

by Bob Lohmann

think **BIG**

GCI's Bob Lohmann explains how courses can be a solution to their communities' water mitigation problems.

When superintendents, along with most of us in the industry, consider water management issues, I think we naturally think first about water "quality" or the increasing concern over water "availability." Clearly these are pressing concerns.

Golf courses have not generally been seen as a positive force for the public when it comes to the maintenance of water quality, or the preservation of water resources. We in the industry know the real truth, though: Wetland areas and the natural filtration qualities of turfgrass can ably serve a community's water quality goals while returning that cleaner resource to the water table we all share. Obviously this message is not being communicated to the larger public well enough, not nearly. We all need to do a much better job in this regard.

But water management issues should be more broadly considered. They don't have to be a source of insecurity for golf course superintendents. They can actually enable better public relations in the immediate community and enable course managers themselves to upgrade their course products, at prices that are reduced or even mitigated by the very water management issues many communities are obliged to address.

Plan projects that make the most of a water element and show off the course's commitment to water management.



BEFORE



AFTER

Let me flesh out what I mean, and allow me to cite multiple real-life examples.

We're working right now with a community in Wisconsin where the city is desperate to identify places within its jurisdiction where it can direct water, store it, clean it up, and release it to a nearby river. The city is obliged to address these water quality and storage issues, by law. The city-owned golf course is going to be key to implementation of these remediation plans — and this municipality is going to receive a valuable redesign and upgrades in the bargain, with limited, if any, impact on its own capital budget.

The project team, which includes Lohmann Golf Designs as the golf course consultant, is 50 percent finished with the design



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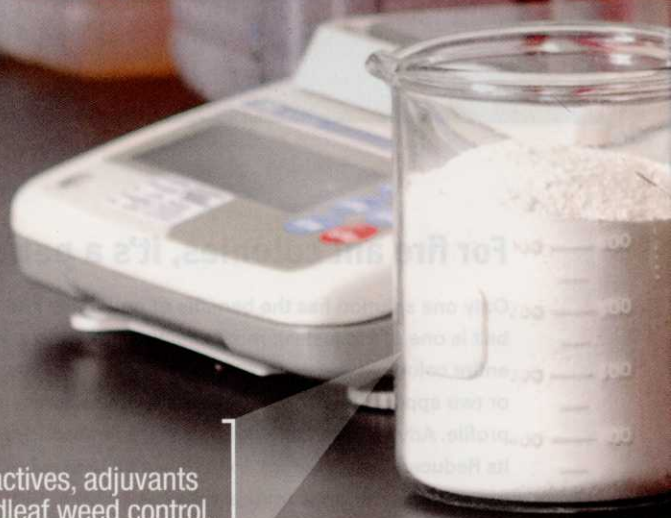
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The Westmoor Country Club in Wisconsin was approached by the City of Brookfield to work together in handling a public water-quality problem: a nearby neighborhood development was causing silt, salt and other debris to enter into the city stormwater systems. The course worked with Lohmann and the city to redesign the 15th hole to take on and clean the water. The redesign included adding a filtrating wetland system, an expanded water feature and stone retaining wall.



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Water quality systems can be worked into existing planned renovations.

phase of this project. We're building two large retaining ponds that will impact 4-5 different holes. As is, the course is a modest layout with a few interesting hills and dales, but it is never going to host a U.S. Open. In other words, those four to five holes — including four brand new greens — will all be vastly improved by the renovation, while further course-wide upgrades will also occur as some 100,000 cubic yards of fill are deployed from the creation of these ponds.

The overall price tag has not yet been determined but it will be covered by the city's stormwater division, mainly via funds provided for the bigger, city-wide water quality effort. So the course improvements will likely

have minimal impact on the golf course's operating budget, other than some fertility costs during grow-in.

Superintendents need to think big and get strategic. Most every community is struggling with these same water management issues. Golf courses are vital, vibrant members of the community that also happen to be vast, in terms of acreage. It only makes sense that they actively partner with cities and counties to be part of larger solutions that also benefit course quality, course maintenance, course budgets and golfers.

The course does not have to be municipal in order to make this sort of partnership work. A few years back, another Wisconsin com-

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“We have to acknowledge that while water conservation is a serious issue, sometimes the problem is actually too much water.”

munity, the City of Brookfield, approached a longtime client of ours, the private Westmoor Country Club, about solving a festering water-quality problem: silt, salt and other street debris running off a particular neighborhood development. The compromised water resource was already coming onto the golf course through an existing pipe.

The club, with our help, took control of the remediation effort. We created a filtrating wetland system on the 15th hole where this water could be cleaned before it re-enters the city stormwater system, and we

redesigned the hole to accommodate the change – expanding the water feature around the green and building an attractive stone retaining wall. We fit this work into a larger renovation effort that was already underway, but all the work at 15 was funded by the city.

Superintendents need to view these projects not as nuisances, but as opportunities – for their courses and their communities at large. We have to acknowledge that while water conservation is a serious issue, sometimes the problem is actually too much water.

In suburban Chicago, we’ve just finished a serious renovation job that was enabled by a similarly serious stormwater management issue. Poplar Creek Country Club had been a nice, upscale municipal facility for decades. But over the last 30-plus years, the land all around it had been developed both residentially and commercially, creating huge stormwater problems for the golf course and immediately adjacent landowners.

We vastly expanded the on-course water storage capability to accommodate the runoff that had routinely flooded the golf holes and upstream properties. In the process we upgraded all 18 holes in some capacity, improving drainage in flood-prone areas, naturally, but also integrating into the routing all this new

pond and wetland space (read: more drama, more risk-reward elements). Again, that much pond-digging creates a great deal of fill. We put all that fill to good use in raising golf features (out of the floodplain), creating more playability (forward tees) and improving separation of uses (mounding around the range).

Today, The Bridges at Poplar Creek is a far better golf course in almost every respect. Was the course budget unaffected by all this renovation work? No. But the park district realized achieving long-term sustainability, a grand mission of the district as a whole, required a change and so they committed the necessary funding. Indeed, a course renovation project would never have been considered if the larger

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Sometimes being aware of water management means equipping the course to handle too much water.

district goals were not served by the project. In addition, maintenance costs at The Bridges are already trending down: less maintained acreage; no more clean-up costs related to regular stormwater damage and better course revenues. The flooding used to be so bad, the course had to be closed for days at a time; Poplar Creek had a reputation as a place that was always soggy, which further eroded rounds.

We frankly see stormwater management and water quality management as largely one and the same. When you gather all that water on a golf course site, you may as well clean it before

releasing it to the water table or a nearby river/stream. Our firm played a role in pioneering this dynamic with our renovation work at a pair of Chicago facilities in the early 2000s. Our work at The Traditions at Chevy Chase in Wheeling won a Renovation of the Year award in 2004, but our work at Deerpath Golf Course in Lake Forest is perhaps the better example.

The course had been there since the 1920s but a hospital – basically a giant slab of concrete and hardtop – had since been built across the street. A recent expansion made things worse. Run-off was supposed to be con-

tained but in reality it wasn't: it caused serious flooding on and around the golf course.

In the end, it was the golf course that solved the problem, and the impacts went well beyond the course boundaries. Lohmann Golf Designs designed and built an elaborate, inter-linked water storage system at Deerpath that gathered all that water, created an extraordinary new wetland habitat, and just happened to bring some nifty new risk-reward strategies to several holes. Pretty neat solution – better than costly storm-sewer upgrades. But we did more than that: The on-course

filtration capability we created through this chain of wetlands vastly improved the quality of retained water. This matters, because no water storage system is entirely closed. At Deerpath it continues to head off site today – all nice and clean – into the Skokie River.

That's not exactly making lemonade from lemons. But it's close. **GCI**

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