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Florida's Council of 100 and the Future of Water Supply Management in Florida[1]

Roy R. Carriker[2]

In September 2003, the Florida Council of 100 published its Water Management Task Force report, *Improving Florida's Water Supply Management Structure*. The report has stimulated lively debate regarding the adequacy of its findings and the substance of its recommendations. The focal point for much of the debate pertains to task force arguments for eliminating the "local sources first" policy that currently governs water supply development in Florida. The task force would replace the "local sources first" policy with one that favors transporting water from non-local sources when doing so would minimize the costs of water supply development. The report emphasizes that transfers of water from non-local sources would be recommended only when doing so would not harm the environment and that transfers of water from non-local sources would be recommended only after the water needs of the sending community had been met.

The purpose of this EDIS publication is to provide a synopsis of the task force report, including summaries of its findings and recommendations. The full text of the report is available on-line at http://www.fc100.org/reports/waterreportfinal.pdf.

What Is the Florida Council of 100?

The Florida Council of 100 was formed in 1961 to promote the economic growth of Florida and to improve the economic well-being and quality of life of its citizens [Florida Council of 100 Water Management Task Force (FC100), 2003, p. 2]. It describes itself as a private, non-profit, non-partisan association whose members represent a cross-section of key business leaders in Florida.

What Is the Water Management Task Force?

The Water Management Task Force was established by the Florida Council of 100 in the spring of 2002 to:

> recommend statewide water management policies that foster sustainable and environmentally sound water supplies and resources that are economically feasible to meet current and future Florida needs (FC100, p. 3).

In his introduction to the report, task force chairman Lee Arnold announced that the group's

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2. Roy R. Carriker, Professor, Department of Food and Resource Economics, Florida Cooperative Extension Service, UF/IFAS, University of Florida, Gainesville, FL.

recommendations emphasize a *statewide* perspective on policies that are *environmentally sound and economically feasible*.

Task Force Findings

Why Florida Needs to Be Concerned about Water

Florida is almost entirely underlain by porous rock formations known as aquifers that store and transport water, most of which comes from rainfall (FC100, p. 7). The Floridan Aquifer underlies most of the state and is the source of clean fresh water for most of north and central Florida. In southern Florida, the water in the Floridan Aquifer is brackish in its natural state, such that its use as a source of freshwater is not feasible. The cities and counties of Florida's lower east coast rely upon the Biscayne Aquifer, which is recharged locally by rainfall and is a prolific source of freshwater underlying Dade, Broward, and Palm Beach Counties. A third aquifer system, known as the "Sand and Gravel Aquifer" is an important source of groundwater in several counties of the western Florida panhandle.

The United States Geological Survey estimates that 7.2 billion gallons of freshwater are withdrawn for use each day in Florida (FC100, p. 8). In total, 60 percent of the freshwater in Florida is from surface water sources and 40 percent is from groundwater, principally from the Floridan Aquifer. Of these withdrawals, 45 percent is withdrawn for irrigation, 29 percent for public supplies, and the remaining 26 percent is withdrawn by self-supplied domestic, commercial, and industrial users, and by power generation plants.

Forecasts of water withdrawals for the year 2020 show that agriculture, domestic self-supply, and industry/commercial/electric demand will remain at the 2003 levels, or even decline (FC100, pp. 9-10). However, according to the report, Florida will need to increase its freshwater supplies from 7.2 billion gallons per day to 9.1 billion gallons per day in order to "meet demands for [Florida's] population increase." Population projections provided by the Department of Environmental Protection (DEP) anticipate a 25 percent increase in Florida's population, from 15.9 million residents in 2003 to approximately 21.8 million residents in 2020.

The report notes that about half of Florida's water withdrawals today are in the South Florida Water Management District. With about half of the forecasted growth in that District as well, population growth, drained wetlands, farming, and cyclical drought will heavily tax the water supply in south Florida (FC100, p. 8). The task force concluded that it is obvious that Florida will need to increase its supply of freshwater in order to meet demand (FC100, p. 10).

It Is Time to Reevaluate Florida's Water Governance Structure

Florida's Water Management Structure. Through enactment of the 1972 Water Resources Act, the Florida Legislature created a new system of water law for the state (FC100, p. 12). The Act established five water management districts based on surface watershed boundaries (not aquifer boundaries). Each district is managed by a governing board which has the authority to regulate, manage, permit, and tax. The report cites language in the Water Resources Act to the effect that "*water is a resource of the state*—it is held in trust by the state for the people of Florida" (emphasis as in the original) [FC100, p. 12]. The report also notes that the Water Resources Act was patterned after a Model Water Code, but that a notable departure from the model was the Legislature's decision not to create a state water board to oversee the water management districts and have authority over water supply and quality issues.

The Need for a Statewide Water Board. The task force advances several arguments for the creation of a statewide water board (FC100, p. 13). According to the task force:

- persistent water shortages in several parts of the state are evidence that the present governance structure is inadequate;
- local governments are not well-suited to address water shortage problems that are regional in nature because their jurisdiction is too narrow and they lack adequate funding for capital-intensive water supply infrastructure;

- water management districts now have the responsibility for water supply planning as well as for water use permitting—a dual responsibility that creates an inherent conflict in their mission (FC100, p. 13);

- Florida lacks a singularly focused advocate for water supply at the state level.

"*Local Sources First*". Current Florida law provides for the transfer of water across hydrologic boundaries, but only on the condition that the transfer does not diminish the availabilty of water for the present and future needs of the sending area (FC100, p. 14). It also requires that the receiving area must have exhausted all "reasonable" local sources and options. According to the task force report,

> One of the unintended consequences of Florida's "local sources first" policy is that districts and localities think they "own their water" and must prevent access by any other district or locality (FC100, p. 14).

The report continues:

> [T]he "local sources first" policy discourages the full understanding of Florida water law, which states that water is a public resource, leading to polarization between water-rich and water-poor areas of the state (FC100, p. 14).

The task force cites several examples within the state where "water-rich" areas are successfully supplying "water-poor" areas across county lines (FC100, p. 15). The examples cited by the report are the Jacksonville Electric Authority, Tampa Bay Water, and Sarasota/Manatee agreements.

The Science and Technology of Water Needs Improvement

The report asserts that "the development, definition, and use of water data and science across the state seems often uncoordinated and conflicting" (FC100, 16). The task force, citing its research and interviews, states that

> ...it is unclear whether water management districts and localities use common scientific proven methodologies and technologies to compute water data, such as water flows/levels and costs, or future water demand projections (FC100, p. 16).

The task force attributes failure of the water management districts to establish standard minimum flows and levels to "varying measurement techniques and other concerns" (FC100, p. 16). It concludes:

> All participants need to find common ground in the science of water or Florida will go forward unprepared to sustain our environment while accommodating forecasted population growth (FC100, p. 16).

Partnerships Can Help Address the State's Water Storage and Distribution Problem

The task force states,

> It is our conclusion that Florida's localized shortage issues are not a water resources problem. One need only to fly on an airplane around the state to see Florida has an abundance of open space and potential for environmentally sound sources of water (FC100, p. 17).

Based on this statement, the task force argues that a significant part of Florida's water shortage problems are of adequate storage and distribution, noting, "*...80 percent of the population and public consumption [of water] is south of I-4; 80 percent of the water resources are north of I-4*" (emphasis added) [FC100, p. 17].

The report states that it is necessary to develop, treat, distribute, and create alternative supplies that could be difficult, time consuming, expensive, and subject to environmental criticism (FC100, p. 18). One of the alternatives the task force suggests is "public-private" partnerships, wherein private-sector partners are contracted to finance, design, build, and operate public facilities. The report states:

> Private sector involvement can be an even bigger part of the solution for developing, treating, distributing, and creating water supplies, as it has been throughout the world (FC100, p. 17).

The task force calls for the creation of incentives for private companies and public entities to develop water resources and to build new water supplies and infrastructure. Such partnerships would distribute water more effectively within regions or "*across the state to water stressed areas*", would implement alternative water supplies, and would arrive at other creative solutions to meet current needs and future demands (emphasis added) [FC100, p. 18].

Task Force Recommendations

The task force recommended that that "local sources first" policy should be replaced with a "resource-based test" based on whether it would be economically feasible to transfer water from a non-local source if:

- it costs significantly more to develop alternative water supplies locally to transport water from someplace else.
- there is no harm to the environment or a potential sender's needs.
- it is mutually beneficial, and minimum flows and levels are not violated (FC100, p. 19).

Recommendation One

Establish a Water Supply Commission, with a statewide perspective, to ensure an adequate water supply to sustain the environment and accommodate forecasted population growth (FC100, p. 20).

The Water Supply Commission envisioned by the task force would have at least seven members, with at least one member from each of the five water management districts. These commissioners would serve four-year staggered terms, without compensation. The members would be nominated by the Governor and subject to confirmation by the Florida Senate—in the same manner as similar gubernatorial appointments. A "small, dedicated staff" would be assigned to the Commission. Funding for the Commission would "come from a legislatively set pro-rata share of the *ad valorem* revenues of the five water management districts" (FC100, p. 20).

The task force would assign the following specific functions to the Commission:

- "redefining" the water supply relationship among the state, districts, and localities (FC100, p. 20).
- planning, coordinating, and advocating a statewide "sustainable environmentally sound" water supply policy.
- supervising the water management districts for water supply planning;
- resolving conflicts relating to water supply.
- reviewing, approving, and monitoring district water supply plans and resolving "science" conflicts.
- establishing statewide water conservation and reuse goals based upon the plans of local districts and governments.
- encouraging the establishment of regional and/or countywide water supplies (e.g., multi-jurisdictional utilities, which provide wholesale water to member utilities such as Fairpoint Utilities or Tampa Bay Water) [FC100, p. 21].
- advising the Governor and Cabinet on resolution of water supply disputes.
- reviewing the "local sources first" policy and making appropriate recommendations to the Governor, which may include "...evolution into a resource-based test that would be part of the development of regional water supply plans" (FC100, p. 21).

The report spells out which functions would *not* be assigned to the Commission and includes parenthetical explanations for why those functions would best be performed by other entities. The Commission's functions would *not* include*:*

- development of water supplies (best done at the local level).
- permitting (best done by the districts).
- *ad valorem* taxing (best done at the district and local levels).

- setting of minimum flows and levels (best done by the districts).
- regulating and protecting water quality (best done at the DEP, district, and local levels).
- protecting wetlands (best done at the DEP, district, and local levels).
- providing flood protection (best done at the DEP, district, and local levels).
- implementing stormwater projects (best done at the DEP, district, and levels).
- managing droughts (best done at the DEP, district, and local levels).
- managing the natural ecology (best done at the DEP, district, and local levels) [FC100, p. 21].

Recommendation Two

Establish a Water Data Center that is clearly in cooperation with the U.S. Geological Survey and the Florida Geological Survey.

The task force believes a Water Data Center would be the best way to create a standardized methodology for reporting and collecting water data and for planning and forecasting (FC100, p. 22).

Recommendation Three

Establish a Science Advisory Council, comprised of voluntary scientists and engineers.

This Council would bring together the "best minds in the private and public sector" to advise the Governor, the proposed Florida Water Supply Commission, and the Environmental Regulation Commission on appropriate use of data, measurements techniques, and methodologies (FC100, p. 22).

Recommendation Four

Find ways to encourage public-private partnerships and public-public partnerships.

The task force believes such partnerships would allow market-driven forces to play a role in water management in ways that would enhance water supply, conservation, distribution efficiency, and the environment (FC100, p. 23). The reports states, without elaboration, that "excess water" on and within state land could become an income generator for the state and the communities from which water is supplied (FC100, p. 23). The task force defines "excess water" to mean "excess to minimum flows and levels and local consumption needs now and for future."

Recommendation Five

Conduct analysis to determine the practicality of a statewide water distribution system that ensures all safeguards for future growth and protection of the environment.

According to the task force, "[*d*]*eveloping a system that enables water distribution from water-rich areas to water-poor areas seems to make good environmental and economic sense*" (emphasis added) [(FC100, p. 23]. Furthermore, a statewide water distribution system "would establish an economic value to water and water would become a general revenue source for the state and for sending areas" (FC100, p. 23).

The task force also believes a comprehensive analysis would demonstrate whether "a statewide water distribution system from water-rich areas to water-poor areas is more environmentally sound and cost effective than other alternative water supplies, such as desalination (FC100, p. 23).

The Task Force's Concluding Comments

[*A*]*s a concluding comment, potential funding of new traditional and alternative water supplies is not included in this report, as most see funding of water supply development as the responsibility of the consumer of the water. Our proposals recommend a strategy and a structure to improve governance, define the science, and build partnerships to guarantee certainty in water supply development. The recommendations set forth set the stage for continuous reasonable debate of the planning, implementation, and funding challenges, as well as the maintenance of our wonderful environment* (emphasis added) [FC100, p. 24].

References

Florida Council of 100. 2003. Improving Florida's water supply management structure. Tampa, FL: Rinaldi. Retrieved December 5, 2003 from http://www.fc100.org/reports/waterreportfinal.pdf.