



# In Bounds

by Jack MacKenzie, CGCS

“If it is brown, flush it down and if it is yellow, let it mellow,” I can still hear Francie’s precious statement resonate in my mind. This was an old term used during power outages when I was a kid and hauled buckets of water from the golf course to flush the toilets. The meaning was explicit; conserve water.

Recently my wife and I were fortunate to spend a little over a week in an arid paradise called Culebra, an island half way between Costa Rica and St. Thomas in the Spanish Virgin Isles. The sandy beaches touted to be, and in actuality were, some of the best in the world, fishing, snorkeling, kayaking and exploring we spent our days doing anything very productive. Bays too shallow for cruise ships, we were two of relatively few people from the mainland.

The solitude was perfect, however we were surprised by the almost retentive sanction our host impressed upon us regarding water use. Unlike the small costal town of Dewey, we did not have the luxury of water piped from the island Vieques and relied upon the rain water captured from the roof during infrequent precipitation and contained in a cistern under the house. Bottled water was used for drinking and cooking.

“You have 1,100 gallons in the tank but you sure better not use it up!”, Francie mandated as she left. Considering the average person in the United States uses between 80 and 100 gallons of water each day, my travel companion and I had to become very water conscious and in a big hurry. The weather was predicted to be sunny with limited chance for rain.

In our fair state, ‘the land of 10,000 lakes’, water, both quantity



and quality, is becoming more and more of a concern. For over a decade you have heard many leaders in our industry express the importance of developing a plan to protect the irrigation rights of our businesses. Climate change, agricultural dynamics, population expansion and political priorities have made water management upon golf courses individually and as a whole, more critical than ever before.

As you know, I represent our industry through participation upon, and attendance at, several levels of agency committees including the DNR North East Ground Water Strategic Planning Work Group and the MDA Pesticide Management Plan Committee. Yes, quantity and quality are catchy words that will be very applicable to our industry in more ways than one as time moves on.

Of paramount interest will be access to this, our most precious, finite resource. Currently, due to the ability of the DNR to monitor stream

flow and lake levels surface water, users are under the gun to reduce water consumption and conserve whenever possible. One northern Minnesota course has been given the following mandate from their local hydrologist : “I therefore strongly urge you to investigate a ground water or other source for irrigation, as after December 31, 2017 the City of \*\*\*\*\* must be able to withstand the result of a complete suspension of appropriation from \*\*\*\*\* lake during low flow periods. After this date the DNR will no longer allow even limited water appropriation”.

As more and more monitoring wells are drilled throughout the state, groundwater tables will be reviewed even closer for depletion below specified thresholds. It can be anticipated that golf course destinations will be targets for irrigation permit suspensions when shortages become apparent. Your Environmental Stewardship Committee, under the guidance of Scottie Hines CGCS, Roger Stewart CGCS and Dr. Brian Horgan are



working hard to create logical water management policies to protect your resource today and during drought cycles.

The issue is much, much larger than use however. In a twisted positive perspective, consider your course as your community's largest rain garden, with the potential to capture and reuse stormwater or a destination for ground water recharge or possibly, if the EPA changes their regulations, the end of the line for effluent water. Several courses in our state already are committed to their communities and provide such partnerships.

As the Environmental Stewardship Committee works through a plan to protect your access to water, put on your thinking cap and consider the many ways you can improve water conservation and potentially reuse at your golf course. Not only must we create policy for shielding our water availability, we must become part of the solution. As individual clubs and as an industry, you must become leaders with the

proactive goal of becoming local water professionals.

Talk with your area hydrologists, city engineers and land assessors. Volunteer to participate upon the local watershed district, land management committee and city council as a professional consultant. Conservation, protection, recycling and reuse should be a priority. Make your club and yourself a valuable commodity to be depended upon as a resolving force to a growing issue.

With buckets upon the floor and distant rumbles of thunder, all of the conservation efforts my wife and I employed on our vacation were without reward. A tropical storm during the last night of our trip not only made all the holes in the roof evident, it also filled the cistern to overflow. Although we reaped no benefit and had plenty of water to spare at the end of our adventure, it was nice to know however, that with or without the aid from Mother Nature, Francie wasn't going to hound us for using too much water.