

# IWA PIPELINE



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Office Hours: 8:30 a.m. – 4:30 p.m. • Phone: (239) 472-1502

## MANAGEMENT CHANGES AT IWA



IWA General Manager, Roger Blind, has announced his intention to retire, effective June 1, 2007. Roger joined IWA in 1989 and became IWA's General Manager in 1993. He and his wife, Janet, have resided on Sanibel and Captiva since 1986, and they plan on retiring to Grand Junction, Colorado shortly after Roger's retirement. They will miss IWA and their many island friends and acquaintances. They look forward to future visits to the islands (outside of hurricane season!).

The IWA Board of Directors has selected Rusty Isler to replace Roger as IWA's next General Manager. Rusty, who is currently IWA's Information Services Manager, joined IWA in 1980. He will be serving as IWA's Assistant General Manager until Roger's departure next June. In his new role as General Manager, Rusty will also be assuming Roger's role as editor/author/typist of this quarterly newsletter (he actually types with all 10 fingers!).

Don DuBrasky, IWA's Electrical Technician, has been selected to replace Rusty as Information Services Manager. Don joined IWA in 1995. Before coming to IWA, Don was the owner/manager of Tarpon Bay Electric on Sanibel for 12 years.

Between now and next June 1<sup>st</sup>, Roger, Rusty and Don will be training one another for their new roles, assuring a smooth and efficient transition, which will be transparent to IWA's Members.

## OH NO, NOT AGAIN!!!!

FEMA was not an organization with which IWA had any experience prior to hurricane Charley in August 2004. As a not-for-profit utility, IWA was eligible for FEMA reimbursement for some of our expenses for recovery after Charley. We re-employed an ex-employee, Jacque Owens, who waded through the bureaucracy and paperwork requirements and prepared/submitted our application for reimbursement (four times! ... the first three were lost!). We eventually, after exactly a year, received over \$250,000 in total reimbursements. We thought that was the end of the matter. Wrong! Now we learn that we (along with all other recipients) are about to undergo a FEMA audit. It's hard to adequately describe our excitement, although comparing it to a root canal procedure might come close.

In addition to the upcoming audit procedure, it also recently came to our attention that our ability to receive FEMA reimbursement for any future disaster-related losses will now be dependent on some of our employees becoming certified in the National Incident Management System (NIMS). Since we were unable to determine exactly which employees required this certification, we decided that the only safe policy would be for all IWA employees to take and pass the two required FEMA online training courses, which has now been completed. The courses may actually prove to be useful when/if we have another disaster, since we will better understand the organizations which are in charge of recovery operations, and where we fit in.

## SAFETY FIRST!

Again this year, IWA has won two safety awards from the Florida Water & Pollution Control Operators Association. One award was won by our employees in Production Department (the RO

Plant) and the other was in Distribution Department. We have won this award for the last four straight years in Distribution Department. In Production Department, we have won for the last eight years and for an additional four scattered years before.

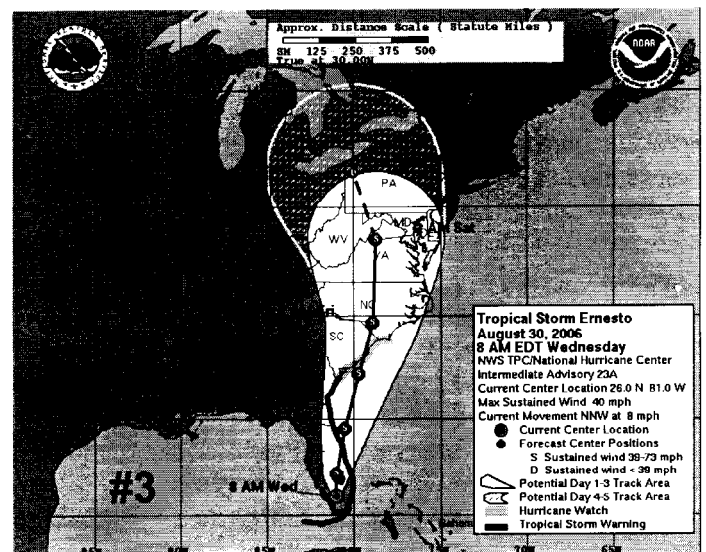
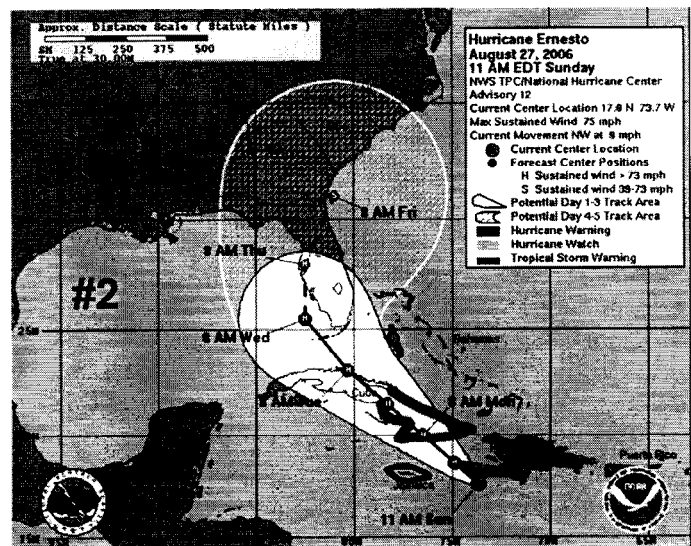
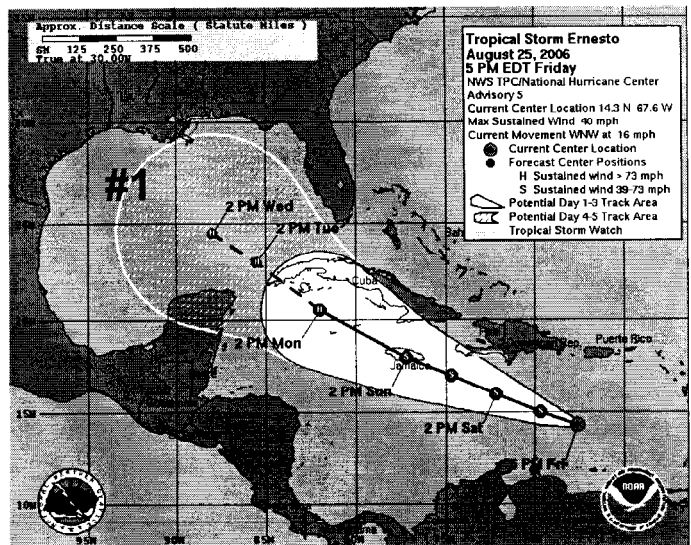
We take safety very seriously at IWA, and therefore we are proud to receive these awards. Accidents are very costly, not only for IWA, but also for the involved employees. Production Manager, Phil Noe, who also serves as IWA's Safety Director, and all IWA employees are to be commended for performing their work in a safe manner for the past many years. As of the date this newsletter was being written, IWA employees had worked 2,125 days without a lost time accident. Our last lost time accident was an incident where an employee caught poison ivy (yes, that is a reportable lost time "accident"), in November 2000.

## A NON-EVENT (THANKFULLY!)

Hurricane/Tropical Storm Ernesto made landfall in South Florida in the early morning hours of August 30<sup>th</sup>, and as this newsletter is being written, it is currently located about 50 miles due east of Sanibel. Looking out our office windows, it looks like a very wet, dreary day, with a slight breeze rustling the palm fronds, but a far cry from our recent experiences with Charley in 2004 and Wilma in 2005. At one point (see chart #2 to the right), the forecast for Ernesto looked eerily similar to that of Charley, which was an experience which no one at IWA really wants to repeat.

As is our normal practice, 10 essential employees (plus assorted spouses and pets) spent the night of August 29<sup>th</sup> in our facilities in order to ensure that our system would remain in operation and that we could respond to any emergencies which arose during the storm.

The forecasts for Ernesto's path and strength were more variable than what we normally see, leading to increased difficulty in deciding what we needed to do. Following is a series of three plots for Ernesto's path, showing the forecast path on August 25<sup>th</sup> (chart #1 - landfall in Texas), August 27<sup>th</sup> (chart #2 - landfall just north of Sanibel ... the worst case), and August 30<sup>th</sup> (chart #3 - after actual landfall in South Florida). On the 25<sup>th</sup>, we were not worrying about this storm at all. On the 27<sup>th</sup>, we started to panic, probably along with a lot of other people in Southwest Florida. Finally, on the 30<sup>th</sup>, it passed very near us, but to our east, so we were on the weak side of the storm, and only felt minimal effects of the greatly weakened storm.



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## BATTERY REPLACEMENT TIME??

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On July 17<sup>th</sup>, we noticed an unusual spike in the amount of water used by our Members at around 9:15 p.m. the previous evening. The spike was significant, at around 1,000 gallons per minute, and lasted for about an hour. The total amount of water used during this incident was around 30,000 gallons. On closer examination, we found that this spike had also occurred every day since July 13<sup>th</sup>. We were concerned that the spike might indicate either a water theft or a very high new water use, although neither of those possibilities seemed very likely, since the spike occurred at exactly the same time every day.

After a day of investigating the possibilities, including phone calls and late evening visits to some of the potential sources of the problem, we solved the "mystery" with the help of data from our Supervisory Control and Data Acquisition (SCADA) computer system. We remembered that we had experienced an island-wide power outage early in the afternoon of July 13<sup>th</sup>, caused by a sailboat hitting the LCEC transmission lines over Pine Island Sound. The power loss should not have affected irrigation controllers, since most of them have back-up batteries for such situations. However, it slowly dawned on us that some of our Members may not know the batteries even exist, or may not keep their batteries up-to-date. When the batteries are dead and a power failure occurs, the controllers lose their programming and revert to a default program, which sets the irrigation system to operate for 10 minutes per zone, every day, starting 8 hours after power is restored. In this case, power was restored at 1:15 p.m., exactly 8 hours before the observed spike in water demand. "Mystery" solved!

As time went on after we solved the "mystery," we noticed that the daily spike in water use was slowly getting less and less, as we assumed our Members noticed the odd operation of their irrigation systems, replaced the dead batteries, and reset their controllers to irrigate at the times allowed by watering restrictions. Then on August 25<sup>th</sup>, we had another prolonged power outage, this time caused by a guy-wire breaking on a LCEC transmission tower over Pine Island Sound and the broken wire shorting out the power lines. To our surprise, exactly 8 hours later, we saw an identical spike in water demand to what we had seen after the previous power outage. The only logical cause of this situation is that the irrigation controllers with dead batteries were reset, but the batteries were not replaced.

If you have an electronic controller on your irrigation system, we suggest that you read your owner's manual to determine if it has a battery back-up for power failures. If so, it may be time for a new battery. Thanks!!

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## THEN AND NOW

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As readers of this newsletter are well aware, about 7 years ago, IWA adopted a stray kitty who showed-up outside our offices in pretty poor health. We named the kitty Lizzie, for her propensity (in her youth) to chase lizards around the office. Over the years, Lizzie has become a real "fixture" at IWA. In some ways, she hasn't changed much over the years, but in others, we have seen a significant change. The following two pictures pretty much tell the story of the "biggest" change we have seen in Lizzie. This change helps to explain the aforementioned decrease in her lizard-chasing abilities.



## AMR UPDATE

From time to time over the years, we have provided an update in this newsletter on IWA's efforts to test AMR (Automatic Meter Reading) on the islands. AMR involves installation of a small electronic device on every water meter, and results in the elimination of the need for manual reading.

On the surface, AMR would seem to be an obvious enhancement to our water metering system. It should eliminate the very few errors that we make during manual reading of our nearly 5,000 meters every month. It should also speed-up the reading process, thereby reducing labor costs. Plus, of course, there is the fact that "everyone else is doing it."

However, on closer examination, the decision is not quite so clear. First, the devices cost around \$110 each, which comes to around \$550,000 to outfit all of our meters. \$100,000 here and \$100,000 there, and pretty soon we would be talking real money! Second, the devices are somewhat less reliable than the proverbial Timex watch. We have pilot-tested several different versions over the years, and the failure rate and unreliability have been quite high for what should be a relatively simple device. Reliability has suffered for a variety of reasons, ranging from apparent poor manufacturing quality control to water intrusion resulting from the devices being installed in flooded meter boxes. Third, the time saved in reading the meters would be offset to some unknown extent by the time spent maintaining the 5,000 AMR devices. Finally, we believe that there is some value in our meter reader opening each meter box and looking inside to take the reading once a month. Not infrequently, we pick up hidden problems with the meter and associated facilities.

One feature of AMR that we have been waiting on for years has been the ability to store and later retrieve historical water-use data. We always thought this should be a simple feature to include in an AMR device, but amazingly we could not find one that contained this capability. This feature, known as data logging, would enable us to go back in time and help diagnose high water usage and leaks. Finally, we found a device with this feature, manufactured by Datamatic. We therefore decided to test these devices on our 200 largest water meters, where leaks would be most significant.

One of the first Datamatic AMR devices was installed on the meter serving a local resort complex. The very first time we read the meter and downloaded data logging information, we noticed a constant minimum water use rate of around 800 gallons per hour, even in the wee hours of the morning, when we would have expected almost zero consumption. After an extensive leak location effort by the resort, the leak was located and repaired, saving them around \$2,000 per month on their water bill, plus possibly even more on their sewer bill. Guess AMR does have its advantages!



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The Island Water Association, Inc.  
P.O. Box 509  
Sanibel, FL 33957