“DRAFT, DRAFT” DEC Municipal Roads Permit Framework
December 8, 2016

[CCRPC staff note: an updated version of this document may become available prior to January 1, 2017 and will be posted to the CCRPC CWAC webpage.]

1. Standards (Also see Appendices)
   a. Standards based on Road Type
      i. Paved/curbed
      ii. Paved/not curbed
      iii. Gravel (not class 4)
      iv. Class 4
   b. Standards Implementation Triggers
      i. Baseline – all roads must always meet
      ii. Additional, if rill or gully erosion is present

2. Requirements (Also see Appendices)
   a. Road Stormwater Management Plan (RSWMP) Components
      i. Inventory
         1. Initial Road Erosion Inventory to determine:
            a. Hydrologically connected or not (ANR Atlas link)
            b. Condition – fully meets, partially, or does not meet MRGP standards (Road Erosion Inventory template)
         2. Subsequent Inventories
            a. At least every 5 years, a comprehensive road condition inventory shall be completed to update the status of road condition (meets/partially meets/does not meet standards); concurrent with this a new implementation table will be developed.
      ii. Implementation Plan
         1. Prioritized based on Road Erosion Inventory Results and Prioritization and:
            a. water quality impacts of a stormwater discharge,
            b. the current state of a municipal road,
            c. the priority of a municipal road or stormwater project in any existing transportation capital plan developed by a municipality,
            d. the benefits of the stormwater improvement to the life of the municipal road.
         2. Priority projects identified for implementation in the next 3 years
            a. Only these projects need specific proposed actions identified in the implementation table
   b. Reporting
i. Road SW Management Plan: Initial Inventory and Implementation Plan
   (Implementation Plan spreadsheet could be used or equivalent)

ii. Semi-annual reports on status of implementation
   1. Update of implementation spreadsheet
      a. Updated status of implementing proposed projects
      b. Updated status of road segment condition (meeting, partially
         meeting, or not meeting standard) for all hydrologically-
         connected road segments
      c. Status of all other road segments will be assumed to remain the
         same, unless updated.

3. Schedule
   a. Draft MRGP components package to circulate to MRGP stakeholders – starting in Jan
      2017
   b. Draft MRGP permit – July 2017
   c. Permit issued – Dec 2017
   d. MRGP Application
      i. Due July 2018
      ii. Simple Notice of Intent (NOI) form with basic town info
   e. Authorizations
      i. Issued Oct 2018
      ii. Includes schedule for submitting inventory and implementation plan
      iii. Points municipalities to baseline GIS road information (municipal roads
           hydrologically-connected road layer on the ANR Atlas)
      iv. Provide municipalities with inventory and implementation spreadsheet template
          as an option or equivalent alternative
   f. First 6-month report on progress of inventory
      i. April 2019
   g. Inventory and Implementation Plan (spreadsheet)
      i. Both due October 2020
   h. Reports
      i. Due every following 6 months:
         1. Oct 2020 (initial erosion inventory and implementation plan and
            schedule update)
         2. April 2021
         3. Oct 2021
         4. April 2022
         5. Oct 2022
         6. Permit expires Dec 2022 (new Permit cycle begins 1/23)

4. Fees
   a. Application – due with initial application
      i. Admin processing fee - $240 every 5 years
      ii. Application review fee - $400 one-time fee
   b. Annual Operating – due every year; $2000

5. MRGP Educational Materials (can be left out of this document if preferred)
Appendix 1a. MRGP Standards

Required for all “hydrologically-connected” municipal road segments within Road ROW. Road segment hydrologic connectivity to be field verified in the road erosion inventory process. See ANR Natural Resources Atlas for hydrologically-connected road segments to be inventoried: [http://anr.vermont.gov/maps/nr-atlas](http://anr.vermont.gov/maps/nr-atlas)

*Practice implementation may require DEC and/or ACOE permitting when working near wetlands, streambanks or lakeshore.*

<table>
<thead>
<tr>
<th>Roadway/travel lane</th>
<th>Paved/curbed roads (see table below)</th>
<th>Paved/not curbed roads</th>
<th>Gravel (excluding Class 4) roads</th>
<th>Class 4 roads (see Class 4 Standards below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway crown</td>
<td>N/A</td>
<td>Only applies during re-paving of road</td>
<td>Crowned <em>(specs)</em>, in-sloped or out-sloped</td>
<td>-</td>
</tr>
<tr>
<td>Removal of grader berm and/or lower road shoulder so precipitation can be shed from the travel lane into the road drainages</td>
<td>N/A</td>
<td>Roadway runoff sheets flows to drainage ditch or filter area</td>
<td>Roadway runoff sheet flows to drainage ditch or filter area, no grader berms or evidence of “secondary ditch”</td>
<td>-</td>
</tr>
<tr>
<td>Road Drainages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet flow (no drainage ditch) Can be substituted for grass or stone-lined ditch. Road embankment lower than road surface (no back slope)</td>
<td>N/A</td>
<td>Sheet flow from roadway/travel lane to grass or forested area</td>
<td>Sheet flow from roadway/travel lane to grass or forested area</td>
<td>-</td>
</tr>
<tr>
<td>Drainage ditch: 0-4% road slope</td>
<td>N/A</td>
<td>Grass-lined ditch (no bare soil)</td>
<td>Grass-lined ditch (no bare soil)</td>
<td>-</td>
</tr>
<tr>
<td>Drainage ditch: Equal to or greater than 5% to 7% road slope</td>
<td>N/A</td>
<td>Stone-lined Ditch 6-8” minus minimum stone recommended and/or Stone-check dams and/or BMPs that disconnect water out of road drainage network (cross culverts and turnouts).</td>
<td>Stone-lined Ditch and outlets and/or Stone-check dams and/or BMPs that disconnect water out of road drainage network (cross culverts and turnouts).</td>
<td>-</td>
</tr>
<tr>
<td>Drainage ditches equal</td>
<td>N/A</td>
<td>Stone-lined ditch-</td>
<td>Stone-lined ditch-</td>
<td>-</td>
</tr>
<tr>
<td>Conveyance areas/zones*</td>
<td>Inventory catch basin outlet for gully erosion (see CB outlet stabilization below)</td>
<td>Disconnect ditch outlets from waterbodies whenever possible to grassed or forested filter area and stabilize with seed and mulch or stone</td>
<td>Disconnect from waterbodies whenever possible to grassed or forested filter area and stabilize with seed and mulch or stone</td>
<td>-</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Closed system (Paved-catch basin) = 1 or both sides of road curbed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catch basin (CB) inventory and outlet erosion evaluation</td>
<td>All Towns</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Implementation of CB outlet stabilization of 5.5% (at least 1 stabilization per year) of eroded outlets per year minimum each year 2021-2038</td>
<td>Category 1 towns (&gt;8.5 miles of paved roads with curbs and CBs)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Implementation of CB outlet stabilization of 7% of eroded outlets per year minimum each year 2024-2038</td>
<td>Category 2 towns (All other towns)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Culverts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal drainage culvert- size** (see below)</td>
<td>18” minimum</td>
<td>18” minimum</td>
<td>18” minimum</td>
<td>-</td>
</tr>
<tr>
<td>Drainage culvert outlet stability</td>
<td>All catch basin outlets stable (no scour erosion)</td>
<td>All culvert outlets stable (no scour erosion)</td>
<td>All culvert outlets stable (no scour erosion)</td>
<td>-</td>
</tr>
<tr>
<td>Drive culvert-size*** (see below)</td>
<td>15” minimum, 18” recommended</td>
<td>15” minimum, 18” recommended</td>
<td>15” minimum, 18” recommended</td>
<td>-</td>
</tr>
<tr>
<td>Conveyance culverts (mostly intermittent streams)- culvert size****</td>
<td>18” minimum required. Larger size diameter recommended in some cases based on DEC RME recommendation and/or VTrans hydraulic study.</td>
<td>18” minimum required. Larger size diameter recommended in some cases based on DEC RME recommendation and/or VTrans hydraulic study.</td>
<td>18” minimum required. Larger size diameter recommended in some cases based on DEC RME recommendation and/or VTrans hydraulic study.</td>
<td>-</td>
</tr>
<tr>
<td>Culvert end treatments/headwalls (for drive and drainage culverts)</td>
<td>Stone header required for &gt;5% slope for all new installations and where moderate or severe erosion present</td>
<td>Stone header required for &gt;5% slope for all new installations and where moderate or severe erosion present</td>
<td>Stone header and apron required for &gt;5% slope for all new installations and where moderate or severe erosion present</td>
<td>-</td>
</tr>
</tbody>
</table>
Other practices

| Municipal winter sand storage area: No runoff from town HW sand pile discharging to waterways (see below) | Applies to sand pile location | Applies to sand pile location | Applies to sand pile location | Applies to sand pile location |
| No exposed or bare soils within municipal road ROW | All bare or otherwise unvegetated areas within ROW must be re-vegetated and/or stone-lined within 48 hours of disturbance of soils or sooner in the event of precipitation | All bare or otherwise unvegetated areas within ROW must be re-vegetated and/or stone-lined within 48 hours of disturbance of soils or sooner in the event of precipitation | All bare or otherwise unvegetated areas within ROW must be re-vegetated and/or stone-lined within 48 hours of disturbance of soils or sooner in the event of precipitation | All bare or otherwise unvegetated areas within ROW must be re-vegetated and/or stone-lined within 48 hours of disturbance of soils or sooner in the event of precipitation |
| Gully erosion, not otherwise addressed in standards Gully erosion defined in Appendix 1.b. | All gully erosion within ROW stabilized. Gully erosion on slopes 10% or greater, remediation required within first 5 years (no later than 2022) | All gully erosion within ROW stabilized. Gully erosion on slopes 10% or greater, remediation required within first 5 years (no later than 2022) | All gully erosion within ROW stabilized. Gully erosion on slopes 10% or greater, remediation required within first 5 years (no later than 2022) | - |

*Conveyance areas*: conveyance areas/zones are defined as the outlet of the road drainage network to a water resource. Conveyance areas are typically the outlet of stone or grass-lined ditch or grass and stone-lined turnouts. There may be some situations where conveyance areas can outlet to settling areas, level spreaders, or Green Stormwater Infrastructure infiltration practices.

**Municipal drainage culverts** are those 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.

***Drive culverts*** within municipal ROW that are conveying road Stormwater runoff. Driveway culverts conveying perennial waters are subject to the DEC Stream Alteration Permit.

****Conveyance Culverts (Intermittent Streams)***- municipal culverts with defined channels at outlets have the ability to convey road Stormwater to adjacent waters and generally drain larger watershed areas than drainage cross culverts. If there is a defined channel at the outlet of a municipal culvert, culvert minimum sizes will be required to be larger 18.” DEC further recommends larger diameter culverts, depending on drainage area input and DEC and/or hydraulic study recommendations.
**Class 4 Roads**: all severe (gully) erosion will be mapped within the connected municipal road segments, remediation plans prepared, and BMPs implemented within the 20 year MRGP period or sooner, before 2038 (see Proposed Triggers and Practice Implementation).

**Town HW Sand Pile storage area**: Sand pile storage areas will be evaluated for erosion potential (as part of the road erosion inventory due fall 2020) to adjacent waters and, if needed, remediation.

**Exceptions/waivers**: extremely challenging sites and conditions may preclude the implementation of the MRGP Standards in certain situations. Some examples include: historic stone walls, historic trees, and other significant, sensitive, and/or unique cultural and environmental resources. Reasons for MRGP Standard waivers must be documented to fully meet MRGP Standards.

**Town Highway Typical**
Appendix 1b. MRGP Standards Implementation Triggers

MRGP Baseline Standards requiring compliance, whether or not there is erosion is present within hydrologically-connected segments. These standards also apply to new construction and significant road upgrades**:

- Road drainage standards- Sheet flow (no back slope) and/or grass and/or stone-lined ditch and/or check dams- slope dependent (required for paved-ditched and gravel roads not Class 4 road types)
- Roadway/travel lane standards- road crowned or in-slope/out-slope (required for gravel roads not Class 4) and no grader berm or high shoulders (required for paved and gravel roads with ditches not Class 4)
- Stable Conveyances- drainage ditch outlets turned out before entering waterbody whenever possible or stabilized with stone (5% or greater slope) or grass (less than 5% slope)

MRGP Required Standards if rill or gully erosion* is currently present. These standards also apply to new construction and significant road upgrades**:

- Driveway culvert upgrade to 15” minimum if rill and/or gully erosion present due to inadequate size or absence of structure
- Driveway culvert headwall stabilization, if rill and/or gully erosion present due to absence of structure
- Drainage culvert upgrade to 18” minimum, if rill and/or gully erosion present due to inadequate size or absence of structure
- Drainage culvert headwall required, if rill and/or gully erosion present due to absence of structure
- Drainage culvert outlet stabilization (stone apron), if rill and/or gully erosion present due to absence or inadequacy of outlet stabilization
- Intermittent stream crossing upgrade to 18” minimum diameter (required) or larger (recommended at some sites) according to DEC River Management Engineer and/or VTrans technical staff recommendation, if rill and/or gully erosion is present due to absence or inadequacy of crossing structure
- Remediation of any rill and/or gully erosion at municipal winter sand storage sites
- Catch basin outlet stabilization, if rill and/or gully erosion present (sedimentation to adjacent water)
- Any gully erosion identified in road erosion inventory on connected Class 4 roads will be require remediation
• Any other rill and/or gully erosion within connected segment (excluding Class 4 roads), not already mentioned above, stabilized

*Erosion definitions and severity:

Rill erosion is considered a moderate level of erosion and specifically defined as erosion rivulets from 1”-9” in depth.

Gully erosion is considered a severe level of erosion and defined as equal to or greater than 1’ in depth.

**All MRGP Standards apply to new municipal road construction projects and/or significant upgrades to existing structures/practices within connected road segments, whether rill and/or gully erosion is currently present
2. MRGP Requirements - Road Stormwater Management Plans Components

2a. Introduction: All municipalities will be required to develop Road Stormwater Management Plans (RSWMPs). The two major components of the RSWMPs are: a comprehensive Road Erosion Inventory of all hydrologically-connected municipal road segments and Implementation Plan and Schedule. RSWMPs will be developed for a 3-year implementation interval in the first MRGP cycle and 5-year intervals for subsequent MRGP cycles.

2a.i. RSWMP Component A.- Road Erosion Inventories: the RSWMP will include an inventory of all hydrologically-connected municipal road segments. Inventories will summarize all municipal road segments both currently meeting and not meeting MRGP standards. The inventory will include a description of methodology used to make this determination and summary report. The inventory will include a list of segments meeting and not meeting the MRGP standards by MRGP road type (see Implementation Plan and Schedule Appendix 2.a.ii). Road Inventories will be updated every 5 years. A sample Road Erosion Inventory can be found at:

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

Road Erosion Inventories should include “scoring” of each hydrologically-connected road segment into the following categories:

- **0-49% Does not meet MRGP standard** - requires practice upgrades to MRGP Standards and according to RSWMP Implementation Plan schedule
- **50-89% Partially meets MRGP standard** - requires practice upgrades to MRGP Standards and according to RSWMP Implementation Plan schedule
- **90-100% Fully meets MRGP standard** - no additional standard upgrades required except annual or semi-annual road grading/crowning and maintenance of existing practices or in implementing new practices
Appendix 2a.ii. Implementation Plan and Schedule

Implementation Plan Components (columns in Excel template):

- List of all hydrologically-connected road segments and ID numbers (from ANR Atlas hydrologically connected road layer [http://anr.vermont.gov/maps/nr-atlas](http://anr.vermont.gov/maps/nr-atlas)). Also include winter sand pile and catch basin outlets
- Additional connected segments not already on the above ANR Atlas layer?
- Road type for each segment: paved-catch basins, paved-ditched, gravel ditched, and Class 4)
- Road segment slope (from [http://anr.vermont.gov/maps/nr-atlas](http://anr.vermont.gov/maps/nr-atlas))
- MRGP standards meeting category: fully meets, partially meets, or does not meet
- Reason of condition
- Remediation plan date. Prioritization and Identification of at least 5.5% of segments for remediation each year that does not meet and/or partially meets MRGP standards.
- For the above 5.5% segments minimum, list specific practices (standards) that will be implemented each year to segments to fully meet the MRGP standards. For each segment, or group of adjacent segments, practices will be itemized by linear foot of practice need or quantity of structures needing upgrades or retrofits. The MRGP standards must be implemented on all hydrologically-connected road segments as soon as possible, but no later than 20 years from permit issuance.
- Actual implementation specifics
- Implementation completion date
- Current compliance status

Example of a Road Stormwater Management Plan Implementation Schedule:

- Remediation of 5.5% minimum connected segments (all towns) and/or eroding catch basin outlets (for Category 1 towns) per year from not meeting MRGP Standards to fully meeting MRGP Standards from 2020-2023,
- Remediation of an additional 5.5% minimum of connected segments upgraded per year from not meeting MRGP standards years to fully meeting MRGP Standards from 2024-2028,
- Remediation of an additional 5.5% of connected segments upgraded per year from not meeting MRGP standards years to fully meeting MRGP Standards 2029-2033,
- 100% of connected road segments meeting MRGP Standards by 2038, maintenance of all connected road segments during the MRGP period to 2038 and thereafter,
- 100% of eroded catch basin outlets stabilized by 2038 for all towns (Category 1 and 2)
Appendix 2.b. Reporting

Semi-annual MRGP Compliance Reporting

Towns will submit Road Erosion Inventories and Implementation Plans, as scheduled in this document. Towns will also submit semi-annual MRGP compliance reporting to DEC, as scheduled in this document, documenting progress in remediation efforts towards meeting schedule. Reports will briefly describe which segments have been improved, practices installed, and whether segments now fully meet MRGP standards, other changes to other compliance categories (does not meet or partially meets). Reports will include “before” and “after” photos, linear feet (i.e. 350’ of stone-lined ditch installed) or quantity (i.e. number of drainage culverts replaced) of practice installed on each road segment. Semi-annual reporting will also include progress made in stabilizing winter sand pile and/or catch basin outlets.

Semi-annual MRPG reporting can be as simple as updating information within the Implementation Plan and Schedule spreadsheet (see link) as to progress made in bringing hydrologically-connected road segments up to MRGP standards. Compliance status of all other segments will be assumed unchanged, unless updated.
Appendix X. MRGP Background

Act 64, also known as the Vermont Clean Water Act, was passed by the Vermont Legislature in 2015. Its passage included several new water quality programs that address some of the state’s chronic water quality issues. Some of the state’s larger waterbodies do not meet water quality standards due to excessive nutrient levels. Act 64’s new programs are directed at sources of nutrients and sediment including: agriculture, wastewaster treatment facilities, logging, impervious surfaces, and roads. The Municipal Roads General Permit (MRGP) was one of the programs created by Act 64 which targets municipal roads. Municipal roads account for approximately 70% of the state’s total road miles.

Act 64 tasked the Vermont Department of Environmental Conservation with developing the MRGP. DEC is currently developing a draft MRGP and related standards and schedules with partners.

Some of the components and requirements of the MRGP will likely include:

- A road erosion inventory of all hydrologically-connected municipal roads (map layers of hydrologically-connected roads can be found at: http://anr.vermont.gov/maps/nr-atlas
- An implementation plan and schedule for bringing non-complying road segments up to MRGP standards
- Implementation of the plan until all road segments are brought up to MRGP standards
- Brief annual reports to DEC documenting progress on road improvement projects

Towns will begin applying for MRGP coverage and paying the associated fees in mid-2018. Road erosion inventories and implementation plans will be due 2 years later and have to be revised every 5 years there after. Both the inventory and implementation of practices are eligible for funding from the VTrans Better Roads grant program:

http://vtrans.vermont.gov/highway/better-roads

DEC is working closely with partners such as VTrans, regional planning commissions, and the VT League of Cities and Towns in developing the permit and standards. The MRGP standards will be very similar to the existing VTrans Road and Bridge Standards and practices, except they will match specific road types, for example there will be different standards for paved roads versus gravel roads. The MRGP standards will also include address erosion issues from winter sand piles and stabilizing catch basin outlets so that they do not impact waterways.

For additional information about the MRGP please see the DEC MRGP website
http://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program

or contact Jim Ryan at jim.ryan@vermont.gov (802) 490-614
VT DEC Municipal Roads Program
Summary Sheet: Developing the Municipal Roads General Permit

This general permit is intended to achieve significant reductions in stormwater-related erosion from municipal roads, both paved and unpaved. Municipalities will implement a customized, multi-year plan to stabilize their road drainage system. The plan will include bringing road drainage systems up to basic maintenance standards, and additional corrective measure to reduce erosion as necessary to meet a TMDL or other water quality restoration effort. The permit is required by H.35/Act 64, the Vermont Clean Water Act, and the Lake Champlain Phase I TMDL.

For more information on the DEC Municipal Roads program and the development of the Municipal Roads General Permit, contact Jim Ryan at (802) 490-6140 or via email at jim.ryan@vermont.gov.

Updated information can also be found on the program’s website at: http://dec.vermont.gov/watershed/stormwater/permit-information-applications-fees/municipal-roads-program

Requirements for Existing Roads

- As a first step municipalities will inventory the sections of their road networks that are hydrologically-connected to surface waters through ditches, culverts or other drainage structures. Hydrologically-connected roads present substantially greater risks to water quality. A map layer of hydrologically-connected municipal road segments is available at: http://anr.vermont.gov/maps/nr-atlas

- The second step will be developing Implementation Plans that will prioritize road segment remediation work to bring non-complying road segments up to MRGP standards. Implementation Plans will include current MRGP compliance status (whether individual road segments meet standards), and itemized list of practices needed to bring non-meeting segments up to standards, and remediation schedules. Towns will submit Semi-Annual Compliance Reports summarizing progress in implementing measures on hydrologically-connected road segments. Standards will likely include measures such as:
  - Grass and stone-lined drainage ditches, stone check-dams, sheet flow, and/or disconnect road stormwater inputs
  - Ditches and turnouts disconnected from surface waters where possible
  - Upgrading road drainage culverts and installing outlet stabilization and/or headwalls where erosion is present
Soils exposed by maintenance would be seeded and mulched or otherwise stabilized

- Catch basin outlets stabilized
- Municipal Sand Piles- no erosion or sediment conveyance to adjacent waters

- Class 4 roads that are adversely affecting water quality may require the installation of best management practices to reduce severe (gully) erosion, but will not be required to be open to travel as part of this permit.

- In-Culverts and bridges:
  - No new requirements to replace perennial stream crossings, but other conveyances and intermittent stream culverts will be covered by the permit and may require upgrades or retrofits.
  - Maintenance and construction activities would continue to conform to the ANR Stream Alteration General Permit.

Requirements for New Projects

- Stable conveyances

- Designed to Vermont Stormwater Manual if over permit threshold of 1 acre impervious surface, or >5,000 square foot expansion

Permit Process and available resources to assist municipalities

- 2016: stakeholder process to develop permit and standards
- Before January 2017: draft general permit
- Before January 2018: final permit
- Commencing with permit coverage, 2018 and beyond: municipalities conduct road erosion inventories for hydrologically-connected road segments and develop and implement road stormwater management plans
- Technical and Financial assistance is from DEC and VTrans. Technical assistance is also available from regional planning commissions, natural resource conservation districts, and others. A new series of Municipal Road Round Table Forums has been launched by VTrans and DEC for a foremen-foremen exchange of ideas of selecting the most appropriate BMPs to remediate erosion and discuss equipment needs and operation. Additional grant funding is available to municipalities to conduct road erosion inventories, implement best management practices, and to purchase shared equipment.
1. **Will the DEC Municipal Roads Stormwater General Permit (GP) apply to the entire state or to the Lake Champlain basin?** The DEC Municipal Roads General Permit will cover the entire state and result in improvements in water quality and aquatic habitat statewide. Addressing sediment and nutrient sources from municipal roads will also reduce phosphorus loads to Lake Champlain and other waters in the state, such as Lake Memphremagog. The Implementation schedule will be determined during the permit development process.

2. **Will the DEC Municipal Roads Stormwater GP cover paved and gravel roads?** Yes, the Municipal Roads GP will cover all municipal road systems, paved and gravel.

3. **Will the DEC Municipal Roads GP apply to all Classes of municipal roads including Class 4 roads?** Yes, the Municipal Roads Stormwater GP will apply to all Classes of municipal roads. Management options for Class 4 roads will be included in the GP but best management practice implementation will be more limited in scope than more regularly traveled roads.

4. **Is there technical assistance available for municipalities in identifying high priority road erosion segments and determining appropriate solutions?** Yes, technical assistance will be available for towns from a number of different organizations including DEC, VTrans, regional planning commissions and other organizations. DEC and VTrans are currently developing enhanced trainings for road foremen and others to inventory and prioritize road erosion sites, this is in addition to the existing DEC-VTrans Rivers-Roads trainings for VTrans and municipal road crews. Municipalities will be made aware of available trainings.

5. **Will the new Municipal Roads Stormwater Standards be consistent with current VTrans Road and Bridge Standards? How will they be different?** The BMPs that are developed as part of the Municipal Roads Stormwater GP will be consistent with the Road and Bridge Standards, although the geographic applicability of practices may differ. For example, the MRGP will only apply to hydrologically-connected road segments while the VTrans Road and Bridge Standards usually apply town-wide. A map layer of hydrologically-connected municipal road segments is available at: [http://anr.vermont.gov/maps/nr-atlas](http://anr.vermont.gov/maps/nr-atlas)
6. **Will culvert replacements be required in the new DEC Municipal Roads Stormwater GP?** Road drainage culverts and cross culverts upgrades may be included in the new GP. In-stream culvert and bridge replacements will not be required in this permit. Culvert headwall erosion and/or culvert outlet scour, for both drainage culverts and driveway culverts, maybe included in the new GP if they are identified as significant sources of erosion.

7. **How long will towns have to implement their roads stormwater management plan?** Municipalities will be required to develop a road stormwater management plan. The plan will be based on the water quality impacts of a stormwater discharge, the current state of a municipal road, the priority of a municipal road in any existing transportation capital plan, and the benefits of the stormwater improvement to the life of the municipal road. The implementation plan shall address all sources of erosion as soon as possible, but not to exceed 20 years. Some towns will be required to implement measures on a faster time schedule.

8. **Will there be funding to assist municipalities in implementing road restoration practices?** Yes, additional funding will be available from VTrans and DEC to implement restoration practices on high priority road erosion segments through programs such as the Better Backroads grant from VTrans or Ecosystem Restoration grant program from DEC. Municipalities will likely have to contribute a portion of the total cost or in-kind measures.

9. **Will the DEC Municipal Roads Stormwater GP be required for municipalities that are already authorized under the Municipal Separate Storm Sewer System (MS4) Permit?** No, MS4 communities will not have to apply for the Municipal Roads GP. The MS4 permit will be amended to incorporate the road requirements, with the goal of simplifying implementation and reporting requirements for MS4s.