

GUEST COLUMN

# Play in this water? Not a chance

By Matthew B. Miller

**S**ultry nights. Sun glinting on the lakes. Summertime in Madison.

Glorious? Perhaps, if we don't go near the water.

Lakes Mendota and Monona are no longer inviting to swimmers as they once were. Lake weeds wrap their green leaves around swimmers' legs and arms. Organic scum washes up with the wind and lies in stinking heaps along our shores. During fall, iridescent bluegreen algae line our beaches and rocky shores.

Not a pleasant smell. Not a pretty picture. It doesn't have to be this way. We can remove the ingredients that nourish the lake weeds and algae that cause the stench.

Phosphorus is one such ingredient. It is everywhere. An essential building block of life, phosphorus is often cited as one of the most critical nutrients affecting plant growth in our lakes.

Dane County has made a good start by banning phosphorus from lawn fertilizer, a significant source of phosphorus in our lakes. This is a positive initiative.

Unfortunately, there is another large source of phosphorus entering our lakes. That is the phosphorus associated with a healthy soil cycle.

Leaves fall to the ground where they are eaten by worms and soil bugs. The passing of soil and vegetation through worms and bugs slowly releases nutrients necessary for new plants to grow.

Phosphorus is a component of all these — the leaves, the critters, and the soil. If you know where to look, you can actually "see" the soil phosphorus in the form of the dark topsoil and its dark decayed organic matter.

We have seen bare soil at construction sites, but perhaps haven't noticed bare, dark soil at the edge of our driveway. When it rains, the impact of the droplets loosens bare soil. The topsoil begins its migration toward our lakes, carrying with it phosphorus and other nutrients which contribute to the production of algae and lake weeds.

We can change this. This is not a problem caused solely by those who live near the lakes. As you walk your neighborhood, notice topsoil that deposits in the corners of sidewalk panels. This soil came from nearby, and is headed for our waters.

Now consider the terrace, the lawn between the sidewalk and the street. This soil receives the toughest treatment and the least respect. We put our trash and recyclable here for pick up. We pile leaves and branches. In winter, we pelt it with street salt and sidewalk salt.

Watch for bare patches on the terraces. Lacking vegetative cover, this soil is prime for runoff to our lakes. Water moves downhill, carrying the topsoil with it, from curb to storm sewer, and then into our streams and lakes.

We need a plan to cover the terraces where the soil is bare, and identify shade-tolerant and salt-tolerant native plant ground covers that can withstand soil compaction and survive being covered by leaves until the leaves are removed.

All different sources of phosphorus contribute to the problem. Everything we can do to control the phosphorus helps to solve this problem which affects us all. We all want safe, swimmable waters without toxic algal outbreaks and health advisories.

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