## 15 YEARS OF WATER CONSERVATION: FARMS, A PUBLIC / PRIVATE PARTNERSHIP AGRICULTURAL COST SHARE PROGRAM

## Carole Estes, P.G

Southwest Florida Water Management District, Sarasota, FL, USA

In 2003 the Southwest Florida Water Management District started a cost share program aimed at reducing agricultural groundwater use. The Districts Cooperative funding program for public supply conservation had been in existence for many years and resulted in a significant reduction in per capita water use. However, agriculture has been the second largest water use in the District with more than 450 mgd permitted Districtwide. With broad stakeholder support in the southern part of the District, The Facilitating Agricultural Resource Management Systems, or FARMS Program was born. In 2004, the year of the hurricanes in central Florida, we originated only 2 projects and were limited to projects in a few priority areas. In the 15 years since, we have approved 208 projects with an estimated reduction in groundwater use of nearly 30 mgd. Our costs are constrained by a requirement that we meet a ratio that compares the benefit of the project to the cost, in terms of cost per 1000 gallons of groundwater saved. Our current average ratio is \$2.34 per 1000 gallons of ground water saved.

Alternative water supply, using tailwater recovery ponds, dominates our program, with additional projects that involve groundwater conservation through irrigation system automation. In the last 15 years we've expanded the program to allow for projects throughout the District, to allow for projects that reduce the use of groundwater for cold protection in the Dover / Plant City Area, and we have recently expanded to allow for nutrient reduction projects in the Districts springs areas. We've also added a Mini-FARMS program for small agricultural operations. Over the last 15 years FARMS has proven to be a cost-effective tool for conservation and a tool that could be used to further future District goals.

**PRESENTER BIO:** Carole Estes has been with the FARMS program for 15 years. Before coming to SWFWMD she spent 15 years in environmental consulting in Florida and Arizona. She has a master's degree in Geology from University of South Florida and a bachelor's degree in Geological Oceanography from Florida Institute of Technology.