Water quality affects virtually every golf course

ing all sides of a water body would pro-
vide the best nutrient filter, this is usually
not an acceptable situation when an area
comes into play. Maintaining a higher
height of cut turf buffer strip or grassed
swale for those areas in play is a reason-
able compromise that can also help mini-
mize maintenance requirements. For the
out-of-play areas of lakes or ponds, bor-
der shrubs and emergent plants should
be established and maintained.

Ideally, “no-spray” zones approxi-
mately 50-feet wide should be enforced
around all surface water bodies. How-
ever, adhering to this ideal is not always
feasible on a golf course. When fertilizer
applications must be made immediately
adjacent to a water body, the use of drop
spreaders is recommended.

Also, only slow release nitrogen
sources and no more than 0.5 lbs. of
actual nitrogen per 1,000 square feet
should be applied at a time in sensitive
areas. If an unacceptable level of pest
activity develops in a “no spray” zone,
naturally the first route to pursue would
be the use of biological control agents. If
a pesticide must be used in these areas, it
should only be applied as a spot treat-
ment.

Also, the chemical characteristics of
the pesticide options should be carefully
considered in selection of the material to
use in these locations.

The Jan/Feb, 1995 issue of the Green
Section Record contains a listing of com-
monly used pesticides and their charac-
teristics.

Water

management

by design

BY STEVE EHRBAR, CGCS
OLD MARSH GOLF CLUB

Old Marsh Golf Club was built on a unique 460
acres of land. Architect Pete Dye routed many of
the holes around protected wetlands and his design
for the irrigation and drainage systems were very
well thought out.

The irrigation system was installed with many
different sized heads and half circles to ensure no
irrigation water would be thrown into the wetlands
or created marshes.

The drainage system on the course has approxi-
mately 30 catch basins per hole. All the excessive
runoff water from rain or irrigation is collected by
these basins and run through a series of pipes to
containment lakes. From these containment lakes,
the water is pumped to the main irrigation lake for
reuse.

One design feature that each hole has is that all
the perimeters of the fairways and roughs are built
higher than the middle of the fairways to ensure no
fertilizer or pesticides contaminate the wetlands.
We are very selective on our use of products, and try
to be environmentally conscious.

Pete Dye manages water at
Old Marsh with unique design features.
Photo courtesy USGA Green Section.