

2012

Water Quality Presentation

by **John Nash**
Spring Lake Lake Board Chairman
Spring Lake Township Supervisor





SPRING LAKE PRIOR TO ALUM TREATMENT
(“GREEN PAINT”)

WHAT ALGAE EATS...



- **NITROGEN**
- **OXYGEN**
- **PHOSPHORUS**

- **NITROGEN**

AVAILABLE IN

THE AIR

- **OXYGEN**

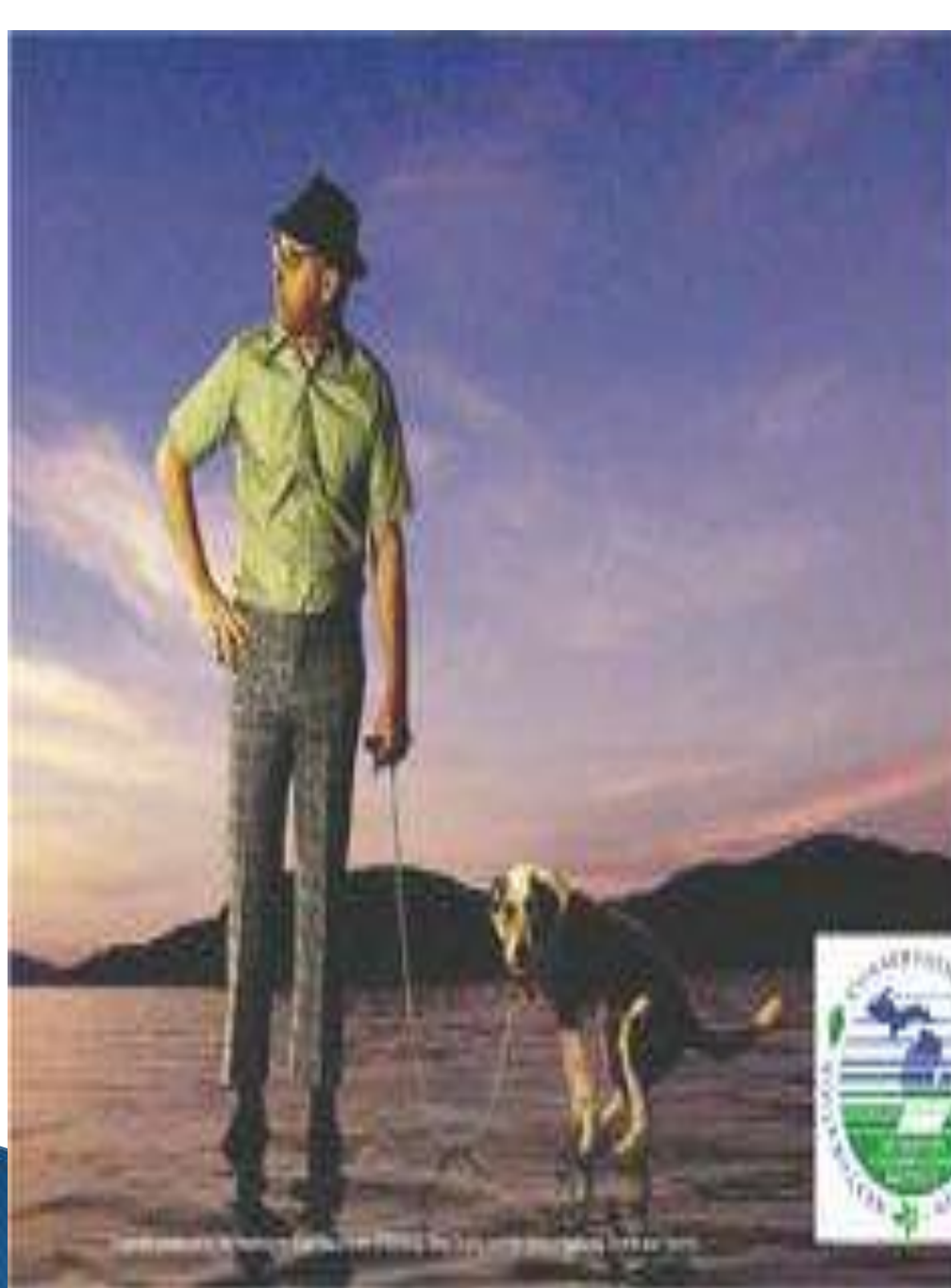
**AVAILABLE IN THE
WATER AND
THE AIR**

● PHOSPHORUS

**THIS IS THE ONE
ON WHICH
WE CAN HAVE
SOME IMPACT**

HOW DO WE REDUCE THE AMOUNT OF PHOSPHORUS AVAILABLE?

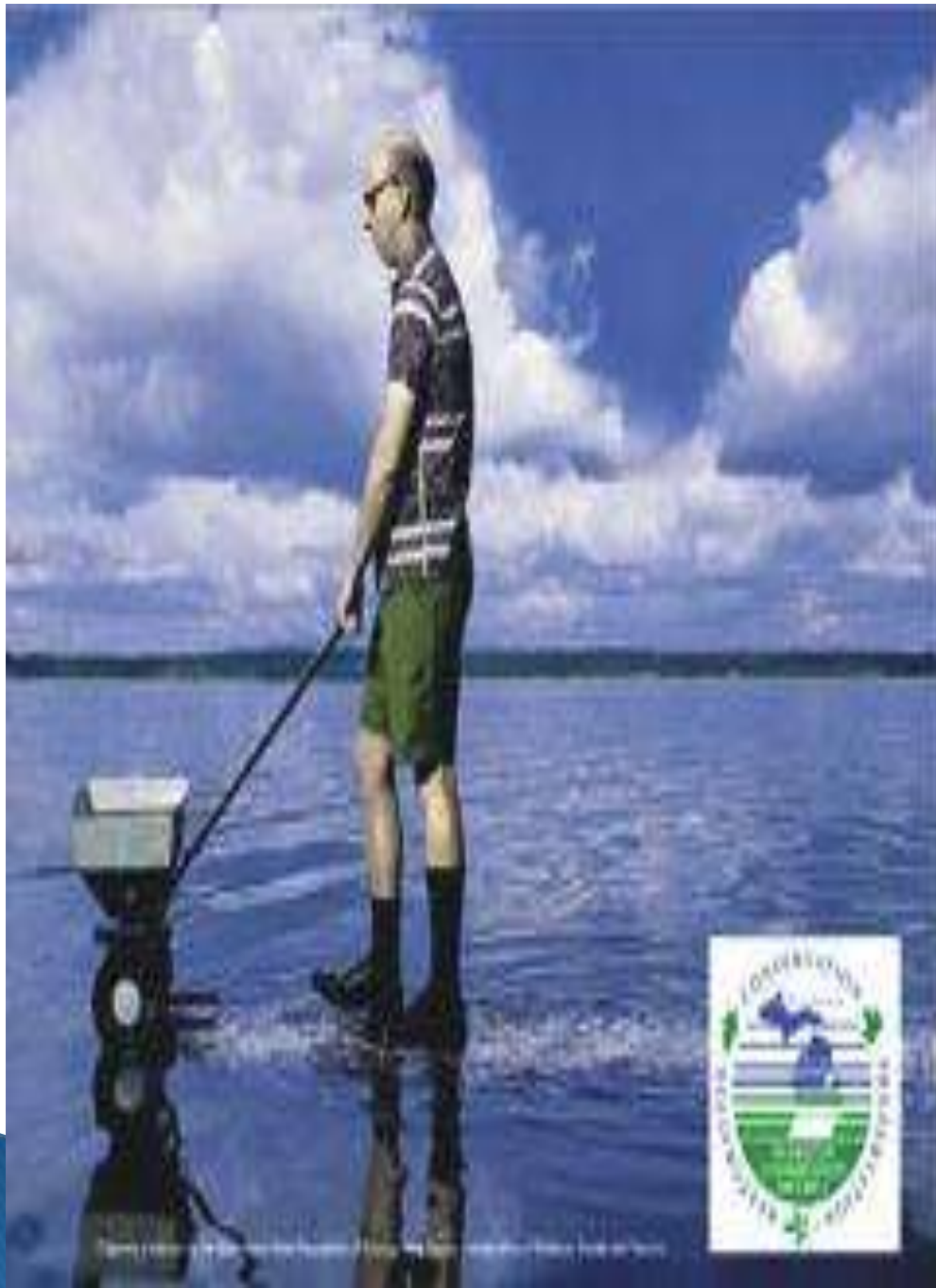
- ☒ **LAWN FERTILIZER**
- ☒ **FARM FERTILIZER**
- ☒ **RUN OFF**
- ☒ **GOOSE P 😞😞 P**
- ☒ **DECAYING MATERIAL**



WHEN YOUR
PET GOES ON THE LAWN,
REMEMBER
IT DOESN'T JUST GO
ON THE LAWN.

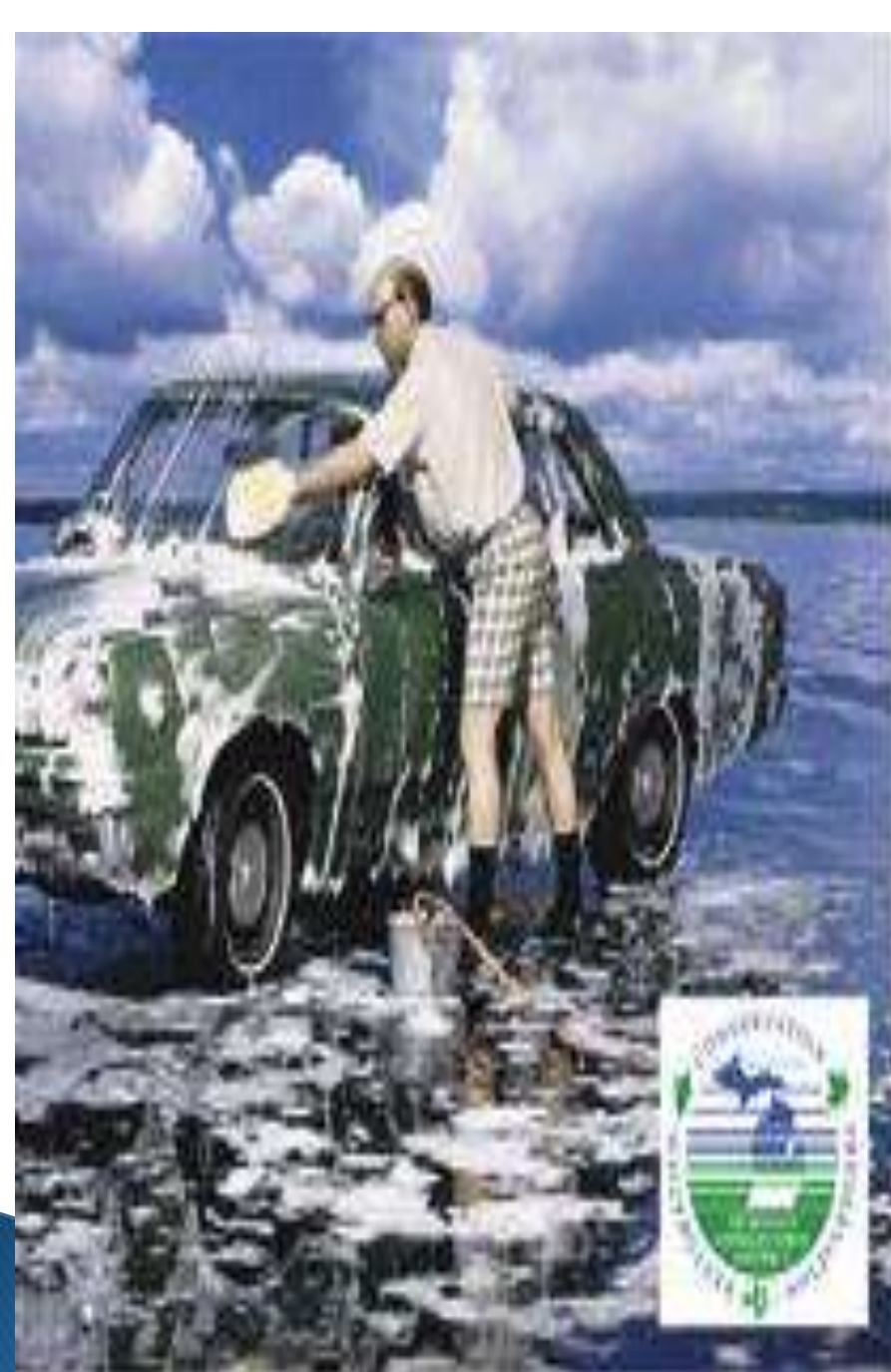


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**WHEN YOU'RE
FERTILIZING THE LAWN,
REMEMBER
YOU'RE NOT JUST
FERTILIZING THE LAWN.**

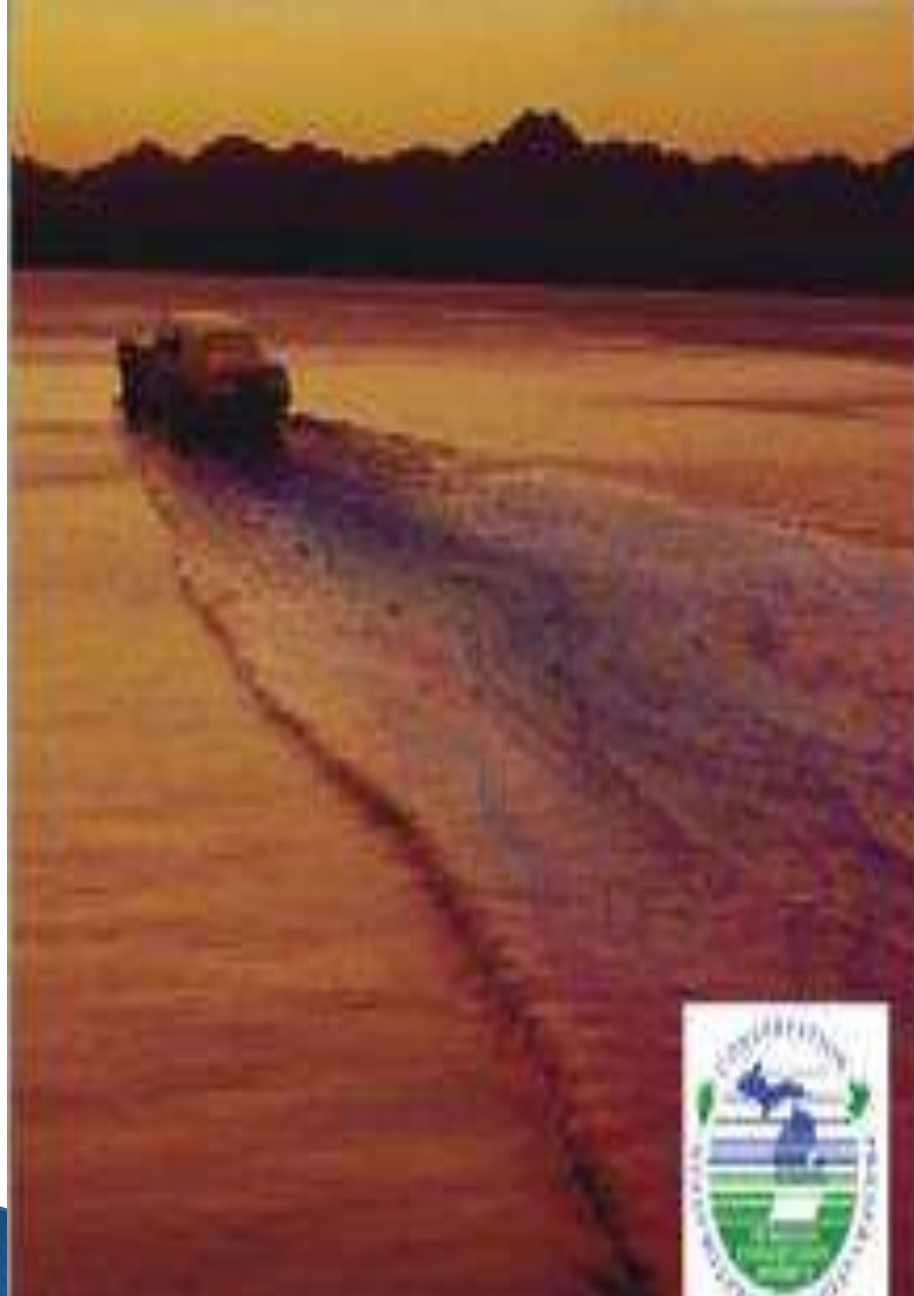
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**WHEN YOU'RE WASHING YOUR CAR
IN THE DRIVEWAY, REMEMBER
YOU'RE NOT JUST
WASHING YOUR CAR
IN THE DRIVEWAY.**

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WHEN YOUR CAR'S LEAKING OIL
ON THE STREET,
REMEMBER
IT'S NOT JUST LEAKING OIL
ON THE STREET.




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**WHAT THE
SPRING LAKE
LAKE BOARD DID TO
CONTROL PHOSPHORUS**



FIRST:

CHECKED SOURCES

- INCOMING STREAMS**
 - LAWN FERTILIZER**
 - LAKE SEDIMENT**
 - SOIL SAMPLES**
- 

SECOND:

WHAT CAN WE DO?

- ★ **EDUCATE**

- ★ **SEAL SEDIMENT**

- ★ **WORK TOWARD A
FERTILIZER ORDINANCE**

2004:

CONTRACTED WITH

GVSU WATER INSTITUTE

.....

VERY EXTENSIVE STUDY TO

SEE IF AN ALUM WOULD

SEAL OFF THE PHOSPHORUS

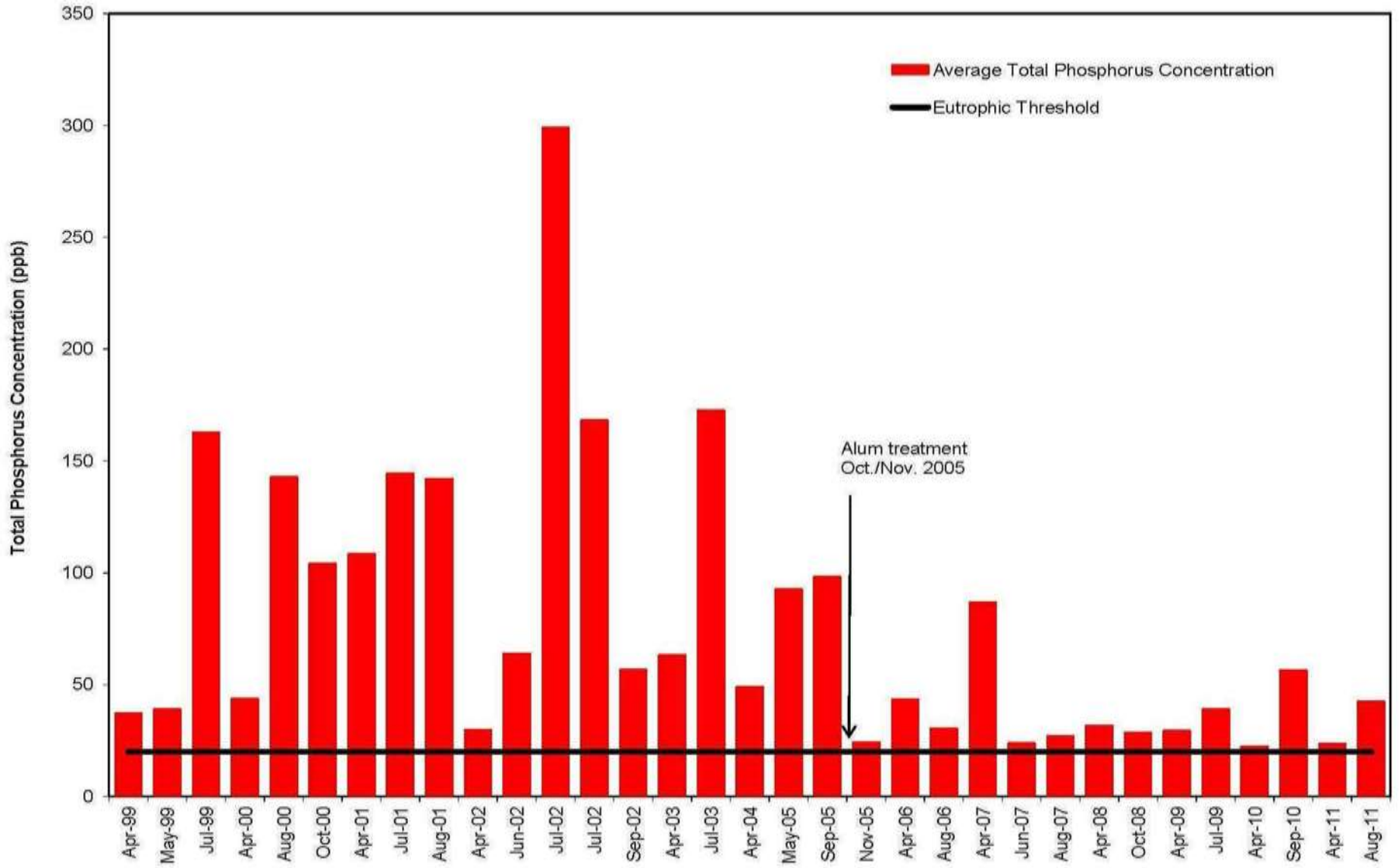
IN THE SEDIMENT

SPRING 2005:

GVSU STUDY RESULTS

.....

- ⇒ ALUM WOULD SEAL THE PHOSPHORUS IN THE LAKE BOTTOM SEDIMENT**
- ⇒ COST: \$1 MILLION**
- ⇒ NEED DEQ PERMITS**



★ **EVERY LAKE IS INDIVIDUAL**

★ **OUR RESULTS HAVE BEEN
VERY GOOD**

★ **NO GREEN PAINT SINCE
ALUM TREATMENT IN 2005**



SUGGESTIONS

- **DISCOURAGE FEEDING WATER FOWL**
- **REMOVE DEAD WEEDS**
- **REMOVE LEAVES**
- **PLANT TREES 50+ FEET BACK FROM WATER'S EDGE**

RAKE AND REMOVE SEAWEED AND LEAVES FROM SHORELINE



BEACH – DECOMPOSED PLANT MATTER



TREE TOO CLOSE TO WATER'S EDGE



MORE TREES TOO CLOSE TO WATER'S EDGE



DO NOTHING.

RESULTS WILL BE. . . .



SeClear*

Algaecide

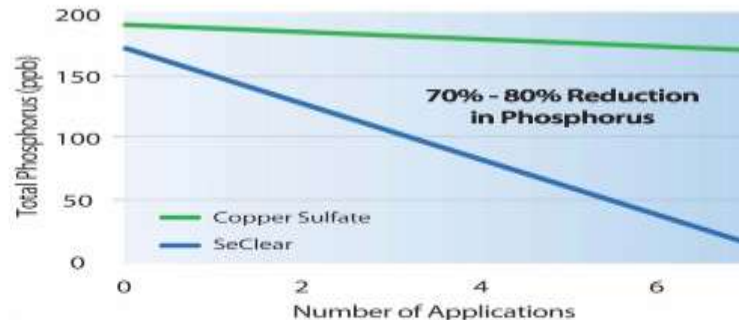
SePRO, the Algae Experts.



A Better Technical, Operational and Economical Solution for Algae Management and Water Quality Improvement

SeClear is the first algaecide and water quality enhancer in-one designed to replace routine algaecide programs. SeClear provides effective control of a broad-range of algae species while reducing in-water phosphorus levels with each application. The result is longer lasting control, improved water quality and aesthetics with reduced maintenance through time. Water treated with SeClear may be used for drinking, swimming, fishing, watering livestock and for irrigated crops, turf, fairways, putting greens and ornamental plants immediately following treatment.

- **Effective algae control**
- **Decreases algal growth rates with less potential for harmful biomass levels**
- **Removes phosphorus from the water column and improves water quality and clarity**
- **Fewer applications and/or lower use rates**



For more information about SeClear, contact your SePRO Aquatic Specialist or call 1-800-419-7779.



Pre-Treatment



14 days after treatment



30 days after treatment

QUESTIONS?

COMMENTS...