVRPC is in concurrence with DEC staff not to include Warren in the Basin-9 Plan because there is not enough coverage to warrant adding Warren and the municipality is covered more thoroughly in the Winooski River Tactical Basin Plan (Basin-8).

The White River Tactical Basin Plan focuses on eleven priority waters (Figure 2.) identified for remediation actions. There are 59 priority actions to address water quality protection and restoration (summarized in Chapter 5 Table 20). In addition, the Plan provides a list of 53 recommended priorities for water quality monitoring and assessment in the Basin (Chapter 5 Table 21). For purposes of the analysis and project prioritization, focus is given to priorities in the three towns (Roxbury, Williamstown, and Washington) from the Central Vermont region.

Introduction

The CVRPC has the opportunity to provide recommendations to the Agency of Natural Resources regarding tactical basin plans pursuant to Vermont Statutes Title 10, Chapter 47, §1253(d). Statute directs regional planning commissions to:

- (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.

CVRPC staff completed a review of the *2018 White River Basin, Basin-9, Tactical Basin Plan Draft, version dated 9/4/2018 on 9/10/2018*. Following that review, the Basin Plan was then reviewed by CVRPC's Regional Plan Committee on September 17, 2018, the Clean Water Advisory Committee on September 20, 2018 and by the Board of Commissions on October 9, 2018. Based upon this review process the CVRPC presents these comments to the VT Agency of Natural Resources.

Plan Conformance

The *2018 White River Basin, Basin-9, Tactical Basin Plan Draft, version 9/4/2018* and the *2016 Central Vermont Regional Plan, amended 2018*, contain overarching conforming Goals and Objectives.

The overall goals and objectives of the Basin-9 Plan is to protect, maintain, enhance, and restore the biological, chemical, and physical integrity of Vermont's waters. The accompanying table lists the Basin-9 priority mitigation strategies and actions as they relate specifically to the municipalities of Roxbury, Williamstown, and Washington located in the CVRPC region and identifies those Regional Plan goals, policies, and actions which are mutually supportive. (See attachment titled "Conformance Analysis of Goals & Objectives: Basin 9 Draft Tactical Basin Plan to the CV Regional Plan"). In general, CVRPC supports the priorities as listed.

CVRPC provides the following comments and accompanying recommendations to strengthen plan conformance:

1. Stream Geomorphic Assessments (SGA): The Basin-9 Plan states that there is a gap that exists for the Phase II Stream Geomorphic Assessments for the Second Branch and Upper Third Branch, and portions of the middle and lower White River mainstem (p.54). The SGAs provide data for incorporation into River Corridor Plans which help identify projects to reduce bacteria, sediment, and nutrients in the river. River Corridor Plans help to manage toward stream equilibrium which is essential for good water quality, healthy aquatic habitat, and flood resilience in the basin and will help mitigate impacts of increased runoff and stream flow. The Regional Plan supports the improved identification and mapping of surface water resources and development of river corridor plans and local river corridor ordinances. Phase II SGA data is a critical planning resource and tool for towns and watershed groups.

CVRPC supports the Department of Environmental Conservation priority to focus on non-forested areas in determining segments for completion under the Stream Geomorphic Assessments. As a heavily forested community, CVRPC understands this may mean Williamstown is not included in the Second Branch SGA Assessment.

Recommendation:

- Make it a priority to complete the Phase II SGA for the entire section of the Second Branch, including consideration of waterways in Williamstown, and develop a River Corridor Plan. In Table 20, Strategy #1, Town Column, identify Williamstown.
- Make it a priority to complete the Phase II SGA for the Upper Third Branch, **including Roxbury**, and develop a River Corridor Plan. Add this to the list of priority mitigation actions in Table 50 as a new strategy. Identify Roxbury in the towns identified column for the new strategy listing

under Table 20. If there is no recommendation for an SGA for the Upper Third Branch please provide an explanation. (Appendix A, Action 36).

- When identifying, developing, and ranking a list of projects in the First Branch River Corridor Plan that will likely reduce bacteria, sediment and nutrient input to the river include Washington located in the CVRPC region. Washington was included in the First Branch Phase II SGA and the geomorphic condition in Washington was found to be fair (Figure 12. TBP, *note this figure number should be corrected to Figure 21 in the draft plan*).

2. Road Erosion Inventory: The Basin-9 Plan and CV Regional Plan mutually support road erosion inventory work under the Municipal Roads General Permit that identifies sections of roads in need of sediment and erosion control, ranks road segments that pose the highest risk to surface water, and estimate costs to remediate those sites using Best Management Practices (BMP). Towns have a time sensitive timeline for completing work under the MRGP, including completing the Road Erosion Inventories. Washington is NOT completed and needs to be “on the radar” for completion. Williamstown is being done in 2018.

Recommendation:

- Add Washington to the towns identified under Strategy #29 of Table 20 as a priority town for completion of a road erosion inventory and list CVRPC as a partner. Also correct the Table 12 on page 63 by adding Washington to the list of towns under the column “on the radar.” Remove Washington from the list of completed towns shown in Table 12 and add Warren to this same list of completed towns.

3. Stormwater Master Planning: Williamstown has been added to the 2018 Draft Winooski Tactical Basin Plan to develop a stormwater master plan.

Recommendation:

- To be consistent between basins, Williamstown needs to be added to the Basin-9 Table 20, Strategy #31 as a town identified as a priority to develop a stormwater master plan. Also, add CVRPC under the Partner column. Since a town-wide stormwater master plan is being recommended, remove Williamstown from Strategy #33, which would look to see whether a project identified through stormwater mapping should be carried out alone or through multi-town stormwater master planning. If Williamstown has its own stormwater master plan, looking into these options would not be necessary.

4. River Corridor Protection: Both Plans seek to protect river corridors and floodplains to increase flood resilience and allow rivers to reach equilibrium. From an emergency management perspective, the Regional Plan discourages development and investment in floodplains, yet it should be noted that overall the Regional Plan (as outlined within the Land Use Chapter) recognizes that our Regional and Town Centers are locations for continued investment and redevelopment. Due to the historic nature of the region, portions of these Regional and Town Centers are located in floodplains and possibly even within River Corridors. It should also be noted that municipal regulations within some central Vermont municipalities do allow development within floodplains. The Basin-9 Plan states the goal of managing toward, protecting, and restoring the equilibrium condition of Vermont rivers is to resolve or avoid conflicts between human investments and river dynamics in a manner that is technically sound, and both economically and ecologically sustainable. River corridor management requires flexibility and prioritizing of areas for protection and enhancement. Strict conformance with protection of river corridors may not be achievable.

Recommendation: *(CVRPC made this same recommendation to the 2018 Draft Winooski River Tactical Basin Plan)*

- Include language within the Basin Plan that recognizes the presence of historic Regional and Town (and Village) Centers in river corridors and floodplains and clarify how DEC will work with regional organizations and municipalities to accommodate these special circumstances. More specifically:
 - Add recognition of historic development pattern in Plan document within the Water Quality ERAF section, Local regulations section, and within the Stream Geomorphic Assessment section.
 - Include further discussion and analysis of the NFIP base requirements compared to the recommendations of the State River Program model flood hazard regulations and model river corridor regulations. The model river corridor regulations make an allowance for infill within state designated historic downtowns and villages. This information could be added into Chapter 4-Regulations and Initiatives for Protecting and Maintaining Water Quality.

5. Reclassification of Surface Waters: CVRPC supports the maintenance or upgrading of existing surface water classifications to reflect their actual recreational uses, except where lower classifications may be needed for municipal sewage treatment projects (Outdoor Recreation Goal 7.). CVRPC supports the reclassification for B(1) recreational fishing for Hart Hollow Brook and South Washington Creek, both very good cold water streams located in Chelsea and Washington to protect their high quality fishing, a valued asset in the Central Vermont region. CVRPC opposes the downgrading of surface water classifications unless such action is required to accommodate treated effluent from new or expanded municipal sewage treatment facilities. The Commission also opposes the upgrading of surface water classifications where such upgrading might be misleading or dangerous to users. (General Land Use Goals, Policies, and Strategies, 3b).

6. Recommendations on Project Prioritization: *(CVRPC made this same recommendation to the 2018 Draft Winooski River Tactical Basin Plan)*

The CVRPC has been working with other RPCs to develop a prioritization process for projects, but it has not yet been finalized nor adopted by the ANR for incorporation into their prioritization process. When this is finalized, the CVRPC will provide further recommendations through the Clean Water Advisory Committee (CWAC) on regional project priorities.

Other Comments

In general, this plan is very comprehensive. CVRPC offers the following general comments:

- In Table 14. *Towns with Completed stormwater mapping reports...* Make Williamstown in italics as a town recommended for stormwater master planning to be consistent with the Winooski Basin Plan and change status to “recommended”.
- CVRPC supports the municipal protection goals as illustrated in Figure 30. This is a nice way to convey data.
- Check waterbody column against town column under Strategy #1, Table 20 for accuracy of towns listed related to Second Branch of the White River. Prioritize all towns in Second Branch and include in those towns listed, the towns of Brookfield, Randolph, Bethel and Williamstown.
- Appendix F. Municipal Water Quality Protectiveness Table. - Update table and Add Williamstown to the list of municipalities listed. CVRPC has provided DEC with a corrected and

updated table for Appendix F.

- Two basin plans are being developed concurrently within the region and while these plans only overlap in three of our towns, if the plans followed the same format it would increase the relationship between the plans and the objectives they strive to attain. Similar formats would also decrease confusion within those communities. (Comment also provided during review of Draft 2018 Winooski Tactical Basin Plan.)
- The overall goals and objectives of the Central Vermont Regional Plan supports the Basin-9 Plan actions to address the four main stressors in the basin affecting water quality: Encroachment, Stream channel erosion, Land erosion, and Pathogens.
- May want to consider incorporation of additional appendices for some of the linked data; when reading a hard copy some of the more pertinent linked data is not available.
- Nice summary on page 84 of funding opportunities/sources.
- Page 23 appears to have redundant text on the CWA that appears on page 19 as well. Can these sections be combined in some manner to be clearer?
- On page 24 Vermont is missing from the list of states mentioned as part of the Long Island Sound Watershed Regional Conservation Partnership Program (LISWR CPP).
- Based on comments from the CWAC, revise the High Quality Waters map, Figures 1 and 9, to show what streams have not been sampled vs. those that do not meet B1 criteria. Just a blank space can be misleading. The map provides a good spatial reference. If the non-sampled areas cannot be added easily to the map, a footnote of what was not sampled/sampled and B2 areas would be helpful.



October 10, 2018

Ms. Emily Boedecker, Commissioner
Vermont Agency of Natural Resources
Department of Environmental Conservation
One National Life Drive
Montpelier, VT 05602

Re: Plan Conformance of the Draft Winooski River Tactical Basin Plan and the Regional Plan and Project Prioritization

Dear Ms. Boedecker,

The Central Vermont Regional Planning Commission has reviewed the *Draft Winooski River Tactical Basin Plan, dated 7/02/2018*. The purpose of this memorandum is to analyze the relative conformance of the Draft Tactical Basin Plan with the relevant Goals, Strategies and Recommended Actions of the Regional Plan and to provide recommendations regarding project prioritization.

Introduction

The CVRPC has the opportunity to provide recommendations to the Agency of Natural Resources regarding tactical basin plans pursuant to Vermont Statutes Title 10, Chapter 47, §1253(d). Statute directs regional planning commissions to:

- (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.

CVRPC staff completed a review of the *Draft Winooski River Tactical Basin Plan, dated 7/02/2018* on July 18, 2018 and August 21, 2018. Staff then presented the review to CVRPC's Regional Plan Committee on August 29, 2018 for review and comment and to the Board of Commissions on October 9, 2018 for review and approval. Based upon this process the CVRPC presents these comments to the VT Agency of Natural Resources.

Plan Conformance

The *Draft Winooski River Tactical Basin Plan* and the *2016 Central Vermont Regional Plan, amended 2018*, contain overarching conforming Goals and Objectives. The accompanying table on page 3 lists the Basin Plan's top objectives and strategies and identifies those Regional Plan goals, policies, and actions which are mutually supportive. (See attachment titled "Conformance Analysis of Goals & Objectives: Basin 9 Draft Tactical Basin Plan to the CV Regional Plan")

CVRPC provides the following analysis and accompanying recommendations to strengthen plan conformance:

- Tactical Plan Basin Objective: *Protect river corridors and floodplains to increase flood resilience and allow rivers to reach equilibrium.*
From an emergency management perspective the Regional Plan discourages development and investment in floodplains, yet it should be noted that overall the Regional Plan (as outlined within the Land Use Chapter) recognizes that our Regional and Town Centers are locations for continued investment and redevelopment. Due to the historic nature of the region, portions of these Regional and Town Centers are located in floodplains and possibly even within River Corridors. The Basin Plan does indicate that it “does not preclude any development that is consistent with municipal bylaws, regional and municipal plans...” (page 3) It would be beneficial to elaborate on this dichotomy; municipal regulations within some central Vermont municipalities do indeed allow development within floodplains. Strict conformance with this Tactical Basin Plan Objective may not be achievable.
 - Recommendation: Include language within the Basin Plan that recognizes the presence of historic Regional and Town (and Village) Centers in river corridors and floodplains and clarify how DEC will work with regional organizations and municipalities to accommodate these special circumstances. More specifically:
 - Add recognition of historic development pattern on page 10, within the Rivers section and on page 32, within the Stream Geomorphic Assessment section.
 - Include further discussion and analysis of the NFIP base requirements compared to the recommendations of the State River Program model flood hazard regulations and model river corridor regulations. The model river corridor regulations make an allowance for infill within state designated historic downtowns and villages. This information could be added into the Flood Hazard Regulation section on page 121.

Recommendations on Project Prioritization

The CVRPC has been working with other RPCs to develop a prioritization process for projects, but it has not yet been finalized nor adopted by the ANR for incorporation into their prioritization process. When this is finalized, the CVRPC will provide further recommendations through the Clean Water Advisory Committee (CWAC) on regional project priorities.

For project selection for funding and prioritization on the DEC’s level, the CVRPC has the following comments:

- Based on concerns raised by the CWAC during the Basin Plan review, CVRPC recommends to include strategies and projects other than those that address phosphorus loading such as projects that address pesticides/herbicide, toxins, and nitrate from groundwater entering streams and wetlands that may impact water quality and aquatic life health.
- The CVRPC also recommends for larger projects, such as expensive stormwater remediation, the grant programs reduce the amount of match required. Many towns do not have the ability to pay match requirements beyond in-kind contributions. Reduced match would make funding through grant programs more accessible to these municipalities.
- The CVRPC recommends that stormwater master planning not be limited to very developed municipalities such as Waterbury and Williamstown. More rural municipalities could benefit from stormwater master planning in addition to road erosion inventories that address compliance with the Municipal Roads General Permit. Many of the rural towns in our region

without a stormwater master plan have villages that have impervious surfaces in need of stormwater management, such as Worcester and Middlesex. Furthermore, more complex road projects can be addressed through stormwater master planning, such as those needing dry well design to help slow and infiltrate runoff from steep roads.

Other Comments

In general, this plan is very comprehensive and technically in-depth. CVRPC offers the following general comments:

- Incorporate more lay-person language to increase readability and understanding by the general public. Especially avoid using acronyms, such as TMDL or TP.
- Add conclusion statements at the end of each chapter or section that would provide a summary of the data and provide a basis for the subsequent objectives and actions.
- Organize the Top Objectives and Strategies listed on page ix with those listed within Table 36 (on page 139) would also help strengthen and reiterate the desired outcomes of the plan. Both page ix and Table 36 list objectives and strategies but they are not consistent. The next table, Table 37 is more detailed but does not necessarily line up with the other tables. It can be confusing to the reader to decipher which are the strategies and the priorities.
- Clearly identify and highlight priority locations for treatment and resource protection, to ensure alignment of local and regional resources investment.
- Two basin plans are being developed concurrently within the region and while these plans only overlap in three of our towns, if the plans followed the same format it would increase the relationship between the plans and the objectives they strive to attain. Similar formats would also decrease confusion within those communities.

The CVRPC Clean Water Advisory Committee (CWAC) conducted a thorough review of the Basin Plan and had some very specific comments sent to the ANR on July 18, 2018. Below are some additional comments included in that document:

- Toxins related to commercial and industrial pollution should be included in addition to impacts from farms and roads.
- Baseline monitoring should be incorporated into in water quality monitoring strategies within the plan.
- The interaction between groundwater and surface water is not addressed. The quality of surface water is influenced by inputs from groundwater, especially nitrates from farms, iron from soil disturbance and metals, and septic failures. The plan should mention this interaction and lay out strategies for reducing surface water contamination from contaminated groundwater.
- The water quality benefit of development limitation of landslide hazard areas should be stated.
- Implementation table should address other stressors such as chloride, mercury, thermal stressors and flow alteration.

Thank you for the opportunity to review the Draft Winooski River Tactical Basin Plan. We look forward to working with ANR on the Plan implementation and other related projects in the future.

Sincerely,

Bonnie Waninger
Executive Director