

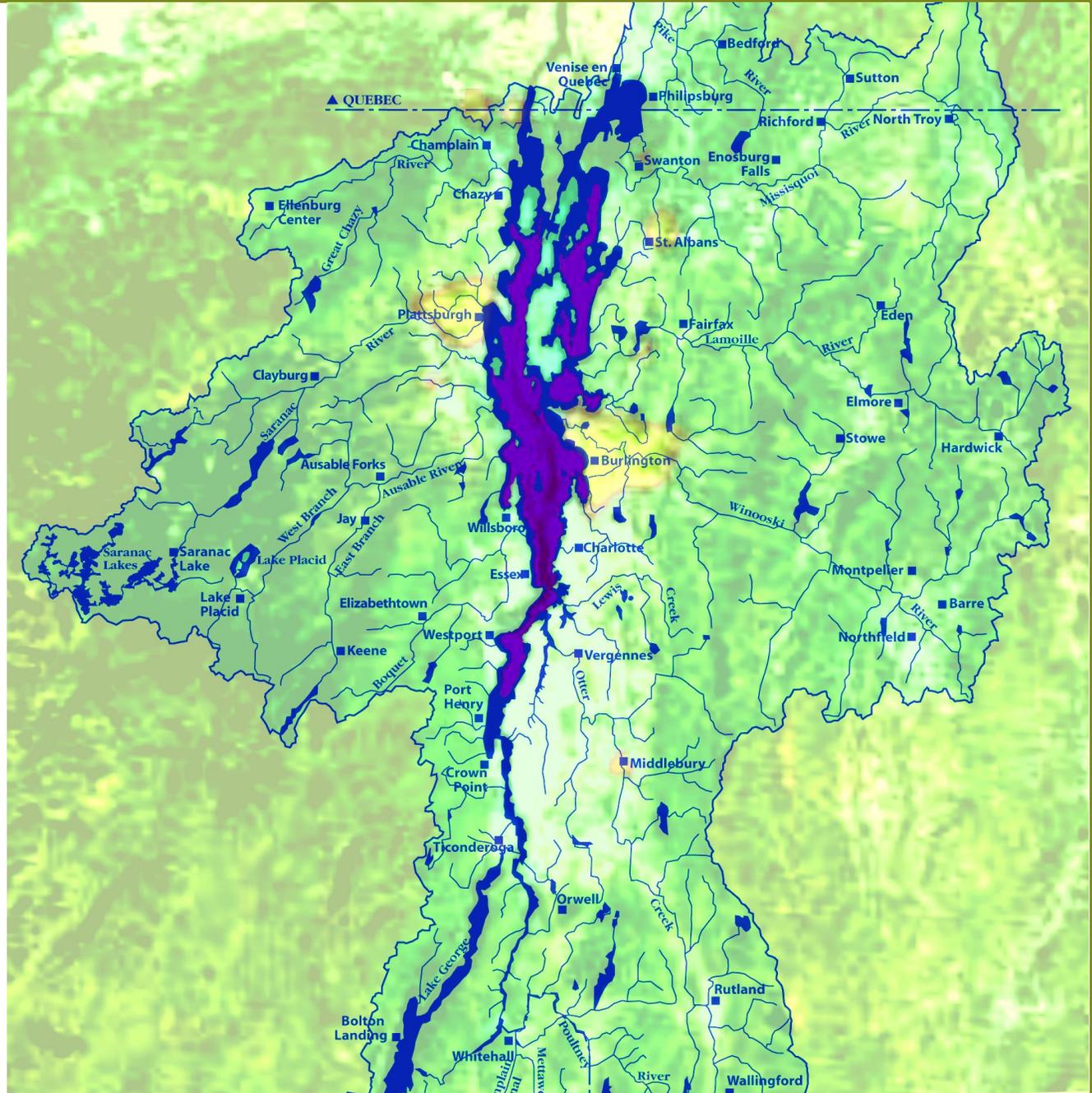
Lake Champlain TMDL Permits



VT DEC Wastewater Program

Table of Contents

1. Lake Champlain TMDL
2. Fact Sheets
3. Permits



Lake Champlain TMDL History and Status

- **2002** – Lake Champlain TMDL for VT, NY and Quebec
- **2008** – TMDL appeal
- **2011** – TMDL disapproved
- **2015** – Act 64
 - Statutory authority and deadlines
 - Establishes clean water fund
- **June 17, 2016** – TMDL Issued
- **September 15, 2016** – Phase I Implementation Plan
 - 34% reduction in Phosphorus across all sectors



Forestry



Wastewater Treatment



Stormwater



River Channels



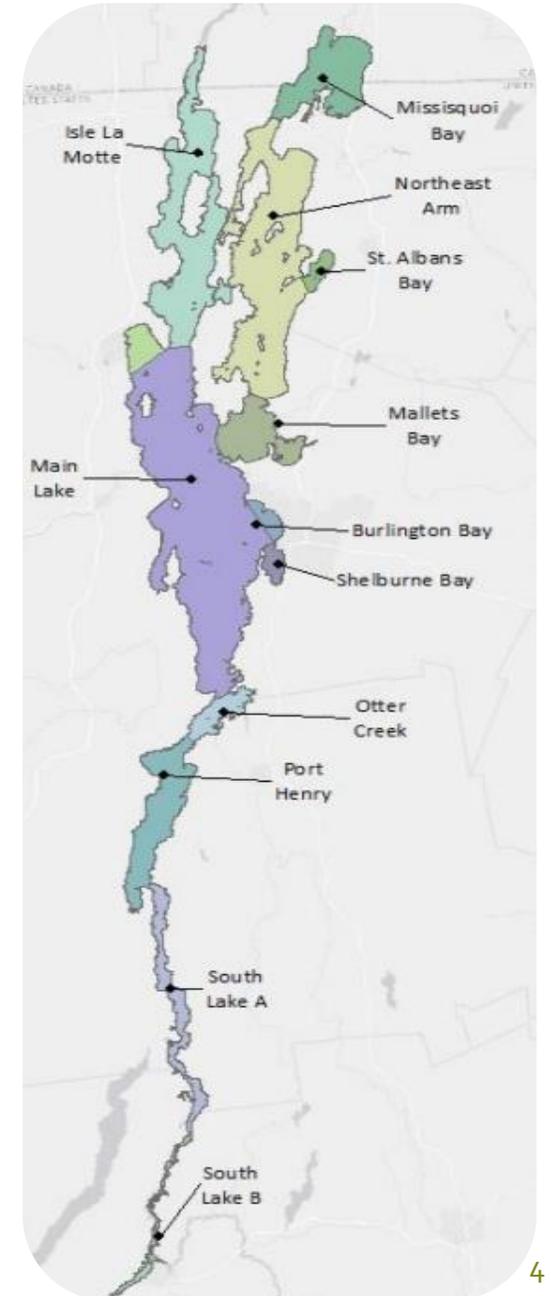
Agriculture



Roads

Phase I Plan Commitment for WWTFs

- Targets watersheds where current wastewater load represents significant portion of TP load from sources:
 - Main Lake
 - Shelburne Bay
 - Burlington Bay } WWTFs = 16% - 97% of segments' TP load
- St. Albans Bay – WWTFs = 27% of segment's TP load
- Missisquoi Bay – WWTFs = 8.5% of segment's TP load
 - WWTF reductions required because EPA determined non-WWTF measures alone would not meet Water Quality Standards (WQS)
- WWTFs in other watersheds keep currently permitted annual load, unless Reasonable Potential to exceed WQS



TP Waste Load Allocations

Lake Champlain TMDL WLAs in metric tons/year:

- Design Flow < 0.10 MGD – no change in TP limit;
 - Design Flow = 0.10 – 0.20 MGD – WLA based on 0.8 mg/l;
 - Design Flow > 0.20 MGD – WLA based on 0.2 mg/l;
 - CSO WLAs covered in Developed Land Load Allocation (except for Burlington).
-
- 25 WWTFs will receive reduced TP permit limits



Permit Background

- New permits are renewals of administratively continued permits
- Have not been issued since early 2000's
- Changes to process since last permit issuance
 - New staff
 - New WQS
 - New EPA Ammonia Criteria
 - Nutrient Criteria
 - Reasonable Potential Determinations are becoming more stringent
- EPA review
 - If RP is determined, limits are required
 - Increased WET testing

Permitting Schedule

North Lake Basin	Missisquoi & Lamoille Basins	South Lake A & B Basins	Winooski Basin	Otter Creek Basin
by 6/30/17	by 6/30/18	by 6/30/19	by 6/30/20	by 6/30/21
Alburgh	Enosburg Falls	Benson	Barre	Brandon
Burlington - Main	Fairfax	Fair Haven	Burlington Electric	Middlebury
Ed Weed F.C.S.	Hardwick	Orwell	Burlington - North	Otter Valley
Montpelier	Jeffersonville	Pawlet	Burlington - River	Pittsford
NWCF	Johnson	Poultney	Cabot	Pittsford F.C.S
Shelburne Plant #1	Milton	Castleton	Essex Jct.	Proctor
Shelburne Plant #2	Morrisville		IBM*	Rutland
South Burlington - BB	Newport Center		Marshfield	Salisbury F.C.S
St. Albans	North Troy		Northfield	Shoreham
Williamstown	PBM Nutritionals		Plainfield	Vergennes
	Richford		Richmond	Wallingford F.D.
	RockTenn Co.		South Burlington - AP	West Rutland
	Sheldon Springs		Stowe	
	Swanton		Waterbury	
	Troy/Jay		Winooski	



Permitting / O&M

Jessica Bulova:

WW Section Supervisor

(802) 490-6181 - Jessica.Bulova@Vermont.gov

Liz Dickson:

Addison, Chittenden & Essex

(802) 490-6183 - Liz.Dickson@Vermont.gov

Dave DiDomenico:

Bennington & Chittenden

(802) 490-6184 - David.DiDomenico@Vermont.gov

Nick Giannetti:

Washington & Windham

(802) 490-6186 - Nick.Giannetti@Vermont.gov

Allison Lowry:

Grand Isle, Lamoille, Orange & Orleans:

(802) 490-6188 - Allison.Lowry@Vermont.gov

Shea Miller:

Rutland

(802) 490-6165 - Shea.Miller@Vermont.gov

Katie Parrish:

Caledonia & Franklin Counties

(802) 490-6182 - Kathleen.Parrish@Vermont.gov

Amy Polaczyk:

Windsor

(802) 490-6185 - Amy.Polaczyk@Vermont.gov

Fact Sheets

Fact Sheets

What's in a Fact Sheet?

1. Proposed Action, Type of facility, discharge location
2. Description of discharge
3. Limitations and monitoring requirements
4. Statutory and regulatory authority
5. Description of receiving water
6. Permit basis and effluent limit derivation
7. Special Conditions
8. Reasonable Potential Determination
9. Procedures for formulation of final determinations

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2ND FLOOR
MONTPELIER, VT 05620-3522

FACT SHEET FOR DRAFT PERMIT (June 2017)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE

PERMIT NO: 3-1284
PIN: EJ95-0299
NPDES NO: VT0100358

NAME AND ADDRESS OF APPLICANT:

City of South Burlington
575 Dorset Street
South Burlington, VT 05403

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

City of South Burlington "Bartlett Bay" Wastewater Treatment Facility
Bartlett Bay Road
South Burlington, Vermont

RECEIVING WATER: Lake Champlain

CLASSIFICATION OF USES OF RECEIVING WATER: All uses Class B(2) with a waste management zone (WMZ). Class B(2) waters are suitable for swimming and other primary contact recreation; irrigation and agricultural uses; aquatic biota and aquatic habitat; good aesthetic value; boating, fishing, and other recreational uses and suitable for public water source with filtration and disinfection or other required treatment. A WMZ is a specific reach of Class B(1) or B(2) waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

I. Proposed Action, Type of Facility, and Discharge Location

The Secretary of the Vermont Agency of Natural Resources (Secretary) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on June 25, 2010. The Town's previous permit was issued on January 1, 2006. The previous permit (hereafter referred to as the "current permit") has been administratively continued, pursuant to 3 V.S.A. § 814, as the applicant filed a complete application for permit reissuance within the prescribed time period as per the Vermont Water Pollution Control Permit Regulations (VWPCPR) § 13.5(b). At this time the Secretary

Proposed Action, Type of Facility, Discharge Location Description of Discharge

Proposed Action

- Application Received Date
- Administratively Continued (Title 3)
- DEC's Decision to Renew

Type of Facility

- Municipal WWTF
- Industrial WWTF
- Industrial Pretreater
- Type of Waste Being Treated

Discharge Location

- Receiving Water

I. Proposed Action, Type of Facility, and Discharge Location

The Secretary of the Vermont Agency of Natural Resources (Secretary) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on June 25, 2010. The Town's previous permit was issued on January 1, 2006. The previous permit (hereafter referred to as the "current permit") has been administratively continued, pursuant to 3 V.S.A. § 814, as the applicant filed a complete application for permit reissuance within the prescribed time period as per the Vermont Water Pollution Control Permit Regulations (VWPCPR) § 13.5(b). At this time the Secretary has made a tentative decision to reissue the discharge permit. The facility is engaged in the treatment of municipal wastewater including domestic, commercial, and industrial wastewaters. The discharge is from the outfall of the City of South Burlington "Bartlett Bay" Wastewater Treatment Facility (WWTF) to Lake Champlain.

A map showing the location of the facility, outfall, and receiving water is provided in the Reasonable Potential Determination (RPD) (see Attachment A).

II. Description of Discharge

The facility is engaged in the treatment of municipal wastewater including domestic, commercial, and industrial wastewaters. The WWTF is a Kruger A/O (Anaerobic/Oxic) extended aeration activated sludge process. The design flow of the facility is 1.250 million gallons per day (MGD) and the design biochemical oxygen demand (BOD₅) loading is 310 mg/L (3,232 pounds/day).

The WWTF maintains a constant discharge to Lake Champlain.

Limitations & Monitoring Requirements

Statutory & Regulatory Authority

Limits & Monitoring Requirements

- Summary of Limits
- Where they are in Permit

Statutory & Regulatory Authority

- Clean Water Act & NPDES Background
 - Laws that establish NPDES program
 - VT delegation to administer program
 - Technology-Based Effluent Limitations (TBELS)
 - Water Quality-Based Effluent Limits (WQBELS)
- Reasonable Potential Determination (RPD)
- Anti-backsliding
 - Limit & conditions in renewal must be as stringent as those in current permit

III. Limitations and Monitoring Requirements

The draft permit contains limitations for effluent flow, BOD₅, total suspended solids (TSS), total phosphorus (TP), settleable solids, *Escherichia coli*, and pH. It also contains monitoring requirements for total nitrogen (TN), Total Kjeldahl Nitrogen (TKN), and nitrate/nitrite (NO_x). The effluent limitations of the draft permit and the monitoring requirements may be found on the following pages of the draft permit:

Effluent Limitations: Page 2-3 of 26

Monitoring Requirements: Pages 7-9 of 26

IV. Statutory and Regulatory Authority

A. Clean Water Act and NPDES Background

1. Reasonable Potential Determination

B. Anti-Backsliding



Description of Receiving Water & Facility Background

Description of Receiving Water

- Outfall location
- Cold / Warm Water Fish Habitat
- Stream Type: SHG, MHG, etc.
- Flow Details:
7Q10, LMM, 30Q10, IWC
- Drainage Area

Facility Background

- History of the WWTF

V. Description of Receiving Water

The receiving water for this discharge is Lake Champlain, a designated Warm Water Fish Habitat June 1 – September 30, and a designated Cold Water Fish Habitat October 1 – May 31. Lake Champlain is impaired for phosphorus and is subject to a Total Maximum Daily Load (TMDL) for phosphorus. This is discussed further in Section VII.C.1. of this Fact Sheet.

VI. Facility History and Background

The City of South Burlington owns and operates the Bartlett Bay WWTF. The facility provides wastewater treatment capacity for residential, commercial, and industrial properties within its sewer service area in the City. The secondary WWTF with an extended aeration activated sludge process was completed in 1970. The facility was upgraded to a Kruger A/O (Anaerobic/Oxic) extended aeration activated sludge process with ultraviolet disinfection and cloth media disk filters for phosphorus removal in 1999.

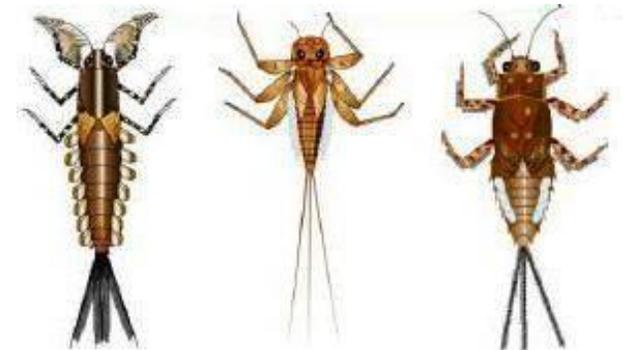
The outfall pipe invert elevation is 15.9 feet below a lake level of 93.0 feet. The effluent outfall pipe is approximately 886 feet in length with an approximate 109-foot diffuser section with four equally spaced 8-inch diameter ports. The available lake to effluent dilution ratio of 33:1 at the outfall was determined in the 1997 Phase II Diffuser Design and Mixing Study report prepared by Binkerd Environmental.

Reasonable Potential Determination (RPD)

Performed by the DEC's Monitoring, Assessment, and Planning Program (MAPP)

Goal: evaluate the draft permit to determine the protectiveness of the permit with respect to receiving water quality criteria. Considering the following:

- Point/Non-point source pollution
- Effluent quality (permit application, DMRs, other reports)
- Instream water quality of receiving waterbody (chemical and biological assessment)
- Toxicity test results (WET, Appendix J)
- Instream Waste Concentration
 - The ratio of the vol. effluent to the vol. receiving water.
 - Effluent/7Q10 (Aquatic life & human health non-carcinogens)
 - Effluent/Low Median Monthly Flow (LMM; nutrients)
 - Mixing zone \leq 200 ft (lakes and some streams)
- Recommendation for limits and monitoring requirements in permit



If Reasonable Potential is determined, a limit must be included in the Permit.

Reasonable Potential Example

Total Phosphorus Limit in the Draft Permit: Steven's Brook is on the State of Vermont 2016 303(d) List of Impaired Waters for nutrients and other pollutants. As there is reasonable potential to contribute to this impairment, the Clean Water Act requires the imposition of effluent limitations necessary to address the facility's portion of the impairment. The draft permit includes a mass-based, effluent limitation of **18 pounds** of TP per year. This annual mass limitation was based on an allocation of **0.0082 metric tons** and was established in the Reasonable Potential Determination (RPD) for the facility, attached to this Fact Sheet as Attachment A. The proposed annual mass limitation will cap the facility's contribution to the impairment of Steven's Brook and is well within the LC TMDL allocation of 0.028 metric tons (61 lbs./yr) that was established in the 2002 Lake Champlain Phosphorus TMDL.

Based on available data, the Secretary has determined that this discharge does have a reasonable potential to cause, or contribute to an instream toxic impact or instream excursion above the water quality criteria. In the instance that reasonable potential exists, the Clean Water Act requires the imposition of effluent limitations necessary to address the facility's contribution to the impairment. Since no TMDL is in place specific to the impaired reach of Steven's Brook, the effluent limitation is derived as a function of the reasonable assurance analysis conducted by EPA in the promulgation of the LC TMDL for the Saint Albans Bay segment. Since an 11% reduction of nonpoint total phosphorus in this watershed may be expected over the permit term, a phosphorus effluent limitation has been expressed as a maximum mass load of 0.0082 MT/yr. or 18 lbs./yr., which is well below the WLA set by the LC TMDL. This is a proposed annual mass limit that will cap the facility's contribution to the impairments.



Instream Water Quality Data: Integrated Watershed Information System - <https://anrweb.vt.gov/DEC/IWIS/>

2017 Vermont Water Quality Standards - http://dec.vermont.gov/sites/dec/files/documents/wsmd_water_quality_standards_2016.pdf

Integrated Watershed Information System

<https://anrweb.vt.gov/DEC/IWIS/>

IWIS

Where 

Site Type # of Sites Sort Order

Search

Sites	Site Reports
Saxtons River - 510231 Description: Just above Saxtons River village WWTF Type: River/Stream , Town: Rockingham , WBID: VT11-05 , LaRosa: Saxtons_5.15	Google Maps ANR Atlas Monitoring Site Summary Water Quality / Chemistry
Saxtons River - 502605 Description: Below Saxtons River village WWTF Type: River/Stream , Town: Rockingham , WBID: VT11-05 , LaRosa: Saxtons_5.0	Google Maps ANR Atlas Monitoring Site Summary Water Quality / Chemistry
Saxtons River - 515609 Description: Saxtons River, between I-91 and VT-141 bridges near tree planting site Type: River/Stream , Town: Rockingham , WBID: VT11-05 , LaRosa: Saxtons_2.0	Google Maps ANR Atlas Monitoring Site Summary
Saxtons River - 515608 Description: Saxtons River, below 5.0 and below main st bridge off of oak st Type: River/Stream , Town: Rockingham , WBID: VT11-05 , LaRosa: Saxtons_4.7	Google Maps ANR Atlas Monitoring Site Summary
Saxtons River - 515322 Description: Below Twin Falls, at swimming hole off of Forest Rd Type: River/Stream , Town: Westminster , WBID: VT11-05 , LaRosa: Saxtons_1.0	Google Maps ANR Atlas Monitoring Site Summary
Saxtons River - 500864 Description: Outside of town center. Fine sand beach in riparian area beyond a meadow adjacent to Rt 121. Type: River/Stream , Town: Rockingham , WBID: VT11-05 , LaRosa: Saxtons_5.6	Google Maps ANR Atlas Monitoring Site Summary Water Quality / Chemistry
Saxtons River - 500863 Description: Fairly remote area upstream from bridge and rapids Type: River/Stream , Town: Westminster , WBID: VT11-05 , LaRosa: Saxtons_19	Google Maps ANR Atlas Monitoring Site Summary Water Quality / Chemistry

Site Search  Site Search allows for a Text base Waterbody Name, Town, Location variety of reports for the found sites.

ANR Atlas  A map based tool that will display (macroinvertebrates, fish, chemist data. Sites will not be visible until Agency geographical information. New users of the Atlas should refer to ANR's

Other Vermont Watershed Management Division Sites

- Lake Data and Maps** Data and Maps for Lakes and Ponds
- Stream Geomorphic Assessment** Stream Geomorphic Assessment Data disp
- LaRosa Current Year Data Access** Data for the current field season, for use a

Other Water Data Sites

- Vermont Monitoring Cooperative** Searchable database of projects, datasets
- USGS Flow Monitoring Map** A Map of US Geological Survey Real-time
- National Water Quality Portal** National Water Quality Monitoring Council
- State Parks Swim Water Testing** Vermont State Parks Swim Water Testing F
- Streams Project** Vermont Streams Project Online Data Acc
- Blue Green Algae** Vermont Department of Health Blue Greer
- Connecticut River Sites** Shows tests along the Connecticut River fc
- UVM Watershed Alliance** Program to increase awareness and knowl

Permit Basis and Explanation of Effluent Limit Derivation

Flow

Conventional Pollutants

1. Biochemical Oxygen Demand (BOD₅)
2. Total Suspended Solids (TSS)
3. Fecal coliform (*E. coli*)
4. pH
5. Oil and grease
6. “and any additional pollutants EPA defines as conventional”

Non-Conventional Pollutants & Toxics

1. *EPA has identified 65 pollutants and classes of pollutants as "toxic pollutants", of which 126 specific substances have been designated "priority" toxic pollutants. All other pollutants are considered to be "nonconventional."*
2. Phosphorus, Nitrogen, Settleable Solids, TRC, Toxicity Testing, Annual Constituent Monitoring parameters



Permit Basis and Explanation of Effluent Limit Derivation

- Proposed Limit
 - Explanation of limit(s) for parameter
 - Comparison to current permit limit
 - History surrounding limit / parameter
- Monitoring Requirements
 - Frequency
 - Seasonality
- Due Dates
- Derivation of Limit(s)
 - State / Federal Legal Statute
 - WQBEL based upon RPD finding
 - WQBEL imposed by TMDL associated with impaired water
- Scientific background supporting limit
 - Outcome of RPD/development of WQBELs

B. Conventional Pollutants

1. Biochemical Oxygen Demand (BOD₅)

The effluent limitations for BOD₅ remain unchanged from the current permit. The monthly average (30 mg/L) and weekly average (45 mg/L) reflect the minimum level of effluent quality specified for secondary treatment in 40 CFR § 133.102. In addition, the draft permit contains a 50 mg/L, maximum day, BOD₅ limitation. This is the Agency standard applied to all such discharges pursuant to 13.4(c) of the Vermont Water Pollution Control Permit Regulations. The Secretary implements the limit to supplement the federal technology-based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations. Mass limitations (175 lbs/day, monthly average and 263 lbs/day, weekly average) are calculated using the concentration limitations above and the originally permitted flow from the WWTF of 0.7 MGD and the provisions of 10 V.S.A. §1252(h). The BOD₅ weekly monitoring requirement is unchanged from the current permit.

Permit Basis and Explanation of Effluent Limit Derivation

Special Conditions:

1. Waste Management Zone
2. Instream Monitoring
3. Laboratory Proficiency Testing
4. Operation, Management & Emergency Response Plan (Sewage Spill Prevention Plan) & Emergency Power Failure Plans
5. Engineering Evaluation
6. Electronic Reporting/Noncompliance Notification
7. Reopener
8. CSOs

Permit Basis and Explanation of Effluent Limit Derivation

Special Conditions:

1. Waste Management Zone: 10 V.S.A. Part 1251(16)

Specific reach of Class B water designated by a permit to accept the discharge of properly treated wastes, that prior to treatment contained organisms pathogenic to humans. Water quality criteria must be achieved but, elevated risks occur.

- Rivers: no less than 1 mile, unless >5% IWC
- Lakes: 200' radius

2. Engineering Evaluation

- Every 20-years
- In-depth inspection of treatment facility, pump station, collection system & manholes to identify and repair equipment, processes, and other possible deficiencies which may adversely affect effluent quality or proper operation.

Permit Basis and Explanation of Effluent Limit Derivation

Special Condition – Instream Monitoring

	Class A(1)			Class B(1)			Classes A(2) and B(2)		
Stream Type ²	Small, High-Gradient	Medium, High-Gradient	Warm-Water, Medium Gradient	Small, High-Gradient	Medium, High-Gradient	Warm-Water, Medium Gradient	Small, High-Gradient	Medium, High-Gradient	Warm-Water, Medium Gradient
Nutrient Concentrations									
Total Phosphorus (µg/L) ³	10	9	18	10	9	21	12	15	27
Nutrient Response Conditions									
pH	Not to exceed 8.5 standard units.								
Turbidity	Consistent with the criteria in § 29A-302(4) of these rules.								
Dissolved Oxygen	Consistent with the criteria in § 29A-302(5) of these rules.								
Aquatic Biota	Consistent with the criteria under § 29A-305(a) of these rules.								
<p>1. Compliance with nutrient criteria shall be achieved either by compliance with the nutrient concentration values specified above or by compliance with all nutrient response conditions. In situations where the applicable nutrient concentrations are achieved but the nutrient response conditions are not met as a result of nutrient enrichment, the Secretary may establish alternate nutrient concentration values on a site-specific basis, as necessary, to achieve compliance with the nutrient response conditions. All waters shall maintain a level of water quality that provides for the attainment and maintenance of the water quality standards of downstream waters.</p> <p>2. Stream type determinations made by the Secretary are based on biological community types that relate to stream size, gradient, and elevation.</p> <p>3. Not to be exceeded at low median monthly flow during June through October in a section of the stream representative of well-mixed flow.</p>									

Permit Basis and Explanation of Effluent Limit Derivation

Special Condition – Instream Monitoring

Assessment and Listing Decision	Discharge Permitting Decision
A. Phosphorus concentration less than or equal to criterion. All nutrient response conditions met.	
Not impaired by nutrients. Rotational basin monitoring on an approximate five-year schedule will be conducted.	If a new or increased discharge is proposed, the permit will limit the phosphorus concentration increase according to the anti-degradation policy. No new or increased phosphorus discharge would be permitted that would cause the phosphorus concentration to be greater than the criterion. If a current discharge at its maximum permitted phosphorus loading rate could produce a mixed, in-stream phosphorus concentration above the criterion value, then representative monitoring will be conducted at the site for phosphorus concentration and all nutrient response conditions. If response conditions are worsening or indicate a likelihood that an impairment will develop, more stringent permit limits will be applied in order to prevent the impairment.
B. Phosphorus concentration greater than criterion. All nutrient response conditions met.*	
Not impaired by nutrients. Representative monitoring will be conducted for phosphorus concentration and all nutrient response conditions at sites affected by permitted discharges. Rotational basin monitoring on an approximate five-year schedule will be conducted at other sites.	If a new or increased discharge is proposed, the permit will limit the effluent phosphorus concentrations and loads to the existing permitted amounts or less. If response conditions are worsening or indicate a likelihood that an impairment will develop, more stringent permit limits will be applied in order to prevent the impairment.
C. Phosphorus concentration less than or equal to criterion. Not all nutrient response conditions met.	
Impaired, but not necessarily by nutrients. Site will be studied to determine the cause of impairment. If found to be impaired by nutrients, an alternate (lower), site-specific nutrient criterion may need to be established for permitting purposes.	If the site is determined not to be impaired by nutrients but a new or increased discharge is proposed, the permit will limit the nutrient increase according to the anti-degradation policy. In no case will amounts be permitted that would cause the phosphorus concentration criterion to be exceeded. If the site is determined to be impaired by nutrients, then more stringent permit limits will be applied in order to correct the impairment.
D. Phosphorus concentration greater than criterion. Not all nutrient response conditions met.	
Impaired by nutrients. Representative monitoring will be conducted for phosphorus concentration and all nutrient response conditions at sites affected by permitted discharges.	More stringent permit limits will be applied in order to correct the impairment. A Total Maximum Daily Load (TMDL) designed to achieve the phosphorus concentration criterion may be required.

* If data are unavailable for any applicable response condition, then the waterbody would be assessed as impaired by nutrients, pending further data collection.

Reopener

Reasons a Permit may be *Reopened & Amended* – Condition II.B.4.

1. *“The Secretary reserves the right to reopen and amend this permit, pursuant to Condition II.B.4 of this permit, to include an alternate TP limitation and/or additional monitoring requirements based on the monitoring data, the results of phosphorus optimization activities, or a reallocation of phosphorus wasteload allocations between the Permittee and another WWTF pursuant to the requirements of the LC TMDL and Vermont’s “Wasteload Allocation Process” Rule (Environmental Protection Rule, Chapter 17).”*
2. WET Test Results
3. Implementation schedule for critical component repair or replacement based on findings from Engineering Evaluation.

CSOs

3. Combined Sewer Overflows (CSOs)

The Permittee has eliminated 10 of the City's 16 combined sewer overflows. There are currently 6 combined sewer overflows remaining that do not discharge during dry weather conditions, which are depicted on Figure 2. Most recently, the Secretary issued 1272 Order No. 3-1207-A4 to the City of Montpelier on September 15, 2012. In response to this Order, the Permittee performed an effectiveness study to assess compliance with the Combined Sewer Overflow Policy (CSO Policy) (June 1990). The effectiveness study indicated that the Permittee was not in compliance with the CSO Policy.

The recently adopted Combined Sewer Overflow Rule (CSO Rule) (Environmental Protection Rule, Chapter 34), which became effective in September 2016, supersedes the CSO Policy. The CSO Rule codifies, updates, and clarifies the technology-based and water quality-based requirements applicable to CSOs. The technology-based controls for CSOs are referred to as the "Minimum Controls" and are included in this draft permit under Condition I.L. To ensure the remaining CSOs are brought into compliance with the Vermont Water Quality Standards, the Secretary, concurrent with issuance of this final permit, shall issue a 1272 Order to the Permittee, requiring the creation of a Long Term Control Plan that complies with the requirements of the CSO Rule.

The following CSO monitoring requirements are included in the draft permit:

- Implementation of a precipitation monitoring system;
- Continued monitoring and reporting of overflow events utilizing tell-tales, at a minimum;
- Notification of wet-weather overflows through public alert within one hour of discovery, and submit to the Secretary specified information regarding the discharge within 12 hours of discovery; and
- A report on CSO control project(s) of the previous calendar year, due by January 31 of each year.

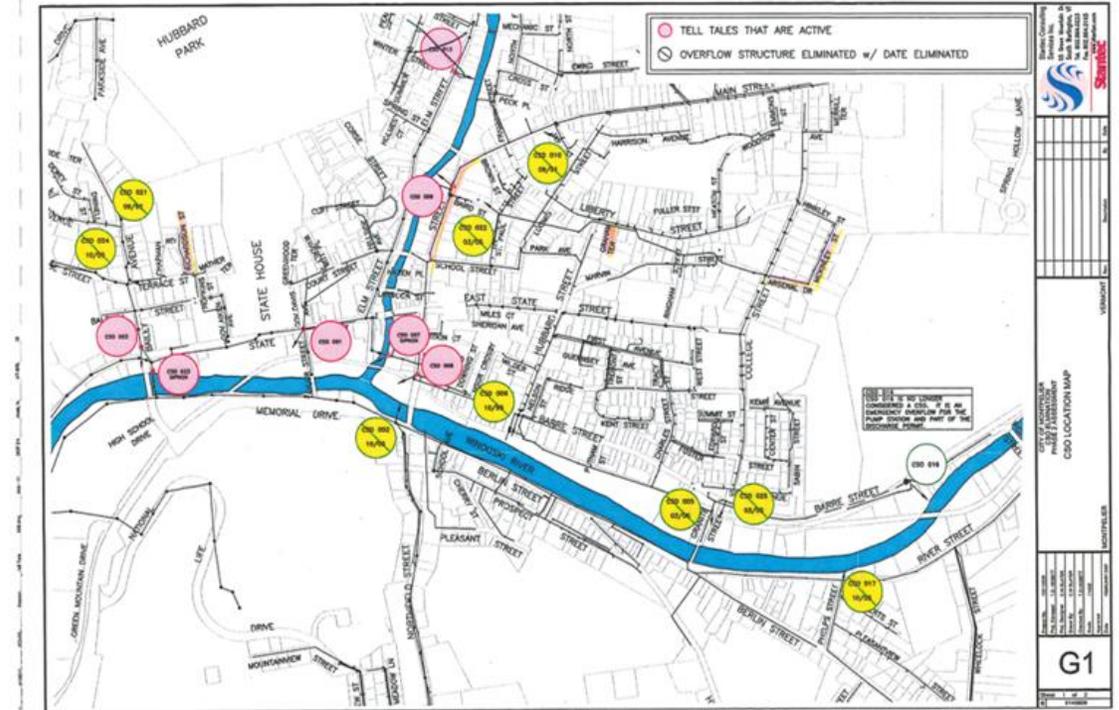
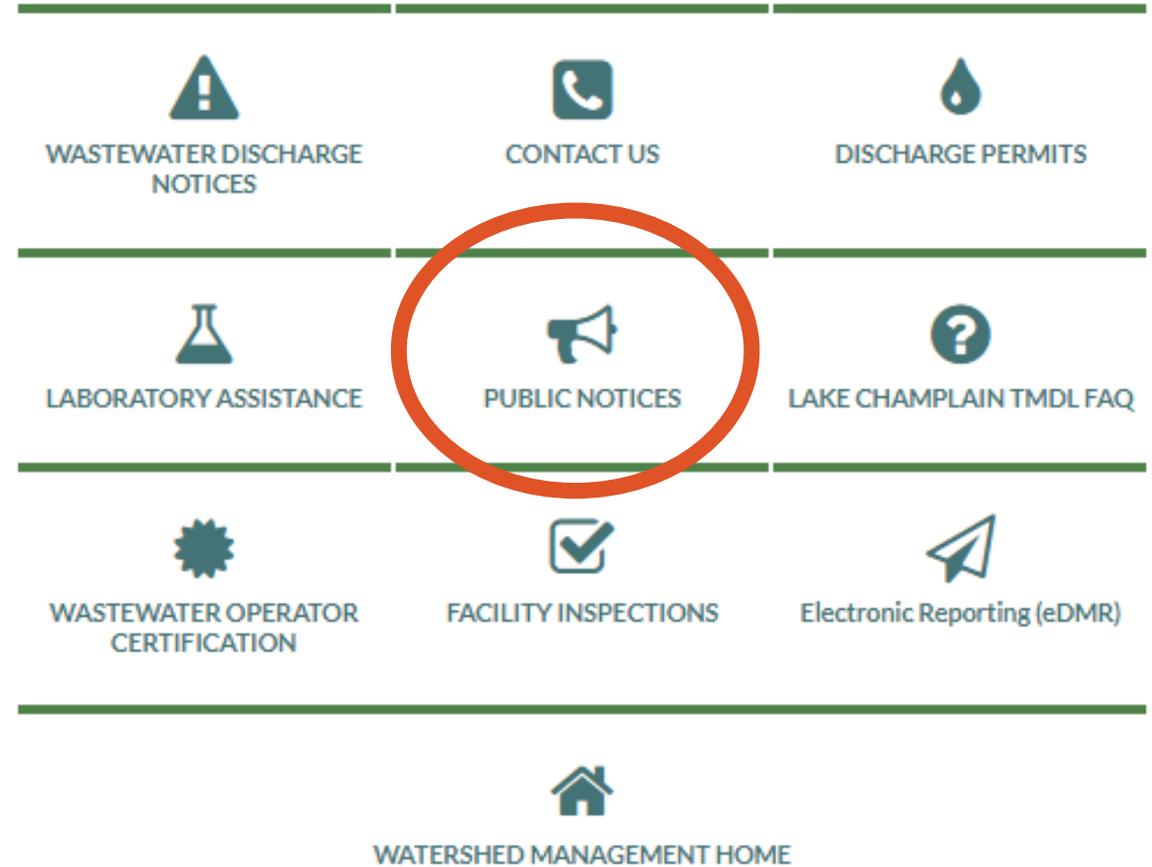


Figure 2: Map of current combined sewer outfalls.

Procedures for Formulation of Final Determinations

- Defines Public Comment Period
 - At least 30 days, may be longer if Public Meeting is offered.
- Defines how to make comments:
 - Via mail: Agency of Natural Resources
Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main Building, 2nd Floor
Montpelier, VT 05620-3522
 - Email/Web
- Public meeting details
 - All LC TMDL permits will have public meeting
 - The public can request a public meeting



Webpage to view documents & submit comments: <http://dec.vermont.gov/watershed/wastewater>

WASTEWATER

PUBLIC NOTICES [Applications on Notice](#) / [Recently Issued Authorizations](#)

APPLICATIONS ON PUBLIC NOTICE

Public comments are being accepted by the Watershed Management Division for the permit actions listed below.

Comments must be received by 4:30 p.m. on the date in which comments are due.

PUBLIC NOTICE START DATE	COMMENTS DUE BY	PERMIT NUMBER	APPLICANT / FACILITY NAME	DRAFT PERMIT (Individual Permits only)	SUPPORTING DOCUMENTS	EMAIL COMMENT
7/11/2017	8/17/2017	3-1304	Town of Shelburne - Harbor Rd	View	View	Comment on 3-1304
6/29/2017	8/9/2017	3-1260	City of St. Albans NWCF	View	View	Comment on 3-1260
7/12/2017	8/30/2017	3-1176	Town of Williamstown	View	View	Comment on 3-1176
7/5/2017	8/17/2017	3-1289	Town of Shelburne - Crown Rd	View	View	Comment on 3-1289
6/29/2017	8/8/2017	3-1207	City of Montpelier	View	View	Comment on 3-1207
6/29/2017	8/9/2017	3-1279	City of St Albans	View	View	Comment on 3-1279
7/31/1971	9/1/2017	3-1537	R E Tucker Inc	View	View	Comment on 3-1537
7/24/2017	8/24/2017	3-1478	Montshire Museum of Science	View	View	Comment on 3-1478

Timely comments will be considered in the formulation of a final decision. Paper copies are available for a fee. During this notice period, a person may request a public informational meeting regarding any draft decision. Any meeting request must state the person's interest and the reasons why a meeting is warranted. Such a meeting will be held if there is sufficient interest. Be certain your name and mailing address are included in the e-mail message. Email comments by clicking on the link provided for that application or directly emailing ANR.WSMDWastewaterComments@vermont.gov.

Alternatively, you may submit comments via US Mail to:

**Public Comment
Wastewater Permit Program
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522**

Fact Sheet Questions?

Permits

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. During the term of this permit, the Permittee is authorized to discharge from outfall serial number S/N 001 of the Bartlett Bay WWTF to Lake Champlain, an effluent for which the characteristics shall not exceed the values listed below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS								
	Annual Average	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
		Mass (lbs/yr)	Mass (lbs/day)			Concentration (mg/L)			
Flow, MGD	1.250		Monitor only ⁵						
Biochemical Oxygen Demand (5-day, 20° C) (BOD ₅) ¹			175	263		30	45	50	
Total Suspended Solids (TSS) ^{1, 2}			175	263		30	45	50	
Total Phosphorus (TP) (total pounds) ^{1, 3}		760				0.8			
Total Nitrogen (TN) ⁴					Monitor only			Monitor only	
Total Kjeldahl Nitrogen (TKN)								Monitor only	
Nitrate/Nitrite Nitrogen (NO _x)								Monitor only	
Settleable Solids									1.0 ml/L
<i>Escherichia coli</i>									77 CFU/100 mL
pH						Between 6.5-8.5 Standard Units			

1. The Permittee shall operate the facility to meet the concentration limitations or pounds limitation, whichever is more restrictive.
2. The Permittee shall operate the facility to meet the Total Suspended Solids concentration limitation, the Total Suspended Solids pounds limitation, or the Total Suspended Solids concentration which ensures that the ultraviolet light disinfection system can meet the *Escherichia coli* limitation, whichever is more restrictive.
3. Total annual pounds of phosphorus discharged shall be defined as the 12-month running annual load, as calculated in Condition I.B.3 and reported monthly on the WR-43-TP form.
4. Total nitrogen (TN) shall be reported as pounds, calculated as: $Average\ TN\ (mg/L) \times Total\ Daily\ Flow \times 8.34$; where, $TN\ (mg/L) = TKN\ (mg/L) + NO_x\ (mg/L)$.
5. Monthly average flow shall be calculated by summing daily effluent flow for each day in the given month and dividing the sum by the number of days of discharge in that month.

Total Phosphorus

1. TP Permit Limits
2. 80% Threshold
3. Phosphorus Optimization Plan
4. Phosphorus Elimination and Reduction Plan
5. TP Reporting
6. Creative Solutions

Total Phosphorus Limits

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS								
	Annual Average	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
		Mass (lbs/yr)	Mass (lbs/day)			Concentration (mg/L)			
Flow, MGD	1.250		Monitor only ⁵						
Biochemical Oxygen Demand (5-day, 20° C) (BOD ₅) ¹			175	263		30	45	50	
Total Suspended Solids (TSS) ^{1,2}			175	263		30	45	50	
Total Phosphorus (TP) (total pounds) ^{1,3}		760				0.8			
Total Nitrogen (TN) ⁴					Monitor only			Monitor only	
Total Kjeldahl Nitrogen (TKN)								Monitor only	
Nitrate/Nitrite Nitrogen (NO _x)								Monitor only	
Settleable Solids									1.0 ml/L
<i>Escherichia coli</i>									77 CFU/100 mL
pH						Between 6.5-8.5 Standard Units			

1. The Permittee shall operate the facility to meet the concentration limitations or pounds limitation, whichever is more restrictive.
2. The Permittee shall operate the facility to meet the Total Suspended Solids concentration limitation, the Total Suspended Solids pounds limitation, or the Total Suspended Solids concentration which ensures that the ultraviolet light disinfection system can meet the *Escherichia coli* limitation, whichever is more restrictive.
3. Total annual pounds of phosphorus discharged shall be defined as the 12-month running annual load, as calculated in Condition I.B.3 and reported monthly on the WR-43-TP form.
4. Total nitrogen (TN) shall be reported as pounds, calculated as: $Average\ TN\ (mg/L) \times Total\ Daily\ Flow \times 8.34$; where, $TN\ (mg/L) = TKN\ (mg/L) + NO_x\ (mg/L)$.
5. Monthly average flow shall be calculated by summing daily effluent flow for each day in the given month and dividing the sum by the number of days of discharge in that month.

TP Concentration Limit

Most permit limits will carry over from the preceding permit.

- Typically: 0.8 mg/l, Monthly Average
- If the WWTF is <0.20 MGD design flow, concentration limit may be greater
- Concentration limit is based on previous TMDL and statute 10 V.S.A. § 1266a

The limit can change:

- Nutrient enrichment of receiving waters, based upon RPD findings
- If receiving water is impaired, see [303\(d\) List of Impaired Waters](#)

TP Waste Load Allocations

Annual Limits based off of TMDL WLA

Lake Champlain TMDL WLAs in metric tons/year:

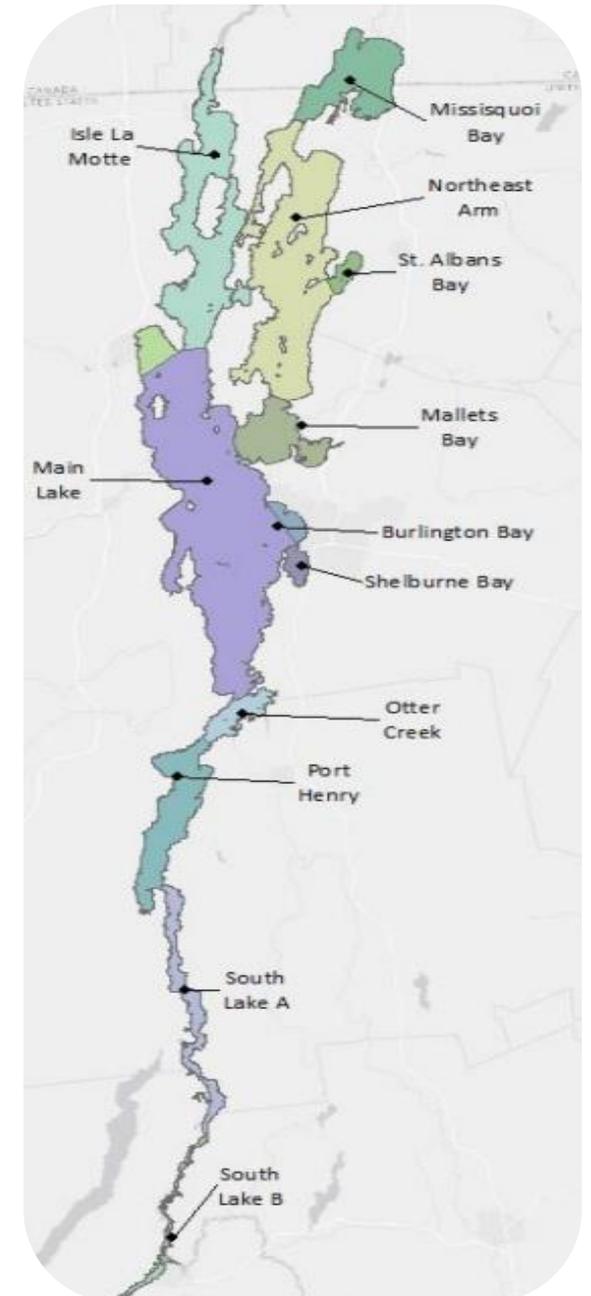
- Design Flow < 0.10 MGD – no change in TP limit;
- Design Flow = 0.10 – 0.20 MGD – WLA based on 0.8 mg/l;
- Design Flow > 0.20 MGD – WLA based on 0.2 mg/l;
- CSO WLAs covered in Developed Land Load Allocation (except for Burlington).

WWTFs Subject:

- Main Lake
- Burlington Bay
- Shelburne Bay
- St. Albans Bay
- Missisquoi Bay

WWTFs Exempt:

- Otter Creek
- Mallets Bay
- Isla LaMotte
- South Lake A & B



TP Annual Limit

Annual Limit:

TP pounds that can be discharged in a rolling 12-month period.

$$\text{Annual Limit} = \text{Flow, MGD} \times 0.2 \text{ ppm} \times 365 \text{ days} \times 8.34$$

Running Annual Pounds:

Pounds of TP discharge in a 12-month period.

Compliance:

Each month, compare TP discharged in past 12-month period (**Running Annual Pounds**) and compare with Annual Limit.

EFFLUENT CHARACTERISTICS	Annual Average	Annual Limitation
		Mass (lbs/yr)

Flow, MGD	1.250	
Biochemical Oxygen Demand (5-day, 20° C) (BOD ₅) ¹		
Total Suspended Solids (TSS) ^{1,2}		
Total Phosphorus (TP) (total pounds) ^{1,3}		760
Total Nitrogen (TN) ⁴		
Total Kjeldahl Nitrogen (TKN)		
Nitrate/Nitrite Nitrogen (NO _x)		
Settleable Solids		
<i>Escherichia coli</i>		
pH		

TP Annual Limit

Conditions:

1. **Annual Limit** – amount of TP lbs allowed in 12-month period.
2. **12-Month Optimization Period** – 12-month period following the permit issuance where Annual Limitation is waived.
3. **Post Optimization Period** – Compliance with the Annual Limit will be evaluated each month, by comparing TP discharged in the past 12-month period (Running Annual Pounds) with the Annual Limit.
4. **80% Threshold** – Measure put in place to ensure WWTF does not exceed Annual Limit. If exceeded, may see additional requirements to remove TP.

TP Annual Limit

Compliance with the Annual Limit will be evaluated each month, by comparing **Running Annual Pounds** with the **Annual Limit**.

Running Annual Pounds: Pounds of TP discharged in the preceding 12-months.

Month	Monthly TP Load (lbs)
August 2017	43.95
September	37.53
October	46.54
November	47.54
December	38.78
January 2018	36.19
February	53.71
March	51.71
April	50.04
May	49.12
June	37.53
July	43.95
August	53.71
September	51.71
October	50.04
November	49.12
December	37.53
January 2019	43.95
February	45.43

12-Month Optimization Period

→ Running Annual Pounds = 536.6 lbs

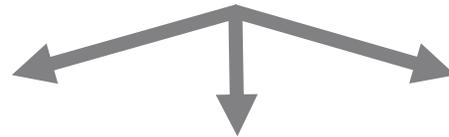
→ Running Annual Pounds = 544.4 lbs

→ Running Annual Pounds = 558.5 lbs

→ Running Annual Pounds = 562.04 lbs

TP Timeline

1. Permit Issued: Begin 12-Month Optimization Period
2. 120 Days (3 Months) After Permit Issued:
 - Submit Phosphorus Optimization Plan
3. 1 Year After Permit Issuance:
 - End 12-Month Optimization Period
 - Compare **Running Annual Pounds** to **Annual Limit**



Running Annual Pounds
consistently < 80%
threshold

Running Annual Pounds projected
to reach /exceed 80% and WWTF
cannot consistently remain below
80% threshold

Effluent will consistently
exceed 80% threshold

Scenario 1.

Effluent TP is consistently below 80% threshold.

Step 1.

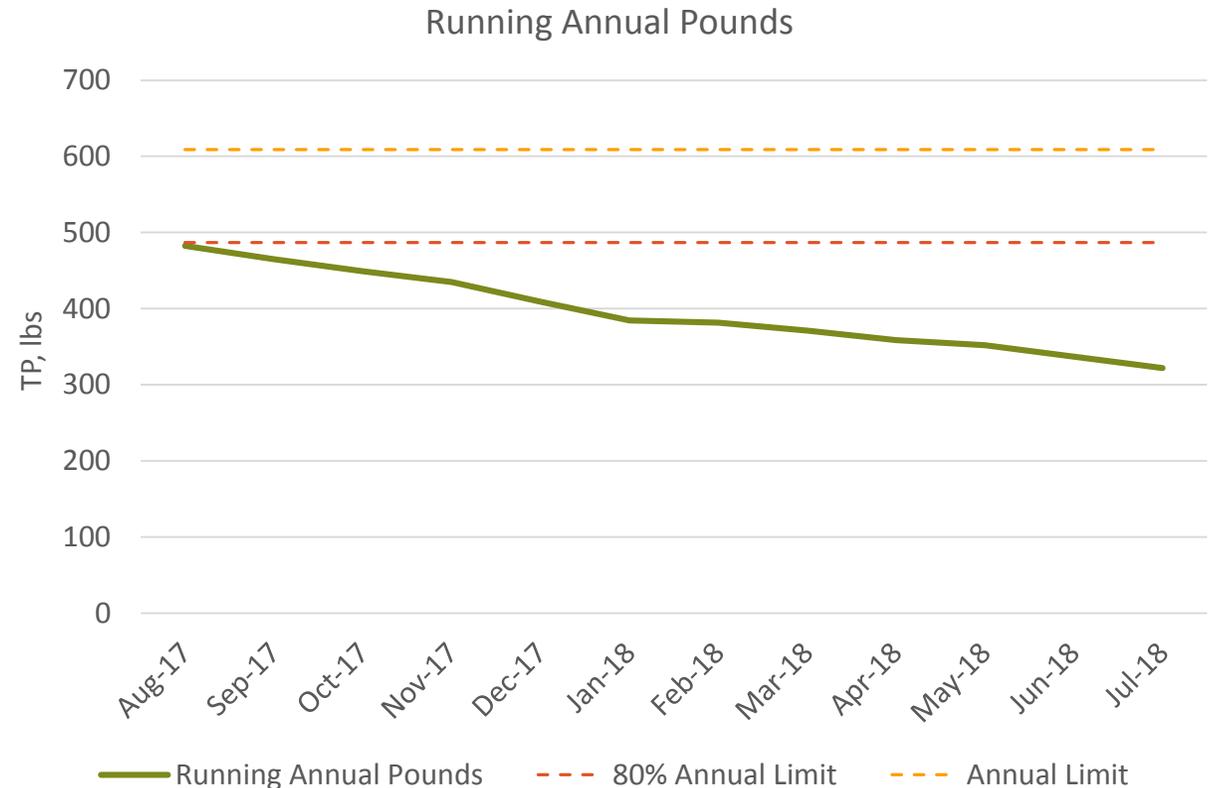
- Outline optimization strategies in POP.
- Continue operating to remain under the 80% permit threshold.

Step 2.

- Plan for future if influent flow or phosphorus concentration and/or loading is expected to increase.

Step 3.

- Submit POP Annual Report in December, each year.



Scenario 2.

Running Annual Pounds projected to reach /exceed 80% and WWTF cannot consistently remain below 80% threshold.

Step 1.

- Outline current and additional optimization strategies in POP.
- Provide implementation schedule to bring effluent TP below 80% threshold.

Step 2. – Following Optimization Period, Running Annual Pounds Reach or Exceed 80% Threshold

- Based on the WWTF's current operations and expected future loadings, project whether TP will exceed Annual Limit during the permit term.
- This projection should be submitted within 90 days of reaching or exceeding 80% threshold.

Step 3.1 – The WWTF is not projected to exceed Annual Limit within the permit term

- Reassess & determine when it is projected to reach the Annual Limit prior to seeking permit renewal.
- Submit that information with the next permit application.

Step 3.2 – The WWTF is projected to exceed Annual Limit during permit term

- See Scenario 3.

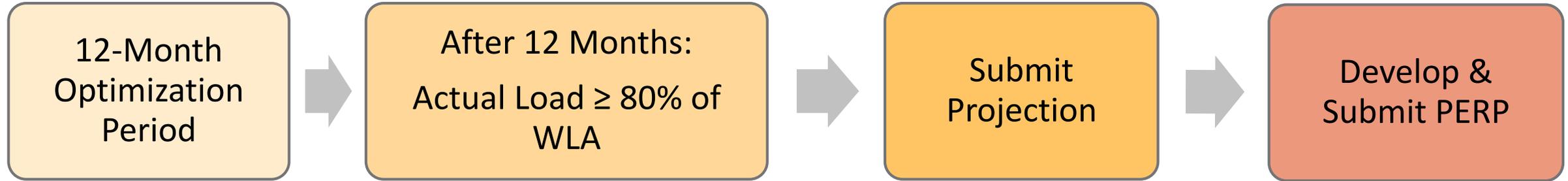
Scenario 3.

After 12-month optimization period effluent TP will consistently exceed 80% threshold and is projected to exceed permit limit.

1. Permittee shall submit a Phosphorus Elimination / Reduction Plan (PERP) within 6 months from the date of submittal of the projection plan.
2. The purpose of the PERP is to outline measures that will ensure compliance with the Annual Limit.



Phosphorus Elimination / Reduction Plan (PERP)



Due Dates:

- **Submit Projection** within 90 days of reaching or exceeding 80%;
- **Submit PERP** if WWTF is projected to exceed WLA during permit term – due within 6 months of projection.

Contents:

- Evaluation / identification of methods to achieve compliance with WLA;
- Financing plan;
- Compliance schedule;
- Permit amendment.

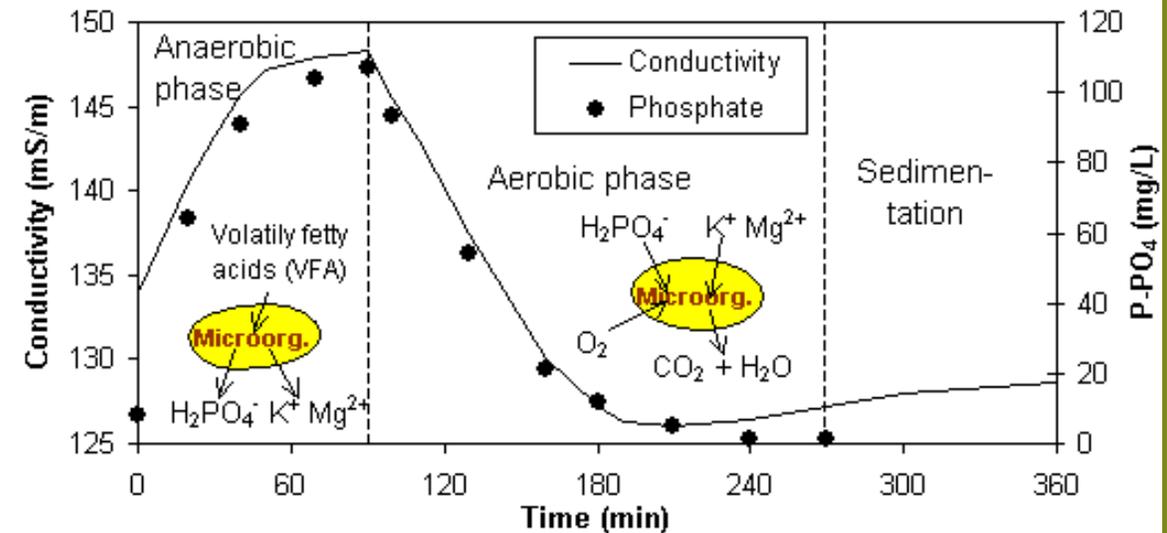
Phosphorus Optimization Plan (POP)

Goals:

1. Evaluate WWTF and Collection System for phosphorus reduction potential
2. Outline current and future measures that can be implemented by the WWTF to reduce TP in the effluent
3. Determine if optimization is sufficient to maintain 80% of Annual Permit Limit

Due: 120 days from day permit is issued (1st of the month).

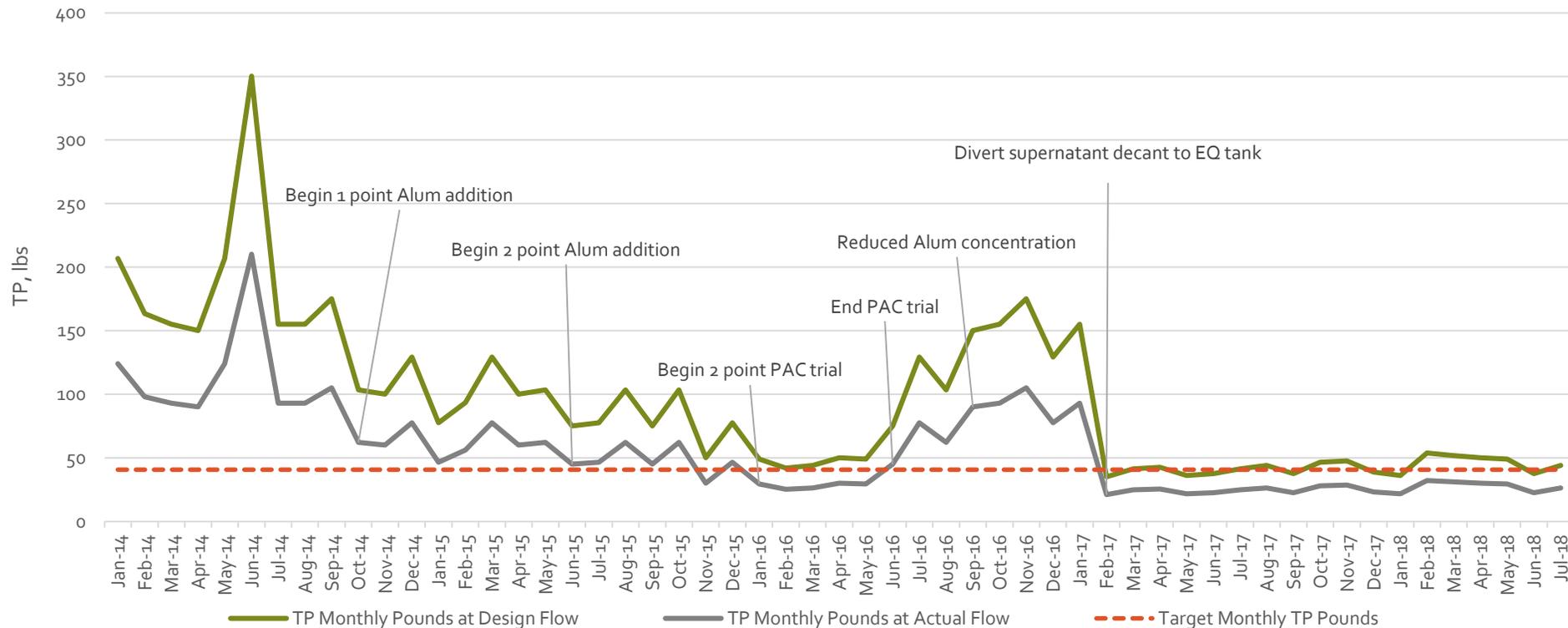
Who: *“qualified professional with experience in the operation and design of WWTFs in consultation with the WWTF.”*



Phosphorus Optimization Plan (POP)

Contents:

1. Evaluation of WWTF and Collection System;
2. Identify Phosphorus Optimization Techniques;
3. Trend phosphorus optimization techniques with TP in the effluent;
4. Provide implementation schedule.



POP – Annual Report

Submit an Annual Report as an attachment to December’s electronic Discharge Monitoring Report;

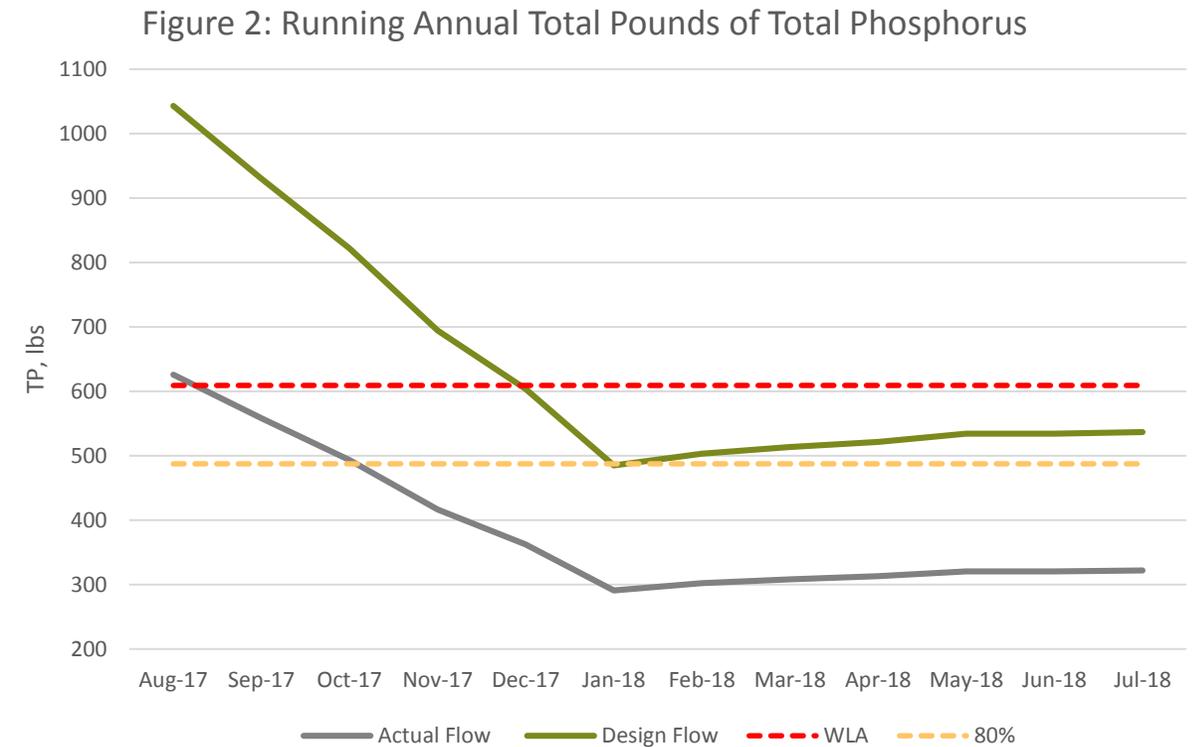
1. *“The optimization techniques implemented under the POP during the previous year.”*

- Identify strategies implemented by WWTF;
- Identify strategies being planned by WWTF.

2. *“A determination of whether the techniques are performing as expected.”*

- Report whether or not the optimization strategies have been effective and are performing as expected.
- Outline changes or adjustments to further enhance optimization.

3. *“The phosphorus discharge trends relative to the previous year.”*



TP Reporting

- TP Concentration (mg/l) – Monthly Average

$$\frac{\text{Sum of month's TP measurements}}{\text{\# of month's TP measurements}}$$

- Total Monthly Pounds of TP

$$\text{Mo. avg TP} \times \text{Mo. avg flow} \times \text{\# of days there was a discharge} \times 8.34$$

- Running Total Annual Pounds

$$\text{Sum of monthly TP from preceding 12 months}$$

- Comparison (%) of Running Load to Permit Limit

$$\% = \frac{\text{Running Annual Pounds}}{\text{Permit Limit}}$$

TOTAL PHOSPHORUS REPORTING WORKSHEET WR-43-TP



This worksheet is intended to help you calculate monthly and annual total phosphorus (TP) discharges. These discharges are required to be reported by your Direct Discharge Permit subject to the Lake Champlain Total Maximum Daily Load (TMDL). **This worksheet shall serve as guidance only and is not required to be submitted with your electronic discharge monitoring report.** All TP discharges shall be recorded on your WR-43 form and reported electronically, via ANR Online.

Total Phosphorus Calculations:

Your Wastewater Permit requires you to report TP in the following ways:

1. Monthly Average Concentration (A)
2. Total Monthly Pounds (D)
3. Running Total Annual Pounds (E)
4. Comparison of Running Total Annual Pounds to Annual Permit Limit (G)

A	Monthly Average Total Phosphorus Concentration <i>(Sum of all daily discharges (mg/l) measured during the month divided by the number of daily discharges measured during the month.)</i>	<input type="text"/>	mg/l
B	Average Daily Flow for the Month <i>(Average daily flow for the month as reported on DMR.)</i>	<input type="text"/>	MGD
C	Number of Daily Discharges in the Month	<input type="text"/>	days
D	Total Monthly Pounds of Phosphorus Discharged <i>(A x B x C x 8.34 = D)</i>	0.00	lbs
E	Running Total of Annual Pounds of Phosphorus Discharged <i>(Sum of all monthly TP from preceding 12 months.)</i>	<input type="text"/>	lbs
F	Total Phosphorus Annual Permit Limit (waste load allocation)	<input type="text"/>	lbs
G	Comparison (%) of Running Total Annual Pounds to Annual Permit Limit <i>(calculated as: E / F x 100)</i>	0.00	%

Creative Solutions

1. Reallocation

- TP loads may be reallocated between WWTFs discharging to same lake segment
- A reallocation agreement between facility would be crafted by WWTF owners and submitted for review and approval by the Wastewater Management Program

2. Integrated Permit

- Multi-sector discharge permit
- Allows for reallocation of TP loads between regulated programs such as stormwater and wastewater
- May not be applicable to communities that do not have MS4s

Additional Permit Conditions

- Plans
 - EPFP, OMER
- Total Nitrogen Monitoring
- Ammonia
- Total Residual Chlorine
- Whole Effluent Toxicity
- Annual Constituent Monitoring
- Lab Proficiency
- Incident reporting

Operation Management & Emergency Response Plans (OMERP)

AKA Sewage Spill Prevention Plans

- Required since 2007.
- Evaluate WWTF; pump stations; river crossings; collection system.
- Reflect the age and overall condition of all components and which are prone to failure.
- Update OMERPs to account for changes to WWTF, collection system & stream crossings.

Guidance:

- Checklists for WWTF, Pump Stations, Collection System.

<http://dec.vermont.gov/watershed/wastewater/facility-inspections#Operation>

Electrical Power Failure Plan (EFPF)

Renewal requires updated EFPF to account for new connections and increased loading (storage time in pump stations).

Guidance:

- Back-up Generators
- Pump Stations Emergency Storage & Drawdowns
- Pumping and Trucking
- Portable Emergency Pumping

<http://dec.vermont.gov/sites/dec/files/wsm/wastewater/docs/WrittenGuidanceEmergencyAction-ElectricPowerFailure.pdf>

Total Nitrogen

Total Nitrogen	1 × month / 1 × quarter	calculated
Total Kjeldahl Nitrogen (TKN)	1 × month / 1 × quarter	composite
Nitrate/Nitrite Nitrogen (NO _x)	1 × month / 1 × quarter	composite

TN = Total Kjeldahl Nitrogen (TKN) + Nitrite/Nitrate (NO_x).

- TN pounds per day, annual average, is calculated as:

Calculate the pounds of TN discharged on each sample date:

TN (lbs/day) = TN (mg/L) × volume discharged (million gallons) on day of sample × 8.34

- Calculate the TN, pounds per day, annual average:

TN (lbs/day, annual average = (Sum of all TN [lbs/day])/(count of TN samples)

Ammonia

Total Ammonia Nitrogen (TAN) = NH_3 + NH_4^+

- Water-Quality Based Effluent Limitation
 - 30Q10 flow for chronic
 - 7Q10 flow for acute

Table 4. Ammonia Effluent Limits for Williamstown WWTF, using pH default of 8.2 and temperature defaults of 20°C and 5°C for summer and winter seasons respectively. Limits are expressed as mass (lbs./day) and as concentration (mg/L).

Season	Mass (lbs./day)	Concentration (mg/L)		
	Monthly Average	Monthly Average	Weekly Average	Instantaneous Maximum
Total Ammonia Nitrogen (June 1 – September 30)	6.5	5.2	13.0	19.2
Total Ammonia Nitrogen (October 1 – May 31)	14.8	11.9	29.7	27.1

Ammonia Monitoring:

Williamstown WWTF has been conducting monthly effluent monitoring (January -December) for ammonia for several years. Effluent ammonia concentrations in 2016 ranged from 0.5 to 31 mg/L total ammonia nitrogen (TAN), the average was 12.8 mg TAN/L.

Under the WQS, two ammonia criteria apply – chronic and acute – which are temperature and pH dependent. The chronic criteria are applied at the 30Q10 flow and the acute criteria are applied at the 7Q10 flow. Using the maximum ammonia concentration of 31 mg/L (TAN) observed during this period, the receiving water concentration (RWC) at 7Q10 instream waste concentration (IWC) of 14% used for implementing the acute criteria would be 4.34 mg TAN/L (7Q10 IWC 0.14 X 31 mg TAN/L). The RWC at 30Q10 IWC of 10% used for implementing the chronic criteria would be 3.1 mg TAN/L (30Q10 IWC 0.10 X 31 mg TAN/L).

Monitoring data indicates the pH of the Stevens Branch within this reach is 8.2, using the temperature and pH dependent values provided in Tables 5a, b and 6 within the [2013 EPA Ammonia Criteria](#) we find that a value of 4.34 mg TAN/L and 3.1 mg TAN/L exceed the chronic and acute criteria of 0.57 mg/L and 2.7 mg/L respectively, when water temperature is 20°C. In fact, the chronic criteria are exceeded for all temperature conditions at the concentration of 3.1 mg TAN/L. Using the average effluent TAN observed of 12.8 mg/L, the chronic criteria would still be exceeded for all temperature conditions, and the acute criteria would be exceeded when temperatures were greater than 24°C. MAPP recommends monthly ammonia monitoring be continued to provide additional data for evaluation.

With respect to ammonia, there exists reasonable potential to cause or contribute to a violation of the toxic criteria contained within the VWQS. As such, effluent limitations are appropriate for insertion into the permit. The following effluent limitations presented in Table 4 have been calculated to reflect seasonal mass limitations that will ensure that ammonia criteria are not exceeded. These limitations have been computed based on mass loading that reflects the worst-case for current facility flows (0.15 MGD annual average), by computing the allowable mass for the lowest observed summer flows, at the 30Q10 (chronic) and 7Q10 (acute) flows.

Whole Effluent Toxicity (WET)

Federal Regulations Require 4 WET Tests during permit term for:

- Annual permitted flow \geq 1 MGD
- Systems with pretreaters
- High Instream Waste Concentration

Facilities that have not conducted toxicity tests in several years are being asked to complete WET tests in the upcoming permit cycle.

Ballpark Cost:

Acute ~\$400-500

Chronic ~\$1100-1200

Typical:

2-2 Species Tests, Acute + Chronic

Year 1

Fall



48-hrs



96-hrs

Year 3

Winter



48-hrs



96-hrs

Annual Constituent Monitoring

Required For:

- Facilities with permitted effluent greater than 0.1 MGD
- Results must be provided as an attachment to the DMR form WR-43 for the month in which the samples were taken

Constituents – Grab Sample:

- Temperature
- Ammonia*
- Dissolved Oxygen
- Oil & Grease

Constituent – Composite:

- Total Dissolved Solids

*** Not required if facility has a permit limit**

Guidance Document

YEAR	SEASON	DATES
2017	Spring	April 1 - June 30
2018	Summer	July 1 - September 30
2019	Fall	October 1 - December 31
2020	Winter	January 1 - March 31
2021	Spring	April 1 - June 30
2022	Summer	July 1 - September 30
2023	Fall	October 1 - December 31
2024	Winter	January 1 - March 31
2025	Spring	April 1 - June 30
2026	Summer	July 1 - September 30
2027	Fall	October 1 - December 31
2028	Winter	January 1 - March 31
2029	Spring	April 1 - June 30
2030	Summer	July 1 - September 30
2031	Fall	October 1 - December 31
2032	Winter	January 1 - March 31

Annual Proficiency Testing

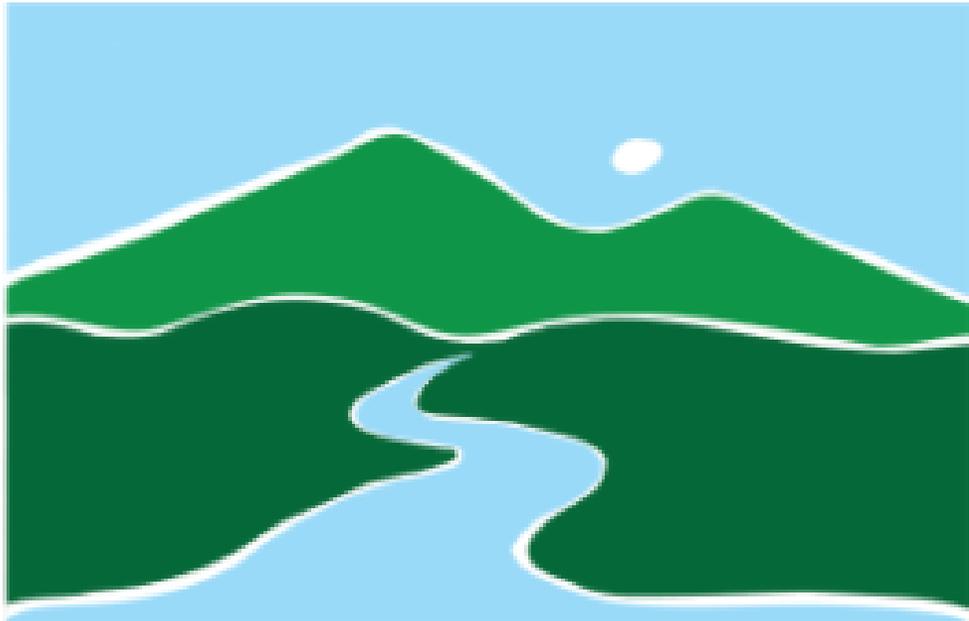
Requires adequate laboratory controls and appropriate quality assurance procedures.

- Annual laboratory test;
- Via accredited lab or EPA DMR-QA study;
- Complete & **submit** by December 31, annually.

Lab Assistance Page:

<http://dec.vermont.gov/watershed/wastewater/wastewater-laboratory-assistance>





ANR Online Technical Support

Greg Lutchko: (802) 272-4529
Greg.Lutchko@Vermont.gov

NPDES Discharge Monitoring Reports

Mari Cato: (802) 490-6105
Mari.Cato@Vermont.gov

Permit Applications & Public Notice:

Jill Draper: (802) 490-6118
Jill.Draper@Vermont.gov

- | | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Jessica Bulova: | WW Section Supervisor
(802) 490-6181 - Jessica.Bulova@Vermont.gov |
| Liz Dickson: | Addison, Chittenden & Essex
(802) 490-6183 - Liz.Dickson@Vermont.gov |
| Dave DiDomenico: | Bennington & Chittenden
(802) 490-6184 - David.DiDomenico@Vermont.gov |
| Nick Giannetti: | Washington & Windham
(802) 490-6186 - Nick.Giannetti@Vermont.gov |
| Allison Lowry: | Grand Isle, Lamoille, Orange & Orleans:
(802) 490-6188 - Allison.Lowry@Vermont.gov |
| Shea Miller: | Rutland
(802) 490-6165 - Shea.Miller@Vermont.gov |
| Katie Parrish: | Caledonia & Franklin Counties
(802) 490-6182 - Kathleen.Parrish@Vermont.gov |
| Amy Polaczyk: | Windsor
(802) 490-6185 - Amy.Polaczyk@Vermont.gov |