

**STATE OF VERMONT  
AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
VERMONT POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES)  
GENERAL PERMIT 3-9040  
FOR STORMWATER DISCHARGES FROM MUNICIPAL ROADS**

Effective January 26, 2023



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## **PART 1: BACKGROUND AND AUTHORITY**

### **1.1 Purpose**

This general permit, also referred to as the MRGP, is issued pursuant to 10 V.S.A. § 1264(c)(6), which requires the Secretary to issue a general permit for discharges of regulated stormwater from municipal roads. This permit is intended to achieve significant reductions in stormwater-related erosion from municipal roads, both paved and unpaved.

### **1.2 Authority**

This general permit is issued in accordance with the following state and federal laws and rules: the Vermont Water Pollution Control statute, 10 V.S.A. Chapter 47, including §§ 1258, 1259, and 1264; the federal Clean Water Act (CWA), as amended, 33 U.S.C.A. § 1251 et seq., including 33 U.S.C.A. § 1342(p); and regulations of the United States Environmental Protection Agency (EPA) including but not limited to 40 CFR Part 122.

## **PART 2: COVERAGE UNDER THIS PERMIT**

### **2.1 Duty to Apply**

Any incorporated city, town, or village with operational control over municipal roads<sup>1</sup> is subject to the requirements of this permit. The exception to this is municipalities that are authorized under the Municipal Separate Storm Sewer System (MS4) General Permit. The MS4 General Permit includes the road stormwater management standards listed in Part 6 of this general permit. Municipalities authorized under the MS4 General Permit address discharges of regulated stormwater from municipal roads pursuant to the terms of their MS4 authorizations. For a list of MS4 municipalities, see Appendix A.

This permit is issued by the State of Vermont as a delegated state authorized to administer the federal National Pollutant Discharge Elimination System (NPDES) program and complies with all state-specific permitting requirements under 10 V.S.A. § 1264.

### **2.2 Permit Coverage**

This general permit covers discharges of regulated stormwater from municipal roads, which include:

- A. Town highways, class 1-4, and their rights-of-way.
- B. Municipal stormwater infrastructure associated with town highways.

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<sup>1</sup> Villages with operational control over their roads are those villages that report mileage to VTrans annually pursuant to Title 19, Ch 3.

For the purposes of this permit, “municipal stormwater infrastructure” refers to all stormwater conveyances and treatment and control systems, controlled by the municipality, that receive stormwater discharges from municipal roads.

### **2.3 Limitations on Coverage.**

Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Road Erosion Inventory (REI), or during an inspection.

Coverage under this general permit does not eliminate the need to seek authorization under a general or individual stormwater permit for the discharge of regulated stormwater associated with the construction, expansion, and redevelopment of impervious surface.

## **PART 3: APPLICATION REQUIREMENTS**

To apply for authorization under this general permit, an NOI must be submitted in accordance with the deadlines in Section 3.1(C), below. After the Secretary has determined that an NOI is administratively complete, the Secretary shall provide public notice of the NOI on the Environmental Notice Bulletin (ENB) in accordance with Part 3.3 of this permit.

### **3.1 Submittal of Notice of Intent**

- A. An application for coverage under this general permit shall consist of a completed NOI form. The NOI forms required to apply for coverage under this general permit are available on the Stormwater Program’s website, at: <http://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program>. If an electronic NOI submittal system is available, the municipality shall submit all application materials, including applicable fees, through the electronic NOI system.
- B. The municipality shall pay the applicable administrative processing and application review fee at the time that it submits its NOI. The applicable fees are included under 3 V.S.A. § 2822 and a fee schedule is available on the Stormwater Program’s website.
- C. Application – Municipalities must apply for coverage under this general permit by filing an NOI with the Agency by January 26, 2023.

### **3.2 Determination of Complete Application and Request for Additional Information**

The Secretary reserves the right to return an application that is incomplete or inaccurate or does not meet the requirements of this permit. The Secretary may require the municipality to submit additional information that the Secretary considers necessary to make a decision on the eligibility for, or the issuance or denial of, an authorization to discharge pursuant to this permit. The Secretary may deny an authorization to discharge pursuant to this permit if the additional information requested is not provided to the Secretary within 60 days of the Secretary’s request

or if any additional information submitted is inadequate for the Secretary to make a decision on the eligibility for, or the issuance or denial of, an authorization to discharge pursuant to this permit.

### **3.3 Public Notice and Public Comments**

- A. Public notice of the initial permit application shall comply with the public noticing requirements for authorizations under general permits found in 10 V.S.A. §7715, Type 4 Procedures, and any rules adopted thereunder.
- B. The Secretary shall provide notice of the final permitting decision through the ENB and shall post the decision to the bulletin. The Secretary shall provide a response to all comments submitted during the public comment period.

### **3.4 Authorization to Discharge**

- A. A municipality shall only be authorized to discharge under the terms and conditions of this permit upon receipt of a written authorization to discharge from the Secretary.
- B. The complete NOI, including all attachments, shall be incorporated by reference and included in the terms of an authorization under this general permit, and the municipality shall comply with all terms and conditions of this general permit and its authorization issued hereunder. Failure to comply with the NOI and all attachments shall be deemed a violation of this permit and may be subject to enforcement action.

### **3.5 Amendments**

A request for an amendment of authorization under this general permit shall consist of a completed NOI, and if applicable, the REI.

- A. Public notice of amendments shall comply with the public noticing requirements for amendments under 10 V.S.A. § 7717 and the rules adopted thereunder.
- B. “Major amendments,” as defined in 10 V.S.A Chapter 170, include the submittal of the permittee’s REI. The submittal of the REI on or before October 31, 2027 shall constitute a major amendment.
- C. The applicant shall pay any fees required under 3 V.S.A. § 2822(j)(2).

## **PART 4: ROAD EROSION INVENTORIES, IMPLEMENTATION TABLE PORTAL, and IMPLEMENTATION REQUIREMENTS**

A municipality shall complete and submit for Agency approval a Road Erosion Inventory (REI) reassessment. REI data must be submitted to the Implementation Table Portal (ITP) by the deadline defined in Sections 4.1.C and Section 4.4. The ITP must be updated regularly as defined in Section 4.2.

#### **4.1 Road Erosion Inventory for all municipal hydrologically-connected road segments**

Each municipality shall complete an REI reassessment of all hydrologically-connected road segments. The REI is intended to verify which municipal road segments are hydrologically connected and identify which of those segments meet the operational standards required under this permit. The municipal road segments are broken down into the following three categories: Open Drainage Roads, Closed Drainage Roads, and Class 4 Roads. A detailed procedure for conducting the REI reassessments can be found on the MRGP website\*.

Municipalities are required to use the DEC-developed REI Survey 123 form application (app) to conduct the REI re-assessment and segment upgrades. The DEC-developed REI Survey 123 form app, Collector Map app, and web-based Reporter for the MRGP tool can be found on the MRGP website\*.

Results of the REI will be recorded in the Implementation Table Portal (ITP). Road erosion scores will be visible immediately when the REI is submitted through the Survey 123 app. A link to the ITP can be found on the MRGP website\*.

Other similar map layer apps are allowed if approved by DEC.

\* Links to the Road Erosion Inventory (REI) Survey 123 app, Implementation Table Portal (ITP), and associated materials can be found on the MRGP website at: <https://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program>.

##### **A. Hydrologically Connected Road Segment Determination**

The REI reassessment shall include all hydrologically-connected municipal road segments. This includes all hydrologically-connected road segments that appear on the ANR Atlas at the time that the REI is conducted, as well as all road segments likely to discharge to waters or wetlands. All hydrologically-connected road segments depicted on the ANR Atlas shall be field visited and evaluated using the REI Form. Additionally, the applicant may propose to add road segments to its REI based on an evaluation of the following criteria:

1. For closed drainage roads : the catch basin outlet pipe is within 500 feet of a water of the State or wetland.
2. For all other municipal roads:
  - a. The municipal road segment is within 100 feet of a water of the State or wetland;
  - b. The municipal road segment bisects any water of the State or wetland, or a defined channel;



c. The municipal road segment is uphill from, and drains to, a municipal road that bisects a water of the State or wetland, and should be included in the REI to accurately capture the extent of the stormwater watershed.

If a road segment appears on the ANR Atlas and none of the above conditions are observed in the field, municipalities may propose to re-classify a segment as not hydrologically connected. Alternately, if none of the above conditions are observed in the field, but the segment is likely to discharge to waters or wetlands, a permittee shall propose to add this segment to the inventory following a field evaluation.

The addition or removal of any road segments not appearing on the ANR Atlas must be documented as part of the REI, and justification for the removal or addition shall be included in the Implementation Table.

The Secretary may determine at any time that a road segment not identified on the ANR Atlas is hydrologically connected, based on the criteria listed above, as well as other site-specific factors that indicate the likelihood of a discharge, including slope, soil type, proximity to waters, etc. When the Secretary determines that an unmapped road segment is hydrologically connected and informs the municipality of its determination, the permittee shall include the segment in its Implementation Table as part of the next annual report.

## B. Road Erosion Scoring

The REI scoring methodology can be found on the MRGP website at:

<https://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program>.

Road segments will be scored automatically upon submittal of REI data through the DEC Survey 123 app. Road erosion scores will be visible immediately in the Implementation Table Portal (ITP) when the REI is submitted through the Survey 123 app.

All road segments will be scored as “Fully Meets,” “Partially Meets,” or “Does Not Meet” the standards listed in Part 6 of this permit. Road segments that score “Partially Meets” or “Does Not Meet” shall be upgraded to meet standards according to the municipality’s implementation schedule. Road segments that score “Fully Meets” do not require upgrades but shall be maintained to ensure that they continue to meet standards.

DEC may at any time reassess any road segment to determine if a segment meets the standards listed in Part 6 of this permit. DEC may identify road segments as Very High Priority as described in Section 4.3 of this permit and may require that DEC-identified Very High Priority Segments be “Fast Tracked.” These “Fast Tracked” segments must be upgraded to “Fully Meeting” standards within 2 years from DEC notification to a municipality.

## C. Deadlines

Municipalities shall submit their completed REI Reassessment by October 31, 2027. The REI Reassessment must be completed between May 1, 2023 and October 31, 2027. The initial REI, conducted during the first MRGP permit cycle, will serve as the basis for

implementation requirements until the second MRGP permit cycle REI reassessment is completed and officially submitted to DEC.

#### 4.2 Implementation Table Portal (ITP)

Municipalities shall record the REI scoring information in the ITP. The ITP is available on the MRGP website at: <https://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program>.

The ITP displays a Progress Report on MRGP compliance for each municipality. The Progress Report displays the number of non-compliant road segments the municipality will bring up to standards in order to achieve compliance by December 31, 2036. The municipality shall upgrade at least 7.5% of non-compliant road segments identified in the REI submitted to DEC in the ITP each year. Municipalities' ITP's Progress Report will identify the number of road segments that must be upgraded by the end of the calendar year to reach, at a minimum, 7.5% compliance annually. The municipality shall report annually on the status of implementation (see Part 5.2) and any changes to individual connected road segment compliance status. Any segment upgrades from non-compliant to compliant (Fully Meets) status reported after May 1, 2023 will not require a new REI reassessment of that segment(s) during this permit term.

#### 4.3 Very High Priority Road Segments

DEC will calculate Very High Priority segment scores using methodology described in the scoring methodology document. Twenty percent of all Very High Priority segments shall be upgraded to meet the MRGP standards annually, as part of the required 7.5% listed in Section 4.2

#### 4.4 Implementation and Compliance Schedule

The municipality shall bring all hydrologically-connected road segments up to the MRGP standards as soon as possible but no later than December 31, 2036.

The following implementation schedule shall apply.

January 26, 2023	NOI must be filed with the Agency
April 1, 2023 and every year thereafter	Annual Report forms due (see Part 5.2.A)
October 31, 2027	REI reassessment via the ITP
November 1, 2027 <sup>2</sup>	Apply for authorization upon reissuance of the MRGP

<sup>2</sup> Date to be confirmed in the reissued MRGP.

No later December 31, 2036	Complete implementation; all hydrologically-connected municipal roads meet the standards listed in the MRGP General Permit
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**PART 5: RECORDKEEPING AND REPORTING**

**5.1 Recordkeeping**

- A. Municipalities must retain records of all inventory information, copies of all reports required by this permit, a copy of this general permit, and records of all data used to complete the application (NOI) for this permit, for a period of at least three years from the date of the report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Secretary at any time.
- B. A municipality must submit its records to the Secretary only when specifically asked to do so. A municipality must make its records, including the notice of intent (NOI), the Road Erosion Inventory and the copy of the ITP Progress Report, available to the public if requested to do so in writing.

**5.2 Annual Reporting**

Municipalities shall submit annual report forms to the Department of Environmental Conservation, Watershed Management Division, Stormwater Management Program by April 1st each year, and upon receipt, the Department shall post each annual report on its website.

- A. The annual report form will require town verification of the information provided in the ITP including the following:
  1. Changes to MRGP compliance status (Fully, Partially, and Does Not Meet) for completed road segments, and the dates upgrades were completed.
  2. Verification of the ITP Progress Report recalculation of remaining segments to be upgraded by end of permit term (January 26, 2028).
  3. Identification of any changes to the hydrologically-connected status of any road segment.

**PART 6: ROAD STORMWATER MANAGEMENT STANDARDS**

The standards listed below constitute the minimum required Best Management Practices (BMPs) applicable to all “hydrologically-connected” municipal roads.

It is the municipality’s responsibility to maintain all practices after installation. Road segments not meeting these standards must implement the BMPs listed below in order to meet the required standards.

Refer to the VTrans Better Roads Manual for BMP sketches and descriptions at:  
<https://vtrans.vermont.gov/sites/aot/files/highway/documents/ltf/Better%20Roads%20Manual%20Final%202019.pdf>

## **6.1 Feasibility**

Municipalities shall implement these standards to the extent feasible. In determining feasibility, municipalities may consider the following criteria: The implementation of a standard listed in Part 6 of this general permit does not require the acquisition of additional state or federal permits<sup>3</sup> or noncompliance with such permits, or noncompliance with any other state or federal law. The implementation of a standard does not require the condemnation of private property; impacts to significant environmental and historic resources, including historic stone walls, historic structures including structures registered on either the Vermont State Register of Historic Places or the National Register of Historic Places, or removing vegetation within 250 feet of a lakeshore; impacts to buried utilities; and excessive hydraulic hammering of ledge. Additionally, the implementation of any standard shall not be required if it would render the road unsafe for travel.

Municipalities shall document in the REI Reassessment each instance where feasibility affects implementation of the standards.

## **6.2 Standards for All Construction and Soil Disturbing Activities**

Following construction and soil disturbance on a hydrologically-connected road segment, all bare or unvegetated areas shall be revegetated with seed and mulch, hydroseeded, or stone lined within 5 days of disturbance of soils, or, if precipitation is forecast, sooner. Projects authorized under the Construction General Permit (CGP 3-9020) or Individual Construction Stormwater Permit (INDC) shall instead comply with the terms and conditions of that permit.

## **6.3 Standards for Open Drainage Roads (Not Class 4)**

The following are the required standards for all non-compliant hydrologically-connected open drainage roads. To maintain compliance with the requirements of this General Permit, municipalities shall apply these standards to all new construction, general BMP maintenance, and significant upgrades of stormwater treatment practices.

### **A. Roadway/Travel Lane Standards**

#### **1. Roadway Crown**

- a. Gravel roads shall be crowned, in or out-sloped:

Minimum: ¼” per foot

Recommended: ¼” – ½” per foot or 2% - 4%.

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<sup>3</sup> Self-verification under a non-reporting permit category does not constitute a permit for purposes of this section.

b. Paved/ditched roads shall be crowned during new construction, redevelopment, or repaving where repaving involves removal of the existing paving.

Minimum: 1/8" per foot or 1%

Recommended: 1% - 2%.

## 2. Shoulder berms (also called Grader/Plow Berm/Windrows)

Shoulder berms shall be removed to allow precipitation to shed from the travel lane into the road drainage system. Roadway runoff shall flow in a distributed manner to the drainage ditch or filter area and there shall be no shoulder berms or evidence of a "secondary ditch". Shoulder berms may remain in place if the road crown is in-sloped or out-sloped to the opposite side of the road from berm side of road. The shoulder berm standard only applies to open drainage gravel roads.

## B. Road Drainage Standards

Roadway runoff shall flow in a distributed manner to grass or a forested area by lowering road shoulders or conversely by elevating the travel lane level above the shoulder. Road shoulders shall be lower than travel lane elevation. If distributed flow is not possible, roadway runoff may enter a drainage ditch, stabilized as follows:

1. For roads with slopes between 0% and 5%: At a minimum, grass-lined ditch, no bare soil. Geotextile and erosion matting may be used instead of seed and mulch. Alternatively, ditches may be stabilized using any of the practices identified for roads with slopes 5% or greater included in Sub-part B.2, below.

Recommended shape: trapezoidal or parabolic cross section with mild side slopes; two foot horizontal per one foot vertical or flatter and 2-foot ditch depth.

2. For roads with slopes 5% or greater but less than 8%:
  - a. Stone-lined ditch: minimum 6"- 8" minus stone or the equivalent for new practice construction. Recommended fractured stone with 2-foot ditch depth from top of stone-lined bottom,
  - b. Grass-lined ditch with stone check dams<sup>4</sup>, or
  - c. Grass-lined ditch if installed with disconnection practices such as cross culverts and/or turnouts to reduce road stormwater runoff volume. There shall be at least two cross culverts or turnouts per segment disconnecting road stormwater out of the road drainage network into vegetated areas or spaced every 160'.
3. For roads with slopes of 8% or greater: Stone-lined ditch. Stone-lined ditches are not required if the toe of the ditch backslope is located outside of the town right-of-way.
  - a. For slopes greater than or equal to 8% but less than 10%: minimum 6"-8" minus stone or the equivalent for new construction. Recommended fractured stone with 2-foot ditch depth from top of stone-lined bottom.

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<sup>4</sup> See Appendix B for check dam installation specifications.

b. For slopes greater than 10%: minimum 6-8" minus stone. Recommended 12" minus fractured stone or the equivalent. Recommended 2-foot ditch depth from top of stone-lined bottom.

4. If appropriate, bioretention areas, level spreaders, armored shoulders, and sub-surface drainage practices may be substituted for the above road drainage standards.

### C. Drainage Outlets to Waters & Turnouts

Roadway drainage shall be disconnected from waterbodies and defined channels, since the latter can act as a stormwater conveyance, and roadway drainage shall flow in a distributed manner to a grass or forested filter area. Drainage outlets and conveyance areas shall be stabilized as follows:

1. Turn-outs - all drainage ditches shall be turned out to avoid direct outlet to surface waters.
2. There must be adequate outlet protection at the end of the turnout, based upon slope ranges below. Turnout slopes shall be measured on the bank where the practice is located and not based on the road slope.
  - a. For turnouts with slopes of 0% or greater but less than 5%: stabilize with grass at minimum. Alternatively, stabilize using the practices identified in Sub-parts (b)-(c), below, when possible.
  - b. For turnouts with slopes 5% or greater: stabilize with stone.
  - c. For slopes greater than 5% but less than 10%: minimum 6"-8" minus stone or the equivalent for new construction.
  - d. For slopes greater than 10%: minimum: 6-8" minus stone or equivalent for new construction. Recommended 12" minus fractured stone or the equivalent.

### D. Municipal Cross Culverts and Intermittent Stream Culverts

1. All municipal culverts- Culvert end treatment or headwall required for areas with slopes 5% or greater, if erosion is due to absence of these structures. End treatment or headwall is required for new construction on road segment slopes 5% or greater.
2. All municipal culverts- Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction on road segment slopes 5% or greater.
3. Cross culverts- Upgrade to 18" culvert (minimum), if erosion is due to inadequate size or absence of structure.
4. In instances where intermittent streams enter the municipal road drainage network, the Secretary requires culvert sizing based on in-field and mapping techniques described in the Intermittent Stream Crossing Sizing Guidance, found in Appendix C.
5. Drainage culverts conveying perennial waters are subject to coverage under the DEC Stream Alteration General Permit. MRGP Standards do not apply to culverts conveying perennial waters.

6. A French Drain (also called an Under Drain) or French Mattress (also called a Rock Sandwich) sub-surface drainage practice may be substituted for a cross culvert.

#### E. Driveway Culverts within the municipal ROW

1. Culvert end treatment or headwall required for areas with road segment slopes of 5% or greater, if erosion is due to absence of these structures. End treatment or headwall is required for new construction.
2. Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction.
3. Upgrade to minimum 15" culvert, 18" recommended, if erosion is due to inadequate size or absence of structure.
4. Intermittent streams may enter the municipal road drainage network, and in these cases, the Secretary requires culvert sizing based on in-field and mapping techniques described in Appendix C.
5. Driveway culverts conveying perennial waters are subject to coverage under the DEC Stream Alteration General Permit.

### **6.4 Standards for Closed Drainage Roads**

Catch Basin Outlet Stabilization: All hydrologically-connected catch basin outlets shall be stabilized to eliminate all rill and gully erosion. Catch basin outlet stabilization practices include: stone-lined ditch, stone apron, check dams, culvert header/headwall, and green stormwater infrastructure practices such as bioretention practices, when appropriate.

### **6.5 Standards for Connected Class 4 Roads**

Stabilize any areas of gully erosion identified in the REI with the practices described above or equivalent practices. Disconnection practices such as broad-based dips and water bars may replace cross culverts and turnouts.

## **PART 7: DISCHARGES UNDER THIS PERMIT**

### **Discharges to High Quality Waters; Anti-degradation**

This permit is adopted in conformance with the Anti-Degradation Policy of the Vermont Water Quality Standards and the Department of Environmental Conservation's Interim Anti-Degradation Implementation Procedure (October 2010).

The BMPs required under this permit are established consistent with 40 C.F.R. 122.44(k) of the Code of Federal Regulations and 10 V.S.A. § 1264(c)(6), were developed based on a review of leading national stormwater standards, and were informed by best available information regarding the effectiveness of the BMPs. Additionally, the BMPs required under this permit

were informed by stakeholder input and subject to public review and comment regarding their effectiveness.

The BMPs required under this permit will be reviewed in cycles not to exceed five years, in conformance with the Department's established plan, to ensure that the required practices provide the highest level of stormwater treatment. Where warranted based on this review, the Department will revise this permit to add, remove, or modify practices to ensure ongoing compliance with the anti-degradation requirements of the Vermont Water Quality Standards.

In the vast majority of cases, application of the BMPs required under this permit will maintain and protect the higher quality of the State's high-quality waters, will prevent limited reductions in the existing higher quality of those waters, and will minimize risk to the existing and designated uses of those waters.

Therefore, compliance with this permit affords a rebuttable presumption of compliance with the Anti-Degradation Policy. The overall presumption of compliance with anti-degradation requirements for projects and sites in conformance with this permit may be rebutted on a case-by-case basis if warranted by credible and relevant project- or site-specific information available to the Agency during the review of an application for a proposed discharge.

## **PART 8: STANDARD PERMIT CONDITIONS**

### **8.1 Operation and Maintenance**

The permittee shall at all times properly operate, inspect, and maintain all stormwater collection, treatment, and control systems and BMPs which are used to achieve compliance with this permit. Any stormwater system deficiencies noted during inspections shall be corrected.

Solids, sediments, and other pollutants collected and removed in the course of treatment or control of stormwater runoff shall be disposed of in a manner to prevent any pollutant from entering waters or wetlands. The condition of the permitted facilities and systems shall at no time contribute to a violation of the terms, conditions, requirements, limitations, and restrictions specified by this permit.

### **8.2 Duty to Comply**

The permittee shall comply with all terms and conditions of this permit and the permittee's authorization to discharge issued hereunder. Any permit noncompliance, including the submission of false, incomplete, or inaccurate information, shall constitute a violation of 10 V.S.A. Chapter 47, the CWA to the full extent it applies, and related rules and regulations, and may be cause for an enforcement action; revocation and reissuance, modification, or termination of the permittee's authorization to discharge under this permit; or denial of a permit renewal application. Violations of the terms and conditions of this permit are subject to civil and criminal penalties pursuant to 10 V.S.A. §§ 1274 and 1275 and administrative enforcement pursuant to 10 V.S.A. § 1272 and Chapters 201 and 211.



### **8.3 Duty to Reapply**

If an authorized stormwater discharge is to continue after the expiration date of its authorization to discharge, the permittee shall reapply for coverage under this permit at least ninety (90) days prior to the expiration date of the authorization to discharge. If the discharge does not meet the eligibility requirements for coverage under this permit, then the permittee shall apply for coverage under an individual permit at least ninety (90) days prior to the expiration date of the authorization to discharge.

If the permittee has submitted an administratively complete application for coverage prior to the expiration date of its existing authorization, the existing authorization shall not expire until the application has been finally determined by the Secretary, and, in case the application is denied or the terms of the new permit limited, until the last day for seeking review of the Secretary's decision or a later date fixed by order of the reviewing court.

### **8.4 Requiring an Individual Permit**

The Secretary may require any municipality that files an application for coverage or who is already covered under this permit to apply for an individual permit. Any municipality may petition the Secretary to take action under this paragraph. Cases in which an individual permit may be required include:

- A. The permittee is not in compliance with the terms and conditions of this permit;
- B. The discharge is a significant contributor of pollution, as determined by the following factors:
  - 1. The location of the discharge;
  - 2. The size of the discharge;
  - 3. The impact of the discharge on the water;
  - 4. Whether an individual permit is necessary to implement an applicable TMDL or Water Quality Remediation Plan; or
  - 5. Other relevant factors

### **8.5 Right of Entry**

The permittee shall allow the Secretary or his/her authorized representatives, at reasonable times and upon presentation of credentials, to:

- A. Enter upon and inspect the permittee's property where discharges, and the stormwater collection, treatment, and control system, and BMPs are located, or where records must be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records required to be kept pursuant to this permit;

- C. Inspect at reasonable time any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- D. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the CWA or state law, any substances or parameters, including BMP performance, at any location.

### **8.6 Duty to Provide Information**

A permittee must provide any new information that is requested to determine compliance with this permit or other information. If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Secretary, it shall promptly submit such facts or information.

### **8.7 Operating Fees**

Pursuant to 3 V.S.A. § 2822, stormwater discharges authorized by this permit are subject to operating fees. A municipality shall submit all operating fees in accordance with procedures provided by the Secretary. Failure to pay operating fees shall constitute a violation of this permit.

### **8.8 Rights & Privileges**

This permit does not convey any property rights in either real or personal property, or any vested rights or exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit does not eliminate the necessity of obtaining such federal, state, or local permits or approvals as may be required by law.

### **8.9 Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **8.10 Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

### **8.11 Anticipated Noncompliance**

The permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

### **8.12 Compliance with Other Laws**

Nothing in this general permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, ongoing obligations to comply, liabilities, or penalties to which the permittee is or may be subject to under other federal, state, and local statutes, regulations, and directives applicable to the permittee in the operation of the permittee's activities. This permit does not eliminate the necessity to comply with other federal, state, and local laws and regulations nor does it eliminate the necessity of obtaining other applicable federal, state, and local permits and approvals as may be required by law.

### **8.13 Permit Actions & Revocation**

The Secretary may, after notice and opportunity for public hearing under 3 V.S.A. § 814, revoke or suspend, in whole or in part, authorization to discharge under this permit for cause, including:

- A. Violation of any terms or conditions of the permit;
- B. Obtaining authorization under the permit by misrepresentation or failure to disclose fully all relevant facts;
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- D. Correction of violations of the Vermont Water Quality Standards.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

### **8.14 Enforcement**

The permittee shall comply with all terms and conditions of this permit. Any violation of this permit or relevant state law may result in the institution of legal proceedings pursuant to 10 V.S.A. §§ 1274 and 1275 and 10 V.S.A. Chapters 201 and 211. Such legal proceedings may include the issuance of orders, the levying of penalties, and imprisonment. Legal proceedings may also be instituted if a person knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method, in connection with this permit and any authorization to discharge issued under this permit. In addition, the Secretary may issue orders pursuant to 10 V.S.A. § 1272 and may take any and all other enforcement actions, without limitation, provided by law.

### **8.15 Signatory Requirements**

- A. All permit applications, including NOI, shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit, and other information requested by the Secretary shall be signed by a person described in paragraph (A) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described in paragraph (A) of this section and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, or an individual or position having overall responsibility for environmental matters for the municipality.

Any person signing a document under paragraph (1) or (2) of this section shall make the following certification:

“I certify under 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 personnel properly gather and evaluate 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 belief, 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.”

### **8.16 Severability**

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. The Secretary’s intent is that the permit is to remain in effect to the extent possible; in the event that any part of this permit is invalidated, the Secretary will advise as to the effect of such invalidation.

### **8.17 Effect of Permit**

Authorizations issued pursuant to this permit shall be valid for a period of time not to exceed five years from the date of the authorization being signed.

## **PART 9: APPEALS**

Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision.

Pursuant to 10 V.S.A. Chapter 220, an aggrieved person shall not appeal this permit unless the person submitted to the Secretary a written comment during the applicable public comment period or an oral comment at the public meeting conducted by the Secretary. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or the appellant’s attorney. In addition, the appeal must give the address or location and description of the property, project, or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Division is: 32 Cherry St.; 2nd Floor, Suite 303; Burlington, VT 05401 (Tel. # 802-828-1660).

## PART 10: DEFINITIONS

1. **Agency:** the Vermont Agency of Natural Resources
2. **Armored Shoulder:** a structure that reinforces existing road shoulder integrity and embankment area stability by reducing Stormwater-related overbank erosion. To construct an armored shoulder, road surface material and base material are excavated and removed and replaced with 12” minus stone 1-3’ in depth and top-dressed with processed road surface material.
3. **Best Management Practices (BMPs):** a schedule of activities, prohibitions or practices, maintenance procedures, green infrastructure, and other management practices to prevent or reduce water pollution.
4. **Bioretention Area:** a vegetated surface depression, often referred to as a “rain garden,” with amended soils used to capture, slow, infiltrate, and treat runoff from impervious surfaces, including rooftops, roads, parking lots and driveways. The goal of this practice is to infiltrate stormwater runoff. Properly designed and installed bioretention area provide volume control, and groundwater recharge. This practice should only be installed on slopes less than 5%.
5. **Broad-based Dip:** a drainage structure, similar to but wider than a waterbar, used on Class 4 roads where grades are less than or equal to 8 percent. These structures divert the surface water runoff into a filter area.
6. **Clean Water Act (CWA):** (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) means the federal Clean Water Act, Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U. S. C. § 1251 et. seq.
7. **Conveyance areas:** are those areas located between the end of the road drainage and water resources.
8. **Culvert Headwall:** stone structures that protect culverts from damage during grading, plowing and ditch cleaning, increase hydraulic efficiency, and prevent erosion around the culvert inlet and outlet. These structures may also be referred to as “headers” or “end treatments.” These structures may be installed using flat stone, rock riprap, or ditch stone around the culvert ends.
9. **Defined channel:** a drainage conveyance exhibiting channel dimensions such as width and depth. At culvert crossings, these characteristics are located both upstream and downstream of crossings.
10. **Discharge:** the placing, depositing or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.
11. **Driveway culvert:** a culvert under a driveway within municipal right-of-way.

12. **EPA:** the United States Environmental Protection Agency.
13. **French Drain / Under Drain:** a drainage practice installed under a road or road ditch to collect and transport subsurface waters. These buried perforated conduits are wrapped in geotextile fabric, which allows water to enter the conduit while keeping sediment out.
14. **French Mattress/Rock Sandwich:** a structure under a road consisting of clean coarse rock wrapped in geotextile fabric through which water can pass freely. These structures are used in extremely wet areas, to support the road bed while allowing unrestricted water movement.
15. **Gully erosion:** a severe level of erosion. Gully erosion is equal to or greater than 12” in depth.
16. **Historic Resource:** any building, structure, object, district, area, or site that is significant in the history, architecture, archaeology, or culture of this State, its communities, or the nation.
17. **Hydrologically-connected road segments:** a road segment, equal to 100 meters in length, where the Secretary has determined that road and drainage characteristics indicate a likelihood of discharges to surface waters or wetlands. This definition includes those road segments identified as hydrologically connected on the ANR Atlas. The Secretary has developed a hydrologically-connected road segment layer using GIS analysis of roadway distance to waters.
18. **Impervious surface:** those man-made surfaces, including paved and unpaved roads, parking areas, roofs, driveways and walkways, from which precipitation runs off rather than infiltrates.
19. **Intermittent Stream:** means a seasonal stream that only flows for part of the year.
20. **Level Spreader:** a rectangular or oval-shaped infiltration structure used to intercept and discharge water flow over a wide linear area. The construction of a level spreader involves the excavation and removal of soil and backfilling excavated area to the original grade with 3”-6” stone.
21. **Municipality:** a city, town, or village. See 10 V.S.A. § 1264(g)(D).
22. **Municipal drainage/cross culvert:** culverts that convey road stormwater from one side of the road to another with no defined channel acting as a conveyance at the outlet. Outlets fan or sheet flow into grassed or forested areas and are not direct conveyances to waters.

23. **Municipal roads:** all town highways, classes 1-4, as defined under 19 V.S.A. Chapter 3, and their rights-of-way, as well as municipal stormwater infrastructure associated with town highways.
24. **Municipal stormwater infrastructure:** all stormwater conveyances and treatment and control systems, controlled by the municipality, that receive stormwater discharges from municipal roads.
25. **NOI:** the Notice of Intent form required for authorization under this permit.
26. **Plunge/splash pool:** is a stone basin located at the outlet of drainage and intermittent stream culverts and used to consolidate and remove sediment from areas with concentrated flows and areas without adequate vegetated infiltration areas. Limited to areas with less than 10% slope.
27. **Pollutant:** dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean (A) "sewage from vessels" within the meaning of section 1322 of the CWA; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.
28. **Rill erosion:** a moderate level of erosion. Rill erosion is erosion rivulets greater than 1" but less than 12" in depth.
29. **Secondary ditch:** road travel lane or shoulder erosion due to the presence of a shoulder berm, prohibiting perpendicular flow of road stormwater off the road surface into the road drainage area.
30. **Secretary:** the Secretary of the Vermont Agency of Natural Resources or the Secretary's duly authorized representative.
31. **Sedimentation:** the deposition or accumulation of sediment. Sedimentation is often a symptom of erosion, and while rill and gully erosion are often concave in cross section, sedimentation is convex.
32. **Stone/Rock Apron:** a fan-shaped culvert outlet stabilization structure, designed to reduce water velocity, constructed of 12" minus stone. This structure should not be installed at perennial stream culvert outlets.

33. **Stormwater or stormwater runoff:** precipitation and snowmelt that does not infiltrate into the soil, including material dissolved or suspended in it, but does not include discharges from undisturbed natural terrain or wastes from combined sewer overflows.
34. **Turn-out:** the extension of a drainage ditch that redirects or ‘turns away’ water into a vegetated buffer and disperses runoff before entering a water resource.
35. **Total Maximum Daily Loads (TMDLs):** the calculations and plan for meeting water quality standards approved by EPA and prepared pursuant to 33 U.S.C. § 1313(d) and federal regulations adopted under that law.
36. **Water Quality Standards:** the Vermont Water Quality Standards define the water quality goals of a water body, or portion thereof, by designating the use or uses of the water, by setting criteria necessary to protect the designated uses, and by establishing anti-degradation requirements to protect existing uses and high quality waters. Vermont has adopted water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the CWA (See CWA sections 101(a)2 and 303(c)).
37. **Waters:** includes all rivers, stream, creek, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through or border upon the State or any portion of it.
38. **Waterbar:** a type of berm or open culvert drainage structure constructed across the width of a Class 4 road that diverts the surface water runoff from ditches and road into a filter area.
39. **Wetlands:** those areas of the State that are inundated by surface or groundwater with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction. Such areas include marshes, swamps, sloughs, potholes, fens, river and lake overflows, mud flats, bogs, and ponds, but excluding such areas as grow food or crops in connection with farming activities.



**PART 11: EFFECTIVE DATE AND TERM OF GENERAL PERMIT**

This permit shall become effective on January 26, 2023 and shall expire on January 25, 2028.

Signed at Montpelier, Vermont this 1st day of December, 2022.

Julia S. Moore, Secretary  
Vermont Agency of Natural Resources

By \_\_\_\_\_

Peter LaFlamme, Director  
Watershed Management Division

## **Appendix A – Municipalities authorized under the MS4**

City of Burlington  
Town of Colchester  
Town of Essex\*  
Village of Essex Junction\*  
Town of Milton  
Town of Rutland  
City of St. Albans  
Town of St. Albans  
Town of Shelburne  
City of South Burlington  
Town of Williston  
City of Winooski

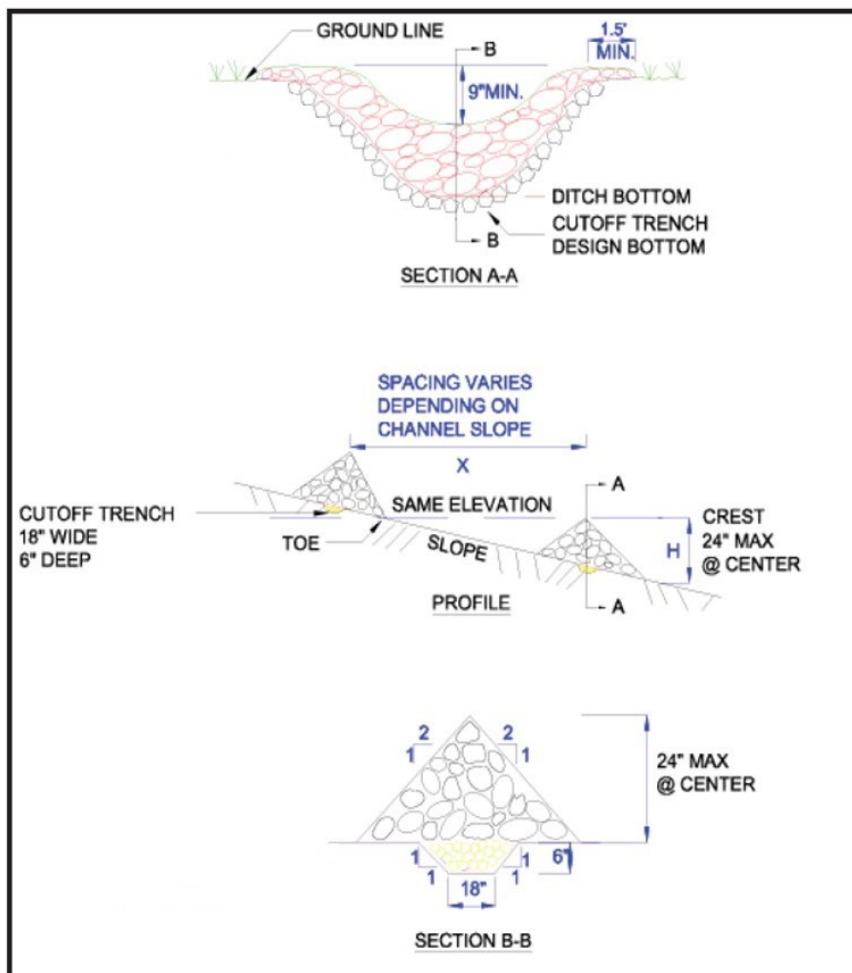
\*= The Town of Essex and Village of Essex Junction have merged in 2022.

## Appendix B – Stone Check Dam Specification

- Height: No greater than 2 feet. Center of dam should be 9 inches lower than the side elevation
- Side slopes: 2:1 or flatter
- Stone size: Use a mixture of 2 to 9 inch stone
- Width: Dams should span the width of the channel and extend up the sides of the banks
- Spacing: Space the dams so that the bottom (toe) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam divided by the channel slope.

$$\text{Spacing (in feet)} = \frac{\text{Height of check dam (in feet)}}{\text{Slope in channel (ft/ft)}}$$

- Maintenance: Remove sediment accumulated behind the dam as needed to allow channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam. If significant erosion occurs between check dams, a liner of stone should be installed.



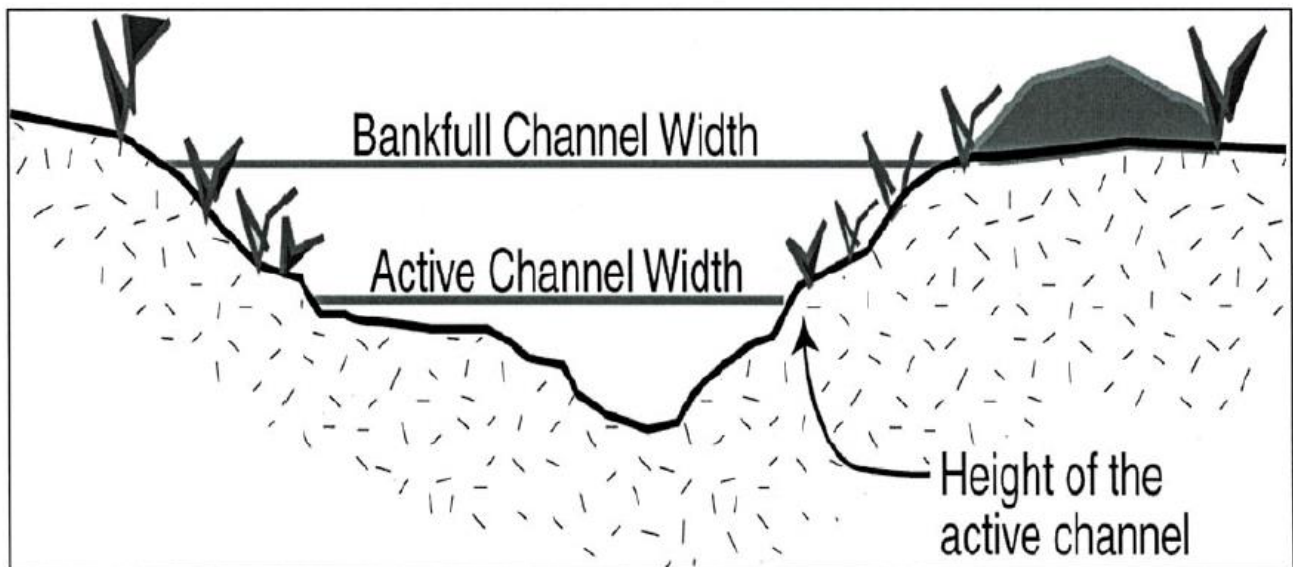
## Appendix C. Intermittent Stream Crossing Specification

VT DEC Watershed Management Division Date: June 2022

Per 6.3.D of the Municipal Road General Permit, all municipal road crossings on intermittent streams require sizing of new and replacement structures to be based on the Active Channel Width (ACW).

1. Intermittent streams will be field identified and consist of a defined channel entering the road network and a defined channel leaving the road network. The absence of surface base flows for an extended period of the year and the watershed size, typically under 0.25 mi<sup>2</sup>, differentiates these stream channels from perennial stream channels.
2. Hydraulics sizing of intermittent stream crossings will conform with the VTrans Hydraulics Manual for the roadway classification, Chapter 4 - Table 4-2. The design of these culverts will satisfy criteria in Chapter 6 - section 6.4.
3. Embedment of culverts on intermittent streams is often beneficial for sediment transport and to reduce the need to increase road heights when maintaining adequate cover above the pipe; minimum embedment of 1' for 4-6' culverts.
4. Culvert end treatments are required for intermittent stream crossings. Inlet and outlet headwalls must consist of any combination of VTrans stone fill with a grubbing layer, laid-up stone, reinforced concrete, and/or a culvert end section.
5. Culvert slope to match stream bed slope. Outlet apron at culvert end using of E-stone is recommended – see details.

### Determining the Active Channel Width on Intermittent Streams



**Active Channel Width (ACW)** is defined as the limits of streambed scour on banks formed by prevailing stream discharges, measured perpendicular to streamflow. The active channel width is narrower than the bankfull width (~75%) and is defined by a break in slope on the channel bank, typically seen as the edge of permanent vegetation.

**Culvert Sizing for Crossings on Intermittent Streams:**

Determine the ACW through field measurements, *the culvert sizing will meet or exceed the Active Channel Width*. \* To obtain the measurements, go to a typical crossing location and obtain several upstream and downstream Active Channel Width measurements in riffles or straighter sections which are often the narrower channel width locations. \* The selected active channel width for the structure will be a representative average of these field measurements.

