

The Green Pages

A compendium of news and opinions about government, golf and the environment

Politicos propose 'market-based' environmental incentives

Some politicians and environmental groups are calling for a new approach to solving environmental problems. "Market-based environmental incentives" would operate by making those companies that create environmental problems bear the total cost to society through higher product costs.

Costs for waste generation by companies and individuals would be geared to the amount they produce. In the same respect, if a company produced a chemical that contaminated groundwater supplies, that company or companies that manufactured that product would pay for the total cost of cleanup.

Keep a close eye on state legislators for market-based approaches that apply to golf courses and development.

Who's wasting it?

Water Fact: Approximately 42 percent of household water is used for landscaping, and landscapes are typically overwatered by 20 to 40 percent.

Curb chemophobia

The Natural Resources Defense Council has called for an 80 percent reduction in agricultural pesticide use.

The organization cited the recently completed EPA well water study as a source for proposing such drastic cuts.

Although the cuts are aimed at agricultural uses, superintendents should brace themselves for future demands by such organizations concerning turf and ornamental products as well.

Public information — and lots of it — is the only way to curb chemophobia.

Traces of herbicides found in rainwater

Traces of herbicides were found in rainwater samples from 23 states in a study recently completed by the U.S. Geological Survey.

The herbicides detected included atrazine, alachlor, metalachlor and a degradation product of atrazine. The main source of the herbicide pollution is believed to be agricul-

tural pesticide use.

This is the first major study to confirm that pesticides can be transported through vaporization into the atmosphere.

Although turf applications were not believed to have contributed to the pesticides found in the rainwater samples, superintendents should be prepared to answer questions from concerned citizens and members.

More restricted pesticides likely

The Environmental Protection Agency has proposed new criteria for determining which additional chemicals should be classified as "restricted-use" pesticides.

The additional criteria, which are designed to protect groundwater supplies, use data from persistence and mobility research and actual detection in groundwater.

These additional criteria are expected to move several turf pesticides now classified for general use to the restricted-use list within three to five years.

Chemical firms face ad charges

Chemical companies as well as lawn-care providers are coming under fire for false or misleading advertising.

This scrutiny focuses on claims that products or services are "non-toxic" or "completely safe."

While FIFRA does not regulate lawn-care company advertising, it does prohibit advertisers of chemical products from making claims as part of a pesticide's distribution and sale that differ substantially from claims made on the label.

Superintendents should be knowledgeable and candid about the toxicity of golf course

chemicals when talking to the media about the uses of those chemicals.

High Court OKs local pesticide laws

The U.S. Supreme Court has ruled unanimously that a local government may enact pesticide rules more stringent than federal requirements.

The June 21 decision overturned the Wisconsin Supreme Court's ruling that an ordinance adopted by the town of Casey, Wis., was illegal because it pre-empted the Federal Insecticide, Fungicide and Rodenticide Act.

The 1985 ordinance requires a town permit to use pesticides on public lands or to perform aerial pesticide applications on private lands.

Forum examines wetlands classification

In an environmental forum sponsored by GCSAA, John Meagher, director of EPA's wetlands office; John Studt, chief of enforcement for the U.S. Army Corps of Engineers; and Rep. Jimmy Hayes (D-La.) discussed how wetlands should be classified.

Hayes, who has introduced a bill that would classify wetlands for protection according to their ecological value, said that the current policy violates the rights of landowners.

"The Fifth Amendment to the constitution states that the landowner has the right to determine what is allowable and that government intrusion is the exception rather than the rule," he said. "If the government does intrude then it is only done under circumstances in which (1) the landowner's rights are protected and (2) if land is taken, the landowner

should receive compensation or mitigation.”

His bill would strip the EPA of its veto power over wetland development and vest greater administrative responsibility in the Army Corps of Engineers.

Under HR1330, wetlands judged to have the highest ecological value would be classified as Type A wetlands. Permits for activities in these wetlands would be tightly regulated, and owners would be compensated for the value of their property.

The bill would allow permits to be issued for activities in Type B wetlands — those judged to have significant but not necessarily critical functions — if mitigation measures were undertaken.

Type C wetlands — those determined to have little ecological value — could be altered without a federal permit.

The current definition of wetlands brought millions of acres under federal protection — prompting some landowners to claim federal infringement on their fundamental property ownership rights.

Studt explained the Corps of Engineers' and EPA's efforts to simplify and streamline the wetlands permitting process.

Both Studt and Meagher commended the February issue of *Golf Course Management*, which was sent to them prior to the forum, and referred to articles while giving their presentations.

“You folks (in the golf industry) have an increasingly positive story to tell, and you should do so,” Studt said.

Bill aims to expand simplified pensions

Reducing the cost and red tape involved in small business pensions is the goal of a crop of

Many fail to see the humor in Ringer commercial

Perhaps you've seen this commercial... a pitchman, standing in front of a series of drawings, delivering a lecture:

“These are the chemicals that go into the lawn that go into the rainwater that goes into the streams that go into the lakes that go into the fish that go into the people who put the chemicals in the lawn in the first place.”

Those are the words from a recent TV spot produced by Ringer Corp., a lawn-care products company based in Minneapolis. The spot, intended to be light and humorous, publicizes Ringer's “all-natural” Restore fertilizer.

Controversy surrounds the commercial not only because of the anti-chemical stance it implies, but because some believe the claims it makes are without scientific support. In a recent *Wall Street Journal* article, ChemLawn Services Corp., O.M. Scott & Sons Co., and other competitors attacked the ad, calling it “false” and “misleading.”

Although the commercial is for a home lawn-care product, some superintendents have reacted to what they describe as unfair criticism in the ad's message. A number of GCSAA members have called headquarters after see-

ing the ad. GCSAA's voice has been added to the number of corporations and organizations that contacted Ringer.

Ringer responded by saying the company's “main motivation is to anticipate the market trends and to provide effective products,” said Scott E. Boutilier, commercial marketing director. “This objective coexists with the debate over chemical restriction but did not cause it.”

With home lawn-care products and services increasingly under the microscope, the golf/turf industry often finds itself under similar scrutiny.

In light of the harsh anti-chemical rhetoric, superintendents need to do their best to make sure that all the facts about turf chemicals and practices are made known to the public.

“Now is the time for GCSAA members to get in touch with their club members, civic groups, media and other public organizations to educate them that professional golf course superintendents are responsible individuals who respect the environment,” says Charles T. Passios, CGCS, the association's government relations liaison.

new U.S. Senate bills and a Department of Labor plan.

The simplification of pensions is targeted for businesses with fewer than 100 employees.

Currently, only eight percent of such businesses have pension plans. The proposed Simplified Employee Pension plans (SEPs) would be managed similarly to individual retirement accounts.

Only businesses with fewer than 25 employees are now able to take advantage of SEPs.

There are several different proposals from both the Democrats and Republicans, as well as one from the Department of Labor.

The proposals vary on the maximum contribution per year and employee/employer

shares of contributions.

Of course, any retirement plan must include all full-time employees of the business.

EPA: Groundwater protection is states' job

In a task force report and in a speech to a group of governors, the EPA has been saying that it is largely the responsibility of the states to protect groundwater from pesticide contamination. The Groundwater Task Force, which was formed in July 1989 to review the agency's groundwater protection program and develop policies, released its report in early May.

The report noted the importance of the state role in managing and protecting ground-

water, and said that such management could require decisions on groundwater allocation, land use, and pesticide restrictions.

EPA is encouraging the states to develop “generic” management plans, according to Susan H. Wayland, deputy director of the EPA's Office of Pesticide Programs. Wayland addressed the National Governors Association's Conference on Comprehensive Groundwater Protection Programs in March.

Given the economic crises many states are experiencing, it is unclear how these plans will be financed, managed and enforced. Superintendents will need to keep abreast of changing regulations as states develop their own groundwater protection programs.

Effluent: A Trojan Horse?

Last summer, President Ray Hansen asked me to become involved with the South Florida Water Management District by leading a group representing golf courses on a committee that was drafting the water district's "policy document."

This document will be the blueprint for future water use. Each of Florida's five water districts will have a similar document drawn up by the end of the year.

My involvement with the committee and my experience in using effluent water for the past seven years has led me to some

specific conclusions on the merits and pitfalls of its use.

As a source of irrigation water, treated effluent has some plusses. Depending on its treatment level, it can contain a high degree of nitrogen; the water I have been getting from my local utility runs 20 milligrams per liter.

How much of this nitrogen actually gets to the turfgrass plant has not been established. The lab technicians of my local utility company estimate that 65 percent of the nitrogen is lost to volatilization during the process of dispersing it through the irrigation system.

Furthermore, the Florida Department of Environmental Regulation has set the maximum allowable limit of nitrogen in "irrigation quality effluent" at 10 mg/l.

If your turfgrass plants are getting 3.5 milligrams of nitrogen per liter of water from your irrigation system, they are not getting enough nitrogen from the irrigation to save you any money on your fertilization program. The benefit of this material as a source of nitrogen is minimal.

On the other side of the coin, effluent water does contain enough sodium to cause concern.

In the final process before entering the pipeline, the effluent must be treated by chlorine injection to kill the bacteria. We all agree this has to be done, especially since the water is to be sprayed in areas of public access.

But that process forces us to deal with sodium levels in the soil that are three or four times higher than they would be if we were using groundwater.

Excessive levels of sodium not only cause turf loss; they also reduce the efficiency of other chemicals and fertilizers. We end up spending more money without getting any increase in turf quality.

In a subtropical climate such as ours, heavy rainfall during some parts of the year will help flush the sodium out of the soil, but it builds up again during the dry seasons.

And sodium isn't my only concern.

Zinc, copper and boron are all quite abundant in treated effluent. After several years of using effluent on the JDM golf courses, these three heavy metals are approaching levels of toxicity to the turf.

Furthermore, since the pH of effluent generally ranges between 7.5 and 8.5, the pH of soil irrigated with effluent will gradually increase, creating another toxic situation for the turfgrass plant.

Whatever nitrogen benefits might be derived from effluent water are more than offset by the costs of dealing with sodium, heavy metals and soil alkalinity.

An even bigger issue is the loss of turf quality that is not so easily explained to the membership and could cost some people their positions.

And of course there is the bottom line: the cost of the material to the golf course.

The re-use of wastewater is one way for utility companies to get rid of their hazardous waste. Their present methods of deep-well injection and ocean outfalls have come under so much sharp criticism from environmentalists and water conservationists that DER and the water management districts have forced the utility companies to create re-use plans.

Basically, each utility company has two years to develop a plan to begin re-use within five years and have 100 percent re-use within 20 years.

Before its plan can be accepted, a company must have signed contracts with the end users, showing daily and yearly flow projections.

Their need for those contracts gives us some leverage.

The golf course operators in each utility service



Tom Benefield, CGCS

area should determine the fair market value of treated effluent before they begin negotiating with the utility companies.

Right now, utility companies typically pay about 40 cents per thousand gallons to build the infrastructure to dispose of their effluent. That's the maximum anyone should pay... but why should we pick up the whole tab for disposing of someone else's hazardous waste?

Collier County Utilities has one of the fairest arrangements: the golf courses on their contracts pay between 4 cents and 10 cents per thousand gallons — approximately what it would cost a golf course to operate a recharge well for irrigation.

Managers at Collier County Utilities maintain that the lion's share of the cost of disposal should be borne by the residential customer. He's the one flushing the toilet.

Forcing a golf course to pay more than the fair market value for treated effluent has the effect of placing a water tax on the only remaining greenbelt recharge areas of the urban environment.

What sense does that make?

Not only would golf courses be recharging the aquifer by re-using treated effluent, but they would be paying a tax for the right to provide this necessary community service!

The utility companies claim that the end-user should pay the whole cost of the material because the end-user is receiving the benefit.

What they don't mention is that peddling effluent to golf courses leaves more water in the aquifer for them to sell to an expanded service base.

A recycling solution utility companies won't even discuss is piping the effluent back to the residential customers who produced the material in the first place. Constructing those pipelines would cost the companies 10 times what it will cost to install lines to golf courses. And they would have no choice but to pass the cost on to the customers.

So even if the utility company absorbs the entire cost of building the pipelines to the golf courses, it is saving its customers 90 percent of the cost of the alternative.

Another reason utility companies will argue against sending treated effluent back to residential customers is that 50 percent of the potable water sold to homeowners is used for landscape irrigation. If the companies were to force residential customers to irrigate with treated effluent, they would be cutting their revenue from potable water sales in half.

So as we deal with this complicated issue over the next six months, here are some things to keep in mind:

- We are willing to make land that is worth hundreds of millions of dollars available for disposal of hazardous waste.
- We have pipelines, pump stations and sprinkler heads worth millions of dollars already in place.
- We in effect already have paid our fair share. Every dollar we have spent on land and infrastructure is one less dollar that John Q. Public will not have to shell out of his own pocket.

A representative of a utility company once told me, "We may have a moral obligation to re-use wastewater, but it is politically unfeasible to ask for rate hikes on sewer bills of residential customers to pay for it."

On another occasion, a member of the SFWMD board of governors told me that the attitude of elected officials about who should pay for something comes down to three solutions:

- A. Charge the rich and wealthy.
- B. Target special interest groups
- C. Charge the end user.

Our work is cut out for us. We must explain to the rule makers exactly how the golf industry fits into the water puzzle.

Even in the driest of years, we are net contributors to urban, shallow aquifers.

We have a positive story to tell.

We must get out and tell it.

*The man
who
flushes
the toilet
should
have to
help pay
for
disposing
of the
hazardous
waste he
creates.*



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One way or the other... It's coming

*Learn to fly
or you'll
never know
what hit
you!*

Green Side Up



Joel D. Jackson

Joel D. Jackson, CGCS

Once upon a time in a little village called Flog there lived an ostrich and an eagle. Of course, they had some obvious differences, but all the ornithologists in the world agreed they were indeed birds. They lived in peaceful harmony with their neighbors, the humans.

One day, the humans that shared the village with the ostrich and the eagle decided the feeding and living habits of these two birds might be fouling the forests, fields, and streams. The village elders met one night and made up a list of rules that the ostrich and the eagle must obey if they were to remain living in the village of Flog. The elders did not tell the ostrich and the eagle about the rules. They merely posted a notice containing the rules in the village square. The notice said the ostrich and the eagle had 30 days to comply with the rules or they must leave.

The next morning the eagle saw the notice, and flew over to tell the ostrich. The ostrich was too busy to talk to the eagle. He didn't have time to discuss rules and regulations. He had work to do. So, the eagle went home to think about the new rules on his own and decide what to do. The next day the eagle went back to the ostrich's house to get him to go with him to talk to the elders about the rules, but once again the ostrich was too busy to sit down and talk to the eagle. So, the eagle went by himself to see the elders.

The eagle reminded the elders that there were many things that he did to help the village. While he might take fish from the stream for food, he also kept mice from stealing the grain. And while he might use some kindling to build his nests he also gave warning when strangers appeared.

The elders began to understand that they might have acted hastily in making the rules, so together they wrote some new rules that both could agree upon for the good of the village.

When they were through, the eagle said, "Tomorrow, come out to the meadow and I shall show you some flying tricks that you've never seen before."

The next day the elders crowded into an ox cart to go to the meadow to see the eagle fly. The way to the meadow passed by the ostrich's house. The ostrich could hear the sound of voices as the cart drew closer. He went outside to see what was going on. When he saw the cart full of elders coming around the bend, he thought they were coming to discuss the rules with him. Being an ostrich, he did the only thing he could do in this situation. He stuck his head in the sand, and hoped that they would go away.

Just then one of the elders spied the eagle practicing some loops and dives. "Look! Look! There's the eagle," he cried! The cart driver was looking over his shoulder trying to see the eagle and the oxen veered off the path and trampled the poor ostrich.

Moral of the story: You can fly with the eagles or you can stick your head in the sand with the ostriches. In either case, the ox cart is coming!