

# Lake Friendly Lawns: Green Lawn – Blue Lake

Jurij Homziak  
Lake Champlain Sea Grant





# Our Waters Support

Quality of life

Tourism and recreation

Economy

Fish and wildlife habitat

# It's a GREAT place to live...

- VT population growth >32% since 1970
- Economic growth doubled
- Chittenden Co. towns increase  
55-75% since 1980

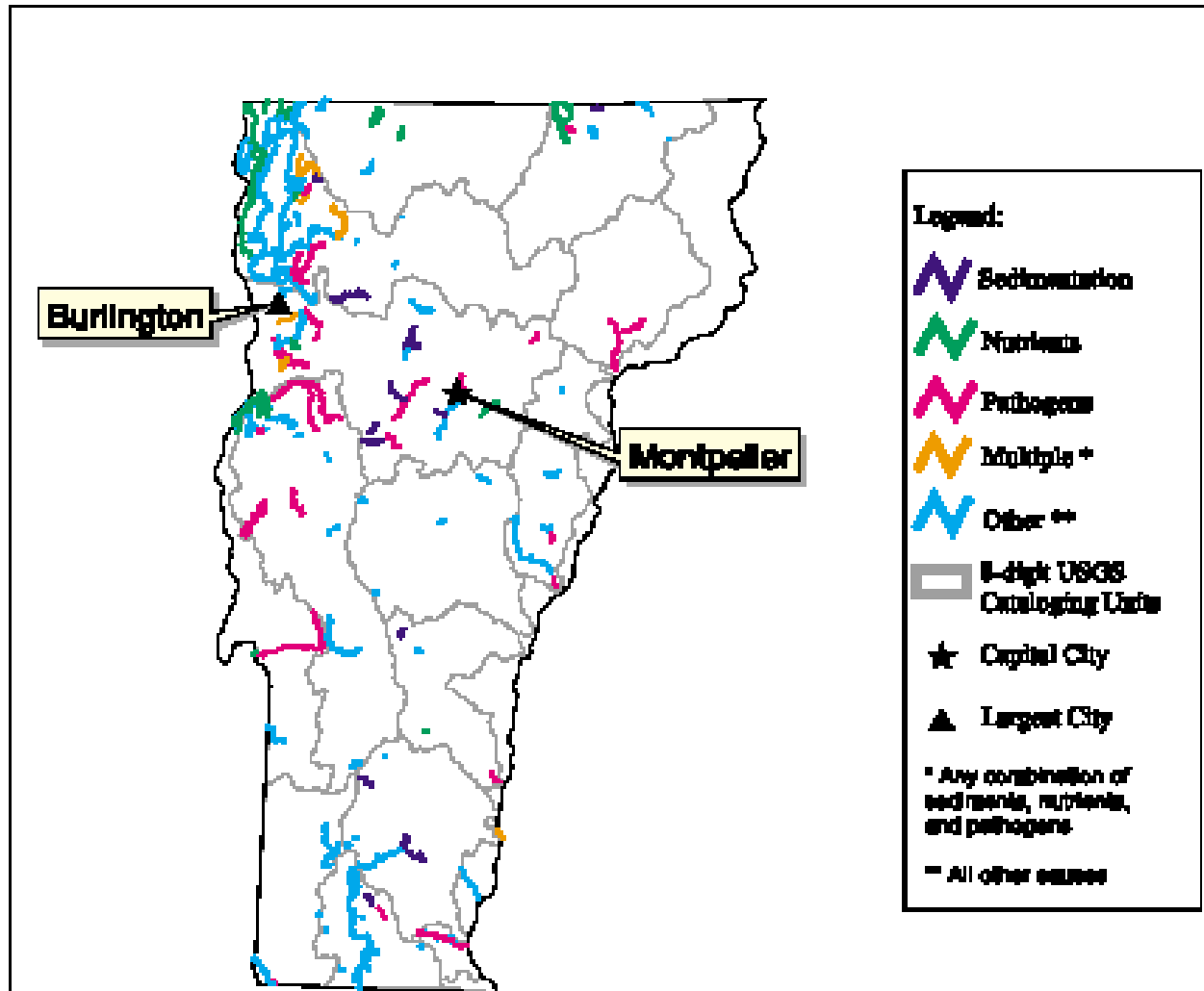


# The Footprint of Growth



# Suffern' Streams, Sylvester!

**Vermont 1998 Polluted Waters**



# What Happens?

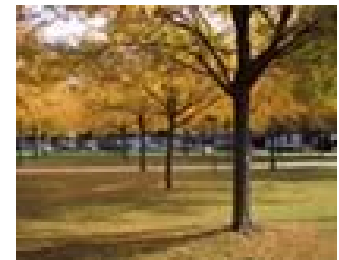
- Beach closures
- Noxious algal blooms
- Excessive aquatic plant growth
- Toxins in fish (PCB, Hg)
- Loss of recreation opportunities and wildlife



# Where Does This STUFF Come From, Anyway?



Homes, streets, businesses and LAWNS  
and GARDENS



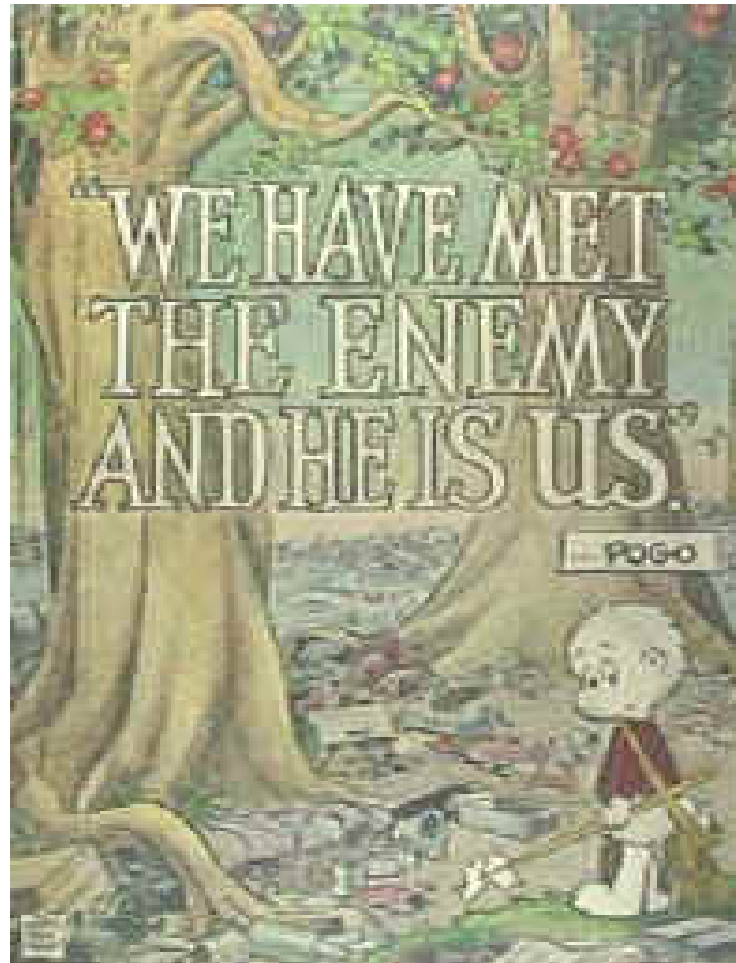
# **Stormwater** carries pollutants from homes, businesses and streets and into streams



- Fertilizer (phosphorous)
- Garden chemicals
- Yard waste
- Pet waste
- Hazardous materials (batteries, HH cleaners)
- Loose soil



# Control of NPS pollution is **EVERYONE'S** responsibility



# Phosphate Fertilizer

- Jan 2013, statewide
- No non-farm P use without a permit
- Permit only for new lawn start up
- Approved test shows P deficiency



# Garden Chemicals: Pesticides and Herbicides





Almost everyone cares about water  
quality

Almost everyone is willing to  
change lawn/garden  
practices

**BUT**

**Less than 10% knew how much  
pesticide  
they actually needed**



**TOO GREEN  
ChemicalLawn**

Lawn care industry come-on photos like this give the impression that:

1. Chemical lawn treatments are safe for children and animals
2. Your lawn must be this color or people will think you're a bum.
3. It's good for the lawn.
4. Lawns need these chemicals to be healthy.

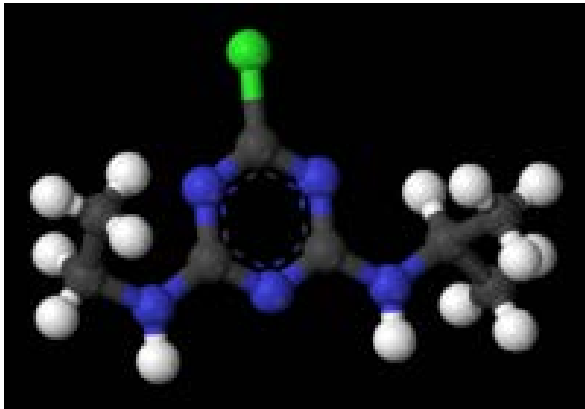
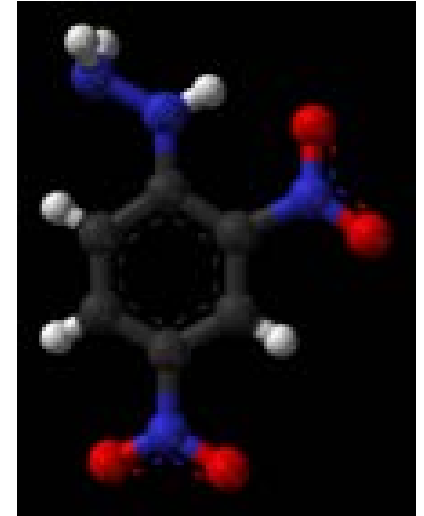


# Human and Environmental Health Issues



"researchers report that dogs were two times more likely to develop lymphoma if their owners sprayed or sprinkled the 2,4-D herbicide on the lawn four or more times a year. [And] even with just one application a season, the cancer risk was one-third higher than among dogs whose owners did not use the chemical."

# 2,4- Dinitrophenylhydrazine



Atrazine

# Yard Waste: Nutrients, Flooding





# Pet Waste

- 146,000 dogs in 92,250 VT households
- not the predominant or most toxic pollutant in urban streams, can have a big impact if left unmanaged.
- Diseases: Campylobacteriosis, Salmonellosis, Toxocarisis
- organic matter and nutrients in pet waste can degrade water quality

# Healthy Stream Habits!

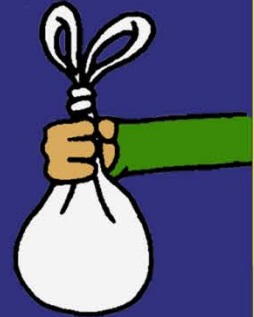
Stormwater washes pet waste from our grass and streets directly into the Letort.

Just one ounce of pet waste contains 650 million coliform bacteria!



If you don't pick it up, you might as well be swimming in it.

**SCOOP IT.  
BAG IT.  
PITCH IT.**



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# Today You Will Learn

- How lawn care practices can affect water quality
- New ways of lawn and garden care

How to become a

**Lake Friendly Gardener**

