

everything we have done, for obvious reasons.

As this newsletter was being written, the Florida Department of Environmental Protection (FDEP) had recently issued a new emergency security ruling, requiring all utilities to notify a central State "warning point" of any suspected security breach, within two hours of such a breach being detected. This rule led to our hiring an additional operator to ensure that we can respond as required, while still continuing to operate our facilities 24/7. The problem with the new rule, as with most new rules, is that there are some gray areas, where the need to report is not 100% clear. One local utility was the focus of a recent enforcement action and media circus, when it responded to an intrusion alarm, saw evidence of fence vandalism, but did not see any evidence of a security breach involving the actual water supply. That utility waited 30 hours to report the incident, and has been paying the price ever since, in dollars and unwanted publicity. We are doing everything in our power to ensure that a similar situation does not occur at IWA.

## CAUSEWAY RESTRICTIONS

Ever since structural damage to the Sanibel causeway was discovered in mid-January, the ever-changing restrictions on traffic have had a significant effect on IWA's operations and budget.

The causeway was totally closed from 10 p.m. on Sunday, January 19<sup>th</sup>, until 12 a.m. on Tuesday, January 21<sup>st</sup>. Since most of IWA's employees live off-island, in order to maintain our operations and to be able to respond to emergencies, a number of key employees spent the two nights in a hotel on the island. As it turned-out, it was a good thing we took this precaution, because one of

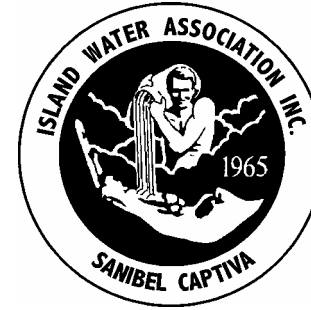
our chemical systems froze-up during the abnormally cold weather on Sunday night. The on-duty employees toiled for much of the night to get our RO treatment plant back up and operating.

Soon after the bridge was reopened, engineering inspections continued, and as a result, reduced load allowances and speed limits were imposed on the causeway on February 6<sup>th</sup>. The more stringent weight limits, reducing the maximum load from 34 tons to 24 or 17 tons (depending on truck size), have had a more significant impact on IWA's operations. Many of our chemicals were delivered in loads exceeding the new weight limits. Subsequent modifications to the restrictions allowed essential cargoes (like our chemicals) to pass over the causeway with heavier loads, one at a time, in the middle of the night. At the time this Newsletter was being written, we were utilizing a combination of smaller daytime loads and larger nighttime loads, both of which were costing us quite a premium (50+%) versus the pre-restrictions situation.

The effect of this continuing situation on IWA's water main upgrade construction projects had yet to be determined at the time this Newsletter was being written. These projects require heavy truck loads of pipe, gravel, sod and asphalt. The causeway restrictions are being refined almost every day, so we are not going to know the final impact on our operations for some time.

## A MONEY-SAVING SUGGESTION

If you are tired of mailing us a check and wasting an envelope and stamp every month to pay your water bill, we would like to remind all our Members that we do offer automatic bank draft payment. Just give us a call at (239) 472-1502. Ask for Karen. Thanks! It saves us money also!



# IWA PIPELINE



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## IT'S ANNUAL MEETING TIME AGAIN

This year's Annual Meeting will be held on Monday, April 14, 2003 at 10 a.m. in our offices at 3651 Sanibel-Captiva Road. Materials relating to this meeting are enclosed with this Newsletter. **PLEASE** vote your proxy and return it to us as soon as possible.

The Nominating Committee met on January 30, 2003 to select candidates for the four vacancies on the Board of Directors this year. Robert B. Davison, currently Board President, was nominated for his third and final two-year term. Stella E. Farwell, currently Board Secretary, was also nominated for her third term. David H. Demaree, currently Board Vice President, was nominated to serve his second term. Finally, Robert J. Wigley, Board Vice President, was nominated for a one-year term. Mr. Wigley was appointed by the Board in October 2002 to fill the position vacated by former Board President, Richard Calabrese, who resigned his Board position to fill a vacant IWA staff position. Brief resumes of all the nominees are enclosed on a separate sheet.

As has been the case at the last few meetings, we'll be happy to give everyone a tour of our facilities after the meeting is over. We will also have the customary coffee and doughnuts available before the meeting begins. So mark your calendars for April 14th and plan to attend. We'd like to see **YOU** at our Annual Meeting this year! All of our Members own a part of IWA, and this is your chance to participate in its operation.

## A GOOD IDEA!!!

We do not normally use the pages of this Newsletter to advertise or promote anything ... unless of course it is our great water supply. However, one of our Members brought a device to our attention that seems so good that we decided to

break with tradition and let you know about it in this way.

For years, we have been looking for a device which would help our Members, particularly those who leave their homes vacant for several months each year, avoid extensive water damage from broken pipes, washing machine hoses, etc. during their absence. Water damage can quickly run up a bill of 10's of thousands of dollars, a fact to which the author of this Newsletter can personally attest. Although much of the cost may be covered by insurance, the loss of irreplaceable objects and the aggravation are not covered. Many members close their house water supply valves when they are absent to prevent this problem, but others can not do so for a variety of reasons, including temporary use of the home by friends, relatives or renters.

We have always known how to design a device that would do what we wanted, which was to detect unwanted water flow, and shut it off. However, our design would have involved the purchase of quite a few expensive separate components, which would then have required significant expertise to install and operate. We also were aware of available devices that would detect water from a leak, and would then shut the water off. That seemed to us to be too late to take action; the proverbial horse was already out of the barn.

Finally, one of our Members told us about a company called FloLogic, Inc. He had already installed one of these devices in his condo, and was very enthusiastic about it, and he invited us to stop by and see it. We did so, and then we became enthusiastic as well. It appeared to be a well-designed and well-packaged device, which was available for a reasonable price. We obtained one of the devices and installed it in our office building, and then we became even more enthusiastic, as we saw it perform as advertised.

The principle of operation for the FloLogic device is quite simple. It consists of a simple flow

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The Island Water Association, Inc.

meter, an electrically-operated shut-off valve, a programmable control panel, a couple of wires, and a battery for our frequent power failures. When the control panel is set to the "Home" mode, the device allows a programmable flow rate (say 20 gallons per minute) for a programmable maximum time period (say 30 minutes). In the "Away" mode, the allowable flow rate can be set much lower (say 0.6 gallons per minute) and the time can also be shortened (say 15 seconds). In this example, the maximum leak that could occur in the "Away" mode would be only 0.15 gallons, which would barely cause a wet spot on your floor. If you forget to set the device to the "Away" mode when you leave, it is even smart enough to correct your mistake. After 18 hours of no or low flow, the device automatically switches itself to the "Away" mode. There are other features of the device that we can not take the space to describe here. You can learn more by visiting FloLogic's website at <http://www.flologic.com/>.

This device was awarded the 1999 "Best of What's New Award" by *Popular Science Magazine*. We have spoken with all Island plumbers, who have indicated a willingness to sell and install the devices to our Members. Feel free to call any of them and to discuss your specific situation with them. You can also stop in our main offices on San-Cap Road, and we will be happy to show you our installation and demonstrate its use. Just call our Engineering Manager, Rich Calabrese, at (239) 472-2113 (Ext.-129), or stop by our offices, if you have any questions.

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## **YOU DON'T NEED THEIR "HELP"!!**

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Lately, we have been contacted by several of our Members regarding a notice they received from Florida Water and Utilities, Inc. (FWU), offering to test their water for "free", and recommending that they have their water tested every year. What a deal they have for you!! Several Members quickly noted at the bottom of the notice, in small print, that FWU is a for-profit corporation, and they certainly aren't making that profit by providing people with free water testing. We managed to track down FWU's local office, and confirmed that they in fact also sell home water treating equipment.

We would like to assure our Members that their water from IWA is constantly being tested by both us and a variety of regulatory agencies. Those tests are run by state-certified laboratories. Our water meets and exceeds all water quality standards. If you want to know more about our water quality, you can refer to our annual Con-

sumer Confidence report, which we automatically send to you every year, or you can stop by our offices and we will be happy to answer your questions. You can also contact the Lee County Health Department at (239) 939-4245, if you would like a government opinion of our water quality.

We suggest that if you contact FWU, you should be prepared for a sales-pitch after your "free" water analysis is complete. Some types of home treatment units do serve purposes that some of our Members might appreciate, such as removing Chlorine. However, the Chlorine is in the water to protect you from water-borne diseases, and removing it can potentially cause problems. One type of home treatment unit that you should definitely not install is a water softener. Our water is already fairly soft as it arrives in your home. A home water softener will increase the Sodium concentration in your water to a level that quite likely may be in excess of the recommended maximum. Soft water can also shorten the life of your hot water tank anode (see the following article ).

If you have any further questions on this matter, just give us a call at (239) 472-1502, and we will be happy to help you.

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## **HOT WATER TANK MAINTENANCE**

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On our islands, as well as everywhere else, failure of hot water tanks is a common occurrence after several years of service. The failure can take a couple of forms, one resulting in water leaks, and one just resulting in the need to take cold showers.

All hot water tanks are candidates for corrosion-induced leak failures. Although the tank itself is usually made-of or lined-with a corrosion-resistant material, there can be manufacturing flaws in that protective material. Then there are the connections to the tank, for water, heating elements, etc. Leaks sometimes develop at these threaded connections. To prevent corrosion, hot water tanks also contain a "sacrificial anode." Those Members who have boats may be familiar with this concept, since boats also have such anodes. In hot water tanks, the anode is normally manufactured of Magnesium. Commonly, it is a rod about ½ inch in diameter and a couple of feet long, which is installed into the hot water tank through a connection on the top. The purpose of this anode is to corrode! However, by corroding itself, it prevents corrosion of the tank, along with the heaters, etc. Unfortunately, the anodes do not last forever, and when they have been totally corroded-away, the corrosion moves on to the tank itself and/or the heating elements, leading to an

eventual failure. The anodes can be replaced. They normally last about 5 years, depending on factors such as water usage and temperature. The next time you have a plumber doing some work, you might consider asking him to check your anode. In addition, if your tank is not already installed in a pan with a drain to the outside of your house, that might be an excellent investment. Most tank leaks start small, and the pan will catch the water and direct it outside, where it can be seen and where it will cause no damage to your house. Finally, periodic draining of the tank through the valve on the bottom can extend the life of the tank and prevent hot water quality problems.

The other type of hot water tank failure is more of a nuisance than a potentially serious water-leak problem. Most tanks come with two electric heating elements, which are installed through the side wall of the tank. These heating elements can simply burn-out, or the small diameter tubes in which they are installed can also corrode through, resulting in failure. When one element fails, it is sometimes hard to detect, although you will probably think that you seem to have less hot water than before ... which you do. When the second element fails, if the first one was not previously replaced, you will know it. There will be no hot water, and it's time to either replace the elements, or depending on the age of the tank, the entire tank.

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## **HELP! RESET IRRIGATION TIMERS**

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At IWA, like at all other water utilities, we have to concern ourselves with two kinds of system capacities. First, there is our treatment plant's capacity to produce enough water to satisfy our Members' average demand over a number of days. Second, there is our capacity to distribute the water at a high enough rate to satisfy the highest instantaneous demand from our Members. The first type of capacity is not a problem at IWA; the second one is, periodically.

Our permitted RO plant treatment capacity is 5.2 million gallons per day (3,600 gallons per minute). That is enough to meet our daily demand for all but a very few days per year, depending on such uncontrollable variables as rainfall. In addition, we have 15 million gallons of water in our storage tanks, which are scattered around the Islands. That amounts to around 3 to 5 days of water stored in those tanks. On those few days when our Members use a little more water than we can treat, we just take the excess demand from the tanks.

On the other hand, our pumping capacity is

on the verge of being a problem. The problem, ironically, has resulted from the water restrictions imposed almost every year by the South Florida Water Management District (SFWMD). Those restrictions limit outside irrigation to just a few hours a day (like 4 to 8 a.m.) on only 2 or 3 days a week. While the SFWMD is convinced the restrictions save water, we are absolutely certain that they cause pumping system problems for every affected utility. The restrictions, in effect, cram all irrigation use into just a few hours, thereby increasing the required peak instantaneous flow rate. At IWA last Spring, our peak flow rate went up to over 9,000 gallons per minute at 4 a.m. on many days on which irrigation was permitted. That is nearly three times (!!) our maximum treatment capacity. In order to pump this high rate of water, we had to run every pump we own, including the spare pumps, which are supposed to be kept in standby to cover failures.

Last Spring, we made a plea for our Members to reset their irrigation timers to sometime other than 4 a.m. in order to help and minimize our pumping problems. We saw limited response to our plea, so we are making it again. At the time this Newsletter was being written, there were no restrictions on irrigation. However, by the time the Newsletter is mailed, it is quite likely that new permanent restrictions will have been adopted by the SFWMD. Those restrictions will prohibit irrigation between the hours of 10 a.m. and 4 p.m. and further limit usage to three days per week, with the specific days determined by street addresses, as with past restrictions. ***We urge all our Members to re-set their irrigation timers NOW to begin at some time in the 4 p.m. to 10 a.m. period, other than 4 a.m.*** Thanks, in advance, for your help. We do appreciate it!!!

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## **SECURITY**

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At IWA, we have always taken the security of our water supply very seriously. After the events of September 11, 2001, we took even more steps to ensure the security of our water system. We have spent over \$100,000 on security enhancement items since 9/11, and we expect to spend roughly the same amount again on additional items. The enhancements we have installed run the gamut of things you would normally expect, like locks, fences, cameras, etc., plus a lot of things you might not consider. We have eliminated all tours of our facilities, except on a need-to-know basis, or under highly controlled circumstances (e.g.: after the Annual Meeting). We can't detail exactly