



Volunteer Mobile Irrigation Lab: Improving Irrigation Efficiency

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Today, Florida residents consume about 8.3 billion gal of water per day. University of Florida experts predict the state will grow 21% in the next decade. Between those residents and nearly 70 million tourists a year, total water demand is projected to reach 9.3 billion gal per day. Furthermore, parts of Florida, including much of Central, South and Southwest Florida, are currently experiencing drought conditions. Records show that 2006 and 2007 were the driest back-to-back calendar years since 1932. In 2008, The Southwest Florida Water Management District's (SWFWMD) estimated water use report stated public supply water users, including domestic self-supply, constituted the largest single category withdrawing an estimated 542 million gal each day. Residential irrigation represents the single largest use of water from our municipal water supplies. This water use has seriously impacted the aquifer that is the source of our drinking water and water that supports Florida's springs and other ecosystems.

To help the residents within the Peace River Basin reduce their potable drinking water usage and pollution to our water systems, a mobile irrigation lab was formed. The Mobile Irrigation Lab audits residential properties by educating residents on their irrigation clocks, and managing their irrigation systems. The goal is to achieve the highest distribution uniformity and efficiency rate for domestic irrigations systems. The Mobile Irrigation Lab also reviews and promotes the nine principles of a "Florida Friendly" landscape. They then provide recommendations (Fig. 1) to the residents requesting audits of their landscapes and irrigation systems. Success requires a commitment on the owner's part to maintain the system to proper specifications and to provide qualified personnel to operate it. Reports generated by audits observe and document the existing irrigation system, and make

recommendations for improving design, installation, operation, and maintenance of their system.

The results of the Mobile Irrigation Lab have shown that there were a total of 35 lateral line breaks discovered and not realized by the residents. After repairs this equates to 1,512,000 gal per day saved according to SWFWMD calculations on low volume leaks—as well as 102,720 gal per day that 428 residents were saved by being taught how to read their irrigation clocks and check their irrigation zones.



Fig. 1. Highlands County Extension helps homeowners reduce water consumption by helping them fine tune their irrigation systems.

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