## Role of Water Management Districts in the Production of a Wholesome Food Supply

## **Jerry Scarborough**

Every three-and-a-half minutes, one acre of Florida farmland is lost to development; and we are fast becoming a state at risk of destroying what remains of our rural heritage. A report prepared by American Farmland Trust (1992) shows that Florida has the highest conversion rate of farmland in the nation. This alarming trend is being repeated in rural communities all across America, but what I want to address is how we can•• and must -- reverse that trend here in Florida.

Agriculture has always been, and always will be, extremely important to our state. In 1995, Florida farmers led the nation with 20 major agricultural products including fruits vegetables and houseplants. They produce 75 percent of the nation's citrus, 10 percent of its vegetables, and 25 percent of its domestic sugar supply.

Florida is the nation's 9th leading agnicultural state, with cash receipts totaling \$6 billion annually. Annual average farm employment exceeds 80,000 people, and farm-related economic activity generates more than \$18 billion each year.

But urban development and competition from foreignimports are tightening the noose around Florida's ag industry. It is therefore incumbent on all of us to become partners with growers and producers, working together to ensure agnicultural sustainability and environmental protection.

I've been invited here today to talk about the role of water management districts in the production of a wholesome food supply. I can tell you what the districts are doing to help keep agriculture alive and well in Florida -- but as for the wholesome part, I'll have to leave that up to the farmers!

Raised on farm in rural Suwannee County, I've come to learn a little bit about agriculture. I've seen the ups and downs that farmers have faced over the years, and understand their economic struggles. I also value the quality of life found in our rural communities.

The Suwannee River region is one of the most beautiful and unspoiled parts of Florida, so I know how vital it is to protect and preserve our natural resources. I believe the regional water management districts are uniquely qualified to lead the way in finding creative and

J.A. Scarborough, Executive Director, Suwannee River Water Management District, Live Oak, FL. Manuscript received 12 March 1997.

cost-effective ways to help meet the needs of local farmers and at the same time fulfill the districts' mission.

And what exactly is our mission?

When the districts were created by the legislature in 1972 under the Florida Water Resources Act, we were told to control two things: flooding and water supply. Eleven years later the legislature gave us stormwater permitting responsibilities. The State also has expanded our duties to include wetlands permitting, water well construction permitting, and land acquisition and management.

Critics argue that water management districts have grown too big, and we've often come under fire for branching out into programs that some consider to be outside of our primary purpose. Maybe we have grown and stretched beyond our original scope. But as times and circumstances change, so do the ways by which we must address our state's complex environmental and economic needs.

The role of water management districts today and in the future will require a new way of operating, which I can sum up in one word: partnerships. It will mean shifting away from traditional regulation to a more cooperative spirit between government and those who are governed. It will mean streamlining the permitting process, and replacing penalties with incentives as the preferred means of encouraging stewardship and compliance.

We have a better understanding today than we did in 1972about how land use and water use are closely linked. We've discovered that good water management requires good land management -- you cannot separate the two. Improved technology now offers us solutions we've never had before, especially in the field of agriculture.

Central to agnicultural sustainability is the availability of water. The districts' role as we enter the 21st century will be the same as it's always been -- to determine how much water is available for use, to protect the quality of that water, and to help develop more efficient methods of conservation and distribution.

What will that mean to the farmers?

Right now, agricultural irrigation accounts for nearly half (49.7%) of all freshwater withdrawals. In the 40-year period between 1950 and 1990, agricultural water withdrawals jumped by 915% statewide:

1950 - 315 mgd 1970 - 2100 mgd 1990 - 3805 mgd

I am happy to report, however, that total freshwater withdrawals decreased by 281 mgd between 1990 and 1995, from 3805 mgd to 3524 mgd, according to preliminary figures compiled by the US in Tallahassee. This is due to a number of factors, including the use of more efficient irrigation techniques, and a willingness to rely less on freshwater and more on alternative sources. The water management districts are committed to working with agriculture to find ways to achieve even better results.

Each district is in the process of establishing minimum flows and levels for the ground and surface water resources within its region. This means calculating how much water flows in our rivers, lakes, streams and aquifersduring various times of the year, and determining how much water can be withdrawn for human use. without causing harm to the natural systems. The districts will use these calculations as part of the basis for reviewing requests for water use. permits. We're also supporting legislation that would allow us to issue long-term consumptive use permits, valid for 20 years, to applicants who use conservation techniques or who rely on alternative water sources.

In response to recommendations made by the Water Management District Review Commission in late 1995, the districts, along with the Florida Department of Environmental Protection (DEP), Florida Department of Agriculture and Consumer Services (DACS), and the Florida Game and Fresh Water Fish Commission (FGFWFC), signed a memorandum of understanding to work together to streamline, consolidate and simplify the existing agricultural permitting process. We've all agreed to develop voluntary, incentive-based alternatives to traditional permitting for agricultural activities, and we formed the Agricultural Regulatory Streamlining Group (ARSG) to accomplish these tasks.

Currently the group is evaluating the Environmental Resource Permitting (ERP) process as it relates to agricultural activities. The group is working to: clarify existing statutory exemptions; develop more consistent rule exemptions, develop streamlined (Notice General) permits for specific ag activities under ERP; and make it easier to obtain and comply with ERP permits through 1) permit consolidation, 2) team permitting, 3) one-stop permitting.

The group's intent is to create more consistency and uniformity in the statewide ERP agricultural program, while at the same time allowing for some variation based on regional differences in water

resources, agricultural practices and water management district priorities. Throughout this process, the group will seek input from the ag community around the state.

The districts also are expanding their efforts to develop alternative sources, especially in regions experiencing declining or deteriorating freshwater supplies. Farmers are encouraged to use desalinated or reclaimed water, which are highly suitable for agricultural use, in combination with more efficient irrigation methods. Four of the five districts offer a matching grants program to assist agriculture and other users in developing alternative water supplies.

Working together hasn't always been easy, but I think we're all getting better at it. The level of trust and communication between the districts and the agricultural communityis good and getting better, because we realize we have more to gain as partners than as adversaries.

Each time we work through a challenge and can point to a successstory, we are more encouraged about our chances to resolve future differences. Let me share a few of those success stories.

For years, farmers in Indian River County had depended on the Blue Cypress Water Management Area to provide surface water for impation and freeze protection, and as a place to store floodwater from their lands. The area also was designed to divert agricultural runoff from the rest of the St. Johns Marsh.

But the area was found to be a nesting site for the endangered Everglades snail kite and its primary food source, the freshwater apple snail. Officials were concerned that water withdrawals for irrigation and freeze protection might impact the lutes and their only food source. They were also concerned about the potential affects of farm runoff on the water quality of the marsh. At the request of the U.S. Fish & Wildlife Service, a management plan was issued to control water withdrawals from the area.

This created hardslup for local farmers and citrus growers, and hard feelings between them and government In an effort to meet the needs of farmers and still protect the endangered kites, the St. Johns River Water Management District arranged meetings between the state and federal agencies, University of Florida fish and wildlife researchers, and farmers and growers.

The result was a series of studies followed by recommendations for alternative water sources and agricultural runoff arrangements. It was also decided that growers could conduct short-term freeze protection withdrawals without harming the ecosystem.

Another example is the Southwest district, which has beenworking to improve relations with the ag community through its Agriculture Surface Water

Management (AGSWM) program that offers farmers an alternative to formal permitting. The St. Johns and Suwannee districts also have similar programs in place.

In the Middle Suwannee basin, where we've recently seen an increase in nitrates in our rivers and springs, the Suwannee district is working with the Natural Resources Conservation Service(NRCS) on a PL-566 cost-share program to install best management practices at 44local dairy operations. We were able to add \$1.2 million in SWIM (SurfaceWater Improvement and Management) dollars to NRCS funding for the installation of site-specific best management practices (BMPs) which will provide economic benefits to farmers as well as benefits to the environment.

Most of my remarks have been directed toward the dairy, field crop and citrus producers, but I don't want to fail to mention what we're doing to assist another very important segment of the agriculture industry -- aquaculture.

A record \$73 million in aquaculture products was sold in 1993. The aquaculture industry depends more than anythingelse on clean water, and the districts are working to ensure that our coastal areas have good water quality to support them.

We continually monitor inland and upstream activities to make sure they don't adversely impact the water quality in downstream shellfish harvesting areas. Where we findproblems, we tryto help fix them. A good example is the wastewater treatment project for the Town of Suwannee in Dixie County.

In 1991, the U.S. Food and Drug Administration (FDA) ordered the closure of Suwannee Sound for shellfish harvesting, due to high bacterial contamination caused by poor septic systems in the Town of Suwannee. To help preserve and protect the area's water resources and the local shellfish industry, the District allocated \$25,000 for a detailed feasibility study that addressed the town's wastewater treatment needs. The District also helped local city and county officals obtain \$8.4million in federal grants and loans, and groundbreaking on the project took place in June 1996.

The Suwannee district also recently agreed to purchase Atsena Otie island off of Cedar Key. Residents there were concerned that planned development of the island would create water quality problems, and threaten the lucrative local shellfish industry. The district agreed to help Levy County seek grant funds for the land purchase and, if none were available, to acquire the land until such time as the county could purchase it.

Should the districts be in the real estate business? when the end result is the protection of our natural systems, I would say the answer is a definite "yes."

Should we help local governments to design stormwater plans? When we have the fmancial and technical means to assistthose who do not have adequate resources, again I would say the answer is yes.

Turning to water quantity, Levy County farmers in our district recently agreed to participate in a voluntary pilot project to install time totalizers to measure agricultural water use. Until now, the Suwannee district has depended on a voluntary self-reporting system which, quite frankly, has not been very successful in terms of willingor consistent participation. The return rate on our twice-yearly water use surveys has been low, about 17%-20% District-wide. We're now looking at the possibility of requiring the use of more traditional means of reliable data collection.

The only available statewide water use numbers are the ones compiled every five years by the U.S. Geological Survey, and those figures alone are not always a true reflection of agnicultural water use. Climate conditions, gain or loss of cropland, and even the definition of what constitutes "agricultural" use tend to blur the picture somewhat.

Collectively, the districts must find ways to: use more accurate, consistent reporting and collection methods; eliminate some categories that fall under the definition agricultural use"; clarify the "gray areas" in our permitting rules, and figure out how to factor in all of the variables. We may discover that farmers are using less water than we thought. Or some farmers may discover they are using more water than they need for a crop, and as a result will look for more efficient and economical ways to irrigate.

Finallythe water management districts can and should support state and local efforts to preserve agricultural lands. This can be done through conservation easements and PDR (purchase of development rights) programs; Blue Belt laws or other tax incentives; and creation of voluntary agricultural districts

These programs offer financial relief to cash-strappedfarmers who might otherwise have to sell their land to developers. It also keeps valuable and productive agricultural lands under private ownership and on county tax rolls.

Keeping land in agriculture and open spaces is good for the environment and the economy. It also provides many environmental benefits. Unpaved lands serve as aquifer recharge areas, floodwater storage areas, and habitats for plants and animals. They serve as buffers between urban development and the state's natural areas, providing scenic and open spaces enjoyed by outdoor recreationists and ecotourists.

The 1996 Farm Bill has made millions of

dollars available through a new Farmland Protection Program that matches federal fundswith state and local money for the purchase of conservation easements. Last year the St. Johns district received \$400,000 to arrange a conservation easement in Osceola County aspart of the Upper St. Johns project Other districts will likely submit their own proposals in the future.

During the 198Os, a poll was conducted by American Farmland Trust and the Soil and Water Conservation Society to find out what Americans thought about the need to preserve farmland. Urban residents, farmers and rural landowners all expressed overwhelming support for farmland protection programs: 73% of the general public said that good farmland should not be used for houses and industry;77% of the general public agreed on the need for a government policy to protect Florida's best farmland from urban growth, and 65% of the general public supported providing economic incentives to farmers to keep their land in farming.

The reasonis simple: American consumers still want to see home-grown food on their tables. We know that U.S. farmers must meet the highest food production standards in the world. We want to be able to enjoy juicy Florida oranges, fresh Plant City strawberries sweet Zellwood corn and North Florida potatoes. I can't

imagine a summer picnic without iced-cold watermelons, boiled peanuts, or that favorite of all Southern dishes -- fried, baked, or barbecued chicken - all of which are produced right here in Florida.

We don't want to see our rural areas or way of life disappear. Agriculture is an important part of our heritage and of our future.

## **REFERENCES**

- Florida Department of Agriculture and Consumer Services. 1995. Agricultural Facts.
- Florida Department of Environmental Protection. 1997. Draft: Strategic Assessment of Florida's Environment: SAFE.
- U.S. Geological Survey, Tallahassee, FL. 1997.
  Preliminary Draft: 1995 Annual Water Use
  Survey.
- Florida Farm Bureau, Florida Agpculture. Sept.-Dec. 1995; Feb., Mar., May, Oct. 1996. Gainesville Sun, February 23, 1997.

## LITERATURE CITED

American Farmland Trust. June 1992. Florida's Growth Management Plans: Will Agriculture Survive? A Report on the Impact of Continued Population Growth on Florida's Farmland.