

Water quality: A Minnesota maelstrom

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When it comes to protecting water, Minnesota voters have stepped up twice, by amending the state Constitution to raise funds through the State Lottery and by expanding the sales tax. The result is tens of millions of dollars spent annually on the state's storied lakes and rivers.

So, with all that spending, water quality must be improving, right?

No, say multiple state reports. In fact, things are getting worse.

Last year Gov. Mark Dayton declared that water quality decline is "serious." He assembled a daylong water summit in February, and he's now embarked on a campaign to explain to a tuned-out public that the problem really is as bad as reports say.

But despite all the spending, planning and persuading — and faux cooing about "success" — the quality of lakes, rivers and groundwater continues to slide.

A must-read series by the Star Tribune's Josephine Marcotty ("[Danger Downstream](#)," Oct. 2-4) detailed how rivers like the Mississippi are spiraling toward an "ecological precipice." The north-flowing Red River is so sullied when it leaves the U.S. that it's enlarging an oxygen-depleted "dead zone" in Lake Winnipeg.

The Minnesota Pollution Control Agency lists 4,600 lakes and stream segments as "impaired," some no longer "fishable or swimmable." Nitrates in groundwater from excessive fertilizer use exceed safe-drinking standards.

It's true that 1970s-era laws brought cleaner water and air than we had in the "good old days," when the rivers and sky were, literally, smelly waste dumps.

But those laws excluded pollutants like farm and lawn chemicals, and local zoning has promoted conversion of forests to cropping and other development that brings ever-increasing runoff of bad stuff. There's worry over spreading invasive species and even over residue of medicines carelessly flushed down toilets.

It's a classic "tragedy of the commons," in which folks acting "rationally" in their own individual self-interest damage a common resource in a way that harms everyone, including themselves.

No one's to blame. Everyone is.

Even the lakes deceive: their shimmering sky-blue reflections mask their degraded condition, the way Botox props up a sagging face. The delusion breeds public indifference, regulatory under-reach, and political timidity.

Dayton's administration is stocked with impressive environmental talent who understand what needs doing. But they're checked by contrary legislators.

For example, in 2015 Dayton signed into law his bill requiring grassy “buffers” around all streams and ditches to soak up contaminants. But before the signing ink dried, farm groups teamed with legislative allies to neuter a laudable law by excluding private ditches.

Regrettably, agriculture’s distended influence increased with the last election, bringing to the Capitol more lawmakers with an anti-environmental bent and an elevated distaste for spending, especially in amounts needed to give lakes any chance at recovery.

Already, close to half of Minnesota’s lakes and rivers are damaged, and the number grows with each new survey. That’s “hair on fire” territory, and lays bare a need to seriously review things.

It starts by facing an uncomfortable truth:

Current efforts to clean lakes and rivers don’t even maintain present degraded levels. The damage is so pervasive that restoration of all but a few select lakes would cost far more than the state’s treasury could ever cover.

Some even doubt whether restoration is possible. Nutrients that trigger biological actions that suck life-supporting oxygen from lakes are still freely washing into waterways where they do instant harm and, worse, settle into bottom sediments and slowly release, causing continuing damage for years.

The state has vast stores of data on water conditions through a massive — and expensive — network of monitoring stations and surveys. And while some of that’s necessary, it seems that a whole lot less needs to be spent on measuring and a whole lot more on fixing.

A profoundly different approach is needed if there’s to be any realistic hope of protecting the state’s \$13 billion tourism industry and billions more in lakeshore-property values that are tied to quality water.

One priority is to safeguard the northern tier of good-quality lakes and those that yield huge sport fish that anglers annually spend \$2 billion to catch.

University of Minnesota fisheries expert Peter Sorensen advocates “fresh water preserves” for high-quality lakes, similar to ocean protected areas. It makes sense, if for no other reason than that it costs much less to prevent than to reverse damage.

Another priority is “triage” — to identify lakes that can and should be protected so that limited resources may be directed to where they can best work. It’s a fool’s errand to pursue a policy of trying to restore all damaged lakes and watersheds.

Water planners caution: “It took decades for lakes to become impaired, and it’s going to take a while to restore them.” They put the timeline at 20 to 30 years, and the State Water Council thinks watershed issues can be addressed by 2034.

This is high-sounding diversion from the urgency to act. There’s simply not time, and here’s why:

Experts list key water-quality challenges as nutrient overload, land-use change, spreading invasive species, and — the biggie — climate change.

Lakes are warming faster than previously understood. Basins are ice-free longer, with more heating days accelerating growth of short-lived algae whose decay consumes life-supporting oxygen.

Combined with removal of lakeshore vegetation by property owners who prefer rock riprap, warming destroys deep-water habitat for fatty feeder fish that grow large sport fish like walleye and muskie.

As cold-water lakes warm, walleye habitat gives way to conditions better suited for largemouth bass, says a recent report by the U.S. Geological Survey. By midcentury, the number of “walleye lakes” in Wisconsin, the studied state, will drop noticeably.

Indeed, climate warming is seen as serious enough for the Minnesota DNR to join with the Leech Lake Area Watershed Foundation to save large, deep-water lakes that support tullibee, those fatty feeders. The plan is to protect forests and other natural cover to maintain 650 high-quality fishing lakes, some already stressed.

The idea of “triage” to concentrate resources on savable lakes is conceptually supported by Minnesota’s Clean Water Roadmap. It says: “Applying resources together in a prioritized, targeted ... manner [will increase] the likelihood of success.”

But the half-dozen state agencies endorsing the report each have different notions of prioritizing. What’s needed is a single state ranking of waterways by such metrics as biological health, recreational popularity and willingness of lakeshore owners to financially participate.

Political minefields are inevitable when hard choices must be made, and so it is here.

Lakeshore folks will see their lake as priority. Nutrient reduction will continue to be opposed by chemical suppliers and farm interests, which have effectively derailed needed rules for decades and pushed the massive cost of nitrate removal to dozens of small towns.

Another challenge is the local-level mind-set that favors tax-yielding development over all else. The very feature that drives property values — water quality — is compromised for short-term financial expediency.

Effectively protecting prized lakes in the land of lakes would enjoy broad support, especially by recreationists and those in the central-lakes region who benefit hugely from quality water.

It’s time to stop fiddling.

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