Tapping New Sources

Meeting 2025 Water Supply Needs

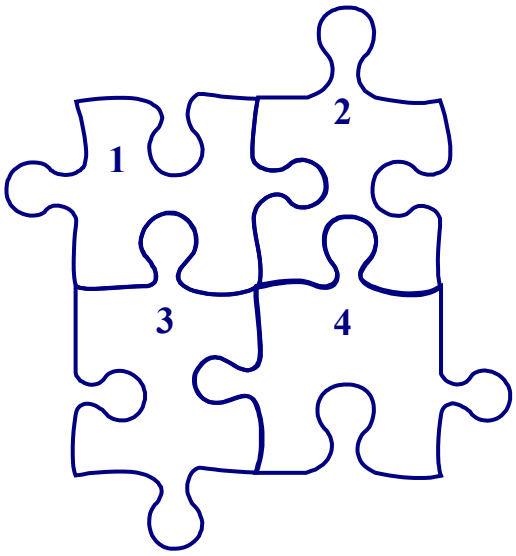
Annual Status Report on Regional Water Supply Planning

Florida Department of Environmental Protection

March 2007

Acknowledgements

We appreciate the kind assistance of the South Florida and St. Johns River Water Management Districts in providing photos of alternative water supply projects for this report.



1 – Bonita Springs Reclaimed Water Production Facility, Equalization and Reject Ponds, South Florida Water Management District
2 – Reverse Osmosis Membrane Treatment Unit, St. Johns River Water Management District
3 – Ormond Beach Water Treatment Plant Expansion, Reverse Osmosis Facility, St. Johns River Water Management District
4 – Reclaimed Water Tanks and Piping, South Florida Water Management District

We also gratefully acknowledge all of the water management district staff who contributed information for the development of this report. We especially thank Jane Bucca, Jim Jackson, and Jorge Patino at SFWMD; Rand Frahm at SWFWMD; Paul Thorpe at NWFWMD; Steve Minnis at SRWMD; Vicki Kroger and John Wester at SJRWMD.

We especially acknowledge our friend Marvin Raulston who passed away this year. Marvin spent his career dedicated to protecting the water resources of the state. We shall miss him.

SUMMARY

About two billion gallons more water a day will be needed for our use in Florida by 2025. The state has created and funded programs to assure that these future demands are met, while protecting Florida's natural environment. During the past year, the water management districts updated their regional water supply plans and implemented the recently created Water Protection and Sustainability Program. With the legislative changes in 2005, regional water supply planners are working closely with water suppliers and growth managers to identify specific water supply development projects to meet the projected demands. All of the regional water supply plans have identified enough sources and projects to meet the 2025 needs. The plans identify many alternative water supply projects that will reduce our reliance on finite groundwater supplies.

While it is important to identify the projects necessary to meet the needs, it does no good to develop these plans if the projects are not constructed. The Legislature recognized that the development of alternative water supplies through implementation of the plans was crucial to Florida's future. The Water Protection and Sustainability Program was established, in 2005, to help water suppliers fund alternative water supply projects. During the first two years (Fiscal Years 2005 – 2006 and 2006 – 2007) of the program the water management districts helped fund 238 projects. The total construction cost of these projects is approximately $2.5 billion. For the first two years, the Water Protection and Sustainability Program will provide $160 million towards the construction of these projects. In addition to this state contribution, the water management districts will contribute approximately $132 million and water suppliers will contribute about $1.6 billion.[1]

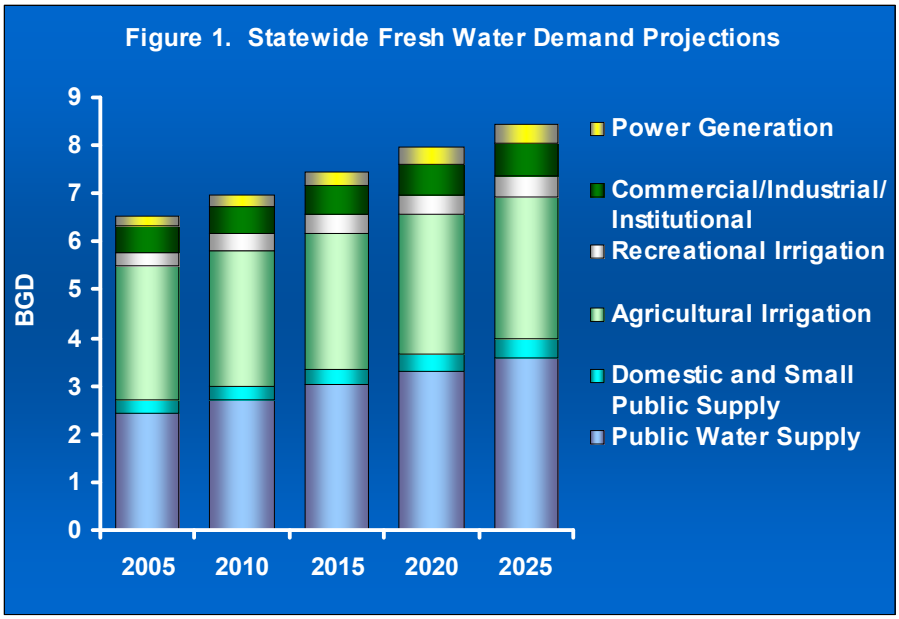
Reclaimed water and brackish water demineralization are the dominant sources of new water supplies. These two types will provide approximately 77% of the water developed by the alternative water supply projects. When completed, these projects are expected to provide *725 million gallons per day of "new" water*. With the help of the Water Protection and Sustainability Program, Florida is well on its way toward meeting future water needs and protecting our water resources for future generations.

This report, prepared by the Florida Department of Environmental Protection according to statutory requirements of sections 373.0361(5) and 373.536(6)(a)4, F.S., summarizes the progress of the water management districts' regional water supply plans, the five-year water resource development work programs, and the development of alternative water sources through funding provided by the Water Protection and Sustainability Program. The report provides information on the trends statewide and at the individual water management districts.

[1] The costs reported for the Water Protection and Sustainability Program, water suppliers, and water management district match represent the costs reported for the first two years of the program, while the total construction costs are reported for the life of the project which may extend beyond two years.

HOW MUCH WATER WILL WE NEED?

In 2005, Floridians used an estimated 6.5 billion gallons per day of fresh water. In 2005, agriculture was the largest use category and accounted for approximately 43% of the fresh water use (Figure 1). Public water supply was the next largest user and accounted for approximately 37% of the total use.



By 2025, the demand for fresh water is estimated to increase by about 2 billion gallons per day to 8.5 billion gallons per day. This is an increase of 29.5%. Agriculture, the sector with the smallest projected increase in use over the next 20 years, will no longer be the largest user and its percentage of total use will decline to 35%. By 2025, public water supply is expected to increase by 49% and become the largest user of fresh water (43% of total fresh water use). The sector with the largest percentage increase over the next 20 years is expected to be power generation. However, this sector is still expected to account for only 5% of the total fresh water use.

Previously, the department's annual reports had provided significantly higher estimates for demand projections. The lower projections found in this year's report are mostly due to changes both in agricultural activities and the methods used to estimate agricultural demand within the South Florida Water Management District. First, agricultural acreage, especially citrus acreage, is being converted to urban uses at a faster rate than anticipated in previous plans. Secondly, and most importantly, the district is using a more accurate model to estimate agricultural demands.

HOW WILL WE MEET THE NEED?

The Florida Water Resources Act (Chapter 373, F.S.), requires water management districts to develop regional water supply plans where existing and anticipated water sources are inadequate to meet demands for a 20-year planning horizon. Regional Water Supply Plans (RWSPs) must include a list of *water supply sources* and *water resource development projects* that will meet anticipated demands while sustaining water resources and related natural systems.

By 2001, the Northwest Florida, St. Johns River, Southwest Florida and South Florida Water Management Districts completed the first set of regional water supply plans. The original plans identified sufficient sources of water to meet 2020 demands. The plans included many projects that would help the districts better manage the water resources. Additionally, the plans identified specific projects for developing water supplies, but did not necessarily provide specific information about the implementation of these projects.

Each plan must be updated every five years (Section 62-40.531, F.A.C.). As a result of the 2005 legislative amendments, the updated plans must identify specific water supply projects that will meet existing and future water demands while sustaining the environment. The plans must also encourage multijurisdictional approaches to alternative water supply development and recommend who should implement specific alternative water supply projects. Alternative water supplies include salt water, brackish water, surface water, reclaimed water, storm water, and other nontraditional sources**.**

During 2006, the St. Johns River Water Management (SJRWMD), the Southwest Florida Water Management District (SWFWMD), and the Northwest Florida Water Management District (NWFWMD) completed their updates of their regional water supply plans. Additionally, the South Florida Water Management District (SFWMD) completed the update of regional water supply plans for three of their four planning regions: Kissimmee Basin, Upper East Coast, and the Lower West Coast. The

SFWMD completed the update to the Lower East Coast Water Supply Plan in February 2007. The NWFWMD determined that another region of their district (Region V - encompassing Gulf and Franklin Counties) needed a water supply plan, which was finalized January 2007. The Suwannee River Water Management District (SRWMD) determined that their groundwater supplies are sufficient to meet the 2025 demand and they do not need to develop a regional water supply plan. This district is closely monitoring three areas that have high population growth to ensure that water supplies continue to be adequate to meet future demands.

Based upon the plans, Florida's water supply will be adequate to meet 2025 demands through development of both traditional and alternative water supply sources and increased water conservation. In NWFWMD, the plans emphasize shifting the demand from coastal well fields to inland well fields and the development of surface water resources. In the remaining areas of the state, the development of reclaimed water and brackish water sources is emphasized. Water conservation is an integral part of all plans and all the districts are participants in the Conserve Florida program (Appendix II provides an update on Conserve Florida).

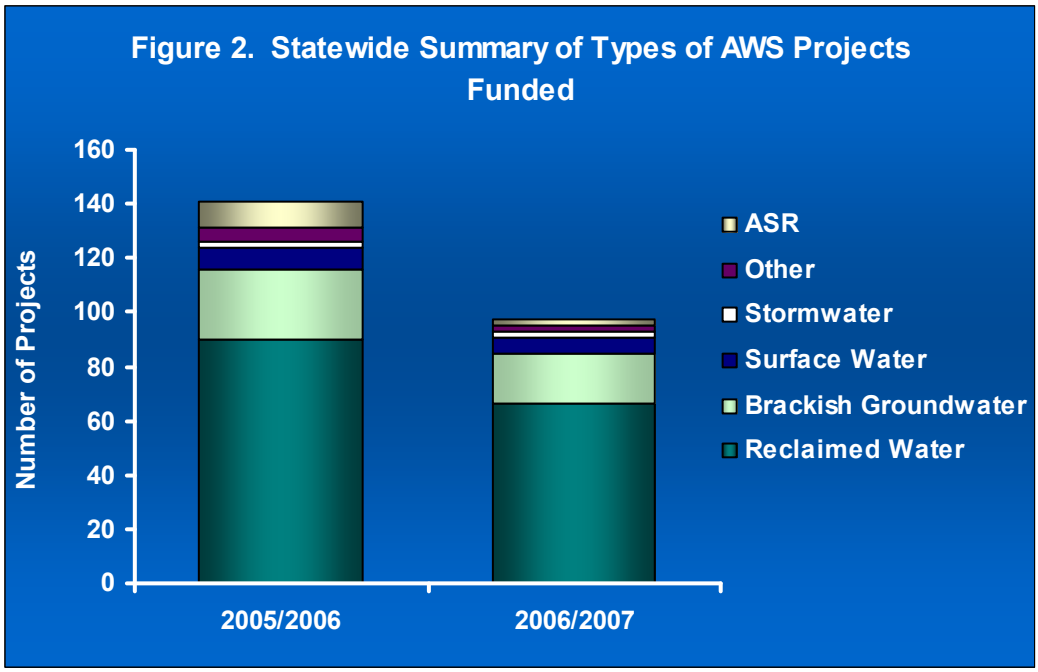
Each year, the districts prepare *Five-Year Water Resource Development Work Programs*, which describe the districts' implementation of the water resource development portion of their regional water supply plans. The department reviewed this year's work programs and determined that they were consistent with the regional water supply plans and the expenditures appeared to be adequate. The work programs become a part of the *Consolidated Water Management District Annual Reports* that are due to the Governor and Legislature by March 1.

HOW WILL WE FUND OUR FUTURE ALTERNATIVE WATER SUPPLIES?

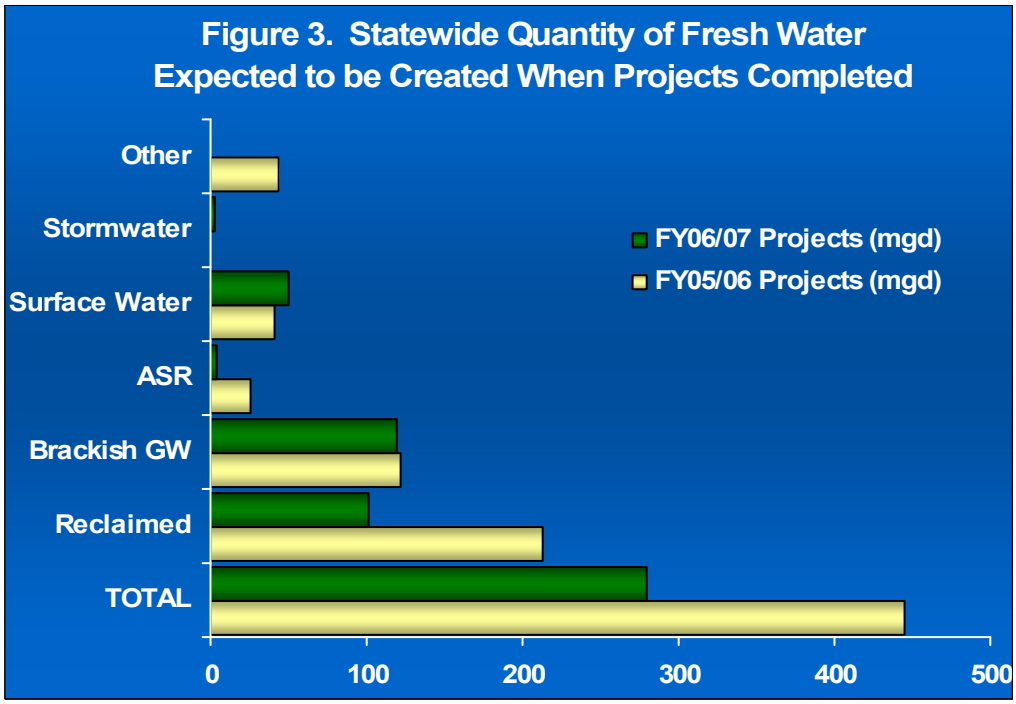
The *Water Protection and Sustainability Program (WPSP)*, created in 2005, provides state funds to the districts for alternative water supply (AWS) project construction. These funds, along with matching district funds, are awarded as grants to local water suppliers. For fiscal year (FY) 2005 – 2006, the state funding level was $100 million. For FY 2006 – 2007 and subsequent fiscal years, the state funding level will be $60 million. These funds are then distributed to the districts according to statutory percentages as shown in Table 1.

Table 1. Funding Distributions for Alternative Water Supply through the Water Protection and Sustainability Program			
Water Management District	**Allocation**	**FY 2005 – 2006 Funds**	**FY 2006 – 2007 and Future Years**
South Florida	30 %	$30 million	$18 million
Southwest Florida	25 %	$25 million	$15 million
St. Johns River	25 %	$25 million	$15 million
Suwannee River	10 %	$10 million	$6 million
Northwest Florida	10 %	$10 million	$6 million
Total		$100 million	$60 million

During the first year of the Water Protection and Sustainability Program, the water management districts provided funding assistance to local water suppliers for the construction of 141 projects. Figure 2 shows that approximately 64% of the projects funded during the first year were reclaimed water projects. The next most common group of projects funded were brackish groundwater projects, which comprised approximately 18% of the total.



During FY 2006 – 2007, the districts expect to provide funding assistance to local water suppliers for the construction of 97 projects. Again, reclaimed water and brackish groundwater will be the largest groups of projects funded through this program. In the second year of the program, funding declined to $60 million, and therefore fewer projects will receive funds compared to the previous year. Additionally, some of the districts will be funding larger multijurisdictional projects.

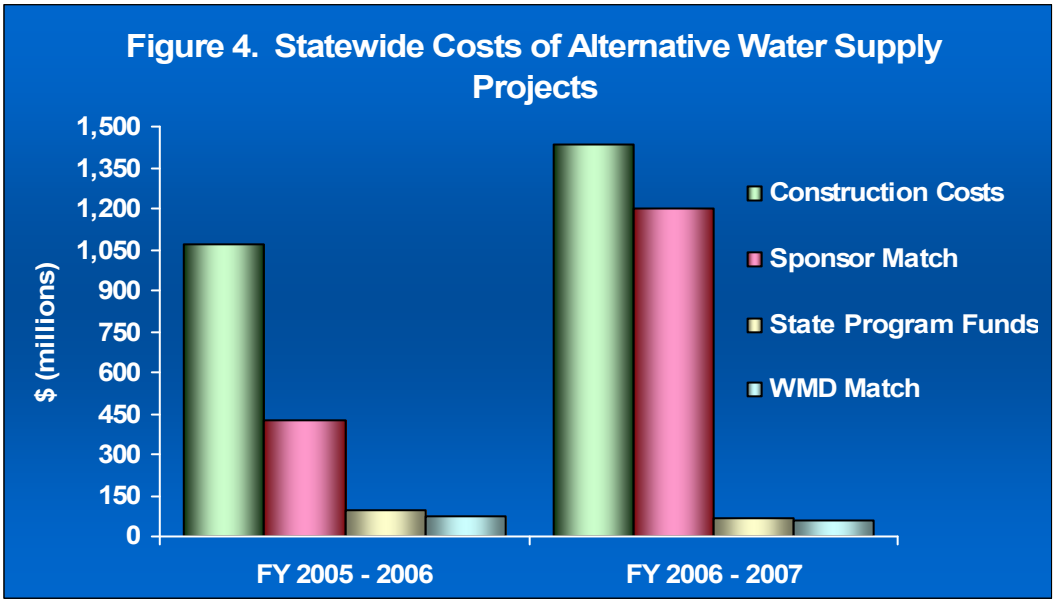


The districts estimate that FY 2005 – 2006 projects, when completed, will help create approximately 446 million gallons per day (mgd) of "new water." Figure 3 shows that reclaimed water projects are expected to produce the largest amount of water, which is approximately 213 mgd. This estimated amount reflects actual reclaimed water flows, but it does not reflect the lesser actual amount of "traditional" water that is expected to be replaced by the development of reclaimed water. Brackish groundwater projects are expected to produce the next largest amount of water, which is approximately 122 mgd.

When the FY 2006 – 2007 projects are completed, approximately 280 mgd of new water will be created. Again the reclaimed water and brackish groundwater projects will generate the most water. When construction is completed for all the projects funded during the first two years of the program, it is expected that approximately 725 mgd of water will be produced.

During the first two years of the program, the total construction cost of the projects selected for funding is approximately $2.5 billion (Figure 4). Based just on the funding for the first two years of the program, the Water Protection and Sustainability Program, including the match provided by the water management districts, will provide about $292 million toward the construction costs, which represents about 12% of the total construction costs. Florida Statutes do not require the Suwannee River and Northwest Florida Water Management Districts to

provide matching funds. The water suppliers have committed to providing about $1.6 billion toward construction of these projects, which represents about 65% of the total. Larger, multi-year projects may receive additional state and district funds in future years. However, in most cases, the statute requires that the local sponsor ultimately be responsible for at least 60% of the total project construction costs.[2]



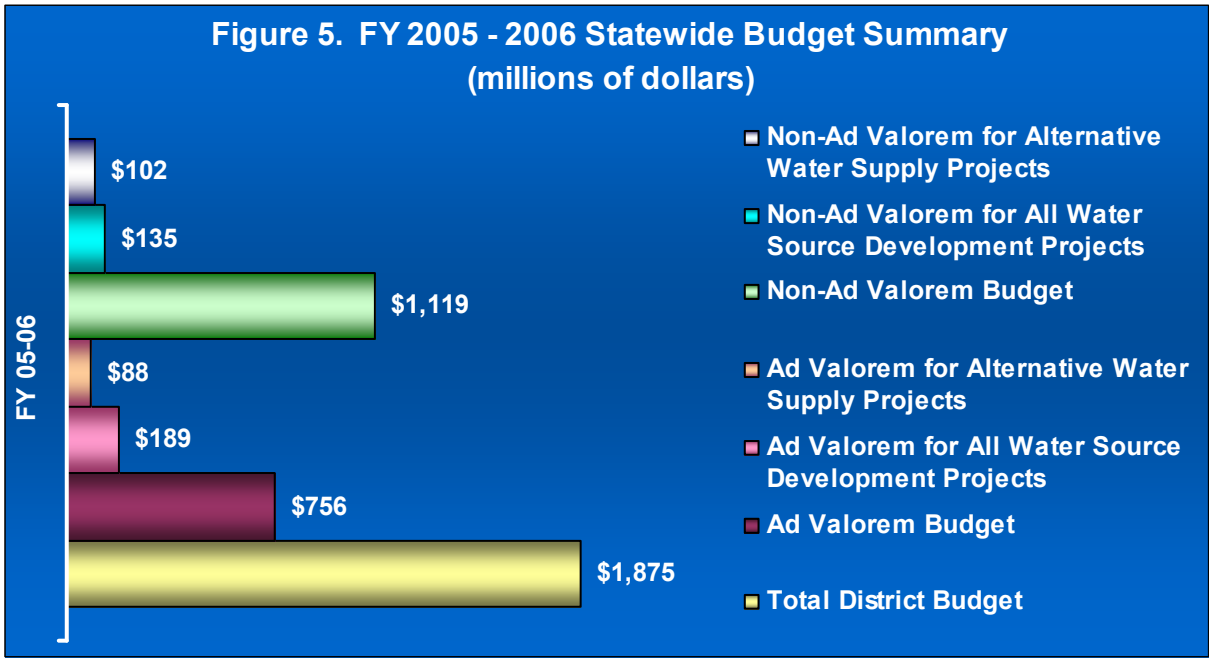
[2] The costs reported for the state program, water suppliers, and water management district match represent the costs reported for the first two years of the program, while the total construction costs are reported for the life of the project which may extend beyond two years.

WATER MANAGEMENT DISTRICTS' BUDGETS AND WATER SUPPLY

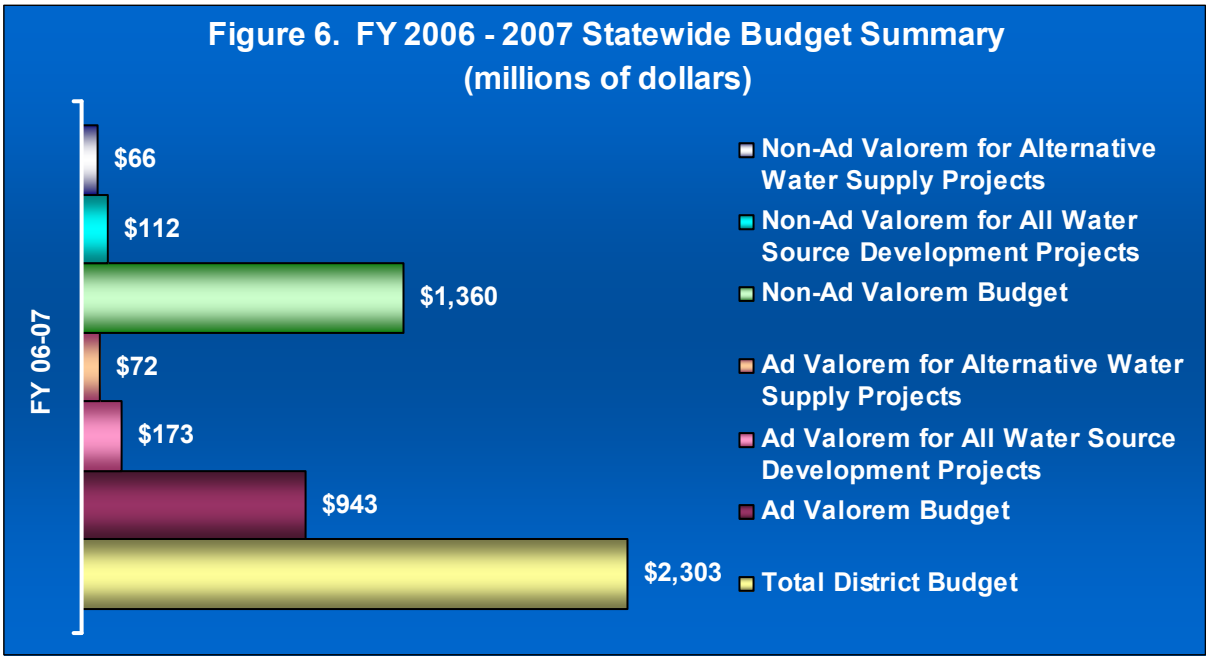
Much interest has been expressed in examining the districts' budgets to determine if appropriate expenditures are being made to support the development of water supplies. The district budgets have emphasized funding various water supply activities ranging from water supply planning, establishing minimum flows and levels, funding water conservation activities, to funding actual water supply projects; all of which contribute to the goal of increasing the availability of water supplies while protecting the environment. Since there are many overlapping programs that support the protection and management of water resources, no single measure can clearly show the relationship between district expenditures and the increasing availability of water.

It can be useful to look at how much of the districts' budgets are dedicated to Water Source Development. Water Source Development includes those district activities associated with water resource development projects and regional or local water supply development assistance projects designed to increase the availability of water supplies for consumptive use. The money allocated by the districts toward this activity probably represents a reasonable percentage of the districts' budgets spent on activities that directly increase the availability of water supplies. Figures 5 and 6 show how much money the Districts allocated to water source development from both ad valorem and non-ad valorem revenues, during FY 2005 – 2006 and FY 2006 – 2007.

In FY 2005 – 2006, about 40% of the districts total budget comes from ad valorem revenues (Figure 5). Of the ad valorem revenues, the districts have allocated approximately 25% toward water source development. Approximately 47% of the water source development allocation is for the development of alternative water supply projects. Approximately 11% of the non-ad valorem revenue is also allocated toward water source development. Almost all of that is directed toward alternative water supply projects.



In FY 2006 – 2007, about 41% of the districts total budget comes from ad valorem revenues (Figure 6). Of the ad valorem revenues, the districts have allocated approximately 18% toward water source development. Approximately 42% of the water source development allocation is for the development of alternative water supply projects. Approximately 8% of the non-ad valorem revenue is also allocated toward water source development. About 62% of that is directed toward alternative water supply projects.



PROGRESS AND FUTURE EFFORTS

The availability of state funds through the Water Protection and Sustainability Program has enhanced the districts' ability to help solve water supply problems. The updated regional water supply plans now provide more specific details to water suppliers about how the future water supply needs can be met and the funding program has been successful in providing incentives to get projects constructed in a timely manner.

The first two years of the program have worked well and the department does not recommend changes at this time. However, as the program continues, some issues need to be watched closely to determine if additional solutions are needed. The program has provided the opportunity for a comprehensive look at the actual construction costs associated with developing alternative water supplies. The estimated total construction costs (not including design and engineering costs) of the 238 projects is about $2.5 billion, with the state and district match offsetting approximately 12% of the total construction costs to date. Additionally, Table 2 provides a rough estimate of the amount of money that would be needed to implement all the projects identified in the 20-year regional water supply plans.[3] It is important to note that the information in Table 2 is based on a 20-year planning horizon which can have substantial uncertainty associated with determining future project costs. It does, however provide a good frame of reference for what the costs might be. At some point in the future, additional funding might be needed to ensure the continued development of alternative water supplies.

Table 2. Funding Needs for Alternative Water Supply Projects to Meet 2025 Demand

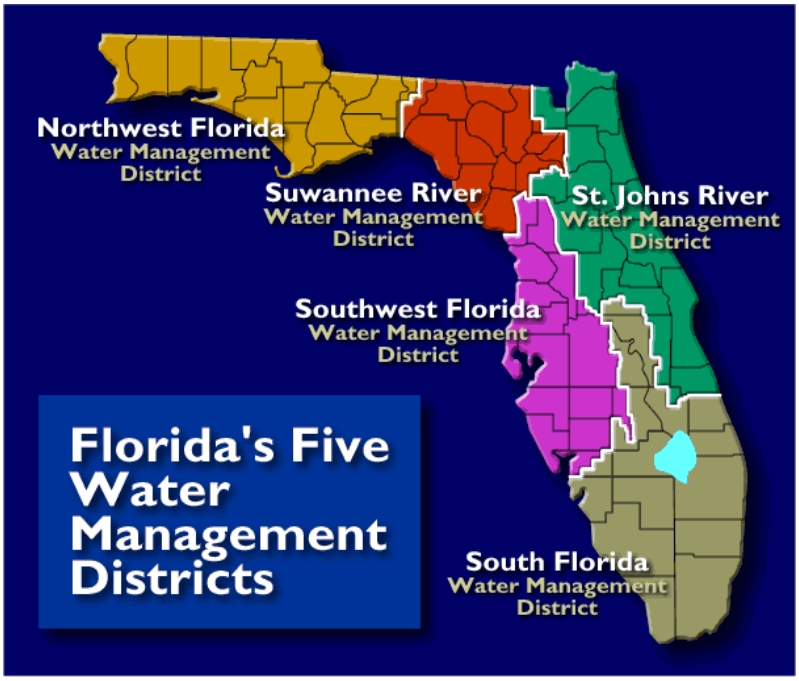
Water Management District	Number of RWSP Projects	Projected AWS Funds for 20 Years	Funds Needed to Complete RWSP Projects
South Florida	314	$372 million	$ 4,600 million
Southwest Florida[3]	10	$310 million	$ 2,174 million
St. Johns River	76	$310 million	$2,175 million
Suwannee River	n/a	$124 million	n/a
Northwest Florida	14	$124 million	$148 million
Total	414	$1,240 million	$ 9,097 million

[3] The information for SWFWMD does not include all of the projects identified in their regional water supply plan, which identifies many more projects than are needed to meet the future demands. The SWFWMD information only includes the most critical projects that will provide almost all of the additional water needed in 2025.

In general, the restriction of the use of funds only for construction activities appears to be appropriate. However, some districts have noted that financially disadvantaged communities lack the resources for project planning, design, and engineering, which becomes an obstacle to developing alternative water supplies. At some point in the future, it might be necessary to re-evaluate this limitation and expand the types of activities allowed to receive funds under certain circumstances.

The program has also focused on the need for the districts and water suppliers to develop multijurisdictional solutions to the water supply problems. Generally the multijurisdictional projects are very large (e.g. SWFWMD's Tampa Bay Regional Reclaimed Water Project and SJRWMD's Taylor Creek Reservoir Project) and take many years to develop. The districts and suppliers need to continue to develop innovative partnerships to ensure that these large multi-year projects get built.

District Summaries



Each district has different patterns of population growth, land use, and water use, so their approaches to meeting 2025 projected water demands differ. The following information, provided by the districts, summarizes their progress toward updating their Regional Water Supply Plans and implementing the Water Protection and Sustainability Program.

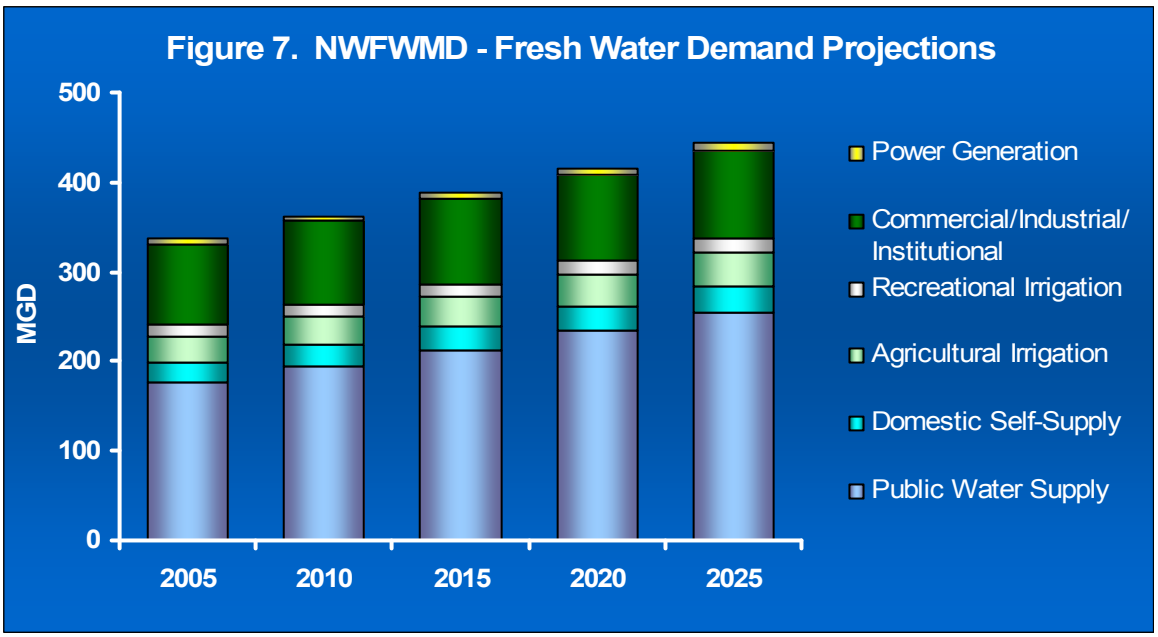
Individual summaries for each water management district follow. These sections include specific information about:

- Demand projections.
- Regional water supply plans.
- The approach used to implement the Water Protection and Sustainability Program.
- The types of alternative water supply projects that are being funded.
- The amount of water created by the projects.
- The amount of money needed to construct the projects.
- Water source development budget information for FY 2005 – 2006 and FY 2006 – 2007.

Detailed information about alternative water supply projects being funded through the Water Protection and Sustainability Program can be found at the following website: http://www.dep.state.fl.us/water/waterpolicy/rwsp.htm.

Northwest Florida Water Management District (NWFWMD)

In 2005, approximately 337 million gallons per day of fresh water were used within the NWFWMD. In this district, public water supply accounted for the largest amount, approximately 57%, of fresh water used. Commercial/Industrial/Institutional self-supply accounted for approximately 27% of the fresh water use, which represents the second largest category. Agricultural use accounted for approximately 8% of the total fresh water use in the district (Figure 7).

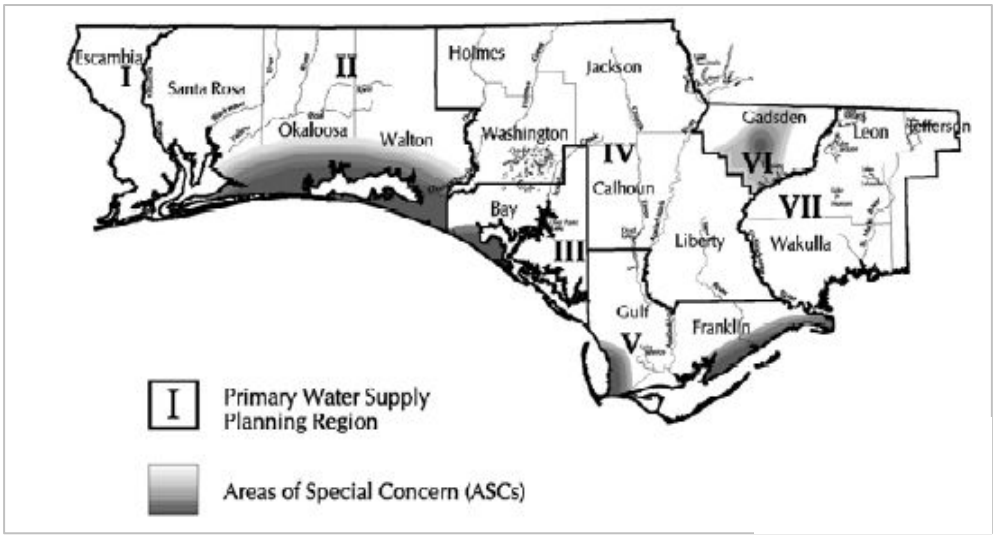


By 2025, the demand for fresh water in NWFWMD will increase by approximately 32% to 443 million gallons per day. Public water supply demands will increase by 45% and will account for 58% of total fresh water demands. Commercial/Industrial/Institutional self-supply use is expected to remain the second largest category, whose use will increase by approximately 10%.

Updating and Implementing the Regional Water Supply Plans

The Northwest Florida Water Management District has seven water supply planning regions. The district's 1998 water supply assessment identified Region II (Santa Rosa, Okaloosa, and Walton Counties) as needing a Regional Water Supply Plan, and the district adopted this plan in 2001. The district has also identified two other areas of special concern: the coastal areas of Region V (Franklin and Gulf Counties) and the upper Telogia Creek drainage basin in Region VI (Gadsden County).

In October 2006, the NWFWMD completed their update of the Region II Water Supply Plan. In addition, the Governing Board, in June 2006, directed staff to develop a water supply plan for Region V (Franklin and Gulf Counties), which was approved in January 2007. Both plans focus on the public supply sector, which is the district's largest water use category. To implement alternative water supply projects and activities identified in the plans, the district plans to use Water Protection and Sustainability Program revenues and matching local revenues. To implement the water resource development projects and activities, the district will use other revenue sources (e.g., district general revenues, Water Management Lands Trust Fund revenues, legislative appropriations, reserves, and other sources).



In Region II, the focus has been on the expansion of an inland well field for three utilities in south Walton County (9 mgd), the expansion of water reuse in Okaloosa County (1.5 mgd), and the identification of environmentally sound surface water alternatives for Okaloosa County (up to 25 mgd). Within Region V, the plan includes development of surface water supplies for the City of Port St. Joe (3-6 mgd) and development of the inland Floridan Aquifer as an alternative water supply source for Franklin County (up to 3 mgd). The district will continue to identify additional projects for Regions II and V.

When the funding needs for alternative water supply projects within the Region II and V are met for a given fiscal year, the district also uses available funds for priority water resource development projects found outside of Region II and V. For example, the district awarded Water Protection and Sustainability Program money to the City of Tallahassee for construction of a public access reuse facility to both offset the use of groundwater (1.2 mgd) and help protect the water quality of Wakulla Springs.

Implementing the Water Protection and Sustainability Program

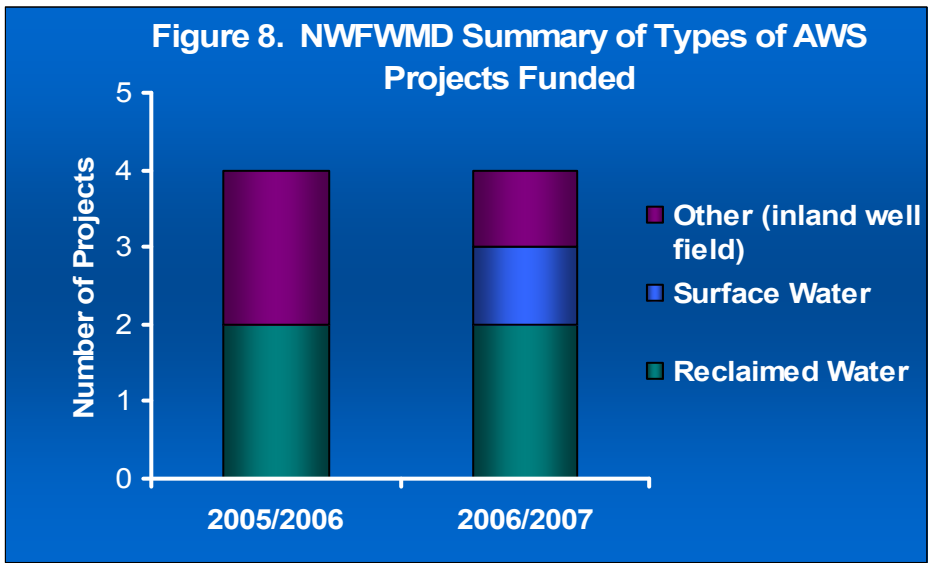
When identifying projects to receive funding from the Water Protection and Sustainability Program, the NWFWMD gives highest priority to projects within Regions II and V. In addition to the statutory guidance found in Chapter 373 and 403, F.S., the district also considers the following:

- The project is identified as a priority in the regional water supply plan.
- The project helps correct or prevent resource impacts, especially through demand reduction for sensitive and/or impacted water supplies (e.g., saltwater intrusion into coastal aquifers).
- The severity of the water supply problem, especially situations requiring prompt action to ensure public health and safety.
- The willingness, capability, and commitment of local partners.
- Projects with regional or multijurisdictional approaches.

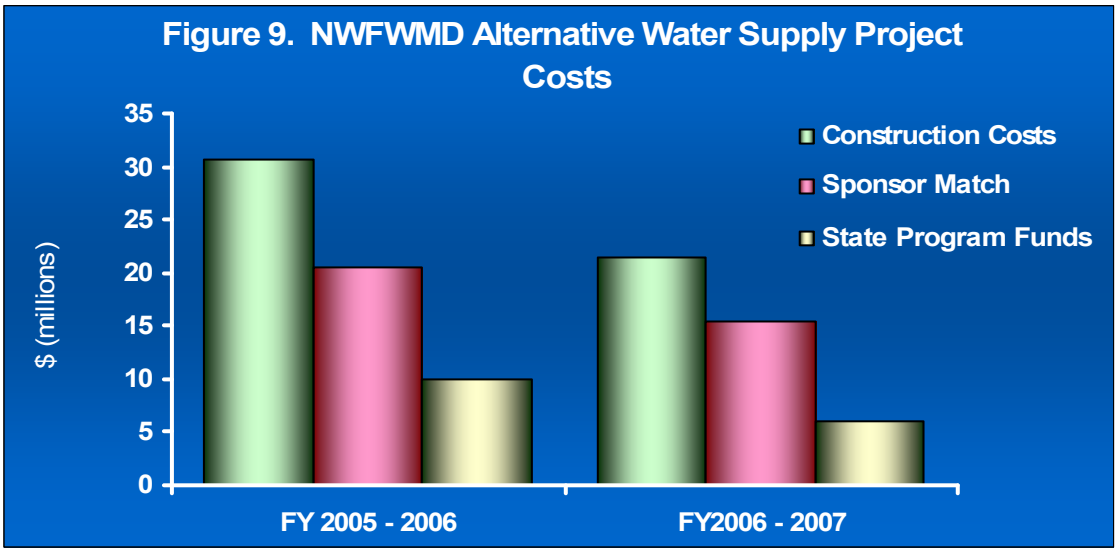
The district also promotes an equitable distribution of funds. In general, the district gives preference, by reducing the match requirements, to assist small, disadvantaged, or otherwise "capability-limited" public supply providers. A higher match commitment is expected of other utilities. All local sponsors contribute in-kind services, construction funds, and other cost-share funding. Local governments and utilities also provide ongoing, long-term system operation and maintenance funds.

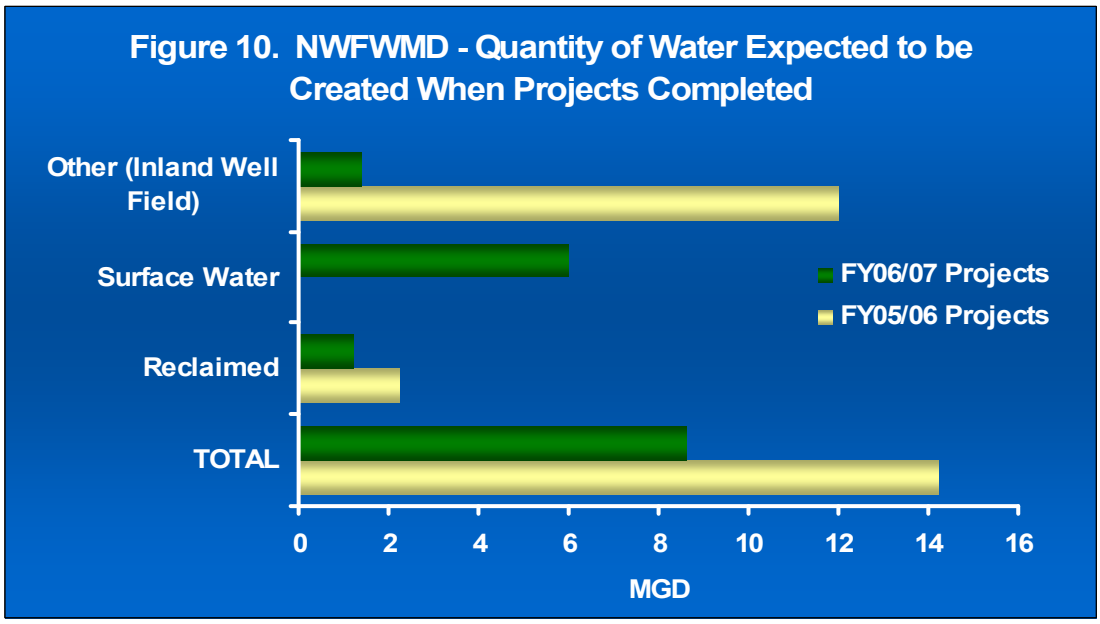
Cooperative efforts of local utilities have been essential to the successful implementation of the Region II plan. The following projects have been implemented:

- Fairpoint Regional Utility System. This is an inland Sand-and-Gravel Aquifer well field which provides water to the coastal water resource caution area in Santa Rosa County (including Gulf Breeze, Midway, Holley-Navarre, and south Santa Rosa).
- Rock Hill. Three utilities (South Walton Utilities, Regional Utilities, and Freeport) cooperatively developed an inland Floridan well field, which provides water to the coastal water resource caution area in Walton County.
- Okaloosa County. The district developed a preliminary surface water feasibility study to assist the county by serving as a framework for identifying additional alternative water supply projects within Region II.



During the first two years of the program, the district approved funding for eight alternative water supply projects, focusing on reclaimed water, inland well fields, and surface water storage projects (Figure 8). The total construction costs for these projects were approximately $52 million (Figure 9). About $36 million will be provided by the water suppliers and $16 million will be provided through the state program, which comprises approximately 31% of total construction costs. The construction costs identified in Figure 9 show the entire project cost, not just the costs expected during that fiscal year. For some projects, money from the state program will be used to fund several phases of the project and extend out to several fiscal years. When completed, these projects are expected to provide 22.8 mgd (Figure 10).





Future Focus

Many of the areas needing future water supply development cover multiple jurisdictions and utility service areas. Further development of alternative water supplies within this district will require continued focus on regional approaches and cooperative efforts.

During the next fiscal year, the district plans to concentrate on:

- Implementing the regional water supply plans for Regions II and V.
- Assisting Okaloosa County with the identification of potential surface water alternative supply projects and associated watershed protection projects.
- Promoting regional approaches to alternative water supply development in Regions II and V.
- Facilitating and overseeing local water supply development responsibilities.
- Assisting local governments with the integration of local planning responsibilities with alternative water supply planning and development.
- Updating the district's water supply assessment and planning the future direction for alternative water supply projects that were not identified in the plans.

NWFWMD Budget Information

The tables below provide a summary of the portions of the NWFWMD budget that are dedicated toward alternative water supply projects and water source development, which directly increases the availability of water supplies.

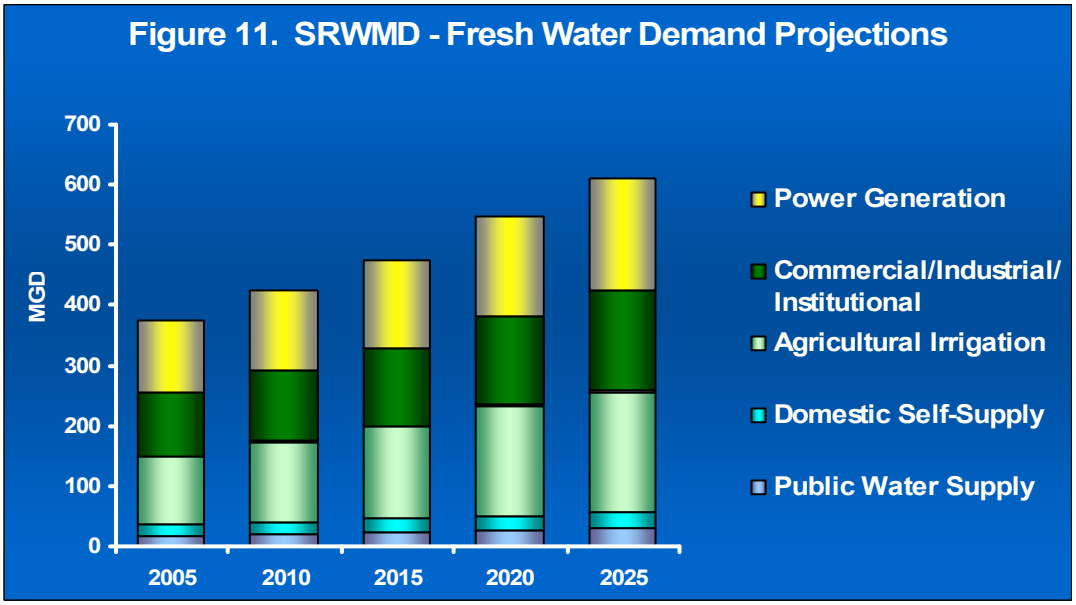
NWFWMD FY 2005-2006	Total	
Total District Budget	**$ 115,617,547**	**Total District Percentage**
Ad Valorem Budget	$ 4,052,723	3.51%
Non-Ad Valorem Budget	$ 111,564,824	96.49%
Alternative Water Supply Budget[4]	**$ 10,000,000**	**8.65%**
Ad Valorem Budget for All Water Source Development Projects	**$ 0**	**0.00%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 25,557,596**	**21.11%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 10,000,000	8.65%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 15,557,596	13.46%
Ad Valorem Budget (from above)	**$ 4,052,723**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 0	0.00%

NWFWMD FY 2006-2007	Total	
Total District Budget	**$ 134,139,173**	**Total District Percentage**
Ad Valorem Budget	$ 5,254,741	3.92%
Non-Ad Valorem Budget	$ 128,884,432	96.08%
Alternative Water Supply Budget	**$ 6,000,000**	**4.47%**
Ad Valorem Budget for All Water Source Development Projects	**$ 0**	**0.00%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 20,950,377**	**15.62%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 6,000,000	4.47%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 14,950,377	11.15%
Ad Valorem Budget (from above)	**$ 5,254,741**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 0	0.00%

[4] Alternative Water Supply Budget – this shows the amount of ad-valorem and non-ad valorem funds that are budgeted for alternative water supply projects.

Suwannee River Water Management District (SRWMD)

In 2005, 375 million gallons per day of fresh water were used within the Suwannee River Water Management District. In this district, power generation accounted for the largest amount, approximately 32%, of fresh water used. Agricultural use accounted for approximately 30% of the fresh water use, which represents the second largest category. Commercial/Industrial/Institutional self supply used approximately the same amount of water as the leading two categories and accounted for 28% of the total fresh demands. Public water supply only accounts for 5% of the total fresh water use in the district (Figure 11).

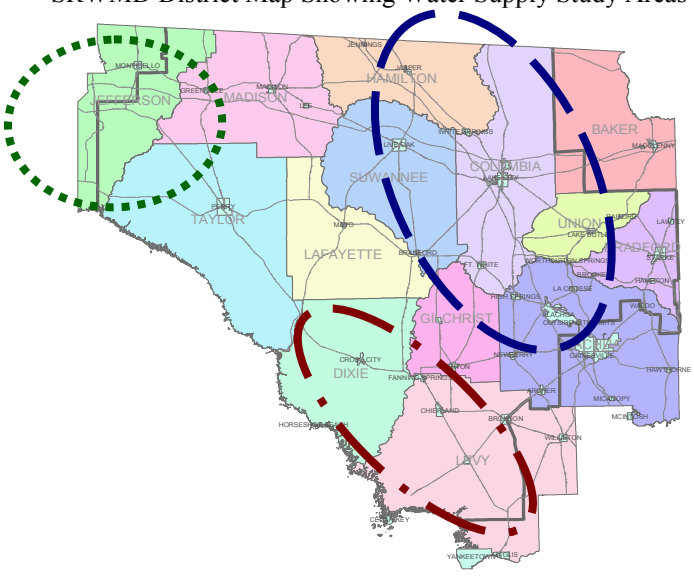


By 2025, the demand for fresh water in SRWMD will increase by 62% to 609 mgd. In 2025, agriculture is projected to become the largest user and will account for 33% of the total demand for fresh water. Power generation will become the second largest user of fresh water and is expected to account for 31% of the total demand for fresh water.

Updating and Implementing the Regional Water Supply Plan

The Suwannee River Water Management District's 2005 water supply assessment determined that adequate resources are available to meet all district water supply demands for the

SRWMD District Map Showing Water Supply Study Areas



- I-10 Corridor - US-19 Corridor - I-75 Corridor

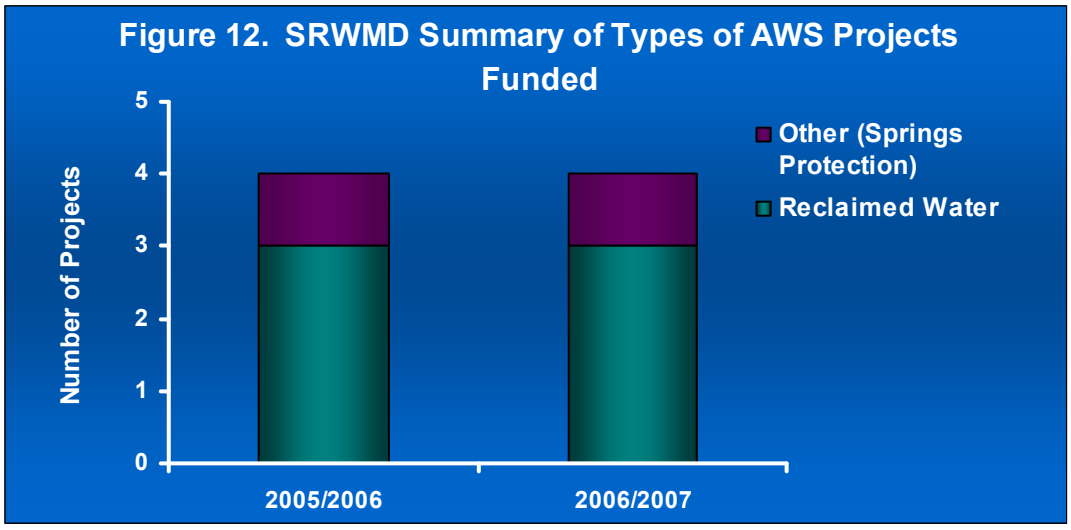
next 20 years. Based upon this finding, the district determined that a formal regional water supply plan is not necessary at this time.

The SRWMD will continue to evaluate the need for a regional water supply plan. The district is monitoring the I-75, I-10, and US-19 corridors as areas that may warrant future assessment because of population increases. Reclaimed water and surface water supplies are available to assist in meeting future demands. Approximately 9 – 15 million gallons per day of reclaimed water is available to offset existing and future groundwater withdrawals. The district also has established an aggressive schedule to establish minimum flows and levels for seven rivers and forty springs by 2008.

Implementing the Water Protection and Sustainability Program

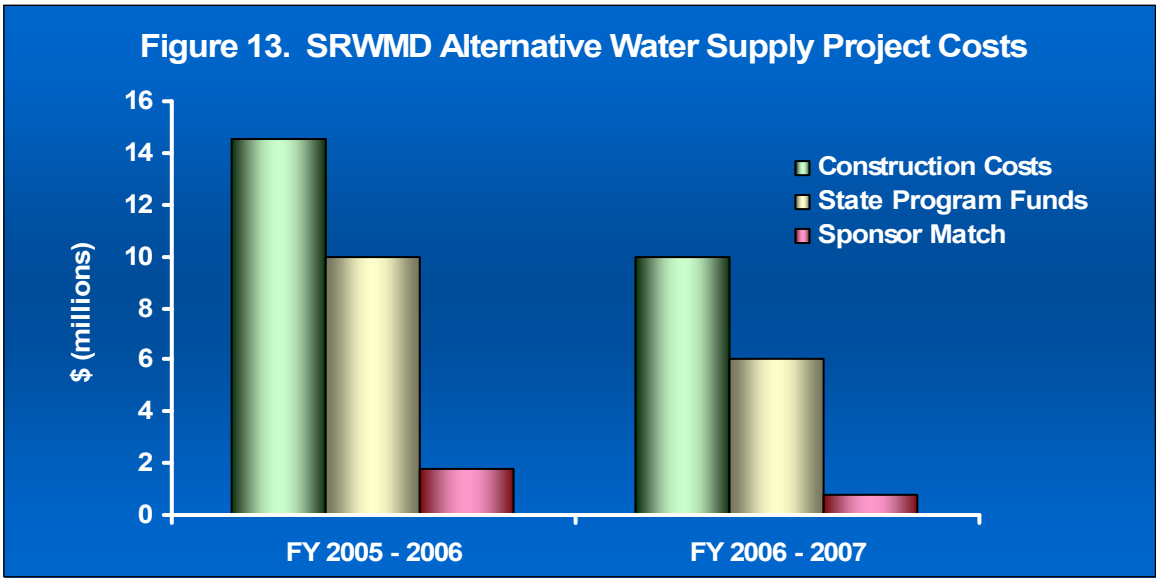
The program has enabled the district and its communities to actively avoid water resource supply problems and provides essential support for the district's alternative water supply and springs protection programs.

District staff met with local officials and held a public workshop to assess alternative water supply development needs and opportunities. The district selects projects based on project readiness, potential groundwater offsets, environmental benefits, cost effectiveness, and local participation. The district also uses the funds for springs protection, which includes establishing minimum flows and levels, collecting and analyzing water quality and water quantity data, and designing and implementing restoration projects. The district expects to continue implementing the program in the same way it has during the first two years of the program.



During the first two years of the program, the district chose to provide funds for several reclaimed water projects (Figure 12) with rural financially disadvantaged communities, including the Cities of Alachua, High Springs, Lake City, Live Oak, and Monticello. The district requires that the local governments provide a 25% match of the funds provided by the state. The total construction costs for these projects are $24.5 million (Figure 13). About $2.5 million will be

provided by the water suppliers and $9.5 million will be provided through the state program, which comprises approximately 39% of total construction costs. The construction costs identified in Figure 13 show the entire project cost, not just the costs expected during that fiscal year. For some projects, money from the state program will be used to fund several phases of the project and extend out to several fiscal years. The district will use $6.5 million for springs protection projects. When completed, the alternative water supply projects are expected to provide approximately 8.3 mgd of water.



Future Focus

Through the program, the district has funded projects that are mostly within rural and financially disadvantaged communities. Funding only construction costs creates challenges because these communities must fund the engineering and survey costs, and because community funding of non-construction costs often must occur over more than one budget cycle. The district will continue to work with the communities to construct these projects.

SRWMD Budget Information

The tables below provide a summary of the portions of the SRWMD budget that are dedicated toward alternative water supply projects and water source development, which directly increases the availability of water supplies.

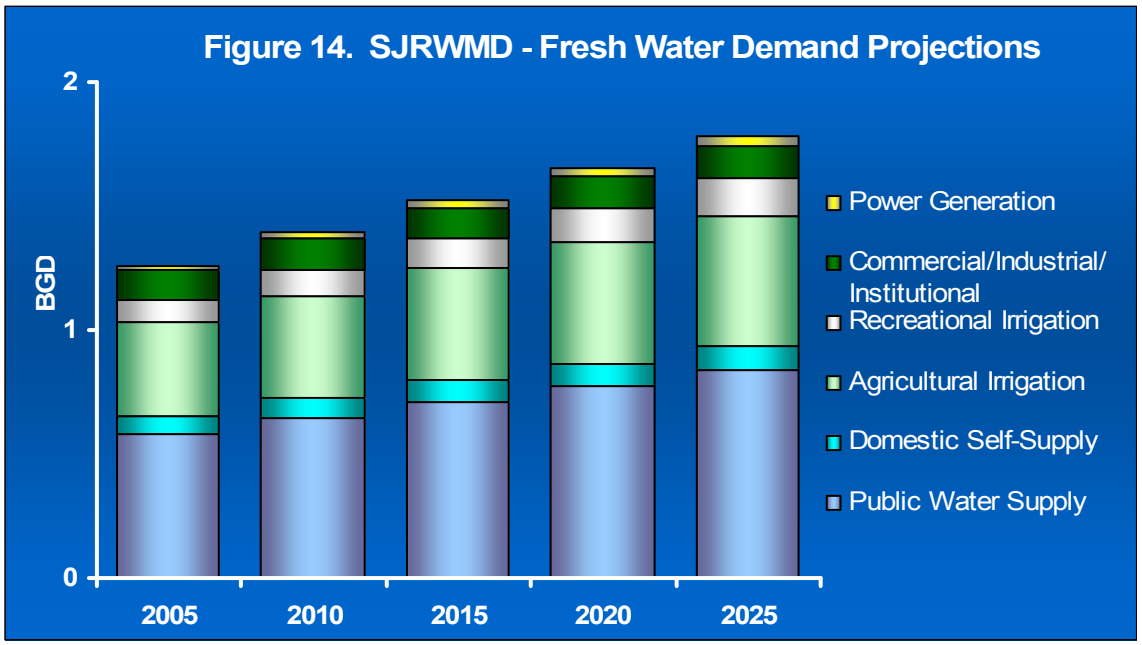
SRWMD FY 2005 - 2006	Total	
Total District Budget	**$ 72,256,990**	**Total District Percentage**
Ad Valorem Budget	$ 4,975,000	6.89%
Non-Ad Valorem Budget	$ 67,281,990	93.11%
Alternative Water Supply Budget[5]	**$ 6,500,000**	**9.00%**
Ad Valorem Budget for All Water Source Development Projects	**$ 0**	**0.00%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 6,500,000**	**9.00%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 6,500,000	9.00%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget (from above)	**$ 4,975,000**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 0	0.00%

SRWMD FY 2006 - 2007	Total	
Total District Budget	**$ 85,194,145**	**Total District Percentage**
Ad Valorem Budget	$ 6,100,000	7.16%
Non-Ad Valorem Budget	$ 79,094,145	92.84%
Alternative Water Supply Budget	**$ 3,000,000**	**3.52%**
Ad Valorem Budget for All Water Source Development Projects	**$ 0**	**0.00%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 3,000,000**	**3.52%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 3,000,000	3.52%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget (from above)	**$ 6,100,000**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 0	0.00%

[5] Alternative Water Supply Budget – this shows the amount of ad-valorem and non-ad valorem funds that are budgeted for alternative water supply projects.

St. Johns River Water Management District (SJRWMD)

In 2005, approximately 1.3 billion gallons per day of fresh water were used within the St. Johns River Water Management District. In this district, public water supply accounted for the largest amount, approximately 46% of fresh water used. Agriculture accounted for approximately 30% of the fresh water used, which represents the second largest use category (Figure 14).



By 2025, the demand for fresh water in SJRWMD will increase by approximately 42% to 1.8 billion gallons per day. In 2025, public water supply demands will increase by 43% and will account for 46% of the total use of fresh water. Agricultural use is expected to increase by approximately 37% and will remain the second largest category. The sector with the largest expected percentage increase over the next 20 years is power generation with a 177% increase over current demands. However, this sector will account for less than 2% of the total fresh water use.

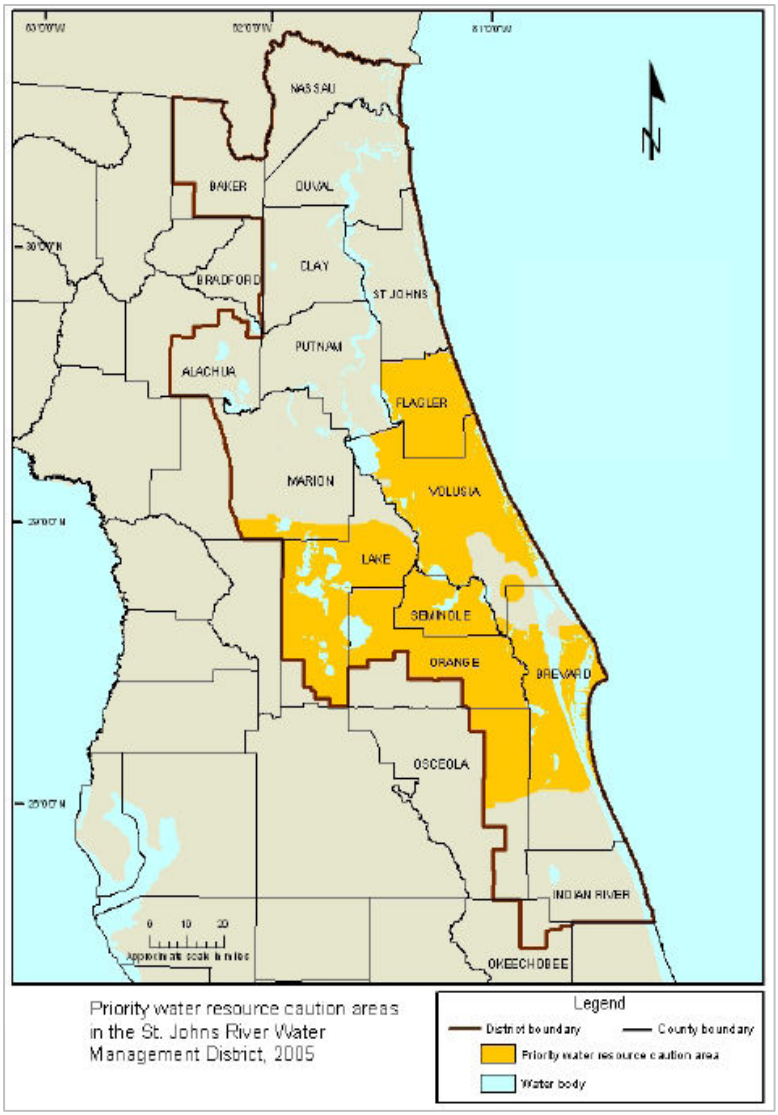
Updating and Implementing the Regional Water Supply Plan

The entire St. Johns River Water Management District is designated as one water supply planning region. The district identified approximately 39% of its jurisdictional area as priority water resource caution areas, located mostly in the east-central Florida part of the region.

In early 2006, the Governing Board approved the update of the District Water Supply Plan. The plan and its addendum focus on the priority water resource caution areas. The plan identifies water resource and water supply development projects which, if implemented, are more than adequate to meet projected demands through 2025 without unacceptable impacts to water resources and related natural systems.

Water Resource Development

The plan's sixteen water resource development projects make additional water available by protecting or enhancing existing water supplies and extending the availability of water supplies through various water management strategies. Six of the projects are new and the remaining ten projects are still underway from the 2000 plan. The water resource development projects identified in the plan, if implemented, could make an additional 120 mgd of water available at a projected cost of $175 million.



Water Supply Development

The plan identified sixty water supply development projects that are more than adequate to meet projected shortfalls in available groundwater by 2025. These sixty projects, if implemented, could supply about 388 mgd of additional water. The total estimated construction cost of these projects is about $2 billion. These water supply development projects include six brackish groundwater projects, six surface water projects, three seawater projects, thirty-eight reclaimed water projects, five reuse augmentation projects, and two agricultural irrigation projects.

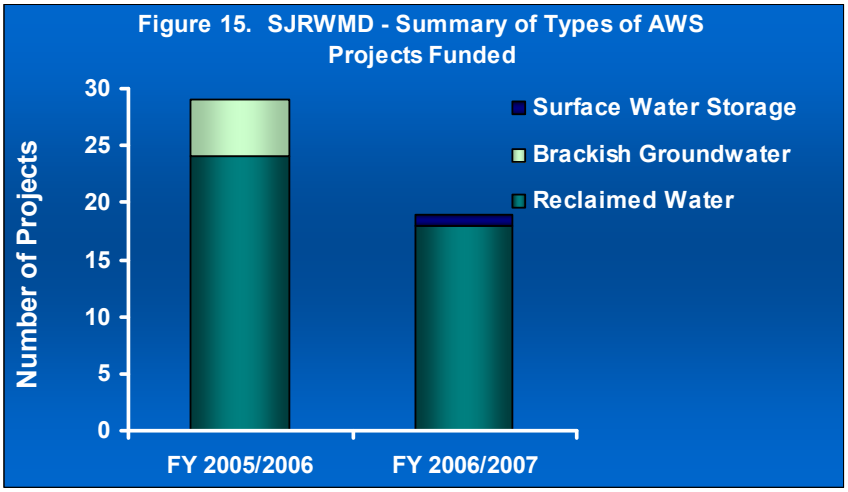
Implementing the Water Protection and Sustainability Program

In addition to the statutory requirements of s. 373.1961(3)(f) and (g), F.S., the district adopted additional criteria to select projects for funding assistance: construction start date, construction duration, county level planning endorsement, and project type. The district uses construction start date and construction duration to plan and program the project funds into the appropriate fiscal year. For district-sponsored, county-level water supply planning efforts, SJRWMD considers whether or not the planning partners endorse a project.

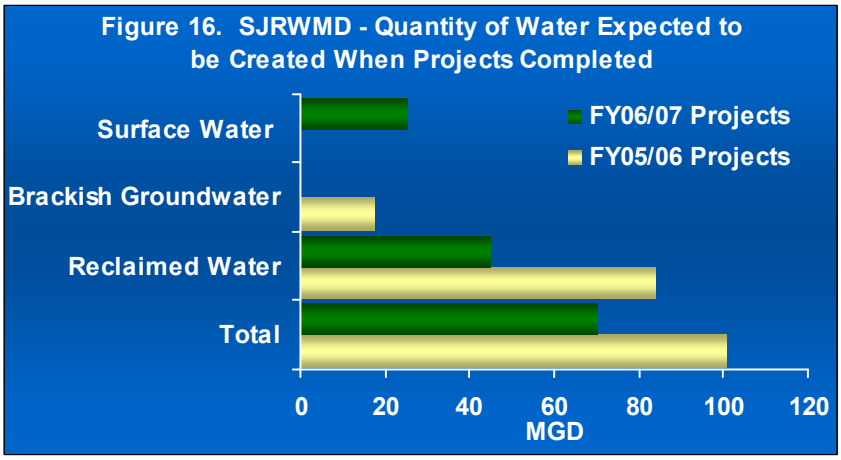
For selected projects, the district will provide matching funds ranging from 20% - 40% of alternative water supply project construction costs, with one-half of this match from Water Protection and Sustainability Program funds and the other half from district ad valorem funds. The district gives higher cost share percentages to projects involving new potable water sources, such as surface water or brackish groundwater projects (up to 40%), than to reclaimed water projects (generally 20%). The district considers continuing funding for multi-year projects if

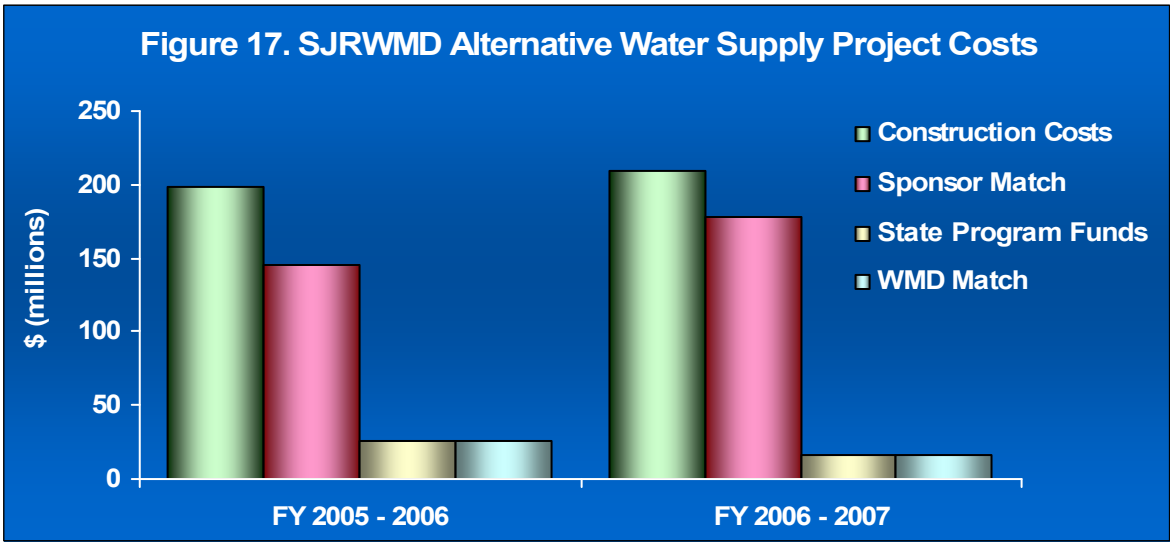
project sponsors have made appropriate progress in the prior fiscal year. This method gives sponsors an incentive to manage projects efficiently and within projected completion timelines.

The district prioritizes projects based upon ability to meet future water needs. The district gives first priority to regionally significant, multijurisdictional projects that will provide significant quantities of new water, such as the St. Johns River/Taylor Creek Reservoir Water Supply Project. For these projects, the district attempts to provide a 40% construction match. Presently, the district has several county-level water supply planning efforts underway, and expects these to identify additional regional multijurisdictional projects in 2007. The district gives second priority to smaller projects that are ready to construct, help sustain current supplies, and extend the time until larger projects come online. These projects receive a 30% match for reuse augmentation or a 20% match for reclaimed water.



During the first two years of the program, the district's Governing Board has approved 48 alternative water supply projects for funding (Figure 15). Forty-two of the projects approved for funding are reclaimed water projects. Over $400 million in total construction costs will be required (Figure 16). The state program and corresponding district match will provide approximately $84 million comprising approximately 20% of total construction costs. Water suppliers will provide about $323.5 million toward construction costs. When completed, these projects will result in approximately 170 mgd of total water (Figure 17).





Future Focus

Generally, project sponsors are satisfied with the first two years of programs implementation. In the future, the district will focus on two areas. The first and highest priority area is facilitating the timely planning, design, and construction of three to five regionally significant water supply projects. For the St. Johns River/Taylor Creek Reservoir Water Supply Project, this means providing incentives to keep project construction on schedule.

The second focus area is ensuring that the remaining projects finish according to schedule and produce the expected amounts of water. Several project sponsors have delayed their proposed project start date, which creates the challenge of establishing realistic project schedules to ensure that funding is adequately secured for the future use. The district's approach is to wait as long as possible during the design and permitting phases before committing program funds through cost share agreements.

SJRWMD Budget Information

The tables below provide a summary of the portions of the SJRWMD budget that are dedicated toward alternative water supply projects and water source development, which directly increases the availability of water supplies.

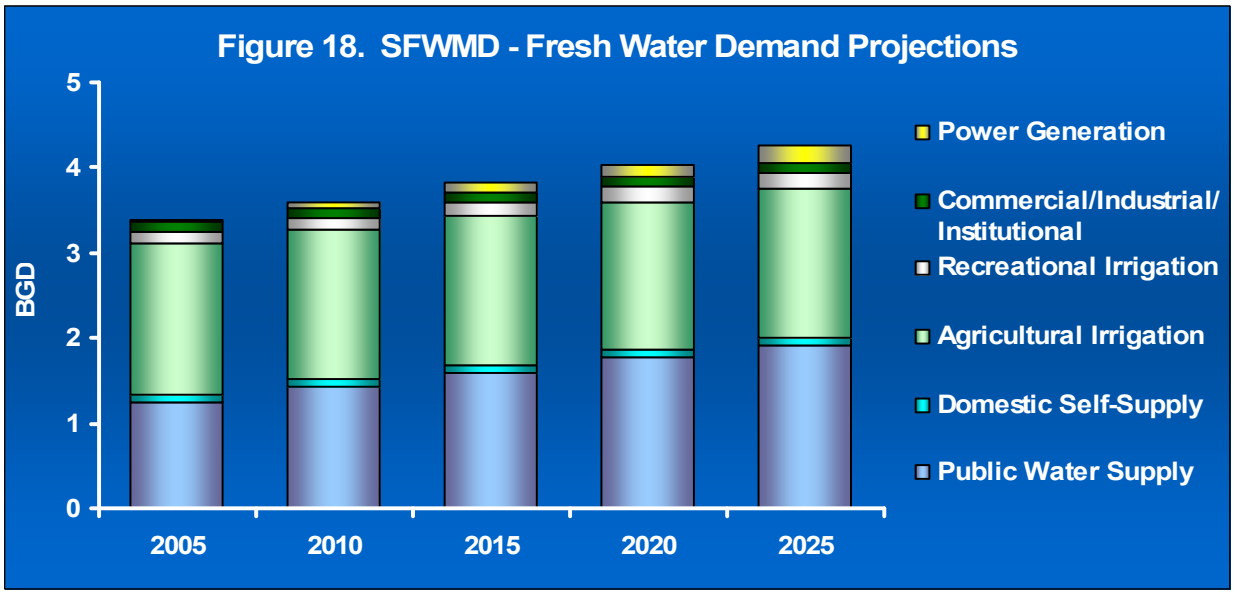
SJRWMD FY 05-06	Total	
Total District Budget	**$ 245,576,724**	**Total District Percentage**
Ad Valorem Budget	$ 115,051,783	46.85%
Non-Ad Valorem Budget	$ 130,524,941	53.15%
Alternative Water Supply Budget[6]	**$ 51,582,163**	**21.00%**
Ad Valorem Budget for All Water Source Development Projects	**$ 46,145,208**	**18.79%**
Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 26,582,163**	**10.82$**
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 19,563,045	7.97%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 46,131,571**	**18.78%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 25,000,000**	**10.18%**
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 21,131,571	8.60%
Ad Valorem Budget (from above)	**$ 115,051,783**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 46,145,208	40.11%

SJRWMD FY 06-07	Total	
Total District Budget	**$ 353,144,417**	**Total District Percentage**
Ad Valorem Budget	$ 142,469,805	40.34%
Non-Ad Valorem Budget	$ 210,674,612	59.66%
Alternative Water Supply Budget	**$ 30,539,750**	**8.65%**
Ad Valorem Budget for All Water Source Development Projects	**$ 21,449,852**	**6.07%**
Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 15,539,750**	**4.40%**
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 5,910,102	1.67%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 35,502,090**	**10.05%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 15,000,000**	**4.25%**
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 20,502,090	5.81%
Ad Valorem Budget (from above)	**$ 142,469,805**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 21,449,852	15.06%

[6] Alternative Water Supply Budget – this shows the amount of ad-valorem and non-ad valorem funds that are budgeted for alternative water supply projects.

South Florida Water Management District (SFWMD)

In 2005, approximately 3.4 billion gallons per day of fresh water were used within the SFWMD. In this district, agriculture was the largest category and accounted for approximately 53% of the total use of fresh water. Public water supply accounted for about 37% of the fresh water use, which represents the second largest category (Figure 18).



By 2025, the demand for fresh water in SFWMD will increase by 26% to 4.3 billion gallons per day. In 2025, public water supply will increase by 54% and will become the largest user of fresh water. Agricultural irrigation is expected to decrease by 3% and will become the second largest user of fresh water. The sector with the largest percentage increase over the next 20 years is expected to be power generation with an 850% increase over current demands. However, this sector will only account for a small percentage of the total fresh water demands (5%).

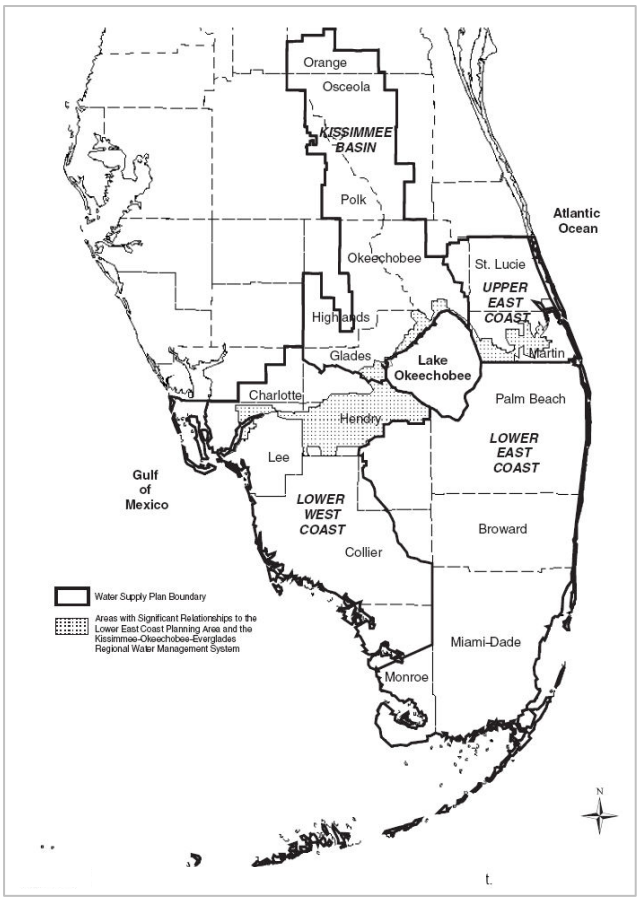
Current estimates of agricultural water use by SFWMD are significantly lower than the estimates in previous SFWMD plans. The lower projections are mostly due to changes both in agricultural activities and the methods used to estimate agricultural demand. First, agricultural acreage, especially citrus acreage, is being converted to urban uses at a faster rate than previously anticipated. Secondly, and most importantly, the district is using a different model to estimate agricultural demands. In the 2004 Upper East Coast Water Supply Plan Update, the district began using the more accurate Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS) model rather than the modified Blaney-Criddle model in estimating the irrigation demands. Use of the Blaney-Criddle model generally results in a higher per acre irrigation than AFSIRS.

Updating and Implementing the Regional Water Supply Plans

The SFWMD has four regional planning areas: the Kissimmee Basin, the Upper East Coast, the Lower East Coast, and the Lower West Coast. In mid-2006, the Governing Board approved the

Lower West Coast Water Supply Plan Update and the Upper East Coast Plan Amendment. The Governing Board approved the update to the Kissimmee Basin Regional Water Supply Plan in December 2006 and the update to the Lower East Coast Water Supply Plan in February 2007.

The 2006 update to the Lower West Coast Plan concluded that most of the future water needs must be met through the development of alternative sources. The updated plan identified enough existing and proposed new supplies to meet the future demands.



Over the next twenty years, the Upper East Coast planning region is expected to experience a large increase in population that will result in significant increases in public water supply demand. Even with this large increase, the plan identified enough new public water supply capacity to exceed the 2025 demands. Alternative water supply development will play a vital role in meeting these needs.

The 2006 update to the Kissimmee Basin Plan concluded that surface supplies in the Lake Istokpoga area of Highlands County were limited but that groundwater and local stormwater were feasible alternatives to meet the 2025 agricultural irrigation demands. In the northern portions of the planning area (Osceola, Polk and Orange Counties) groundwater was determined to be limited, calling for the immediate need to begin the identification and development of alternative supplies. As a result, the three Districts in the region have begun a collaborative process to assist in developing new potable water sources by 2013.

Water Resource Development

The water resource development projects identified in the updated water supply plans will support the development of future water supply projects. While the projects will not directly create additional water, the projects will ensure the development of alternative water supplies and the protection or enhancement of existing supplies. The water resource development projects identified in the plans include groundwater monitoring, exploratory drilling and testing, feasibility studies, and the development of a groundwater model and database.

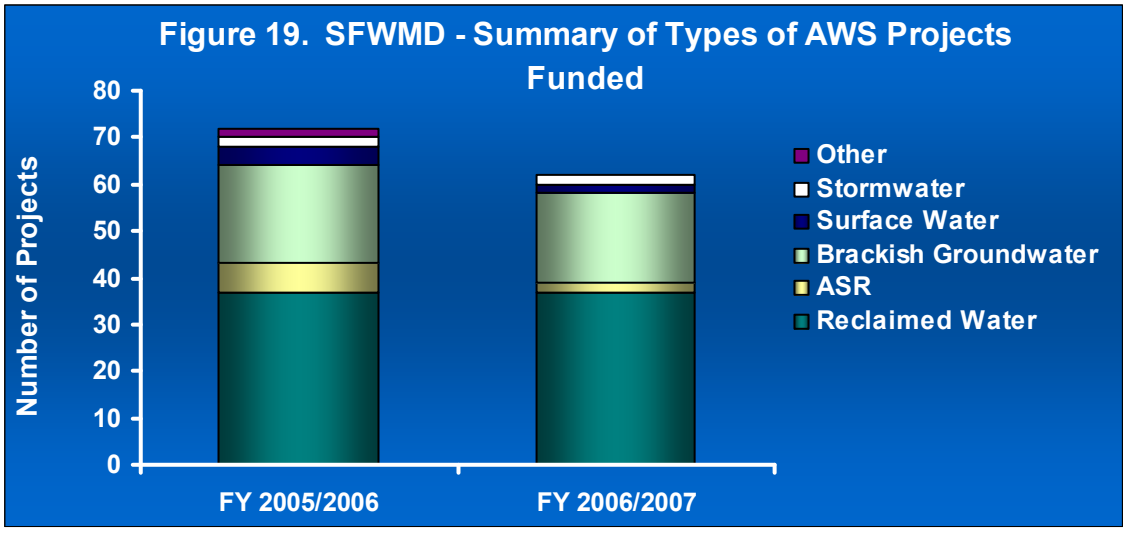
The district has allocated $5.9 million in FY 2007 for water resource development projects identified in the plans, which includes $1.4 million for the district's Comprehensive Water Conservation Program. The district estimates this conservation program will save 2.65 mgd of water in FY 2005 – 2006 and 3.0 mgd of water in FY 2006 – 2007.

Water Supply Development

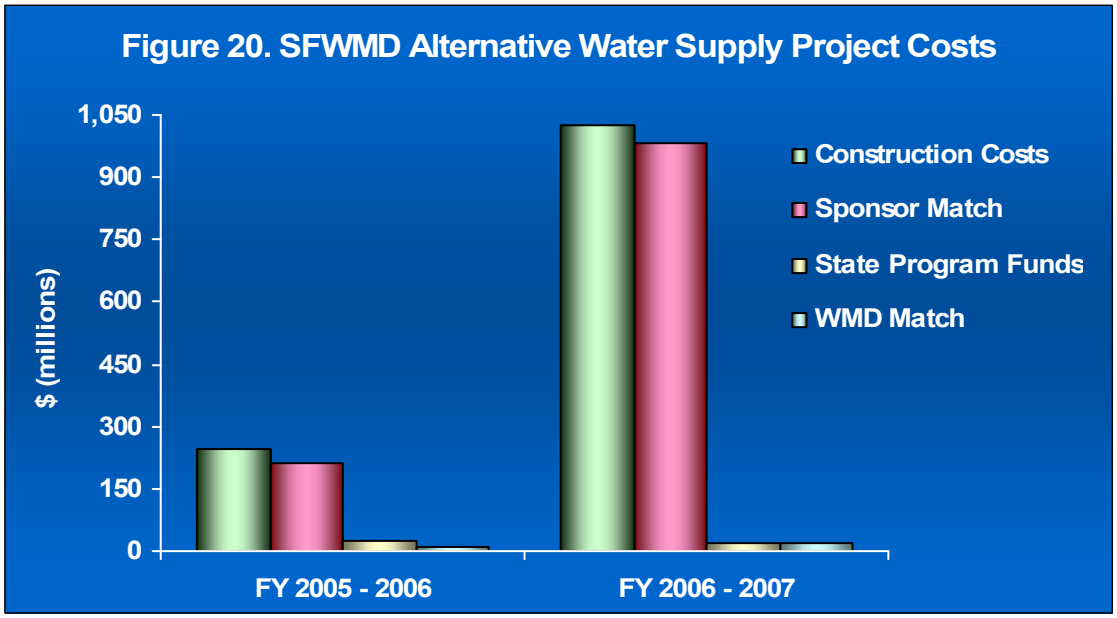
During the development of the plans, local governments, government-owned and privately owned utilities, regional water supply authorities, multijurisdictional water supply entities, self-suppliers, and other water users identified the water supply development projects that will meet the future needs of the region. The regional water supply plans identified 314 alternative water supply projects that will create an additional 1.5 bgd of water supply to meet the 2025 water needs. These projects are estimated to cost $4.6 billion.

Implementing the Water Protection and Sustainability Program

For more than a decade, the South Florida Water Management District has engaged in cooperative funding agreements for alternative water supply projects. From 1997 to 2005, the district funded 169 projects with $35 million, and created 400 mgd of additional alterative water capacity, leveraging $500 million in total construction costs.

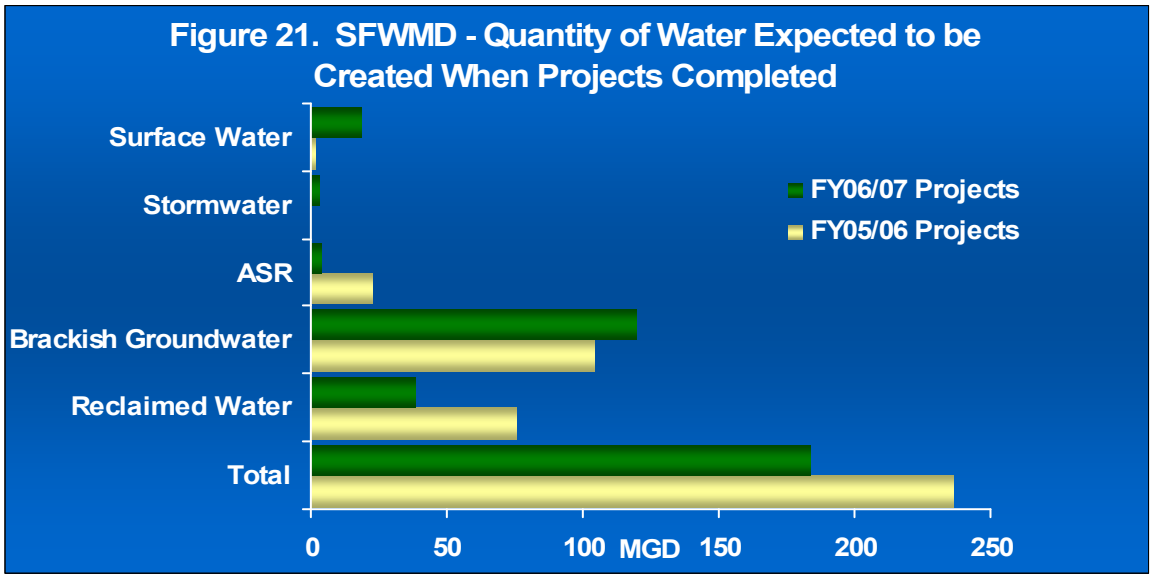


During the first two years that the Water Protection and Sustainability Program has been underway, the District has approved funding for 134 alternative water supply projects (Figure 19). Total construction costs for these projects are about $1.3 billion (Figure 20). About $77 million will be provided through the state program and corresponding district match, which comprises about 6% of total construction costs. Water suppliers will provide about $1.2 billion toward construction costs (Figure 21). The district also has provided funding to projects located in Rural Economic Development Initiative communities.



In addition to the statutory requirements, the district has also adopted guidelines to promote funding equity among projects. These guidelines base funding levels on the total water quantity to be made available and type of technology used by the project. In 2007, the district funded reclaimed water distribution systems at 40%.

These projects will add almost 200 mgd of water capacity by August 2007 and 419 mgd of water capacity upon completion. The state program has enabled the district to greatly expand the number of funded alternative water supply projects. Now, substantially more water will become available quicker than would have happened under the district's previous funding program. Because of the district's existing cooperative funding program, numerous partners already were preparing to construct or expand projects and the state program has allowed these partners to accelerate project construction.



The significant financial incentives provided by the state program created additional interest, particularly from locally elected officials, in developing alternative water supplies to meet the future needs in a sustainable manner. Additionally, the Governing Board has directed suppliers to consider alternative sources to meet their future water supply needs because water availability from traditional water sources is limited.

Future Focus

The updated regional water supply plans identified 314 alternative water supply projects to meet the 2025 water demands. The estimated construction cost of these projects is approximately $4.6 billion. If funding levels stay the same over the next twenty years, the total funding provided will be $372 million, which represents about 8% of the total funding needed to construct the projects identified in the regional water supply plans. The District will continue to focus its efforts on ensuring that funds are available to provide the necessary incentive to build the projects.

The district will continue to pursue aggressive development of alternative water supplies in Broward and Miami-Dade Counties, two of the largest urban areas in the state. Both counties lag behind others in reclaimed water use and alternative water supply development. Significant funding will be needed to diversify water sources in these two counties. Other counties desire funds for ready-to-build projects, and the district will allocate funds equitably.

SFWMD Budget Information

The tables below provide a summary of the portions of the SFWMD budget that are dedicated toward alternative water supply projects and water source development which directly increases the availability of water supplies.

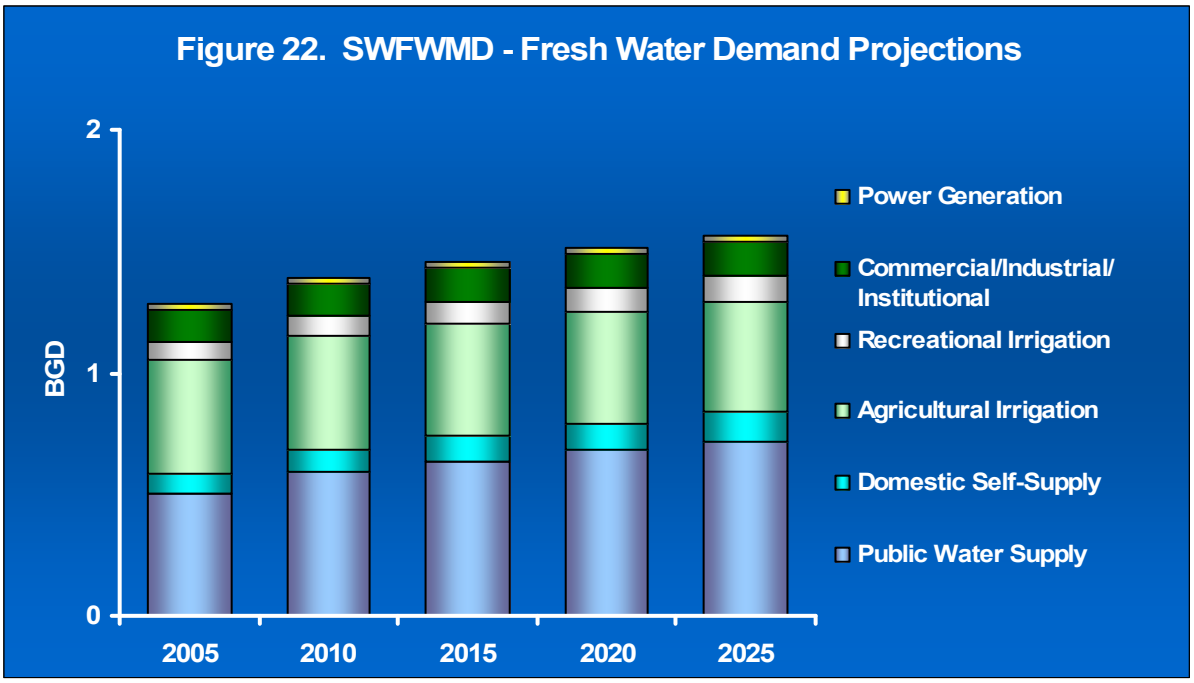
SFWMD FY 05-06	Total	
Total District Budget	**$ 1,127,016,382**	**Total District Percentage**
Ad Valorem Budget	$ 444,075,931	39.40%
Non-Ad Valorem Budget	$ 682,940,451	60.60%
Alternative Water Supply Budget[7]	**$ 60,700,000**	**5.39%**
Ad Valorem Budget for All Water Source Development Projects	**$ 30,700,000**	**2.72%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 30,700,000	2.72%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 30,000,000**	**2.66%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 30,000,000	2.66%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 0	0.00%
Ad Valorem Budget (from above)	**$ 444,075,931**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 30,700,000	6.91%

SFWMD FY 06-07	Total	
Total District Budget	**$ 1,365,862,587**	**Total District Percentage**
Ad Valorem Budget	$ 553,009,838	40.49%
Non-Ad Valorem Budget	$ 812,852,749	59.51%
Alternative Water Supply Budget	**$ 43,985,910**	**3.22%**
Ad Valorem Budget for All Water Source Development Projects	**$ 32,803,218**	**2.40%**
Ad Valorem Budget Available for Alternative Water Supply Projects	$ 23,000,000	1.68%
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 9,803,218	0.72%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 32,872,195**	**2.41%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	$ 20,985,910	1.54%
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 11,886,285	0.87%
Ad Valorem Budget (from above)	**$ 553,009,838**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 32,803,218	5.93%

[7] Alternative Water Supply Budget – this shows the amount of ad-valorem and non-ad valorem funds that are budgeted for alternative water supply projects.

Southwest Florida Water Management District (SWFWMD)

In 2005, 1.3 billion gallons per day of fresh water were used within the SWFWMD. In this district, public water supply accounted for the largest amount, approximately 39%, of fresh water used. Agriculture accounted for 37% of the fresh water use, which represents the second largest category (Figure 22).



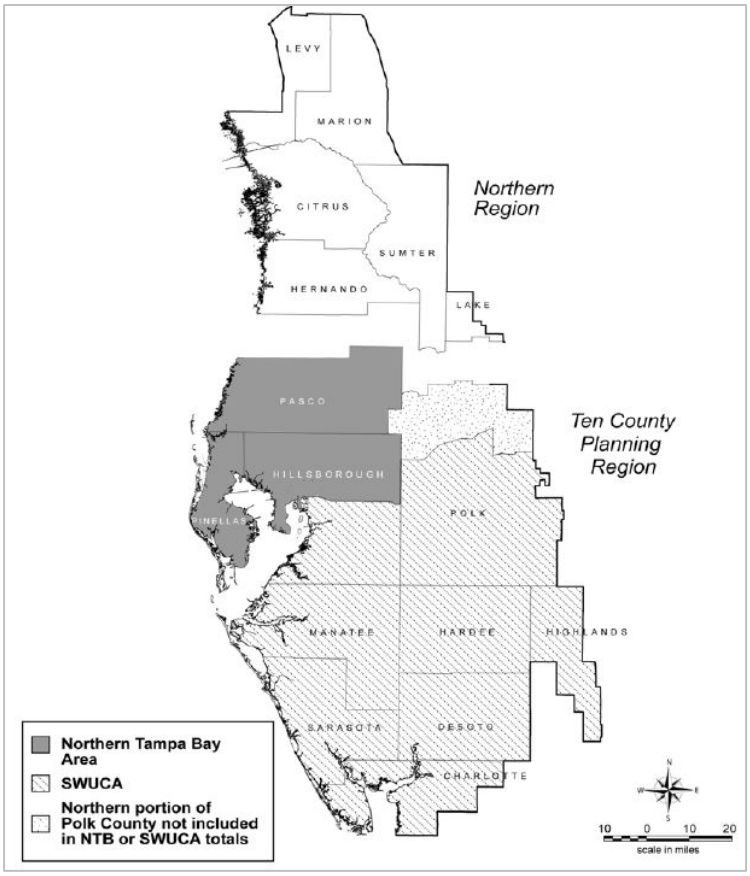
By 2025, the demand for fresh water in SWFWMD will increase by approximately 22% to 1.6 billion gallons per day. In 2025, public water supply will remain the largest category whose demand of fresh water will increase by 42%. Agricultural irrigation is expected to decrease by approximately 4%, but will remain the second largest category. This decline is due mostly to land use changes to an urban area.

Updating and Implementing the Regional Water Supply Plans

On November 30, 2006, the district's Governing Board approved the update to the Regional Water Supply Plan, which covers a 10-county planning region from Pasco County south to Charlotte County and inland to Polk and Highlands Counties. The plan estimates that an additional 409 mgd of water will be needed by 2025 over the base year of 2000. The plan identifies various water supply development options which collectively have the potential to produce as much as 704 mgd of water.

Groundwater withdrawal impacts on lakes, wetlands, rivers, and saltwater intrusion near the coast have limited the availability of water from the upper Floridan aquifer in the planning region. Water conservation and the reuse of reclaimed water are critical components of the plan. The plan also recognizes the role of land use changes in meeting future demands. In many areas,

groundwater intensive land uses, such as mining and agriculture, are changing to urban land uses. Although this change will result in an increased demand in public water supply, the district expects that alternative sources will meet many of these new demands, particularly in coastal areas, and groundwater use should decline. The decline in groundwater use will help meet the saltwater intrusion minimum aquifer level. In areas of limited alternative source availability, some of this groundwater may be reallocated to help meet growing public supply demands.



Water Resource Development

In the plan, the district classified water resource development projects into two broad categories: (1) Data collection and analysis to support water supply development, and (2) Specific projects intended to increase water availability. For data collection and analysis, the district allocated $38.5 million in FY 2005 – 2006. The district expects to allocate a similar amount of money through 2010, which would provide a five-year funding level of $192.5 million. Additional funding for some of these efforts will be provided by district partners.

In the second category, the plan identified nineteen specific projects in three classifications: research and/or pilot projects, agricultural water supply/environmental restoration, and upper Peace River minimum flow restoration. The amount of water made available cannot easily be quantified for all of these projects, but the district estimates that some of the projects will produce or conserve at least 41 mgd of water. The total cost of these projects is estimated at nearly $228 million, which will be funded by the district and its partners.

Water Supply Development

The public supply sector will require most of the 409 mgd of water needed by 2025. About 132 mgd of water will be needed for the district-specific environmental restoration category. The following water supply options are identified in the plan: conservation, reuse, surface water, seawater, brackish groundwater, and fresh groundwater. Many of the specific project options resulted from the planning efforts of regional water supply authorities and local government alliances.

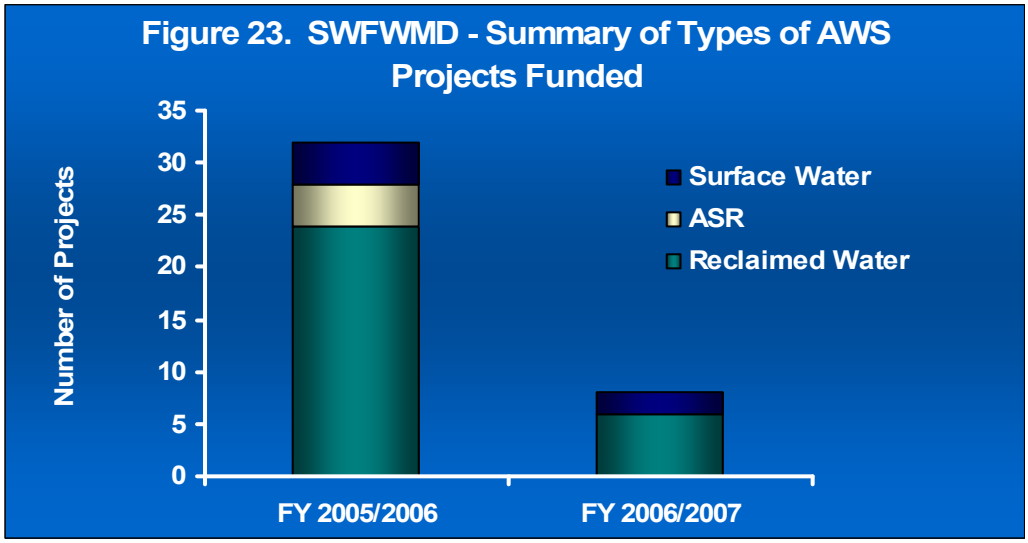
Approximately half of the needed 409 mgd has already been developed or is under development. To estimate the cost of meeting the remaining demand, the district compiled a list of 10 large scale water supply projects proposed by water supply authorities and local governments and several key water resource development projects needed to restore minimum flows to the upper Peace River. These projects will produce an estimated 152 mgd of new supply at a cost of approximately $2.17 billion. This will satisfy the majority of the unmet demand in the planning area, with the remainder to be addressed through smaller scale projects. The plan identifies a variety of district, local, state, and federal funding sources that could be combined to meet the projected demand.

Implementing the Water Protection and Sustainability Program

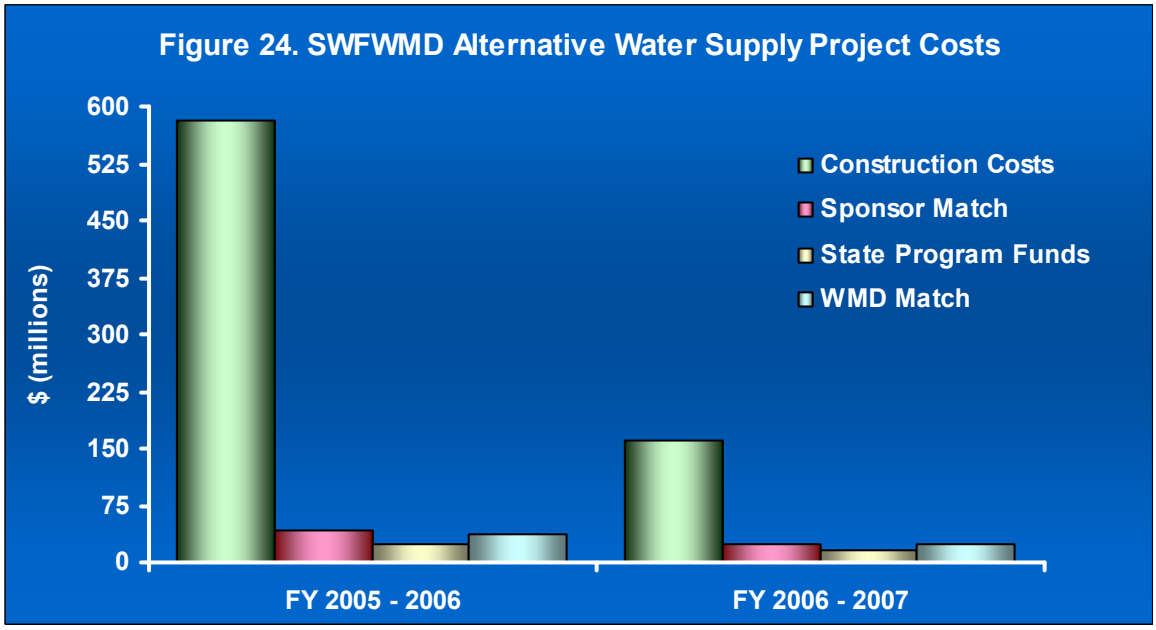
The district focuses on developing alternative water supplies in locations where the traditional sources (groundwater from the upper Floridan aquifer) are limited. Specifically, the district seeks to significantly reduce groundwater withdrawals in the Northern Tampa Bay Water Use Caution Area, prevent overall pumpage from increasing in the Southern Water Use Caution Area, promote regional cooperation in water supply development, avoid competition for limited groundwater resources, and ensure that growing water demands can be met. In the northern counties not covered by the plan, the district's strategy is preventive, with a focus on developing alternative supplies (primarily reclaimed water) and avoiding problem types seen in the other regions.

In the Northern Tampa Bay Water Use Caution Area (NTB), SWFWMD entered into the Partnership Agreement with Tampa Bay Water and its member local governments in the late 1990s. The agreement addresses environmental impacts in the region, including lake level drawdowns and dewatering of wetlands, caused by Tampa Bay Water's groundwater withdrawals. It calls for a reduction in pumping at 11 well fields from 160 mgd to 90 mgd by the end of 2007 and the development of at least 85 mgd of alternative water supplies. Tampa Bay Water has largely achieved these objectives through construction of a new surface water treatment facility, a reservoir, and a desalination plant. Water demand continues to grow in the area, and additional supplies need to be developed. One current priority is Tampa Bay Water's Downstream Enhancement/System Configuration II Project, which includes expanded surface water treatment and storage capacity and infrastructure upgrades.

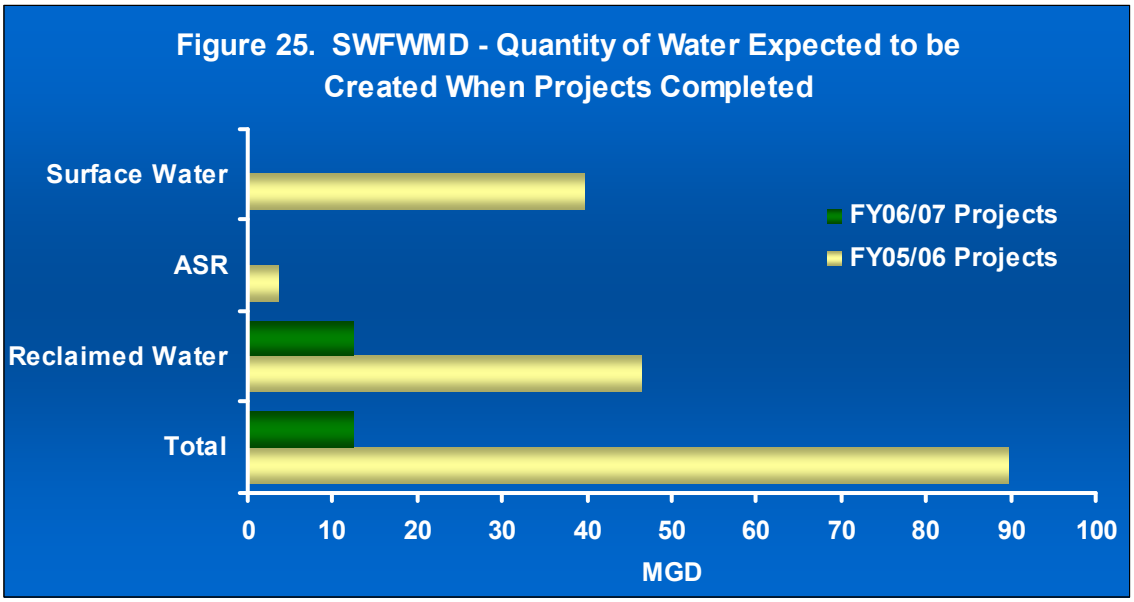
In the Southern Water Use Caution Area (SWUCA), excessive groundwater withdrawals have contributed to coastal saltwater intrusion, flow reduction in the upper Peace River, and lowered lake levels on the Lake Wales Ridge. In 2006, the SWFWMD Governing Board approved a recovery strategy for the Southern Water Use Caution Area with several components. Planning for and developing alternative water supplies, particularly for the public supply sector, is a key strategy with an objective to decrease overall groundwater use by 50 mgd. This reduction can be achieved, in part, by phasing out groundwater withdrawals as lands change from mining or agricultural uses to urban/suburban uses served by alternative sources. The district allocated significant portions of the FY 2005 – 2006 Water Protection and Sustainability Program funds for the expansion of surface water treatment facilities and construction of a new reservoir by the Peace River/Manasota Regional Water Supply Authority and for several important reclaimed water and aquifer storage and recovery projects in the Southern Water Use Caution Area.



During the first two years of the Water Protection and Sustainability Program, the district has funded forty alternative water supply projects (Figure 23)[8]. This represents over $747.2 million in total construction costs. Approximately $99.8 million to date has been provided through the state program and corresponding district match, which comprises approximately 13% of total construction costs (Figure 24). Additional contributions will be made in future years for multi-year projects. When completed, these projects are expected to provide approximately 100 mgd, including reuse flows (Figure 25).



[8] For SWFWMD, the total number of projects funded through the program includes ten projects that won't receive state funds, but will receive district funds and will be used to meet the match requirements of the Water Protection and Sustainability Program.



Before the Legislature created the Water Protection and Sustainability Program, the SWFWMD was already working with local governments, regional water supply authorities, and other partners to develop alternative water supplies through its Cooperative Funding Program. In this program, the district provided up to 50% of project costs. To integrate the Water Protection and Sustainability Program into its existing program, SWFWMD applies available Water Protection and Sustainability Program funds to all eligible projects using two funding ratios. For construction costs, the district first allocates up to 20% from the Water Protection and Sustainability Program, with SWFWMD paying 40% and the cooperator paying 40% of the remaining costs. For non-construction costs, the district and cooperator continue the 50%-50% cost share split. This approach allows cooperators to bear a significant cost share and maintain a major stake in the projects, while benefiting from the availability of the Water Protection and Sustainability Program funding.

The Water Protection and Sustainability Program has provided a much-needed supplement to SWFWMD's existing funding programs by allowing the district to stretch its dollars and provide seed money for more critically needed alternative water supply projects. The program also has provided an additional incentive for regional cooperation in water supply development, an approach strongly favored by the district.

Future Focus

In the future, the district projects significant, continuing funding needs for alternative water supply development throughout its jurisdiction. In the Northern Tampa Bay area, Tampa Bay Water's Downstream Enhancement/System Configuration II Project has an estimated total capital cost of $232 million and will require additional funding for several years. This project will also need to overcome permitting challenges associated with water quality in the Hillsborough River. In the Southern Water Use Caution Area, additional funding is needed to complete the Peace River/Manasota Regional Water Supply Authority reservoir project and to continue development of a regional loop system that will interconnect the major facilities in the four-county region. The Peace River/Manasota Regional Water Supply Authority also is planning another set of surface water projects and will request funding in the next two years. To meet the growing water needs of Polk County and other areas outside the SWFWMD, the district is investigating the possibility of developing surface water supplies from the Kissimmee River with SFWMD. If pursued, this project would begin around 2010. Finally, the district will focus on projects that expand and interconnect reclaimed water systems to better utilize this important alternative source.

SWFWMD Budget Information

The tables below provide a summary of the portions of the SWFWMD budget that are dedicated toward alternative water supply projects and water source development, which directly increases the availability of water supplies.

SWFWMD FY 05-06	Total	
Total District Budget	**$ 314,644,907**	**Total District Percentage**
Ad Valorem Budget	$ 188,076,151	59.77%
Non-Ad Valorem Budget	$ 126,568,756	40.23%
Alternative Water Supply Budget[9]	**$ 60,892,803**	**19.35%**
Ad Valorem Budget for All Water Source Development Projects	**$ 112,535,704**	**35.77%**
Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 30,442,803**	**9.68%**
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 82,092,901	26.09%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 33,225,000**	**10.56%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 30,450,000**	**9.68%**
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 2,775,000	0.88%
Ad Valorem Budget (from above)	**$ 188,076,151**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 112,535,704	59.84%

SWFWMD FY 06-07	Total	
Total District Budget	**$ 364,489,009**	**Total District Percentage**
Ad Valorem Budget	$ 236,160,294	64.79%
Non-Ad Valorem Budget	$ 128,328,715	35.21%
Alternative Water Supply Budget	**$ 54,800,735**	**15.03%**
Ad Valorem Budget for All Water Source Development Projects	**$ 118,448,875**	**32.50%**
Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 33,800,735**	**9.27%**
Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 84,648,140	23.22%
Non-Ad Valorem Budget for All Water Source Development Projects	**$ 22,500,000**	**6.17%**
Non-Ad Valorem Budget Available for Alternative Water Supply Projects	**$ 21,000,000**	**5.76%**
Non-Ad Valorem Budget Available for Non-Alternative Water Supply Projects	$ 1,500,000	0.41%
Ad Valorem Budget (from above)	**$ 236,160,294**	**Ad Valorem Percentage**
Ad Valorem Budget for All Water Source Development Projects	$ 118,448,875	50.16%

[9] Alternative Water Supply Budget – this shows the amount of ad-valorem and non-ad valorem funds that are budgeted for alternative water supply projects.

Appendices

I. Acronym List
II. Conserve Florida Update
III. Statutory Excerpts (to be added)

Appendix I – Acronym List

AWS	Alternative Water Supply
BGD	Billion Gallons per Day
F.A.C.	Florida Administrative Code
F.S.	Florida Statutes
FY	Fiscal Year
KB	Kissimmee Basin
LEC	Lower East Coast
LWC	Lower West Coast
MFL	Minimum Flows and Levels
MGD	Million Gallons per Day
NWFWMD	Northwest Florida Water Management District
RWSP	Regional Water Supply Plan
SFWMD	South Florida Water Management District
SJRWMD	St. Johns River Water Management District
SRWMD	Suwannee River Water Management District
SWFWMD	Southwest Florida Water Management District
UEC	Upper East Coast
WMD	Water Management District
WPSP	Water Protection and Sustainability Program
WRCA	Water Resource Caution Area
WSD	Water Source Development

Appendix II - Conserve Florida Update

The 2004 Florida Legislature enacted a law (Section 373.227, F.S.) encouraging the use of efficient, affordable water conservation measures by emphasizing a goal-based, accountable water conservation program tailored for public water supply utilities. The legislation directs the Department of Environmental Protection to "develop a comprehensive statewide water conservation program for public water supply… in cooperation with the water management districts and other stakeholders." This program is called Conserve Florida. In the past year, Conserve Florida developed a computer application, the Guide, to assist utilities with goal-based conservation plan development. The Miami-Dade Water and Sewer Authority successfully used the Guide to help develop a five-year conservation plan, and now is using this software to develop a 20-year conservation plan as part of SFWMD's requirement for a 20-year water use permit. Conserve Florida also has established a conservation Clearinghouse to collect, analyze, and provide information and technical assistance to utilities and water managers for use in developing conservation plans.

Appendix III – Statutory Excerpts

373.0361 - Regional water supply planning.--

(5) Annually and in conjunction with the reporting requirements of s. 373.536(6)(a)4., the department shall submit to the Governor and the Legislature a report on the status of regional water supply planning in each district. The report shall include:

(a) A compilation of the estimated costs of and potential sources of funding for water resource development and water supply development projects as identified in the water management district regional water supply plans.

(b) The percentage and amount, by district, of district ad valorem tax revenues or other district funds made available to develop alternative water supplies.

(c) A description of each district's progress toward achieving its water resource development objectives, including the district's implementation of its 5-year water resource development work program.

(d) An assessment of the specific progress being made to implement each alternative water supply project option chosen by the entities and identified for implementation in the plan.

(e) An overall assessment of the progress being made to develop water supply in each district, including, but not limited to, an explanation of how each project, either alternative or traditional, will produce, contribute to, or account for additional water being made available for consumptive uses, an estimate of the quantity of water to be produced by each project, and an assessment of the contribution of the district's regional water supply plan in providing sufficient water to meet the needs of existing and future reasonable-beneficial uses for a 1-in-10 year drought event, as well as the needs of the natural systems.

373.536(6) - Final Budget; Annual Audit; Capital Improvements Plan; Water Resource Development Work Program.

(a)4. A 5-year water resource development work program to be furnished within 30 days after the adoption of the final budget. The program must describe the district's implementation strategy for the water resource development component of each approved regional water supply plan developed or revised under s. 373.0361. The work program must address all the elements of the water resource development component in the district's approved regional water supply plans and must identify which projects in the work program will provide water, explain how each water resource development project will produce additional water available for consumptive uses, estimate the quantity of water to be produced by each project, and provide an assessment of the contribution of the district's regional water supply plans in providing sufficient water to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event. Within 30 days after its submittal, the department shall review the proposed work program and submit its findings, questions, and comments to the district. The review must include a written evaluation of the program's consistency with the furtherance of the district's approved regional water supply plans, and the adequacy of proposed expenditures. As part of the review, the department shall give interested parties the opportunity to provide written comments on each district's proposed work program. Within 45 days after receipt of the department's evaluation, the governing board shall state in writing to the department which changes recommended in the evaluation it will incorporate into its work program submitted as part of the March 1 consolidated annual report required by s. 373.036(7) or specify the reasons for not incorporating the changes. The department shall include the district's responses in a final evaluation report and shall submit a copy of the report to the Governor, the President of the Senate, and the Speaker of the House of Representatives.

For More Information

DEP Office of Water Policy
http://www.dep.state.fl.us/water/waterpolicy/index.htm

Conserve Florida *Guide*
http://www.conserveflorida.net/
http://www.ConserveFloridaWater.org

Northwest Florida Water Management District
http://www.nwfwmd.state.fl.us/

Suwannee River Water Management District
http://www.srwmd.state.fl.us/

St. Johns River Water Management District
http://www.sjrwmd.com/

South Florida Water Management District
http://www.sfwmd.gov/

Southwest Florida Water Management District
http://www.swfwmd.state.fl.us/


DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA