

system include the effect of turbulence as the water moves through fittings, valves and other components; and the effect of elevation change as the water moves up (constituting a pressure loss) or down (constituting a pressure gain) along the pipe routing. Each of these loss (or gain) factors combine to have a "net effect" on the energy available at any point along the system when the water is in motion. This net effect is commonly termed "dynamic pressure".

In order for an irrigation system to operate properly it must be designed to account for all of these factors and provide the proper amount of dynamic pressure at each sprinkler. If the water source supplying your golf course doesn't provide adequate potential energy (static pressure) at the outset then you need to somehow overcome this pressure deficit.

***Next month: Overcoming Inadequate Pressures***

## **ENVIRONMENTAL CONSIDERATIONS FOR GOLF COURSE MANAGEMENT**

At the 61st GCSAA National Conference held in Orlando, Fl. this past February, I attended "Environmental Considerations in Golf Course Management." The two day seminar was presented by Tom Thomas, a lawyer/scientist and Scott Harrison, Director of Pesticide Education at Penn State. Topics included: environmental benefits of golf courses; fate of chemicals in the environment; groundwater and wetlands protection; water law and policy related to golf courses; health effects and toxicology of golf course pesticides; legal liabilities for environmental consequences of management actions; public opinion; media relations; pesticide modes of action; environmental audits; Integrated Pest Management and a discussion of specific problems related by class participants.

This was the first time this seminar was presented, the instructors were interesting and informative, the material was well presented and given adequate time. I feel it's critical that we understand how our management strategies effect the environment, that we are aware of public perceptions and liabilities we create. Northern

California GCSA was well represented at this seminar as six local superintendents participated. I strongly urge those going to next year's GCSAA convention in Las Vegas to schedule this seminar.

Submitted by Peter J. Galea, CGCS  
Crystal Springs Golf Course

## **MEMBERSHIP-APRIL**

### **Members Today-30 day wait up**

#### **Class A**

David Wilber, Lake Wildwood CC

#### **Class D**

Jeffrey Roberts, Royal & Ancient Golf Club, Scotland  
Garmit Singh, Richmond CC  
Leon Smithen, Saratoga CC

#### **Class F**

Charlotte Sestito, West Coast Greens  
William Tavener, Pacific Sod

### **Current-30 day Wait**

#### **Class D**

Don Ballard, Bennett Valley GC  
Wilber Maeder, Petaluma G&CC

#### **Class F**

Mark Razum, Oakland Athletics  
Andrew Wheeler, Water Utilities Services

### **Pending Exams**

Carol Lozito, Snowcreek GC Class A  
Darshan Dass, Canyon Lakes CC Class B