

# Residual Designation Public Meeting

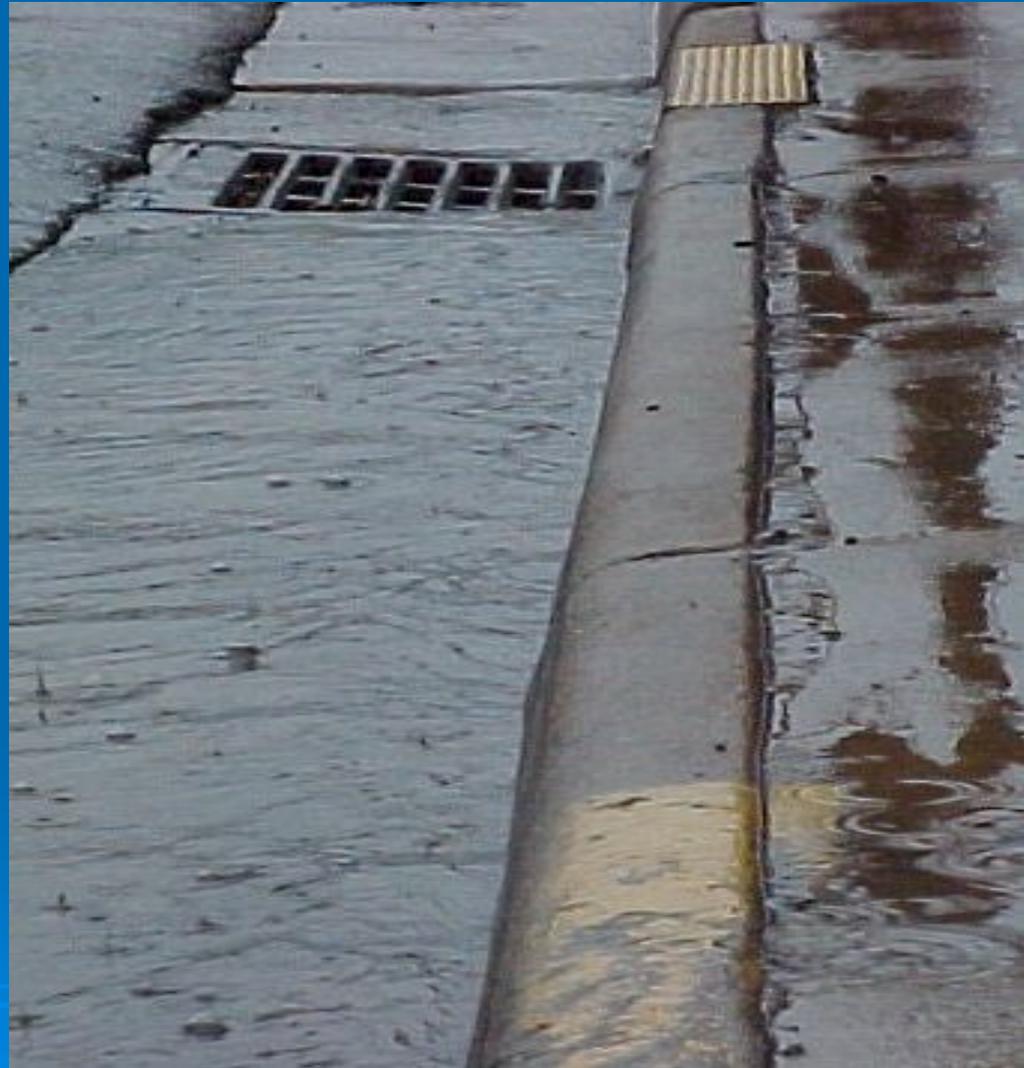
August 5, 2009

Water Quality Division  
Vermont Department of Environmental Conservation



# What is stormwater runoff?

“Precipitation, snowmelt, and the material dissolved or suspended in precipitation and snowmelt that runs off impervious surfaces and discharges into surface waters.”



# Stormwater runoff can adversely affect:

## ➤ Water quantity

- runoff is increased by impervious surfaces (paved and unpaved roads, parking areas, roofs, driveways, walkways)
- can cause local flooding, channel erosion, and loss of infiltration to groundwater

## ➤ Water quality

- pollutants carried in stormwater runoff (sediment, oil, metal particles, fertilizer, pesticides, waste)
- physical impacts to channel (scour, washout, etc.)
- reduced baseflow



**Stream Geomorphic Destabilization**

# VT's 303(d) list of impaired waters

- Federally approved list of waters not meeting water quality standards
- States must adopt Total Maximum Daily Loads (TMDL) or equivalent cleanup plans for impaired waterbodies
- TMDL = amount of a pollutant that a waterbody can accommodate without exceeding water quality standards

# EPA Approved TMDLs

- Potash Brook
  - December 6, 2006
- Centennial, Bartlett, Englesby, and Morehouse Brooks
  - September 28, 2007



# How were TMDLs developed?

- After WRB overturn of WIP process
- In collaboration with Vermont's Stormwater Advisory Group (SWAG) and EPA
- SWAG – representatives of academia, industry, consultants, EPA, municipalities, other government agencies

# What do TMDLs require?

- **Bartlett**
  - Reduction in high flows: -33.9%
  - Increase in low flows: +13.9%
- **Centennial**
  - Reduction in high flows: -63.4%
  - Increase in low flows: +23.2%
- **Englesby**
  - Reduction in high flows: -34.4%
  - Increase in low flows: +11.2%
- **Morehouse**
  - Reduction in high flows: -65.3%
  - Increase in low flows: +15.0%
- **Potash**
  - Reduction in high flows: -17.9%
  - Increase in low flows: +12.2%

# How will TMDLs be Implemented?

- SWAG was convened in Summer 2008 to discuss implementation
- Developed overall approach to implementation
  - TMDL Implementation Framework Report

# TMDL Implementation Framework

- Part 1 - Reissuance of MS4 permit by December 2009:
  - Development of watershed-specific BMP plans with MS4 permittees – 3 years
  - Identify “low hanging fruit” for implementation by MS4s
  - Require implementation of required BMPs after BMP plan developed – either by MS4s or by individual property owners
  - Encourage formation of stormwater utilities

# TMDL Implementation Framework

- Part 2 – Residual Designation Permits:
  - Issued to discharges that do not drain through MS4 (municipal) system

# Residual Designation Authority

40 CFR 122.26(a)(1) and (9) provide 4 major categories of stormwater discharges that require a federal NPDES permit:

- Discharges that had been permitted prior to February 4, 1987
- Large and Small **Construction Discharges**
- Large and Small **MS4 discharges**
- **Industrial Stormwater Discharges**

# Residual Designation Authority

- Two additional categories of discharges that may be “residually designated” (40 CFR 122.26(a)(9)) :
  - Stormwater discharges that are determined by the permitting agency to be causing or contributing to a water quality standards violation or are a significant contributor of pollutants.
  - Stormwater discharges that the permitting authority determines require stormwater controls based on wasteload allocations that are part of TMDLs that address the pollutants of concern.

# Residual Designation Case

- In 2003, Conservation Law Foundation (CLF) files petition asking ANR to require NPDES permits for all existing discharges to five stormwater-impaired streams because they contribute to a water quality violation.
- ANR denied petition; CLF appealed to VT Water Resources Board and Board held that NPDES permits are required for all existing discharges to these brooks except for “de minimis discharges”



# Residual Designation Case

- ANR and other interested parties appealed decision to Vermont Supreme Court
- August 2006, Supreme Court rejects Board's decision and remands back to ANR to undertake RDA analysis
- In December 2006, ANR again denied CLF's petition
- January 2007 – CLF appeals to Environmental Court

# Residual Designation Case

- August 2008 – Environmental Court issues Judgment Order to ANR:
  - Directs ANR to notify all “currently unregulated” stormwater discharges of their obligation to apply for NPDES permit within 180 days
  - “Unregulated” means not currently regulated under NPDES construction, MS4 or industrial permit or a state stormwater permit with an offset



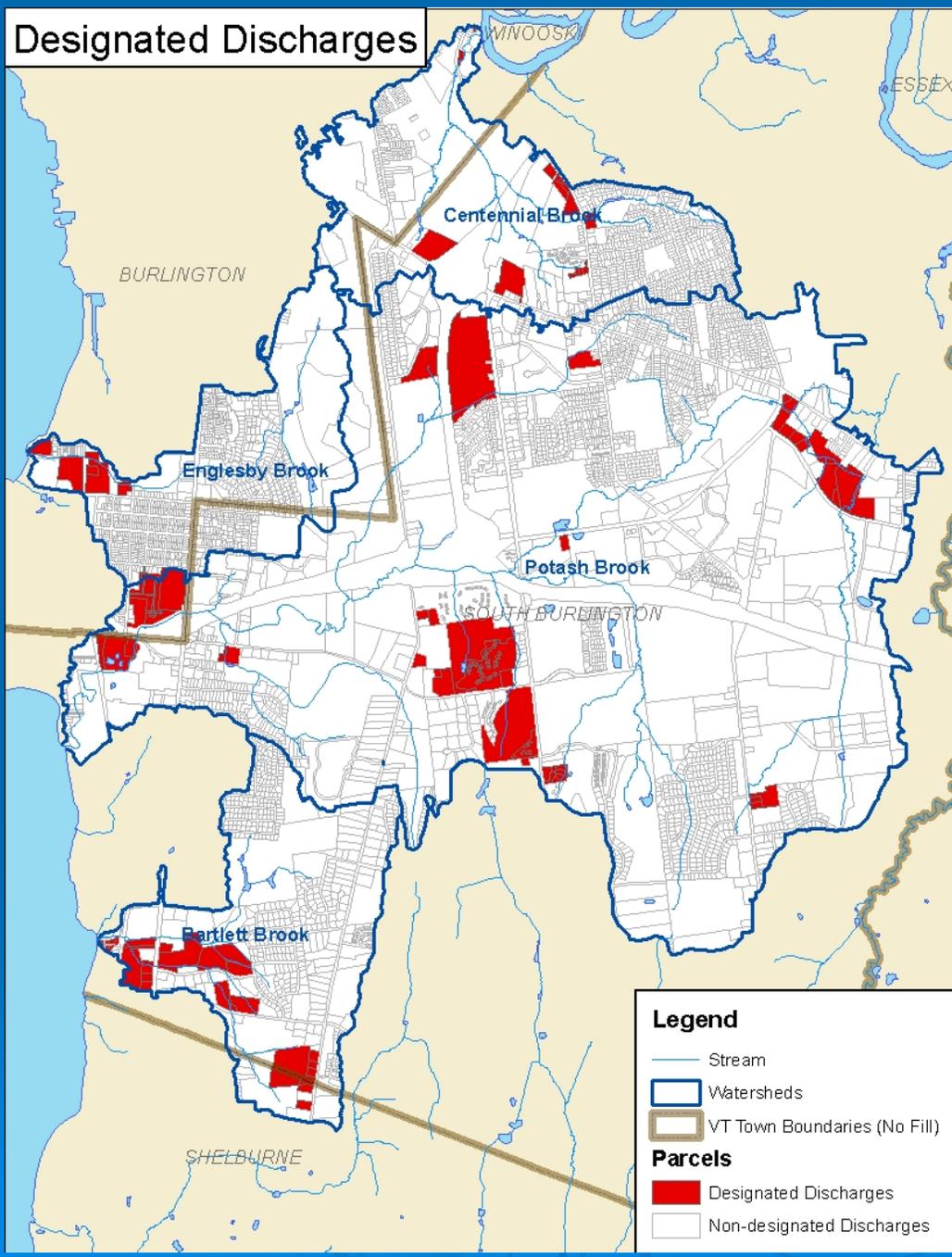
# RDA Notice Issued

- June 19<sup>th</sup> – RDA Notices Issued
- Approximately 400 dischargers were notified
- **Designated dischargers** must apply for NPDES permit within 180 days (December 16<sup>th</sup>, 2009)

# What is a “designated discharge?”

- A stormwater discharge that is not currently regulated by:
  - A state stormwater permit with an offset or on-site controls that result in no net contribution to the impaired stream
  - A federal multi-sector, or MS4 permit
    - For the purposes of this designation any stormwater runoff that enters or commingles with the MS4 system is considered to have coverage under the MS4 permit.

# Designated Discharges



# What will RDA permit require?

- Permit currently under development
- Draft expected by end of August
- Public Comment Period
- Goal – issue final RDA permit by Oct. '09
- RDA Designation remains open until close of public comment period on draft permit

# The RDA Permit – Preliminary Thoughts

- Categories of permittees
  1. Parcels with a previously issued state stormwater permit
  2. Parcels without a state stormwater permit
    - Parcels with < 1 acre of impervious
    - Parcels with > 1 acre of impervious

# Parcels with a state stormwater permit

- Conduct an Engineering Feasibility Assessment (EFA)
- Build treatment based on EFA
- EFA will not require:
  - Installation of sub-surface storage or treatment structures
  - Purchase or acquisition of additional land
  - Demolition of buildings or removal of existing impervious surface
  - Off-site treatment
  - Re-grading or re-contouring
  - Pumping or other mechanical re-routing of stormwater
  - Mechanical or chemical treatment of stormwater
  - Infiltration where basement flooding or subsurface pollutant plume transport will occur.

# Parcels with no state stormwater permit and > 1 acre of impervious

- Conduct a limited site assessment
- A site assessment will look at:
  - Soils
  - Surface hydrology
  - Utility inventory
  - Impervious cover
  - Areas of active erosion or other potential problems

# Parcels with no state stormwater permit and < 1 acre of impervious

- Follow good housekeeping practices on site (ie. disconnection, sweeping, etc.)
- Most likely will not require construction under this permit
- Relatively inexpensive fixes

# What's next?

- Draft expected by end of August
- Public Comment Period
- Goal – issue final RDA permit by Oct. '09
- Applications must be in by December 16<sup>th</sup> 2009
- RDA Designation remains open until close of public comment period on draft permit

# Overall Strategy Post RDA Decision

- Vermont will use a combination of MS4 permit and “Residual Designation Authority (RDA)” permit to implement TMDLs
- MS4 permittees will be asked to take lead in development of watershed-specific BMP plans and implementation
  - This plan may include RDA properties that are required to do site assessments
- Permits will be issued as needed after BMP Plans developed

# Guiding Principles - Implementation

- Seek most cost-effective solution
- Work cooperatively with municipalities to develop watershed-specific BMP plans
- Develop best strategy to implement BMPs
- Issue watershed permits as necessary
- Ensure consistency across watershed – both in RDA areas and non-RDA areas

# Guiding Principles - Implementation

- Continue to seek federal funding to aid implementation
- Provide time for implementation
- Maintain concept of “fairness”
- Implement monitoring to assess success and guide future implementation efforts

➤ Questions?

➤ Visit our website:

- <http://www.vtwaterquality.org/stormwater>

➤ Contact Information:

Jenn Callahan

802-241-3780

[jennifer.callahan@state.vt.us](mailto:jennifer.callahan@state.vt.us)





# What is a “point source” discharge?

- NPDES permits only required for *“point source”* discharges.
- Defined as *“any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, conduit, well, discrete fissure, container, etc. from which pollutants are or may be discharge”*

# “Point source discharge”

- Factors that courts have considered in determining if a point source discharge exists:
  - Has operator changed the surface, directed the waterflow or otherwise impeded its progress?
  - Do pollutants discharge from discernible, confined, discrete conveyances, either by gravitational or non-gravitational forces?

# “Point source discharge”

- Are there gullies, ditches, rills, swales, erosion pathways to a stream?
  - Was property graded so as to channel water a certain way?
  - Is runoff traceable to a source and controllable at the source?
  - Is activity emitting pollution from an identified point?
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# Point source discharge

- Point source discharges (open and closed conduits) to streams identified by Pioneer
- Subwatersheds draining to each point source delineated
- Discharges expected under storm events
- 40 CFR 122.21 – anyone *“who discharges or proposes to discharge pollutants”* must apply for NPDES permit