

# **FUTURE DIRECTIONS OF WATER RESOURCE MANAGEMENT IN SOUTH FLORIDA**

by

**SHARON M. TROST**  
Director  
Water Supply Planning Division  
South Florida Water Management District

Future water resource management in South Florida will be based on Water Use Management Plans (WUMPs), which are currently being developed by the South Florida Water Management District (SFWMD). The SFWMD initiated the water use management and planning process in October 1988 in order to develop comprehensive water use plans throughout the District. The WUMP process will result in resource based subregional plans which detail quantitative assessments of available water resources (including ground water and surface water) combined with projections of future water use demands. These subregional plans will include analyses of preventive and remedial actions, including supply augmentation and water demand reduction. The WUMP initiative is divided into two phases.

Participation by representatives of the planning areas will be included throughout both phases of the plan development to assure local needs are met. Implementation of the final plan will be accomplished on the local and regional level utilizing both regulatory and operational approaches.

## **PHASE I**

Phase I will be completed during fiscal years 1989 and 1990, and is made up of three essential elements:

- 1) The District Water Use Management Plan (DWUMP). The DWUMP is the documentation of District wide water management policies and will provide the foundation of the subregional water use management plans (SWUMPS).
- 2) The revision of the Basis of Review. The Basis of Review is the set of rules governing water use allocations in the District. Revisions to the Basis of Review will address incipient local policies and allow incorporation of allocation rules into the SWUMP process.
- 3) Assessment studies. These are water availability models (supply side) and environmental/social demand forecasts (demand side). Water availability models are being developed for ground water and surface water, and the costs of water supply alternatives are being evaluated. The demand forecasting project is currently assessing present and future water use for both urban and agricultural purposes and a special working group has been formed to delineate environmentally sensitive areas.

## **PHASE II**

Phase II will be completed in fiscal years 1990 through 1993. Phase II deals with the actual development, approval and implementation of the Subregional Water Use Management Plans. This process involves:

- 1) The identification of areas where demands will exceed supply. In areas where projected demand is greater than the allocable supply the District will require programs which will reduce demand from its projected level (mandatory demand management, reduced level of permitting, etc.) or will undertake programs to augment supply (reverse osmosis, water reuse, aquifer storage, etc.).
- 2) The formulation of management alternatives such as supply augmentation and demand management. The augmentation/supply alternative program will perform technical and economic evaluations and comparisons of various environmentally compatible water supply alternatives (such as reverse osmosis, use of reclaimed water, aquifer storage and recovery, etc.) in critical water supply problem areas. The demand management program will emphasize four major areas: urban conservation (including xeriscape landscaping, leak detection, and flow restrictive devices), agricultural conservation (efficient irrigation technology and management), regulatory demand management and public outreach and education.
- 3) The evaluation of management options to eliminate unacceptable planning elements. The next round of comprehensive plan renewals (five year comprehensive plans) is scheduled to begin in 1993. The subregional plans will be distributed to all local governments to assist them in the development of their comprehensive plans.
- 4) The preparation of a draft of the final plan.
- 5) Beginning rule making and public hearing procedures. The renewal of all agricultural permits in the SFWMD will begin in 1991 and end in 1993. The subregional plans will be completed for each basin prior to the agricultural permit renewal dates, so that the SFWMD will have a basis for future water use allocation decisions.
- 6) Beginning implementation of final plan.

The final completion date of the SWUMPs will coincide with the next renewal of all agricultural water use permits in each of the areas. The water use plans will also be completed prior to the next revision of the comprehensive plans to facilitate local government planning efforts. In order to be responsive to the changing needs of South Florida, the SWUMPs will be revised every five years again corresponding to the comprehensive planning schedule.