

# DEC's Municipal Roads General Permit

Jim Ryan



VERMONT DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION  
**WATERSHED  
MANAGEMENT DIVISION**  
STORMWATER PROGRAM

# GOING ON A ROAD TRIP

EXPECTATION

vs

REALITY



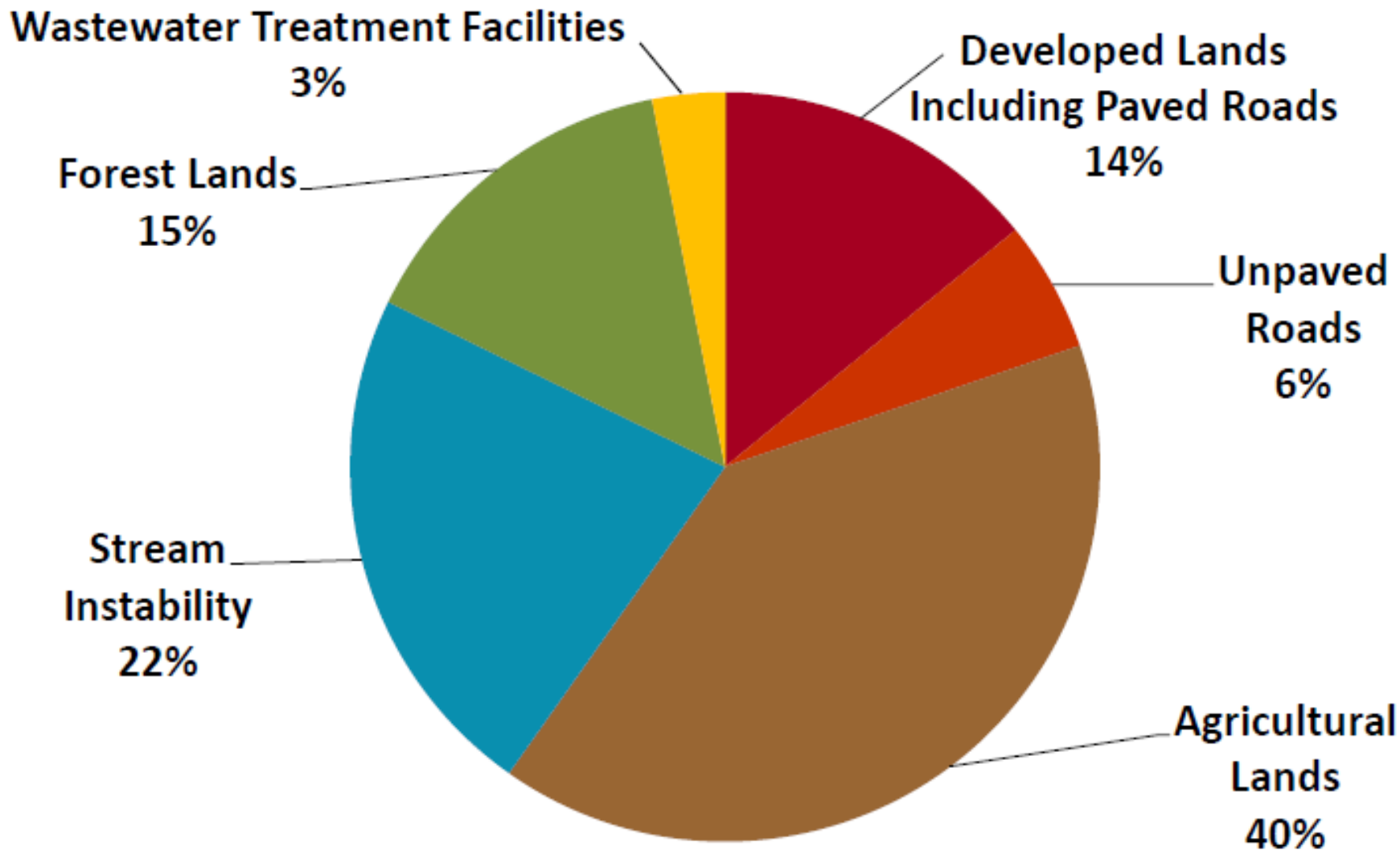


# Lake Champlain post TS-Irene

(photo credit Bill Howland)

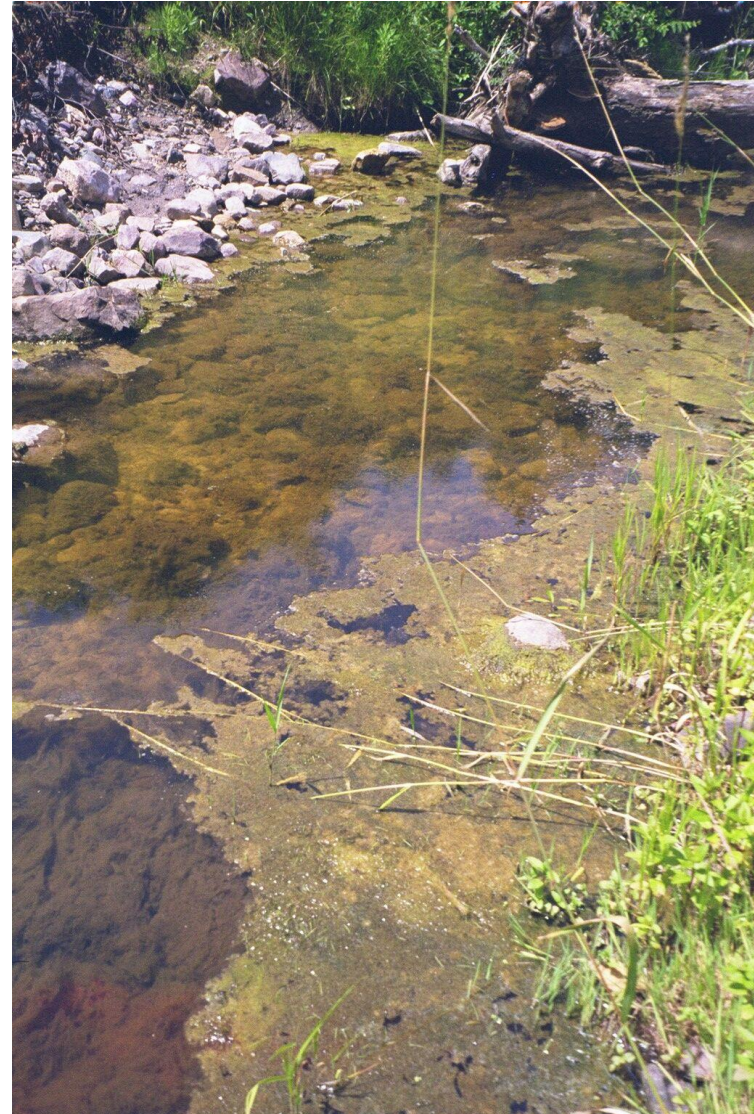


## Sources of phosphorus in the Vermont portion of the Lake Champlain Basin (Preliminary estimates from Tetra Tech, 2013)



# Potential Road Pollutants

- Nutrients- Phosphorus
- Sediment
- Trace heavy metals
- Hydrocarbons
- Road salt





# Secondary benefits: flood resilience and reducing town road maintenance and costs



Photo Credits: Beverley Wemple



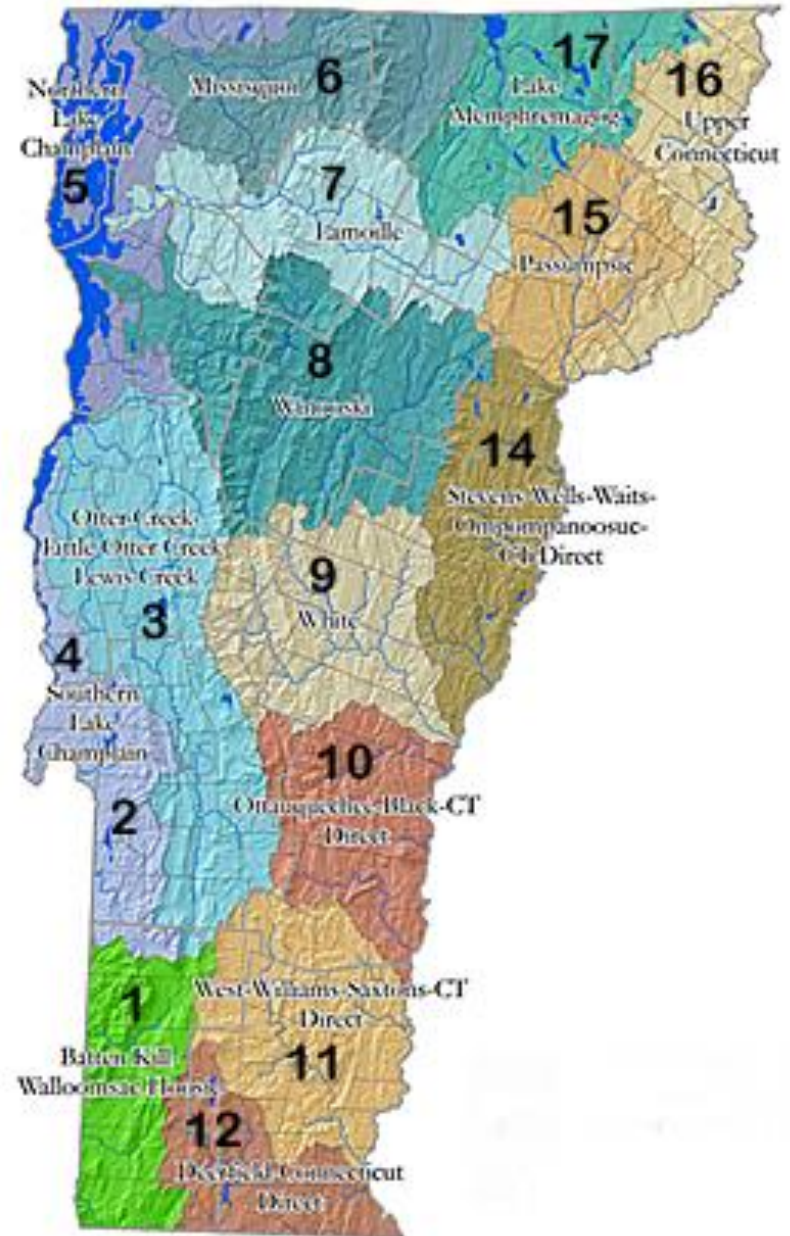
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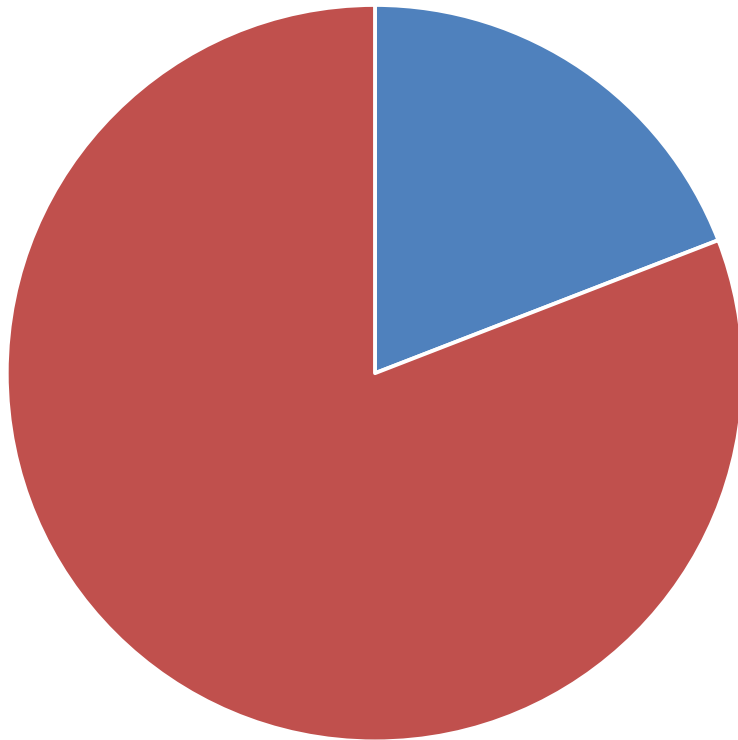
# MRGP Coverage

- The MRGP will cover all Vermont municipalities
- MRGP jurisdiction limited to ROW
- Unorganized towns exempt



# Vermont Road Mileage

Road Miles



■ State Highway ■ Municipal roads ■ ■

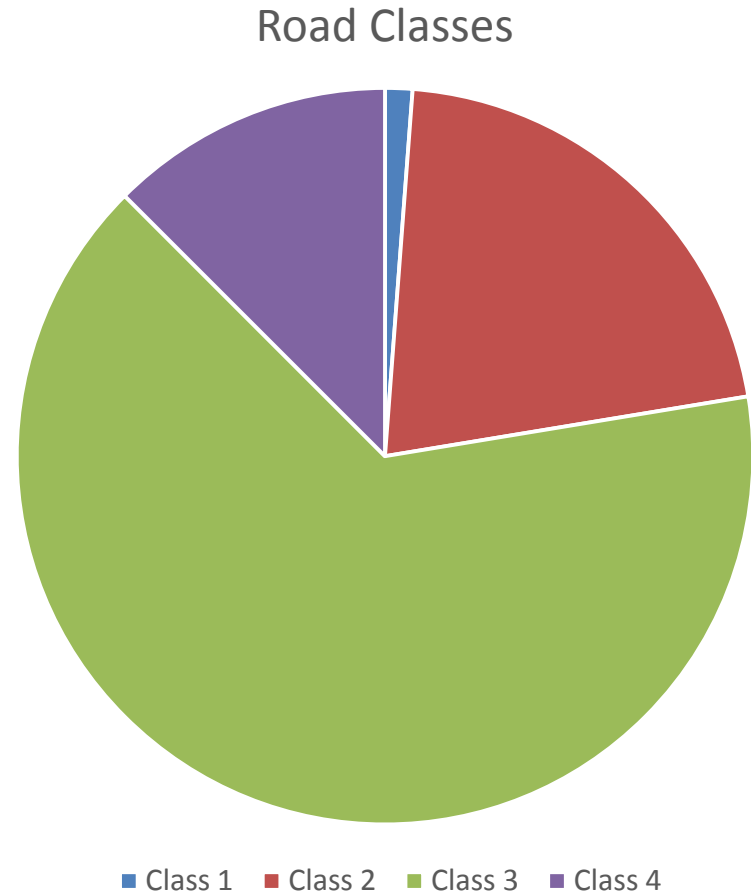
- 15,840 total road miles (Classes 1-4 and SH)
- 2,709 miles of state highway
- 13,131 miles of town highway (Classes 1-4)



# Municipal Road Classes

## Road Class Distribution

- Class 1: 1.2% (VTrans and municipally- maintained)
- Class 2: 21.2%
- Class 3: 65.1%
- Class 4: 12.5%



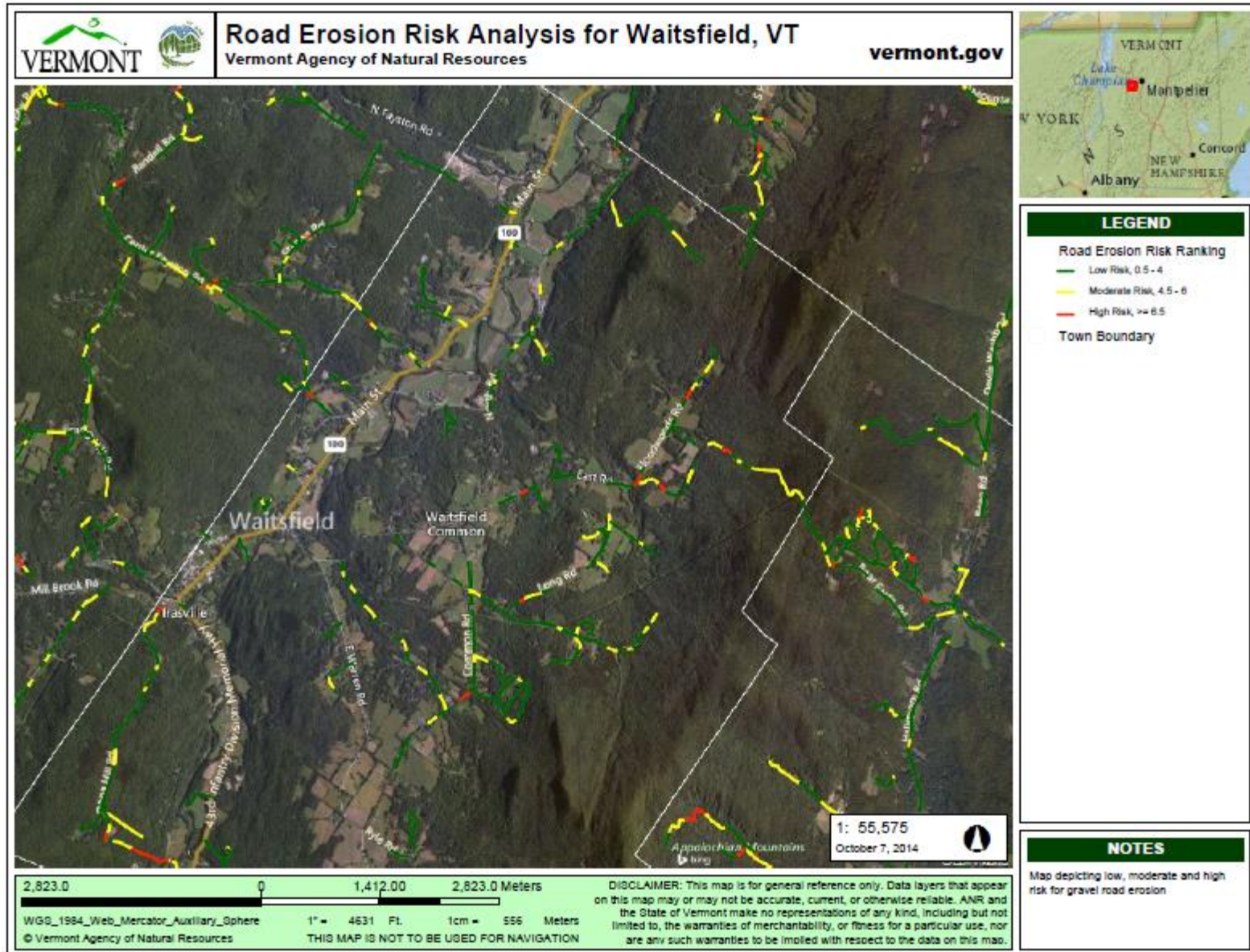
# Purpose of the Roads Permit

- Bring “priority” road segments up to basic maintenance standards



- By implementing **Best Management Practices** necessary to reduce erosion

# Priority Road Segments

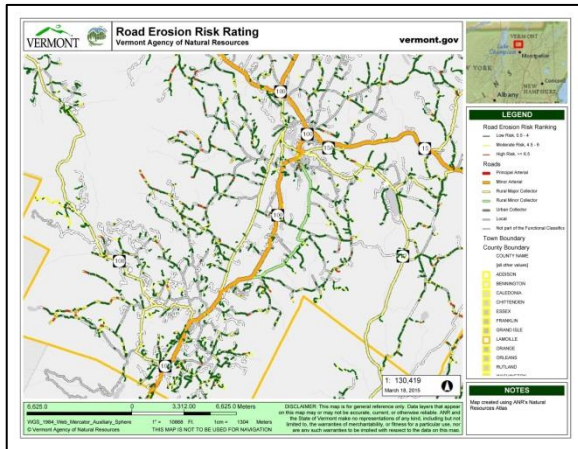




# Permit Framework

- Municipalities develop Road Stormwater Management Plans

## Inventory



## Prioritize



## Implement



# Road Stormwater Management Plans

**SWMP components *will likely* include:**

- Road miles by road type
- “Priority Road Segments” (PRS)
- ID of PRS not meeting standards
- Implementation schedule



# MRGP- Town Example

**Town A. has 50 total road miles**

- 25 road miles are **priority** road segments
- 25 miles not considered **priority**, no BMP work needed
- 15 **priority** road miles currently fully meet MRGP standards
- 10 remaining **priority** miles- required to be brought up to MRGP standards over a 20 year period

In this scenario **0.5 miles** of road per year would need to be brought up to standards for 20 years (or sooner)



© Mike Galloway / Corbis



Brain

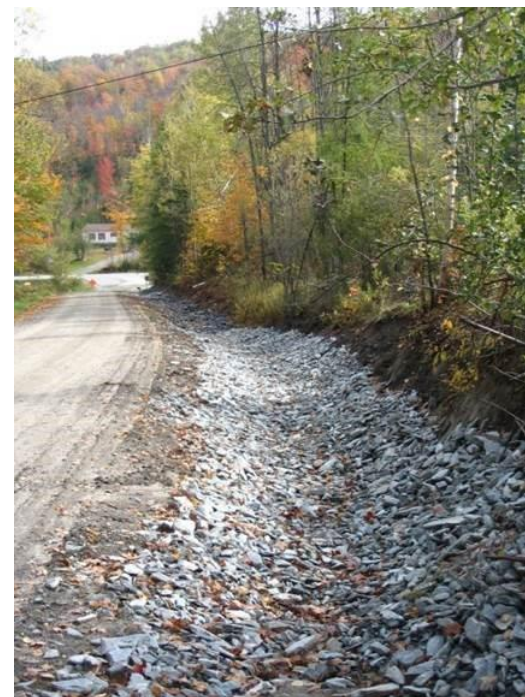
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# MRGP Practices and Standards

Practices will:

- Improve water quality
- Be cost-effective
- Easy to maintain (whenever possible)



# What types of practices will be included in the MRGP?

Practices will likely include:

- Stone-lined ditches and check dams
- Turn outs
- Road crowning
- Culvert headers
- Culvert outlet stabilization
- Regular catch basin clean outs and sweeping
- Possible new techniques and Green Stormwater Infrastructure Practices

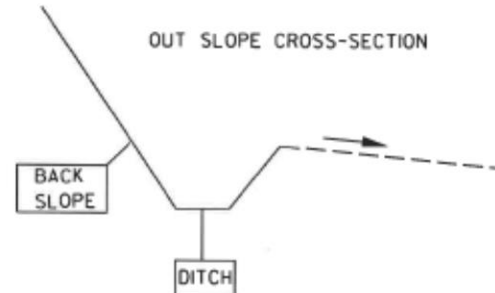
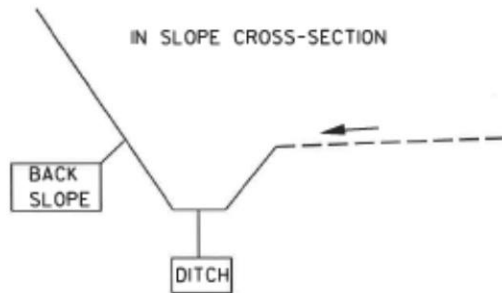
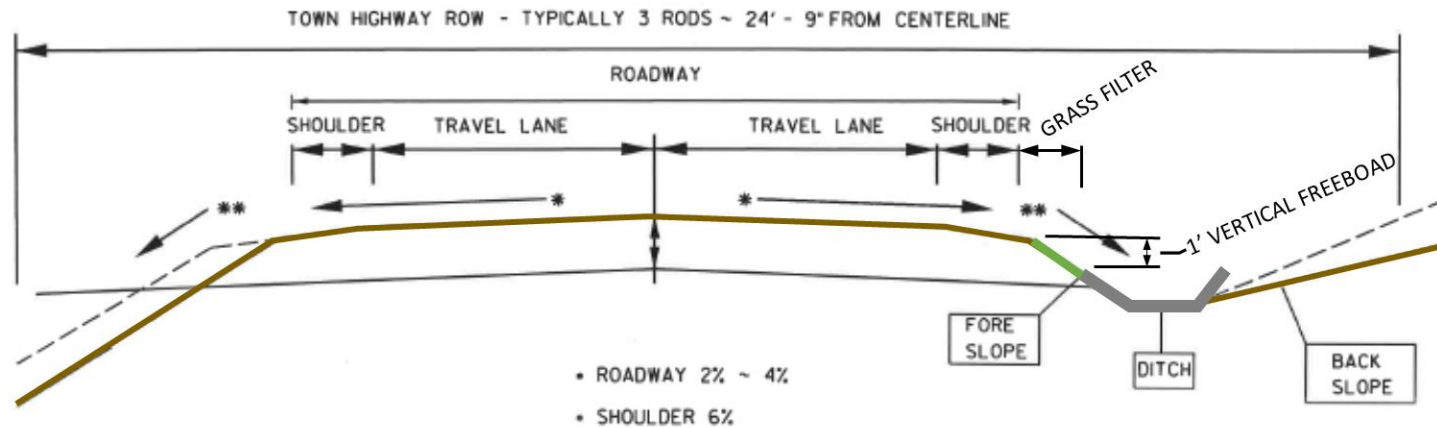




# Possible MRGP standards for different road types (EXAMPLE ONLY)

	Paved- curbed	Paved- not curbed	Gravel (Not Class 4)	Class 4
18" minimum drainage culverts	X	X	X	N/A
Culvert headers/ stable outlets	X	X	X	If erosion present
Grass-lined ditch	N/A	X	X	N/A*
Stone-lined ditch/check dams	N/A	X	X	Possibly
Road crowning	N/A	N/A	X	N/A
Gully stabilization	X	X	X	X
Street sweeping	X	N/A	N/A	N/A
Water bars/dips	N/A	N/A	N/A	X* (may be substituted for ditching)
Stable turnouts and conveyances	X	X	X	X

# TOWN HIGHWAY TYPICAL

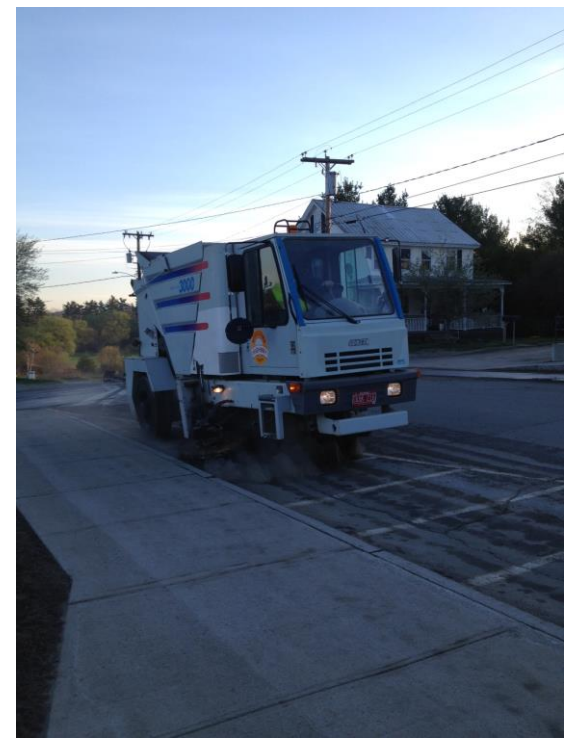


# Road crown





# Paved Road BMPs



# FAQs

# Are all road classes covered by the GP?

- Yes, All road classes will be covered by the permit (Classes 1-4)
- Requirements for Class 4 roads will likely be less stringent





# Possible Class 4 Road Practices



# Will in-stream culvert replacements be part of the MRGP?



- No, only the replacement of drainage culverts
- Drainage culverts will be properly-sized and aligned
- Culverts may require header and/or outlet stabilization



# MRGP and VTrans Road and Bridge Standards Compatibility?

- Both standards will be compatible, as they are developed/revised
- The geographic applicability will likely differ





# Should towns wait until the MRGP is issued to begin road work?

- Towns that are proactively identifying and addressing road-related water quality issues (consistent with current *Road and Bridge Standards*) will be credited for this work as part of the MRGP compliance.

# Assistance to towns?



- Additional grant and cost-share funding is currently available through DEC and VTrans
- Outreach and Technical assistance is available from DEC, VTrans, RPCs, and other organizations.

# Draft- MRGP Timeline and deliverables

## MRGP Timeline

- Draft permit by end of 2016
- Final permit by end of 2017
- Phase in permit coverage 2018-2021 (TBD)

## MRGP Draft Deliverables

- Fall 2018- all towns apply for MRGP coverage
- Fall 2019- Road Stormwater Management Plans (RSWMPs) Due
- Fall 2020 and beyond- towns begin implementing Road SWMPs
- Fall 2024- RSWMP updates due





# MRGP Stakeholder Groups

- **MRGP Core Team:** DEC, VTrans, VLCT, and RPCs
- **MRGP Technical Team:** DEC and VTrans Technical staff tasked with developing standards

## Regional Outreach Groups:

- County road foremen groups
- TAC groups
- RPC transportation planners
- Roads Roundtables
- Town Officer trainings
- Selectboard Institute
- VLCT WQ Advisory Committee
- Flood Resilient Vermont Conference



# What's Next?

Development of Draft Permit and standards- with key partners, regional partners, and technical staff



Questions, Comments, Suggestions?

Jim Ryan- DEC Municipal Roads Program

[http://www.watershedmanagement.vt.gov/stor\\_mwater/htm/sw\\_municipalroads.htm](http://www.watershedmanagement.vt.gov/stor_mwater/htm/sw_municipalroads.htm)

[jim.ryan@vermont.gov](mailto:jim.ryan@vermont.gov)

(802) 490-6140