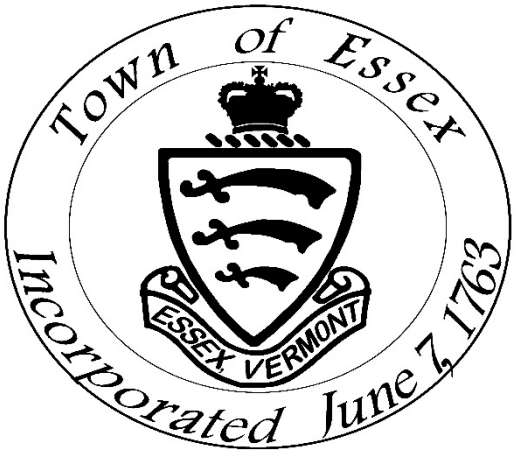

Town of Essex and Village of Essex Junction Stormwater Management Plan

Submitted January 23, 2019

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Introduction

Section 3.4 Co-Permittee

This Stormwater Management plan (SWMP) documents the Town of Essex and Village of Essex Junction's joint strategy to address and reduce the impact of stormwater runoff as required by the Vermont Municipal Separate Storm Sewer System (MS4) permit #3-9014 issued July 27, 2018. This plan contains the required elements described in the 2018 Vermont MS4 permit including which entity is responsible for implementing each measure.

The following people are responsible for implementing and coordinating the SWMP, BMPs and the associated requirements:

Town of Essex	Village of Essex Junction
Dennis Lutz, P.E., Public Works Director	James L. Jutras, Water Quality Superintendent
Annie Costandi E.I., Stormwater Coordinator/Staff Engineer	Chelsea Mandigo, Stormwater Coordinator/Wastewater Operator

Watersheds in Both Town & Village

The Town and Village contain six different watersheds within their boundaries. Of the six, two of these watersheds are stormwater impaired due to excess flow. In September 2008, TMDLs were established for these two stormwater impaired waterways– Indian Brook (VT05-09) and Sunderland Brook (VT08-02). Copies are included in *Appendices A*. This SWMP not only works to remove these impairments but also maintain the non-impairments status of the remaining four watersheds which include Winooski River, Alder Brook, Browns River and Abbey Brook. A map of the watersheds in the Town and Village are included in *Appendix B*.

Indian Brook is the third largest watershed in the Town and Village with a watershed area of 12 square miles and covers approximately 20.2% of the total drainage area. The westerly edge of the watershed extends into Colchester and southerly edge into Essex Junction. Indian Brook Reservoir is the largest waterbody in the watershed. Indian Brook flows south into Essex Junction, west into Essex, and continues west into Colchester. The State has designated this watershed impaired by stormwater flow due to the non-support of aquatic life designated uses.

This watershed is a mix of different land uses. The TMDL indicates that the land breakdown in the watershed is 39% developed lands, 43% forested land or wetlands and 18% agricultural lands. The majority of the residential and commercial development is located in the southerly portion of the watershed adjacent to Route 15 in the Town and Village and the Circumferential Highway.

Sunderland Brook has a watershed area of approximately 5.5 square miles. The headwaters of Sunderland Brook originate in highly developed areas adjacent to Route 15 in both the Town and Village. The west edge is bounded by Colchester and the southerly edge by Essex Junction. The State has designated this watershed impaired by stormwater flow due to the non-support of aquatic life designated uses.

This watershed area consists primarily of residential and commercial uses which are significant portions of the total watershed area. The southerly portion of Susie Wilson Road and Kellogg Road in the Town and Pearl Street in the Village extend through this watershed area. According to the TMDL, 76% is developed land, 4% agricultural land, and 20% forested land.

Part 6: Minimum Measures (MM)

The Town and Village share responsibility in complying with the six minimum measures laid out in the VT MS4 permit in a joint effort unless otherwise specified in the tables below.

MM 1: Public Education & Outreach

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/ Both
a)Participate in a regional stormwater education strategy or develop an MS4 specific program	Ongoing	Participate in and provide financial support for operation of the regional Rethink Runoff campaign consisting generally of periodic advertising throughout each year supplemented by a survey of residents every 5 years to track reported behavior with regards to residential stormwater BMPs via an annual report provided by the Chittenden County RPC's subcontractor. The permittee will document annual number of site visits to www.rethinkrunoff.org as well as other metrics.	Support of the campaign will educate the general public in the MS4 area about key stormwater quality issues by using TV, radio, online media placements/advertising to drive viewers to the www.rethinkinrunoff.org website.	Both in collaboration with the CCRPC
b)Create educational brochure about pet waste & water quality	April 2019	Number of brochures handed out	Providing a display at the Clerk's office will offer education to pet owners on the effect of pet waste on water quality through the daily interaction the Clerk's office has with residents especially during annual dog license renewal	Both
c)Provide biodegradable pet waste bags to community	ongoing	Number of bags purchased or distributed	Providing pet waste bags to residents make it easy to pick up after their pets and allows the opportunity for water quality education by having information signage or brochures included with the bags.	Both

MM 1: Public Education & Outreach Continued

BMP	Timeframe	Measurable Goal	Rationale	Town/ Village /Both
d) Install pet waste dispensers	As determined necessary	Number of pet waste dispensers	Providing residents with an area to dispose of pet waste in high pet activity areas encourages them to pick up after their pets by being able to dispose of the waste easily while walking, keeping the pollutant out of the watershed.	Both
e) Install signs with the message to "pick up after your pet"	As determined necessary	Number of signs	Providing education to pet owners on the effect of pet waste on water quality, focusing on high pet activity areas	Both
f) Update website to contain current stormwater & water quality information	Ongoing; At minimum semi-annually	Number of updates made; Number of visits to the website	Providing the a central location for the community to go to gather education on stormwater and water quality issues, events, projects occurring in the municipalities	Both
g) Provide a water quality table at annual Town/Village meeting	Annually	Number people reached and directly contacted	Providing the community with stormwater and water quality information, issues, events, projects occurring in the municipalities	Both
h) Provide educational talks about the importance of water quality including virtual or physical tours of the Wastewater Treatment Facility	Ongoing	Number of classroom visits, virtual tour or tours given; Number of students	To educate the public about the importance of water quality and how individual actions can make a difference.	Both
i) Review of Land use codes to ensure consistency with LID practices as they apply to community and compliance goals	By 2023	Percentage of land use codes reviewed	To encourage and/or require residents, developers, and businesses to implement LID practices through codes and ordinances reducing stormwater runoff and improving water quality.	Both
j) Review of site plans to ensure incorporation of LID and BMPs in compliance with local regulation	ongoing	Number of site plans reviewed	To encourage LID in new or redevelopment projects wherever practicable to reduce stormwater runoff and improve water quality.	Both
k) Incorporate LID into municipal projects	ongoing	Number of project retrofitted	Encourage through municipal engineers or consultants implementation of LID in new or redevelopment projects to achieve reduction in stormwater runoff.	Both

MM 2: Public Participation & Involvement

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/ Both
a)Participate in a regional stormwater public involvement and participation strategy or develop an MS4 specific program	Ongoing	The permittee will participate in and provide financial support for operation of the Rethink Runoff Stream Team consisting generally of both outreach and hands-on participation events in various MS4 towns on a rotating annual basis via an annual report provided by the Chittenden County RPC's subcontractor. The permittee will document on an annual basis the number of participants and/or persons contacted by outreach events and hands-on activities through the Rethink Runoff Stream Team.	Through support of the Stream Team, the regional campaign's "action arm", the permittee will support the engagement of local residents in the MS4 area via outreach events and via hands-on participation events.	Both in collaboration with the CCRPC
b)Participate in Vermont Green-up Day or organize stream clean-up day	Annually	Report Tons of trash and other materials collected	Encourage & educate residents about the importance of stream corridor health and its relation to water quality	Both

MM 3: Illicit Discharge Detection and Elimination

- Monitoring of illicit discharges will comply with Section 9.1 of the 2018 MS4 Permit.

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/Both
a)Maintain & improve storm sewer GIS map	ongoing	Number of outfalls field verified; Number of map updates made	Updated storm sewer maps will ensure efficiency in identifying illicit discharges.	Both
b)Review of Stormwater Ordinance & Land Development Code to effectively prohibit illicit discharge	By 2023	Status report of proposed changes & approved changes to local regulation	Ensure that appropriate procedures and actions are in place to prohibit illicit discharges into the MS4 system	Both
c) Review IDDE document & program	annually	Status report of proposed changes & approved changes to local regulation	To improve water quality through an effective, proactive and current IDDE program	both

MM 3: Illicit Discharge Detection and Elimination Continued

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/ Both
d) Provide education materials related to hazards associated with illicit discharges	ongoing	Number of doortags placed; Number of IDDE brochures handed out; Number of public notices	To educate residents about the hazard of illicit discharge, importance of proper disposal of waste and protect water quality	both
e) Illicit Discharge Detection & Elimination Program	ongoing	Number of discoveries or complaints; Number resolve; Number of water quality test conducted or samples collected;	To improve water quality through an effective, proactive and current IDDE program.	Both

MM 4: Construction Site Stormwater Control

BMP	Timeframe	Measurable Goal	Rationale	Town/Village /Both
a) Inspect construction sites for compliance with stormwater construction permits	ongoing	Number of construction site inspections	To ensure construction projects are in compliance with their State or local stormwater construction permits and are properly protecting water quality	Both
b)Review existing policies, codes & ordinances to ensure compliance with State/federal requirements in relation to construction activities and erosion control/stormwater mitigation	By 2023	Status report of proposed changes & approved changes to local regulation	Determine the effectiveness in managing construction related erosion and stormwater control; Ensure consistency with State's general stormwater permit	Both
c)Review existing policies, codes, ordinances to ensure projects <u>below</u> State/Federal jurisdiction are covered in relation to construction site erosion control activities /stormwater mitigation	By 2023	Status report of proposed changes & approved changes to local regulation	Protect water quality through effective management of construction related erosion and stormwater	Both

MM 4: Construction Site Stormwater Control Continued

BMP	Timeframe	Measurable Goal	Rationale	Town/Village /Both
d)Provide erosion control brochures to zoning permit applicants	ongoing	Number of brochures handed out	To inform residents about simple practices they can implement to reduce amount of erosion during construction projects improving water quality	Both

MM 5: Post-Construction Stormwater Management for New Development and Redevelopment

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/Both
a)Inspect post-construction sites for compliance with stormwater stabilization control requirements	ongoing	Number of post-construction site inspections conducted	To ensure post-construction sites are in compliance with State & municipal site stabilization requirements improving water quality	Both
b)Review existing policies, planning, zoning, subdivision regulations & ordinances to assess whether changes can be made to support LID options	By 2023	Status report of proposed changes & approved changes to local regulation	To determine their effectiveness to support LID options including street and parking requirements; To ensure their consistency with their requirements with State rules and general permits and to identify gaps.	Both

MM 6: Pollution Prevention and Good Housekeeping for Municipal Operations

BMP	Timeframe	Measurable Goal	Rationale	Town/Village/ Both
a)Inspect catch basins	annually	Number of catch basins inspected; Amount of material removed in yards	Periodic inspections will ensure that the stormwater system is functioning properly and will reduce the amount of pollutants entering into waterways	Both
b)Conduct street sweeping	Spring/Fall/ As-needed	Number of lane miles swept; Yards of material collected	To reduce the amount of sediment and pollutants (including phosphorus) entering the MS4 stormwater system	Both
c)Inspect outfalls	annually	Number of outfalls inspected	Periodic inspections will ensure that the stormwater system is functioning properly and will reduce the amount of pollutants entering into waterways	Both

MM 6: Pollution Prevention and Good Housekeeping for Municipal Operations Continued

BMP	Timeframe	Measurable Goal	Rationale	Town/Village /Both
d) Inspect MS4 permitted infrastructure	annually	Number of STP inspections; Number of STPs maintained	Regular inspections will ensure that the stormwater system is functioning properly and will reduce the amount of pollutants entering into waterways	Both
e) Installation of STPs	2023	Number of STPs installed	To comply with State approved Indian Brook & Sunderland Brook FRPs including the TMDL's for Indian & Sunderland Brooks	Both
f) Installation of retrofitted STPs	2023	Number of STP's retrofitted	To comply with State approved Indian Brook & Sunderland Brook FRPs including the TMDL's for Indian & Sunderland Brooks	Both
g) Inventory & Installation of "No Dumping, Drains to Waterways" markers or painted stencils on catch basins	annually	Number of "No Dumping, Drains to Waterways" markers installed; Number of basins stenciled	To bring awareness to residents about the MS4 separate stormwater system and its direct connection to water quality	Both
h) Participation in proper disposal of hazardous waste in compliance with CSWD requirements	2023	Provide documentation of compliance; Tons of waste disposed	Incorporate into illicit discharge procedures, regulations & program	Both
i) Continue to prohibit use of phosphorus containing fertilizers on facility operations unless warranted by a soil test.	ongoing	Number of educational materials provided	To reduce amount of phosphorus in the watershed	Both
j) Participation the Agency's Municipal Compliance Assistance Program	Once per permit cycle	Provide documentation of compliance	To review materials and shop maintenance practices for regulatory compliance performance	Both
k) Continue the Joint Stormwater Coordination Committee	ongoing	Number of times met or informed the committee of stormwater progress via email or mailings	Est. in 2013,consisting of Town and Village staff, Trustees/Selectboard, public to provide input on the Village/Town decision-making in coordinating stormwater permit compliance	Both

MM 6: Pollution Prevention and Good Housekeeping for Municipal Operations Continued

l) Develop budget for stormwater permit compliance including BMP implementation	annually	Annual stormwater operating budget by Fiscal Year	To invest money into a stormwater infrastructure maintenance program with best Asset Management practices	Both
m) Participate in stormwater training for staff	annually	Number of credit hours	Participate in regional, local and national stormwater and water quality trainings to be informed on new techniques and polices	Both

Six Minimum Measures BMP Alternatives Considered: It is the purpose of this application to define what beneficial stormwater actions will be taken. The list of potential BMPs that could have been selected has no boundaries and the answer to the question of which BMPs were not selected is essentially infinite in scope. The Town and Village have identified specific BMPs that exceed the minimum permit requirements (in the tables above). If the regulatory agencies determine that additional BMPs should be evaluated for inclusion in the plan, these BMPs should be identified by the regulatory agencies and either considered or rejected by the communities with a rationale for the decision.

Joint Stormwater Coordinating Committee

In 2013, the Town and Village created the Joint Stormwater Coordinating Committee which consists of the following members:

- Unified Manager
- Selectboard Member appointed by the Selectboard
- Trustee Member appointed by the Trustees
- Village Stormwater Staff
- Town Stormwater Staff
- Town Representative appointed by the Town Selectboard
- Village Representative appointed by the Village Trustees

The purpose of the Committee is to study and make recommendations to the Selectboard and Trustees on policy relating to common interests in complying with the NPDES Phase 2 MS4 Stormwater Permit requirements. Further, the Committee explores and makes recommendations as needed relating to joint/cooperative stormwater management, operations, and funding of stormwater activity in both communities.

The Town and Village plan to continue this collaborative effort. Both communities are the principle municipalities responsible for the impairment improvements of the Indian Brook and Sunderland Brook watersheds. Both communities are also responsible for meeting the phosphorus reduction targets from developed lands in the Main Lake and Mallets Bay lake segments. A joint and coordinated approach to some or all aspects of permit compliance will reduce costs and improve the efficiency of delivered services to both communities. A website is maintained for the Committee and acitivty will be included in the MS4 annual report.

Part 7: Assumption of Responsibility for Previously Permitted Stormwater Systems

Town of Essex

The Town will be incorporating the following 9010 stormwater permits that are located in the unimpaired waterways under the MS4 Permit:

- 3081-9010.R: Perkins Bend
- 3201-9010.R: Pinewood Section G
- 3267-9010.1R: Saybrook
- 3324-9010.R: Meadows Edge
- 3574-9010.R: Forestdale
- 3575-9010.R: Lang Farm Parcel I
- 3577-9010.R: Lang Farm Parcel H
- 3578-9010.R: Pinewood
- 3579-9010.R: Old Stage Village
- 3580-9010.R: Rivers Bend
- 3581-9010.R: Heritage Phase II
- 3996-9010.R: Sand Hill Pool Complex
- 4367-9010.R: Autumn Knoll
- 5710-INDO.R: Colbert Street Treatment System
- 5944-INDO: Kellogg Road
- 7002-9015: Police Station

Note: The Town has previously accepted partially or on whole the listed 9010 permits.

The Town has incorporated the following expired stormwater permits that are located in Indian and Sunderland Brooks under the MS4 Permit:

- 1-0250: Kimberly Drive
- 1-0491: United States Postal Service
- 1-0518: Ewing Place
- 1-0552: Town Market Place
- 1-0619: Ewing Place
- 1-0667: Woodlands I
- 1-0694: Ewing Place
- 1-0761: Ewing Place
- 1-0775: Essex Outlets
- 1-0896: David Drive
- 1-0965: Ewing Place
- 1-1143: The Edge
- 1-1186: Woodlands II
- 1-1307: Essex Outlets
- 1-1319: The LDS Church
- 1-1371: Links at Lang Farm
- 1-1381: The Commons
- 1-1463: VT Systems, Inc.
- 1-1496: Baymont Inn & Suites
- 2-0613: Essex Outlets
- 2-0633: Shillingford Crossing
- 2-0634: Ewing Place
- 2-0925: Town Market Place
- 2-1045: Pearl Street Park

Village of Essex Junction

The Village will be incorporating the following stormwater permits under the MS4 Permit:

- 6653-9015: Upper Village Walk (unimpaired waterway, Winooski River)
- 6006-9020.1 INDS: Taft Street (Impaired waterway, Indian Brook)

The Village has incorporated the following expired or valid stormwater permits that are located in Indian and Sunderland Brooks under the MS4 Permit:

- 1-0236: Brickyard Rd/Upper Main St
- 2-0155: Essex Park Phase 3
- 2-0769: Athens Dr.
- 2-0952: Essex Park Condominiums

- 3268-9010: Woods End/Rivendell Dr.
- 4128-INDO: Hannaford Offset-Brookside Rd/Drury Dr/Upland Rd
- 1-0953: Drury Dr./Meadow Ter.
- 2-0187: Grove St./North St.
- 2-0835: Village Glen/Densmore Dr.
- 2-0961: Brookside Condominiums
- 3547-9010.R: Whitcomb I/II/III Combined
- 4989-INDO.R: Five Corners North
- 1-1074: Countryside II/Fairview Dr.
- 2-0289: Countryside Dr./Beech Rd.
- 2-0855: Village Knoll (Briar Lane)
- 2-1103: Pleasant St./East St.
- 3553-9010: Brownell Rd

Stormwater Treatment Practices Owned by MS4

Town of Essex

Stormwater Treatment Practice	System Name	Location	State Stormwater Permit
Retention Pond	Kellogg Road Retention Pond	Kellogg Road	5944-INDO.R
Swirl Separator	Colbert Street Swirl Separator	Colbert St and Abare Ave	5715-INDO.R1
Detention Pond	Baymont Inn Pond	Susie Wilson Road	7025-9014.A
Swirl Separator	Pinewood Drive	Pinewood Dr/Riverview Dr	3081-9010.R
Stormwater Pond	Pinewood Drive	Pinewood Dr/Valleyview Dr	3081-9010.R
Retention Pond	Saxonhollow Drive Pond	Saxonhollow Drive	3574-9010.R
Retention Pond	Highway Garage Pond	Sand Hill Road	7025-9014.A
Retention Pond	Autumn Knoll	Irene Avenue	4367-9010.R
Retention Pond	Meadow's Edge	Clover Drive	3324-9010.R
Stormwater Pond	Saybrook Road	Saybrook Road	3267-9010.R
Retention Pond	Craftsbury Court	Craftsbury Court	3581-9010.R
Retention Pond	Essex Outlets	Essex Outlets Shopping Center	7025-9014.A
Retention Pond	Essex Outlets	Essex Outlets Shopping Center	7025-9014.A
Retention Pond	Essex Outlets	Essex Outlets Shopping Center	7025-9014.A
Stormwater Pond	LDS Church Pond	Essex Way	7025-9014.A
Stormwater Pond	LDS Church Pond	Essex Way	7025-9014.A
Stormwater Pond	The Commons	Essex Way	7025-9014.A
Stormwater Pond	The Commons	Essex Way	7025-9014.A
Detention Pond	Sydney Drive Pond	Sydney Drive	7025-9014.A

Village of Essex Junction

Stormwater Treatment Practice	System Name	Location	State Stormwater Permit
Vortech Unit/Flow Control	5 Corners North	Educational Dr/Central St	4989-INDO
Stormwater Wet Pond	Fairview	Hawthorn Cir	7024-9014.A
Vortech Unit	N/A	Hawthorn Cir	7024-9014.A
Dry Swale	Whitcomb Combined	South St	3547-9010.R
Vortech Unit	Upland/Drury	Brookside Ave	4128-INDO
Stormwater Pond	Upper Village Walk	Kiln Rd Ext	7024-9014.I
Stormwater Pond	Whitcomb Combined	Dunbar Rd	3547-9010.R
Stormwater Pond	Whitcomb Combined	Ketchum Rd	3547-9010.R

Lake Champlain Total Maximum Daily Load (TMDL)

Excess phosphorus from the various sources across the landscape have caused the water quality of Lake Champlain to become impaired. In 2002, Vermont prepared a plan to reduce phosphorus loadings through the development of a EPA mandated TMDL, placing a cap on the maximum amount of phosphorus allowed to enter the Lake and still meet Vermont Water Quality Standards. This plan was appealed by lawsuit by EPA in 2011. On June 17, 2016 the Environmental Protection Agency (EPA) approved a new phosphorus TMDL for twelve Vermont segments of Lake Champlain. The percentage reduction required from developed lands per Lake Segment is included in *Appendix I*. The Town and Village fall under the Main Lake and Mallets Bay Lake Segments and will be required to reduce phosphorus from developed land by 20.2% and 20.5% respectively.

The following section of this SWMP outlines the approach the Town and Village plan to use to work towards achieving the percent reduction in phosphorus from developed lands.

Part 8: TMDL IMPLEMENTATION

Flow Restoration Plans

The Town and Village submitted Flow Restoration Plans to the State in October 2016 which the State accepted on January 30, 2017. A copy of the State's acceptance letter and approved FRPs are included in *Appendix F, Appendix G, Appendix J and Appendix K*. Under the Sunderland FRP and State of Vermont Criteria, the high flow target is currently being met and no additional BMPs for flow are required in the watershed. TMDL compliance determination is pending State microbiological testing of the waterway.

The Indian Brook FRP identified 4 projects that are required to meet and exceed the high flow target which are identified below:

- Sydney Drive Stormwater Pond Retrofit (Town)
- Brickyard Gravel Wetland (Village)

- LDS Church Stormwater Pond Retrofit (Town)
- Fairview/Mansfield Gravel Wetland (Village)

The Town and Village have secured funding through various grant programs for all 4 projects which are on schedule for work/implementation to be completed by 2023. The Town and Village will submit reports annually on April 1st to the State addressing the actions taken to implement all FRP components. These projects have been modified to reduce phosphorous as well as meeting the FRP requirements. With these projects, fully implemented, the FRP high flow minimum requirement will be exceeded by approximately 212%.

The Town and Village shall implement the measures necessary to achieve the flow restoration targets in the stormwater TMDLs using the FRPs developed no later than December 5, 2032.

Flow Monitoring

Both communities have signed the Memorandum of Agreement (MOA) with the Vermont Department of Conservation (DEC) that authorizes DEC to contract with a third party to implement a flow monitoring program. A copy of the MOA is included in *Appendix H*. The Agreement will provide monitoring services to participating MS4s through State Fiscal Year 2021. The Town and Village will continue to comply with the program obligations outlined in the Agreement.

Stream Corridor Protection

The 2012 MS4 general permit required that the two communities report on legal authorities or strategies the Town/Village has adopted to protect and regulate development in the stream corridors of stormwater impaired waters including developing a plan for enhanced stream corridor protection. In accordance with the 2018 MS4 permit, the Town/Village will report any updates to the plan including link to relevant ordinances or regulations as part of the annual compliance report due April 1.

8.2 Lake Champlain Phosphorus Control Plans (PCP) Requirements

The Town and Village will develop Phosphorus Control Plans (PCPs) that are consistent with the timely guidance provided by the State and requirements outlined under the Permit and the Lake Champlain TMDLs.

This plan will be designed to achieve a level of phosphorus reduction equivalent to the percent reduction targets for developed lands in the Main Lake and Mallets Bay lake segments *Appendix I*. The Town and Village will submit joint annual reports on the development of the PCP including information requested in 8.2.E of the 2018 VT MS4 permit. A final PCP will be submitted for approval by the Secretary by April 1, 2021. Upon approval, the Plan will become a part of this SWMP under *Appendix J*.

Municipal Roads Requirements

The Town and Village have been working with the Chittenden County Regional Planning Commission (CCRPC) to conduct the Road Erosion Inventory (REI) of all hydrologically-connected road segments within the municipalities. The CCRPC is also conducting the Road Erosion scoring for each hydrologically-connected road segment to include in the Implementation Table. The results of the REI will be recorded in the Implementation Table and submitted by April 1, 2020.

The Town and Village will submit individual annual reports which will include an update on how many hydrologically-connected road segments were brought up to standards in the past year. We will also identify which segments are planned to be upgraded the following calendar year in the Implementation table.

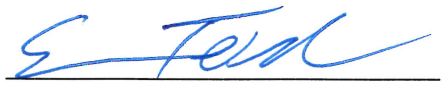
Part 9: Monitoring, Record Keeping, and Reporting

The Town and Village will comply with all monitoring, record keeping, and reporting requirements as outlined in Part 9 of the 2018 MS4 permit including internal review of the SWMP.

Part 10: Standard Permit Conditions

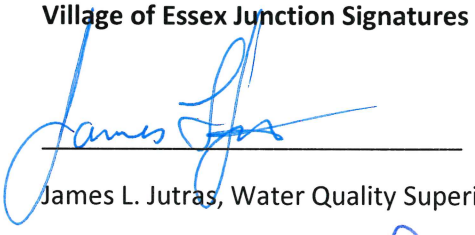
10.8 Signatory Requirements

"I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personal properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and believe, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

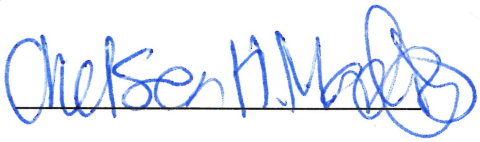


Evan Teich, Unified Municipal Manager

Village of Essex Junction Signatures

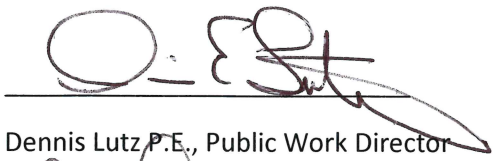


James L. Jutras, Water Quality Superintendent

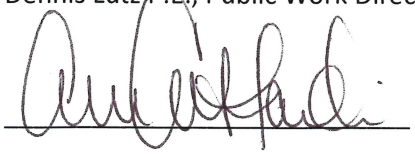


Chelsea H. Mandigo, Stormwater Coordinator/Wastewater Operator

Town of Essex Signatures



Dennis Lutz P.E., Public Work Director



Annie Costandi E.I., Stormwater Coordinator/Staff Engineer

Appendices Table

Appendix A: Indian Brook and Sunderland Brook TMDL Reports

Appendix B: Map of the Watersheds in the Town and Village

Appendix C: Stormwater Program Agreement between the MS4 Communities and the Chittenden County Regional Planning Commission for Rethink Runoff

Appendix D: Stormwater Ordinance including 2014 Expired Permit additions

Link to entire document: https://www.essex.org/index.asp?SEC=B1514A56-E23E-43B7-9195-5ED284507A8F&Type=B_BASIC

Appendix E: Land Development Code Table of Contents

Link to entire document: https://www.essexjunction.org/codes/development-code/

Appendix F: VT DEC MS4 Permit Authorization incorporating the FRP's and Expired Permits for the Village of Essex Junction

Appendix G: VT DEC MS4 Permit Authorization incorporating the FRP's and Expired Permits for the Town of Essex

Appendix H: Flow Monitoring Memorandum of Agreement

Appendix I: Developed Lands Phosphorus Reduction Requirements by Lake Segment

Appendix J: Indian Brook Flow Restoration Plan

Appendix K: Sunderland Brook Flow Restoration Plan

Appendix L: Phosphorus Control Plan placeholders