

# Minnesota's New Phosphorus Lawn Fertilizer Law

Jerry Spetzman

Water Quality Advisor

Minnesota Department of Agriculture

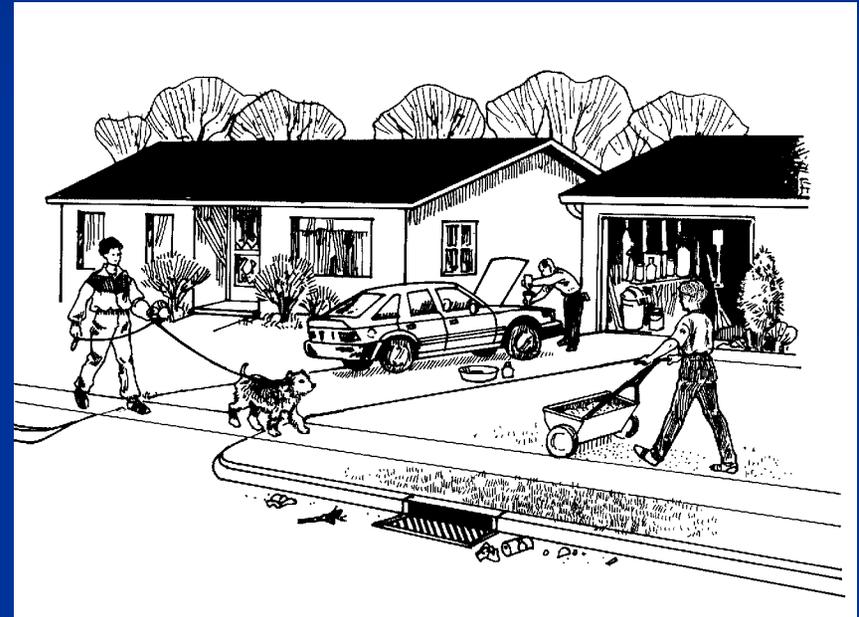
# What is the role of phosphorus in lawns, landscapes and lakes?

- Phosphorus is vitally important to healthy plant growth and development.
- Phosphorus is found throughout the landscape – soils, plants, animals, airborne dust.



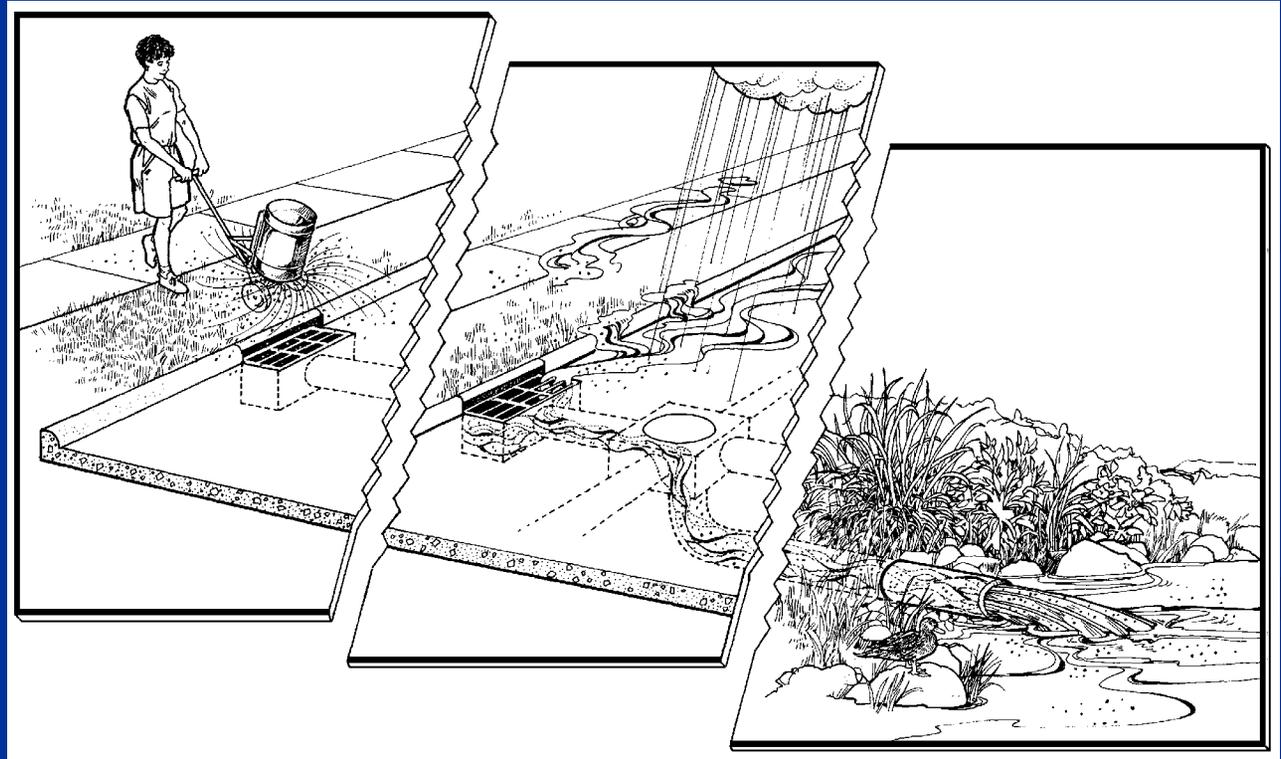
# What is the role of phosphorus in lawns, landscapes and lakes?

- Fertilizer, leaves, grass clippings, eroded soil, and animal waste are all sources of phosphorus.



# What is the role of phosphorus in lawns, landscapes and lakes?

- When these are swept or washed into the nearest street or storm drain, they usually end up in a local lake or river.



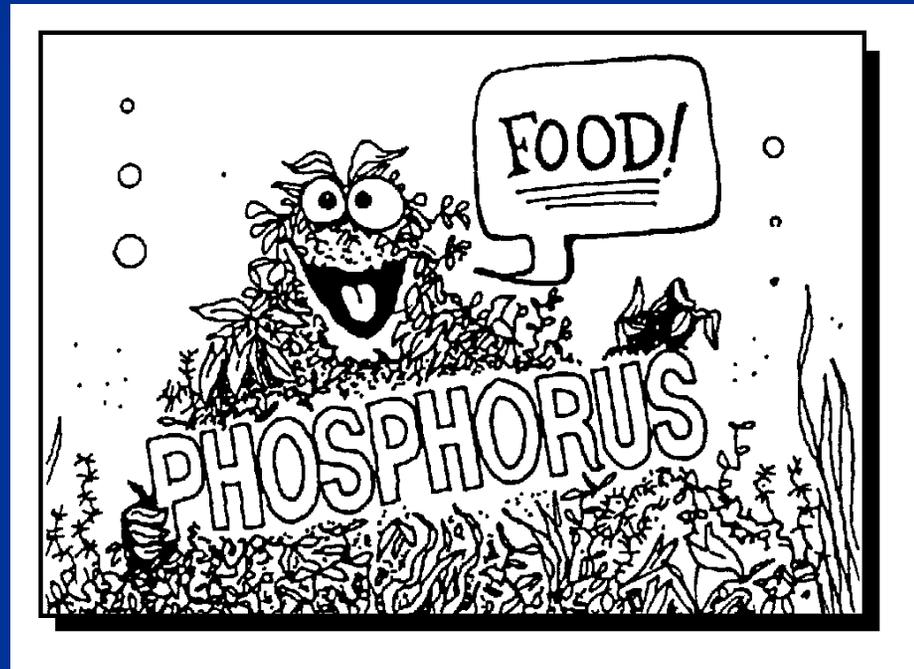
# What is the role of phosphorus in lawns, landscapes and lakes?



- Runoff water in storm sewers is not filtered.

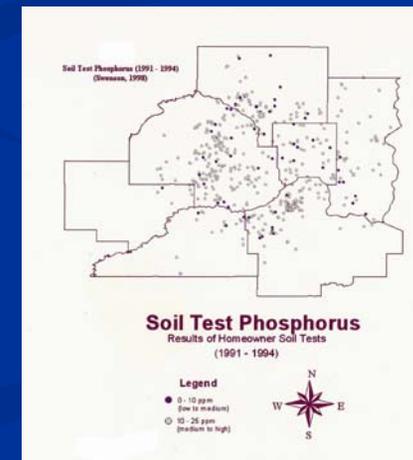
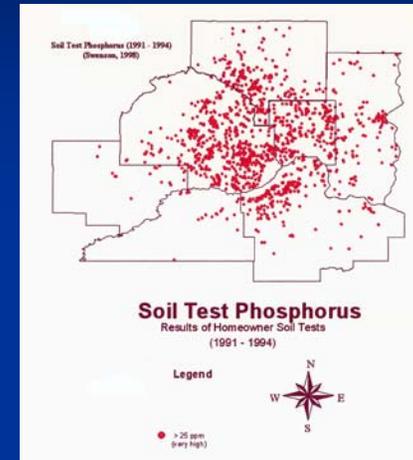
# What is the role of phosphorus in lawns, landscapes and lakes?

- Excess phosphorus in lakes and rivers can cause
  - algae growth
  - decreased water clarity
  - disagreeable odor
  - habitat loss
  - fish kills



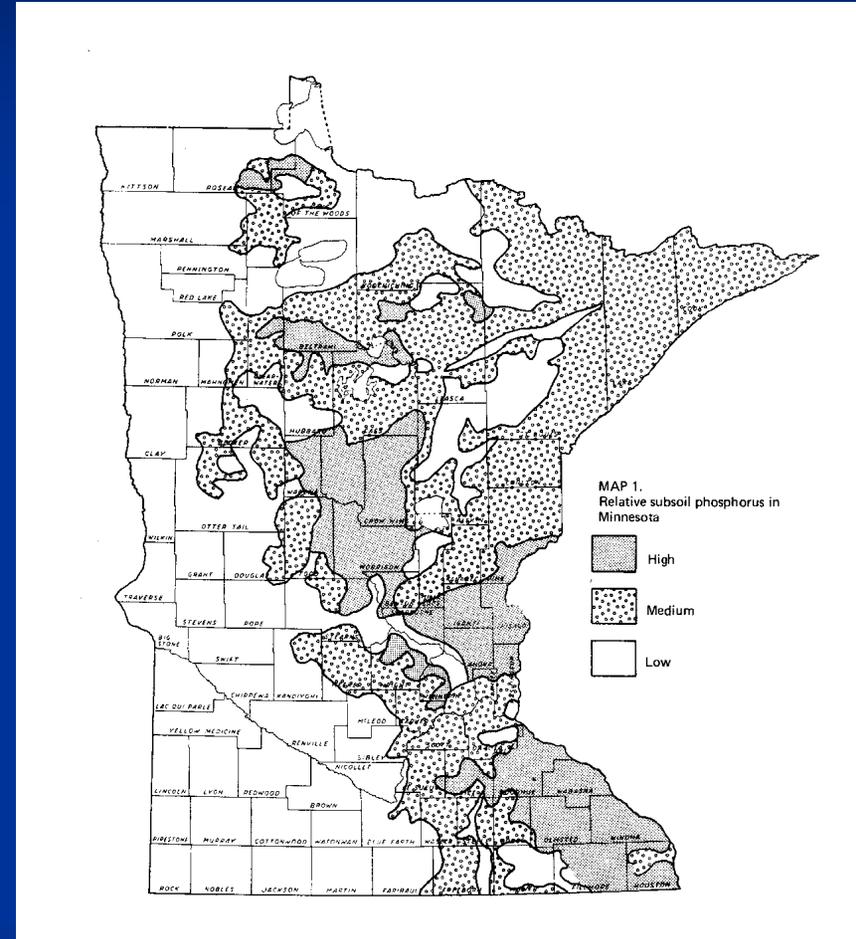
# What is the role of phosphorus in lawns, landscapes and lakes?

- While phosphorus is necessary to grow healthy lawns, soils in many residential areas of MN already have high native levels of phosphorus
- Average 44 parts per million.
- In these instances, adding more phosphorus is not needed and will not benefit the lawn.



# What is the role of phosphorus in lawns, landscapes and lakes?

- Most lawns in the TCMA have adequate levels of phosphorus for healthy turf growth.
- However, in western MN soils have lower levels of phosphorus and lawns may need additional phosphorus.



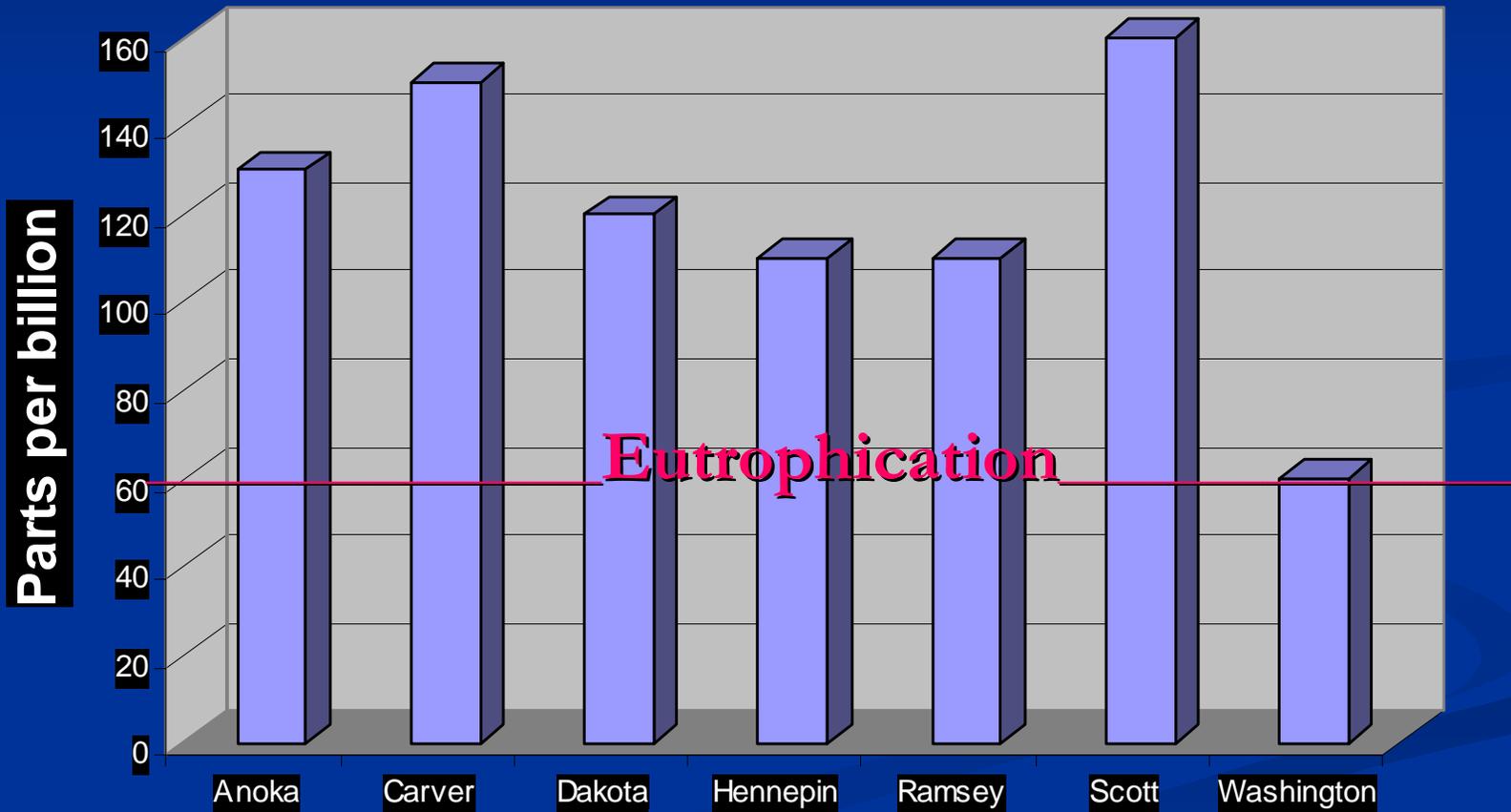
# What is the role of phosphorus in lawns, landscapes and lakes?



- Phosphorus (except in rare instances) does not green up a lawn.
- Phosphorus - new roots, shoots, leaves, seeds.
- Healthy lawns can be maintained with phosphorus-free fertilizer.

# What is the role of phosphorus in lawns, landscapes and lakes?

## Total Phosphorus in Lakes

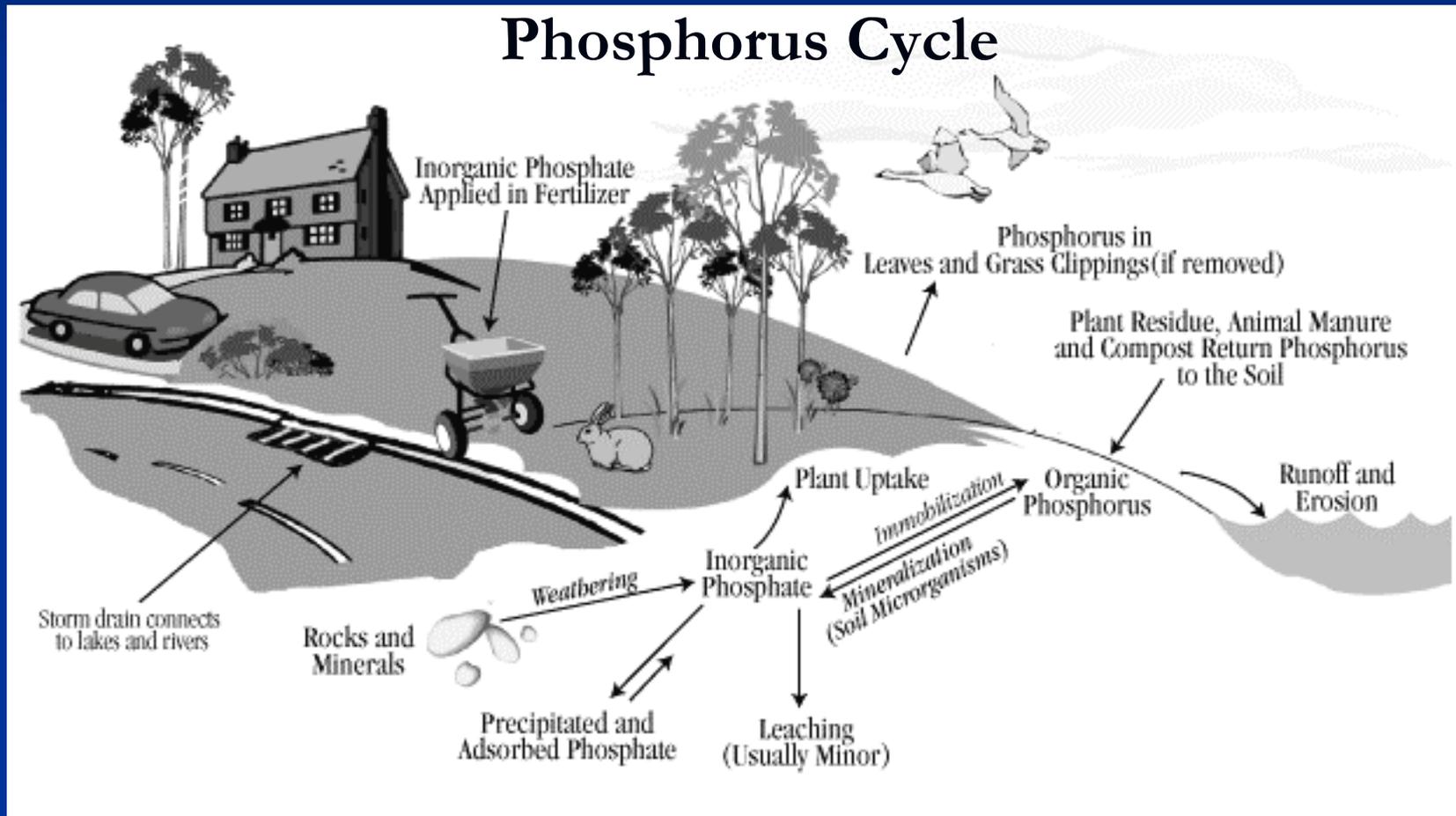


# What is the role of phosphorus in lawns, landscapes and lakes?



- P levels in soils measured in parts per MILLION
- P levels in lakes measured in parts per BILLION
- 1000 X difference
- 25 ppm soil P – healthy turf
- 25 ppb lake P – excess algae growth

# What is the role of phosphorus in lawns, landscapes and lakes?



# History of the law

- 1985 - Shoreview first community to adopt ordinance
- 1996 – Plymouth requires zero P without soil test.
- 1996 – Shorewood restricts sales.
- 2000, 2001 legislative sessions – bills do not pass.
- 2002 – Minnesota is first state to pass law
- 2004 – Law expanded to statewide

# What is the law?

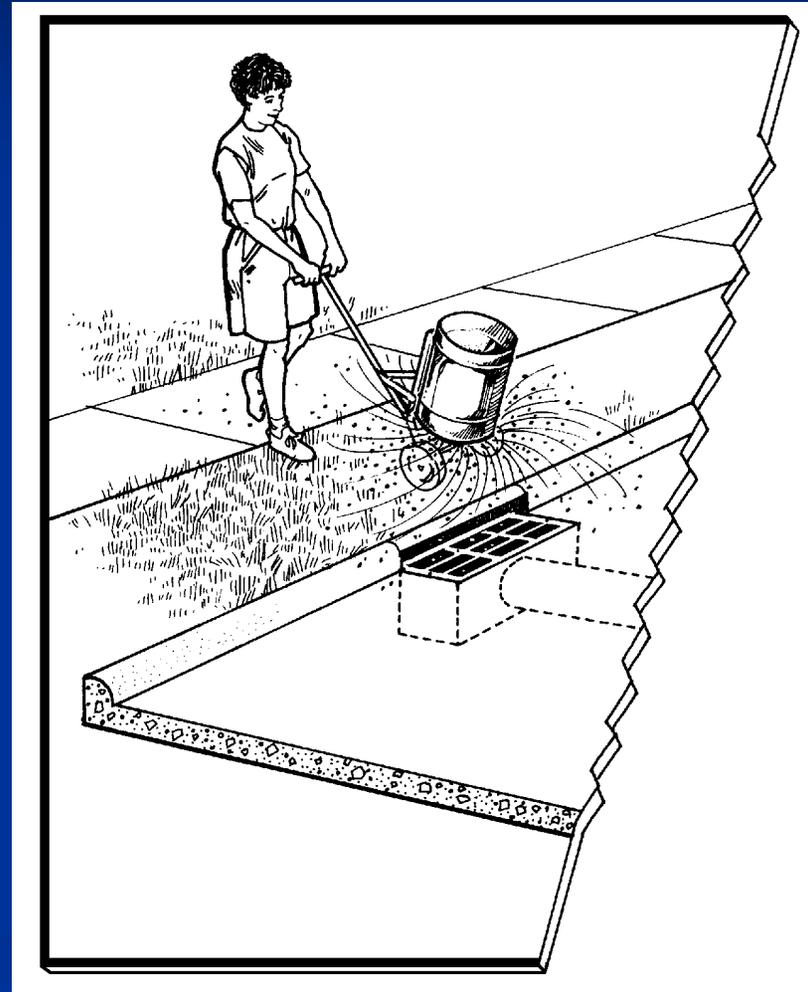
## IT IS NOT A BAN

- The restrictions apply only to fertilizer used on lawns
- The law does not apply to fertilizer used for agricultural crops (including sod fields), trees, flowers and vegetable gardening, or on golf courses managed by trained staff.



# What is the law?

- It is prohibited to spill or spread (ANY) fertilizer on paved surfaces such as streets, sidewalks or driveways.
- Clean up immediately.
- All fertilizers, whether or not it contains phosphorus.



# What is the law?



- Fertilizers containing phosphorus cannot be used on lawns in Minnesota.
- Look for the middle number on a bag of fertilizer.
- It should be zero (0).
- Exceptions ...

# What is the law?

## IT IS NOT A BAN

- Phosphorus fertilizer can be used ...
  - On lawns if a soil or leaf tissue test indicates that it is needed.
  - When establishing a new lawn.
  - On a golf course by trained staff.
- No distinction made between organic and inorganic sources of phosphorus.



# What is the law?

- STATE LAW DOES NOT PROHIBIT SALES OF PHOSPHORUS LAWN FERTILIZER
- Some lawns may still need phosphorus.
- Homeowner has responsibility to choose proper fertilizer – not retailer.

# Preemption of local law

- The new law preempts (supersedes) local ordinances restricting USE of phosphorus fertilizer in
  - Agriculture (growing of crops including sod farms)
  - Lawns
  - Except...

# Preemption of local law

Local ordinances that restrict the SALE (not use) of phosphorus lawn fertilizer that were in effect by August 1, 2002 will remain in effect.

- Bloomington
- Eagan
- Eden Prairie
- Lindstrom
- Maplewood
- Minneapolis
- Plymouth
- St. Paul
- Savage
- Shorewood

# Who will enforce the new law?

- Restrictions and prohibitions in this law may be enforced by local units of government under their existing authority.
- Minnesota Department of Agriculture does not have authority to enforce this law.
- Violations are a petty misdemeanor.

# Research

- Minnesota Department of Agriculture, University of Minnesota and other affected groups shall ...
  - evaluate research needs,
  - encourage targeted research opportunities,
  - investigate the effects of phosphorus fertilization on urban stormwater quality,
  - report to legislature by January 15, 2007.

# Research

- TROE Center – Turfgrass Research, Outreach and Education



# Consumer Information

- Minnesota Department of Agriculture, University of Minnesota and other affected groups shall ...
  - produce consumer information
  - suitable for posting and distribution at retail points of sale.

# Point of Sale Resources - Poster

## Follow Minnesota's Phosphorus Lawn Fertilizer Law

**\*Starting January 1, 2005, fertilizers containing phosphorus cannot be used on lawns in Minnesota.**

This is an expansion of the current law restricting use in the twin cities metro area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties).

For more information go to the Minnesota Department of Agriculture website: [www.mda.state.mn.us](http://www.mda.state.mn.us)



### Identify the fertilizer

There are three identifying numbers on a bag of fertilizer. Find the phosphorus content by looking for the middle number.

It must be **0**.

**\*These restrictions do not apply to fertilizers used for agricultural crops, flowers and vegetable gardening, or on golf courses by trained staff.**

**\*Exemptions - Fertilizers containing phosphorus may be used on lawns if a soil test indicates that it is needed or if you are establishing a new lawn.**



# Point of Sale Resources – Fact Sheet



Reduce Waste *If not you, who?*

## YOUR LAWN AND THE ENVIRONMENT

### Use phosphorus-free lawn fertilizer to protect Minnesota lakes and rivers

Minnesota has recently passed a statewide law that restricts the use of lawn fertilizers containing phosphorus, the primary nutrient that turns lakes green with algae.

#### New Phosphorus Law

Starting January 1, 2005, fertilizers containing phosphorus cannot be used on lawns in Minnesota. This is an expansion of the current state law that restricts the use of phosphorus in the Twin Cities metro area. Look for the middle number on a bag of fertilizer. It should be zero (0).

**Keep fertilizer off paved surfaces:** It's illegal to spread any fertilizer on hard surfaces such as streets, sidewalks, and driveways. Rain can wash the fertilizer into nearby storm drains or road ditches, eventually getting into a lake or river near you. If you accidentally spill or spread fertilizer on a hard surface, clean it up immediately.

#### Exemptions

Fertilizers containing phosphorus may be used on lawns if a soil test indicates that it is needed or if you are establishing a new lawn.

These restrictions do not apply to fertilizers used for agricultural crops, flower and vegetable gardening, or on golf courses by trained staff.



Will phosphorus-free fertilizer keep my lawn healthy?

Soils in most parts of Minnesota already have an adequate amount of phosphorus to grow a healthy lawn. In these instances, adding more phosphorus in fertilizer is not needed and will not benefit your lawn.

**Do the green thing: Fertilize responsibly.** Most garden centers and hardware stores carry phosphorus-free lawn fertilizers.

#### THE PROBLEM: TOO GREEN



**Green algal bloom:** Excess algae and weed growth is a major problem in many Minnesota lakes and waterways.



**More phosphorus, less fish:** Too much algae lowers oxygen levels and darkens the water. This can have a devastating effect on fish populations.

#### What to look for

On any bag or box of fertilizer, there is a string of three numbers. The middle number indicates phosphorus content and should read "0".



### What can you do to protect water quality?

Fertilizers, leaves, grass clippings, eroded soil, and animal waste are all sources of phosphorus. When they are swept or washed into the nearest street or storm drain, they end up in your local lake or river. You can do your part to protect water quality by doing the following:

- ▶ Follow Minnesota's phosphorus lawn fertilizer law.
- ▶ Keep leaves and lawn clippings out of your gutters, streets, and ditches.
- ▶ Never wash or blow soil or grass clippings into the street.
- ▶ Pick up pet waste promptly. Pet waste can contain harmful bacteria as well as nutrients that cause excess algae and weed growth in lakes and rivers.
- ▶ Control soil erosion around your house. When left bare, soil is easily washed away with rain, carrying phosphorus with it. Soil erosion can be prevented by keeping soil covered with vegetation or mulch.



**Don't blow!** Grass clippings and leaves left on streets and sidewalks can be a major source of phosphorus pollution in lakes and rivers.

### Find out what you need: Test your soil

A soil test is a good idea, especially if you are concerned that your lawn may need phosphorus.

Instructions on soil testing are available through the University of Minnesota Extension Service's INFO-LIN by calling 612-624-2200 (toll free) or 1-800-525-9636 and requesting message 469.

Soil testing information can also be obtained through the Internet by visiting [www.extension.umn.edu](http://www.extension.umn.edu) and searching for "Lawn Soil Testing."

A list of laboratories certified for soil testing by the Minnesota Department of Agriculture can be found at [www.mda.state.mn.us/soil/soilinfo.htm](http://www.mda.state.mn.us/soil/soilinfo.htm).

Visit [www.reduce.org](http://www.reduce.org) for lots of ideas about reducing waste and toxic chemicals in your day-to-day life.

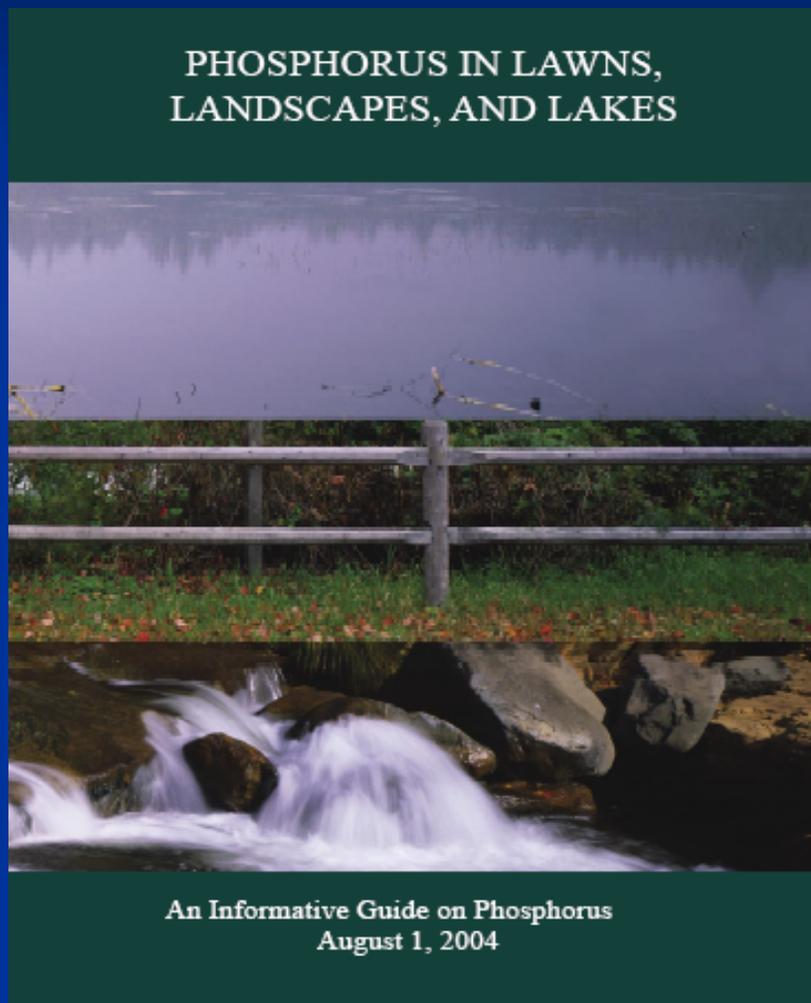
[reduce.org](http://www.reduce.org)

### For more information on lawn care

- ▶ The **Yard & Garden Line** is the University of Minnesota Extension Service's one-stop telephone link to information about plants and insects in the home landscape. Call 612-624-4771 or visit [www.extension.umn.edu/projects/yardandgarden](http://www.extension.umn.edu/projects/yardandgarden).
- ▶ University of Minnesota Extension Service's web site: [www.extension.umn.edu](http://www.extension.umn.edu). From the home page click on "Garden" then on "Lawns."
- ▶ University of Minnesota Extension Service - Sustainable Urban Landscape Information Series (SULIS): [www.sustland.umn.edu](http://www.sustland.umn.edu). From the home page, click on "Maintenance" then on "Lawn care."
- ▶ Minnesota Department of Agriculture: [www.mda.state.mn.us](http://www.mda.state.mn.us). From the home page, click on "Water & Land," then on "Lawn Care & Water Quality."
- ▶ Minnesota Pollution Control Agency: [www.pca.state.mn.us](http://www.pca.state.mn.us). From the home page, click on "Water."



# In Depth Information



- Target Audience:
  - Retailers
  - Lawn and Landscape Professionals
  - Master Gardeners
  - Educators
- Available at MDA web site

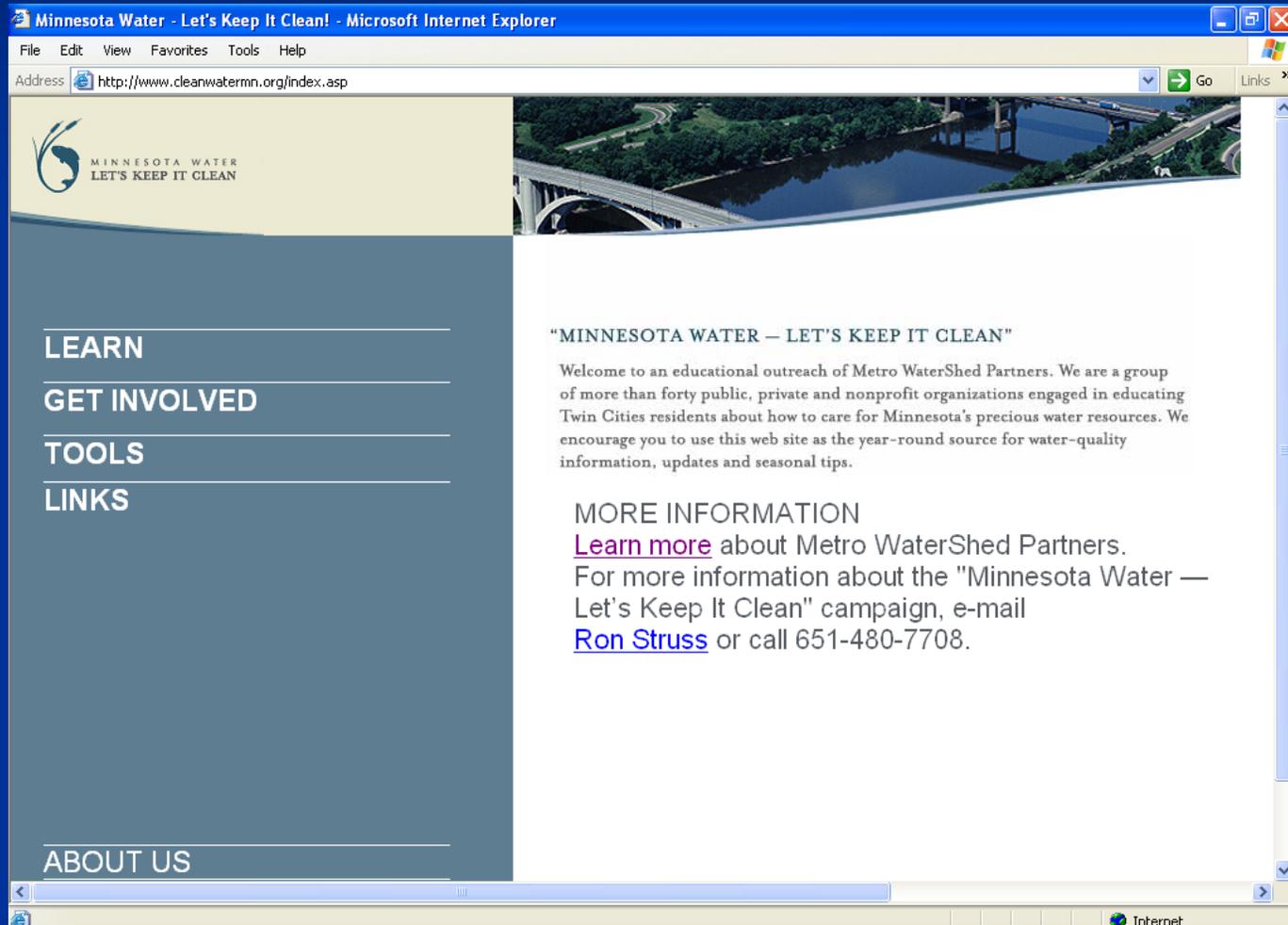
# Consumer Awareness



MINNESOTA WATER  
LET'S KEEP IT CLEAN

# Minnesota Water - Let's Keep it Clean!

[www.cleanwatermn.org](http://www.cleanwatermn.org)



The screenshot shows a Microsoft Internet Explorer browser window displaying the website <http://www.cleanwatermn.org/index.asp>. The browser's title bar reads "Minnesota Water - Let's Keep It Clean! - Microsoft Internet Explorer". The address bar shows the URL. The website content includes a logo for "MINNESOTA WATER LET'S KEEP IT CLEAN" on the left, a navigation menu with links for "LEARN", "GET INVOLVED", "TOOLS", "LINKS", and "ABOUT US", and a main content area with a header "MINNESOTA WATER – LET'S KEEP IT CLEAN" and a welcome message. The welcome message states: "Welcome to an educational outreach of Metro WaterShed Partners. We are a group of more than forty public, private and nonprofit organizations engaged in educating Twin Cities residents about how to care for Minnesota's precious water resources. We encourage you to use this web site as the year-round source for water-quality information, updates and seasonal tips." Below this, there is a section titled "MORE INFORMATION" with the text: "Learn more about Metro WaterShed Partners. For more information about the 'Minnesota Water — Let's Keep It Clean' campaign, e-mail Ron Struss or call 651-480-7708." The browser's status bar at the bottom indicates "Internet".

# Minnesota Water Let's Keep it Clean!

Fall  
2003  
Print  
Ad

## Patricia, Lake



Lake Patricia, age 12,830, after a long and grueling battle with contaminated runoff. Patricia is survived by 9,999 lakes and hundreds of rivers and streams. An active member in the aquatic community, Patricia contracted damaging amounts of algae due to high phosphorous levels given off by leaves and grass clippings that entered her system. In lieu of flowers, loved ones are asked to rake or sweep leaves from nearby streets and stormwater drains, and to mulch or compost this fall.

For more details visit  
[www.letskeepitclean.org](http://www.letskeepitclean.org)



Spring  
2004  
Print  
Ad

# Minnesota Water Let's Keep it Clean!

- Spring 2004 Radio Ad  
*Algae World*



30 Second Spot



One Minute Spot

# Will the lakes get better now?

- While following the law is important, there are many sources of phosphorus in urban landscapes.
- Levels of phosphorus in soils change very slowly – decades.



# What else can we do?

*test & amend  
your soil*



- Test your soil.
- A soil test is a good idea, especially if you are concerned that a lawn may need phosphorus.
- MDA Website – list of certified soil test labs

# What else can we do?

- Keep leaves and grass clippings out of gutters, streets and ditches.
- Clippings contain about 1/3 pound phosphate per 1000 square feet during the growing season.



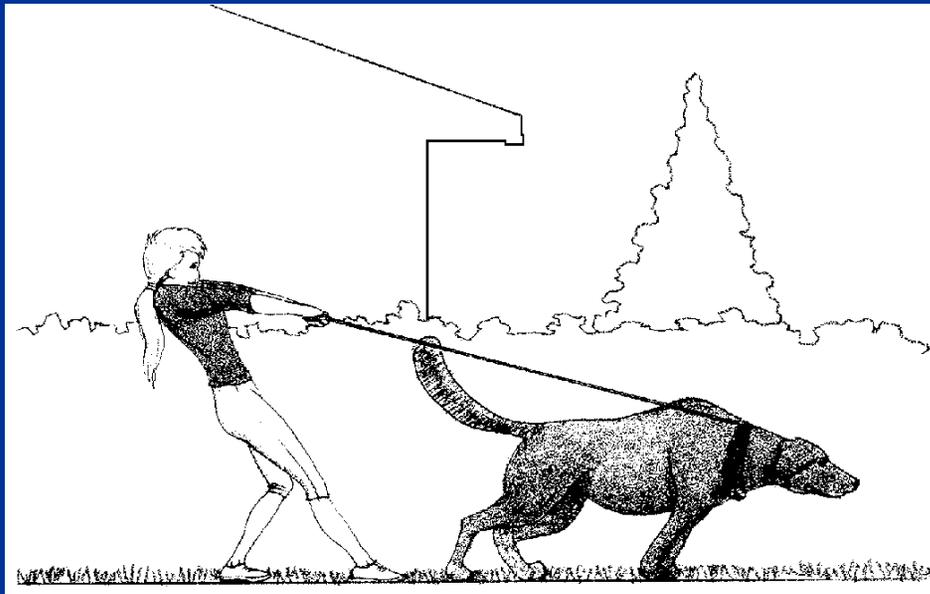
# What else can we do?



- Clean lawn and garden equipment on the grass, not on hard surfaces.
- Don't wash or blow soil or grass clippings into the street.

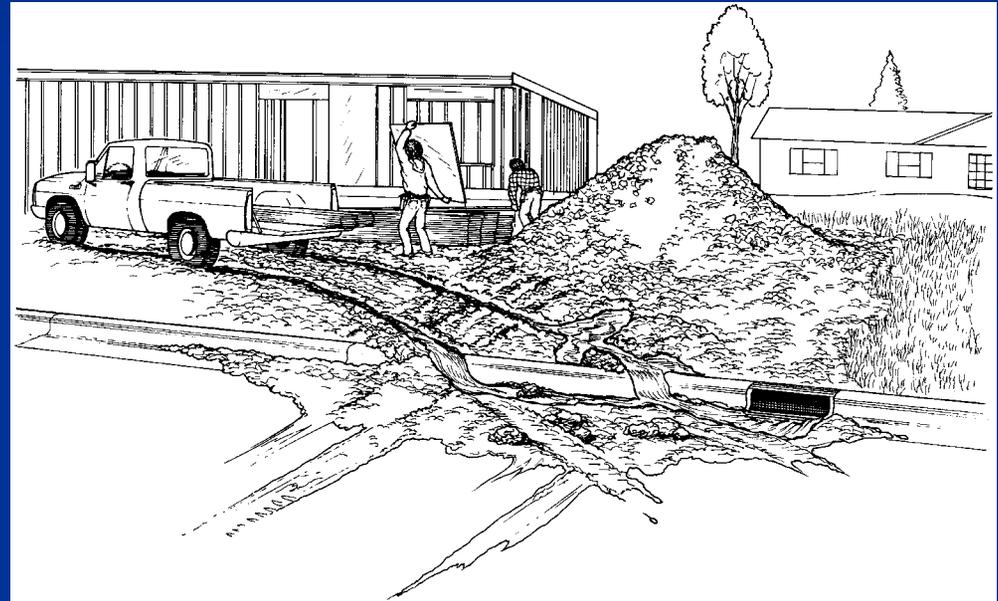
# What else can we do?

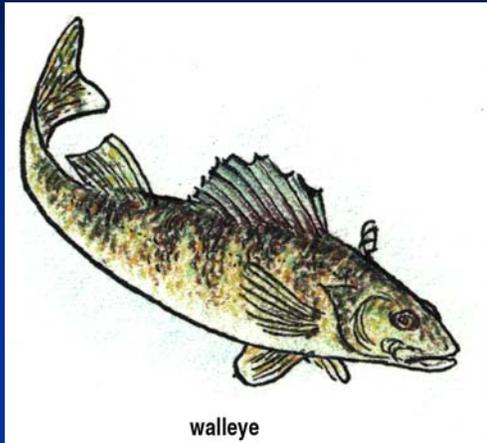
- Pick up pet waste promptly.
- Pet waste can contain harmful bacteria as well as nutrients.
- Don't allow pet waste in the street or ditches.



# What else can we do?

- Control soil erosion around homes.
- When left bare, soil is easily washed away with rain, carrying phosphorus with it.
- Soil erosion can be prevented by keeping soil covered with vegetation or mulch.





Thank You!  
Questions?  
Comments?



For more information: 651-297-7269

[www.mda.state.mn.us](http://www.mda.state.mn.us)

Click on “Water & Land”

Click on “Lawn Care & Water Quality”