



2004 Annual Agency Reuse Report

Southwest Florida
Water Management District


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Southwest Florida Water Management District

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PART I

BACKGROUND

The Southwest Florida Water Management District (SWFWMD/District) is pleased to provide the *SWFWMD 2004 Annual Agency Reuse Report*. This report satisfies the requirements of House Bill 293 passed in the 2004 Legislative session, which created FS 403.0645. The legislation requires state agencies to identify and report reclaimed water use at their respective facilities, as well as to identify agency efforts to encourage and promote reclaimed water utilization.

The Southwest Florida Water Management District owns and operates four office facilities. The SWFWMD headquarters is in Brooksville and there are three (3) service offices in Tampa, Bartow, and Sarasota. The Brooksville headquarters is the only office with its own on-site treatment facility. The wastewater from the Brooksville office is treated at that facility and 100% is reused via groundwater recharge. The wastewater from the three service offices is treated by local utilities and reused throughout their respective reclaimed water service areas (City of Tampa, City of Bartow, and Sarasota County). At this time, reuse is not available at any of the three SWFWMD service offices. However, the SWFWMD is involved with the development and funding of a stormwater reuse project that is anticipated to provide reuse at District Sarasota service office in 2007.

In addition to promoting and encouraging reuse at SWFWMD properties the District has an aggressive alternative water supply development program. The SWFWMD has committed to identifying and assisting with appropriate solutions to the water resource problems within its area by providing technical and financial support in developing alternative water supplies. Program funding sources are primarily the District's eight basin boards and Governing Board. As a result, since the inception of the funding program in Fiscal year (FY) 1987 and through FY2005, more than \$205 million dollars in District grants for 249 reuse projects (\$607 million dollars in total project costs) have been cooperatively funded with more than 55 separate cooperators. These projects will result in 849 miles of reuse pipeline, 200 mgd of reclaimed water supply, 618 mg of reuse storage, and 131 mgd of traditional water supplies offset by the use of reclaimed water.

PART II**Encouragement and Promotion of Reuse in Florida**

The SWFWMD is unique among Florida's water management districts in that, beyond the similar structure of the governing boards, it has nine basins with jurisdictional boundaries encompassing the major watersheds making up the District. In eight of the nine basins population is such that boards have been appointed to address local, sub-regional water resource issues by sponsoring projects in cooperation with local governments, private citizens and private businesses, to improve, protect and restore the water resources of their respective areas. The basin boards, like the Governing Board, have the authority to levy ad valorem taxes up to 0.5 mill within their boundaries. Budget development and approval follow the public hearing and adoption process as required under state law.

The SWFWMD basin boards have been providing local funds for local water resource-related projects since the District's creation in 1961. Originally, the focus of the basin boards and the Governing Board had been on funding flood control projects. In the late 1980s, the basin priorities began to shift to the identification and funding of projects that focus on water conservation and the development of alternative water sources. Currently, staff and financial resources are focused on issues of water quality, natural systems improvement, flood protection, water conservation, and alternative water source development.

Before the late 1980s, basin participation in local water resource projects, both financial and staff support was primarily driven by requests from local governments. Recognizing the importance of their ability to support local governments by providing solutions to the growing issues surrounding water supply, the basins adopted a more pro-active role in addressing local non-regulatory water issues. At first, there was no set system for receiving project assistance requests, and no criteria regarding timing, project eligibility, funding, and other conditions for participation. The *Cooperative Funding Initiative* was established in recognition of the growing need for a structured approach in order to maximize the basins' effectiveness in choosing and funding water resource projects and budgeting for their completion. The funding policies reflect the District position that reclaimed water is a resource to be used efficiently for the maximum benefit to the water resource.

BASIN BOARD COOPERATIVE FUNDING INITIATIVE

A structured program for solicitation of requests for local water resource projects was established for all basins in the SWFWMD in 1987. Since then, the basin boards have continued to refine their policies in response to changing goals and basin priorities. As a whole, the basins have made noteworthy strides in the areas of water conservation and alternative water sources development. Eligible Cooperative Funding Initiative projects generally receive 50 percent funding from appropriate basin board(s), and the remaining 50 percent from the local cooperator(s). The 50 percent basin board contribution may be split among two or more basins, depending on the geographical area served by the project. The Cooperative Funding Initiative has been instrumental in encouraging the development of reclaimed water projects, and in recognition of this the WateReuse Association awarded the District with its prestigious 2003 WateReuse Special Award of Merit.

NEW WATER SOURCES INITIATIVE (NWSI)

In 1993, the SWFWMD Governing Board recognized the need to accelerate the development of alternative water sources to address the water resource impacts identified in the Southern Water Use Caution Area (SWUCA) and the Northern Tampa Bay Water Use Caution Area (NTBWUCA). The program solicited requests for large, regionally significant projects that would develop non-traditional (other than ground water) sources to offset existing use or provide for future growth. The Governing Board initiated the New Water Sources Initiative (NWSI) program with a \$10 million commitment beginning in FY1994, and up to \$10 million in each subsequent year. This program is in addition to the Cooperative Funding Initiative.

Eligible NWSI projects generally receive 25 percent of their funding from the District's Governing Board, 25 percent from appropriate basin board(s), and the remaining 50 percent from the local cooperator(s). The 25 percent basin board contribution may be split among two or more basins, depending on the geographical area served by the project. The NWSI program, like the Cooperative Funding Initiative, is administered pursuant to legislative directives to promote and fund alternative source development.

WATER SUPPLY AND RESOURCE DEVELOPMENT PROJECTS (WSRD)

In response to the findings of the SWFWMD *Regional Water Supply Plan (2001)*, the SWFWMD Governing Board and the basin boards initiated another funding opportunity to address large-scale water supply and resource development projects with multiple cooperators and regional benefits. The WSRD projects receive funding from the Governing Board, multiple basin boards, and from local cooperators. Depending upon the size and scope of the project, some WSRD projects may also involve federal funding.

Many WSRD projects in the Tampa Bay Area such as the innovative "Tampa Bay Regional Reclaimed Water & Downstream Augmentation Project" have been funded by the District's basin boards according to the same formula used in the landmark Tampa Bay Water/SWFWMD Partnership Plan, as the WSRD projects are expected to delay the need for additional traditional water supply infrastructure for Tampa Bay Water. The financial formula is reflective of the proportional benefits anticipated to be realized by each of the basins, and the collective basin funding is then matched by the Governing Board. As such, eligible WSRD projects generally receive 25 percent of their funding from the District's Governing Board, 25 percent from the collective basin boards, and the remaining 50 percent from local cooperators.

Table 1: Summary of Reuse Projects

To summarize the SWFWMD's reclaimed water funding efforts, Table 1 shows the significant historical financial contributions and alternative water quantities made available as a result of Governing Board and basin board participation in more than 249 reuse projects since fiscal year 1987.

TABLE 1			
SUMMARY OF REUSE PROJECTS BY BASIN BOARDS AND GOVERNING BOARD			
(Including Reuse Projects Funded Through the NWSI Program and WSRD Projects)			
Governing Board/ Basin Board(s) Providing Funding	Available Reclaimed Water (GPD)	Gallons of Storage (Million)	Amount (\$) Budgeted by District*
Alafia River	6,857,147	12.07	\$3,974,409
Coastal Rivers	14,316,055	17.68	\$15,237,264
Hillsborough River	9,530,515	28.74	\$11,030,062
Manasota	33,674,085	160.79	\$20,423,449
NW Hillsborough	13,206,944	21.10	\$16,311,351
Peace River	20,042,644	20.38	\$17,518,429
Pinellas-Anclote River	60,138,551	123.53	\$92,831,351
Withlacoochee River	3,693,135	4.21	\$2,700,632
Governing Board	38,952,335	228.78	\$25,052,578
Total	200,411,411	617.78	\$205,079,525

Source: Reuse and Conservation Projects Summary Report, October 01, 2004.

Note: Amounts do not include Partnership Project funding.

*FY1987-FY2005 total of 249 budgeted projects.

PART III

Reclaimed Water Education & Research

As part of the District's efforts to promote and encourage reuse, the SWFWMD has developed a comprehensive commitment to reclaimed water education and research.

EDUCATION PROGRAM REQUIRED OF ALL RECLAIMED WATER FUNDING RECIPIENTS

All SWFWMD reclaimed water funding agreements contain language requiring funding partners to develop a District approved reclaimed water education program that conveys to customers that reclaimed water is a valuable resource and should be used wisely. In addition to the education required of funding partners, the District has developed a reclaimed water brochure for residents and also a guide to assist utilities, engineering firms, water supply districts, environmental agencies, local governments, industry and other parties interested in developing and expanding reclaimed water systems.

RECLAIMED WATER GUIDE

The award winning *Southwest Florida Water Management District Reclaimed Water Guide* is offered free of charge and provides real examples of ordinances, policies, regulations, surveys, petitions, permits, contracts, public information and notification, inspections, cross-connection control, storage options including Aquifer Storage and Recovery, rates and fees,

signage, appurtenances, financing, contacts, suggestions, tidbits of knowledge, and much more. Since the District first published the *Guide* in the spring of 1999, support has been overwhelming and the original intent of the book as a District wide resource has been surpassed. The SWFWMD has distributed more than 600 hard copies and 1000+ CD versions to local, national and international entities.

RECLAIMED WATER WEB SITE DEVELOPMENT

The District is in the final stages of developing its comprehensive reclaimed water web site. The web site will offer "one stop shopping" for anyone looking for reclaimed water information. The easy to navigate site will contain detailed maps of all the reuse systems within the District as well as multiple levels of reuse information. Information will be geared to inquires from the average resident looking for general reuse information on up to searches by research scientists looking for the latest links and reuse information. The SWFWMD Reclaimed Water Website is anticipated to go online in the late spring of 2005.

RECLAIMED WATER RESEARCH FUNDING

In conjunction with the District's funding and education efforts, the SWFWMD has maximized its research efforts by partnering with the WaterReuse Association and WaterReuse Foundation. The District became a member of the WaterReuse Association in 2002 and became a subscriber member of the Foundation in 2003. The District's Executive Director serves on the Foundation's Board of Directors, and a District Project Manager serves on the Foundation's Research Advisory Committee and WaterReuse Association's Potable Reuse Committee. To date the District has budgeted more than \$650,000 to fund \$1,700,000 worth of WaterReuse reclaimed water research projects.

PART IV

SUMMARY OF RECLAIMED WATER USE AT AGENCY OWNED FACILITIES

As stated previously in this report the Brooksville SWFWMD WWTP is the only wastewater treatment facility that the SWFWMD owns. In 2004 an average of **7,100** gallons per day (gpd) of wastewater from the Brooksville headquarters office was treated at the small package plant facility and **100%** was reused via groundwater recharge.

The wastewater from the District's three service offices was treated by local utilities (**1,300 gpd** from the SWFWMD Tampa Service Office treated by the City of Tampa, **950 gpd** from the SWFWMD Bartow Service Office treated by the City of Bartow, and **2,400 gpd** from the SWFWMD Sarasota Service Office treated by Sarasota County) and reused throughout their respective reclaimed water service areas. At this time, reuse is not available at any of the three SWFWMD service office sites.

CONCLUSION

The Southwest Florida Water Management District has developed an aggressive reclaimed water and alternative water supply development program through the efficient utilization of the resources available to its eight basin boards and the Governing Board. The SWFWMD is committed to identifying and assisting with appropriate solutions to the water resource problems within its area by providing technical and financial support in developing alternative water supplies. The SWFWMD has a long history of commitment to cooperative efforts with local governments, private industry, and the public at large through the sponsoring of research, flood studies, conservation, natural system improvements, water quality and water supply. The water supply element features the development of alternative water supplies such as reclaimed water. The SWFWMD is confident in its mission to find and maintain adequate and ecologically sustainable resources within its boundaries.

APPENDICES

1. SWFWMD FY2005 Annual Alternative Water Supply Report (SWFWMD, 2005)
2. SWFWMD 2004 Reuse and Conservation Projects Summary Report (SWFWMD, 2004)
3. SWFWMD Reclaimed Water Guide (SWFWMD, 2000)
4. Tampa Bay Regional Reclaimed Water & Downstream Augmentation Project (Greeley & Hansen, 2004)

Submittal Addresses – The Annual Agency Reuse Reports shall be submitted to the following two addresses:

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