

6

Water Supply Development Status and Projects

This chapter provides a summary of the water supply development projects anticipated to meet the water needs of the Lower East Coast (LEC) Planning Area for the 2010 to 2030 planning horizon. Information is provided for each water use category presented in **Chapter 2**, with an emphasis on the Public Water Supply (PWS) category in response to statutory requirements. Additional details about demand projections, local government responsibilities, and water supply development projects can be found in **Appendices A, F, and G**, respectively.

A growing population and viable agricultural industry in the LEC Planning Area is driving the increase in demand and need for water supply development. The region's population is expected to increase by 18 percent, from approximately 5.6 million in 2010 to 6.7 million in 2030. The gross demand for PWS, the largest water use type in the LEC Planning Area, is expected to increase 19 percent to a projected demand of 1,000.8 million gallons per day (MGD). The second largest user, Agricultural (AGR) Self-Supply, is projected to increase 9 percent over the 20-year planning horizon from 631.7 MGD to 686.1 MGD. Gross water demand for all of the water use categories combined is projected to increase by 15 percent, from 1,695.5 MGD in 2010 to an estimated 1,949.6 MGD in 2030.

Water users, such as utilities, local governments, and self-suppliers, including agriculture, industrial/commercial/institutional, and power generation, are primarily responsible for water supply development projects. PWS relies almost exclusively on fresh groundwater from the Surficial Aquifer System (SAS), which includes the Biscayne aquifer. However, as discussed in previous chapters, the availability of fresh groundwater to meet the needs of future growth in the LEC Planning Area can be limited by local conditions. The additional water needed to meet future PWS demand is generally expected to be developed from other sources, primarily through development of brackish groundwater, reclaimed water, and stormwater/surface water capture. The implementation of water conservation programs also offers potential water use savings to reduce future water demand.

A utility summary is included at the end of this chapter for each PWS utility supplying 100,000 gallons per day (0.1 MGD) or greater to its service area. Each summary includes the identified water supply projects proposed by utilities. For other water use categories, specific projects are identified as provided to the South Florida Water Management District (SFWMD) for this plan update.

REGIONAL AND LOCAL PLANNING LINKAGE

The SFWMD's water supply planning process is closely coordinated and linked to the water supply planning of local governments and utilities. Significant coordination and collaboration throughout the water supply plan development and approval process is needed among all water supply planning entities. In the LEC Planning Area, There are 52 PWS utilities with a capacity of 0.1 MGD or greater. Of these 41 are local government-owned utilities and five are privately-owned utilities that serve 112 local governments and the Seminole Tribe of Florida. Six water control or special districts (Chapter 298) are also located within the LEC Planning Area and operate PWS utilities that serve portions of local governments. **Appendix F** provides lists of utilities and local governments served as well as statutory requirements relevant to local government comprehensive plans.

For consistency in the water supply planning process, the SFWMD, local governments, and utilities worked closely to project demand and identify water supply projects for the future. Projects proposed in local governments' water supply facilities work plans are listed in the annual utility progress reports provided to the SFWMD each fall. Some of the projects identified in this plan update were listed in the *2005–2006 Lower East Coast Water Supply Plan Update* (2005–2006 LEC Plan Update) (SFWMD 2006). Those projects are currently proposed with future expansion phases (multiple phase projects), or were delayed and/or modified due to changes in population and demand projections. The regional and local water supply planning process is illustrated in **Figure 1** and described in the Process box on the next page.

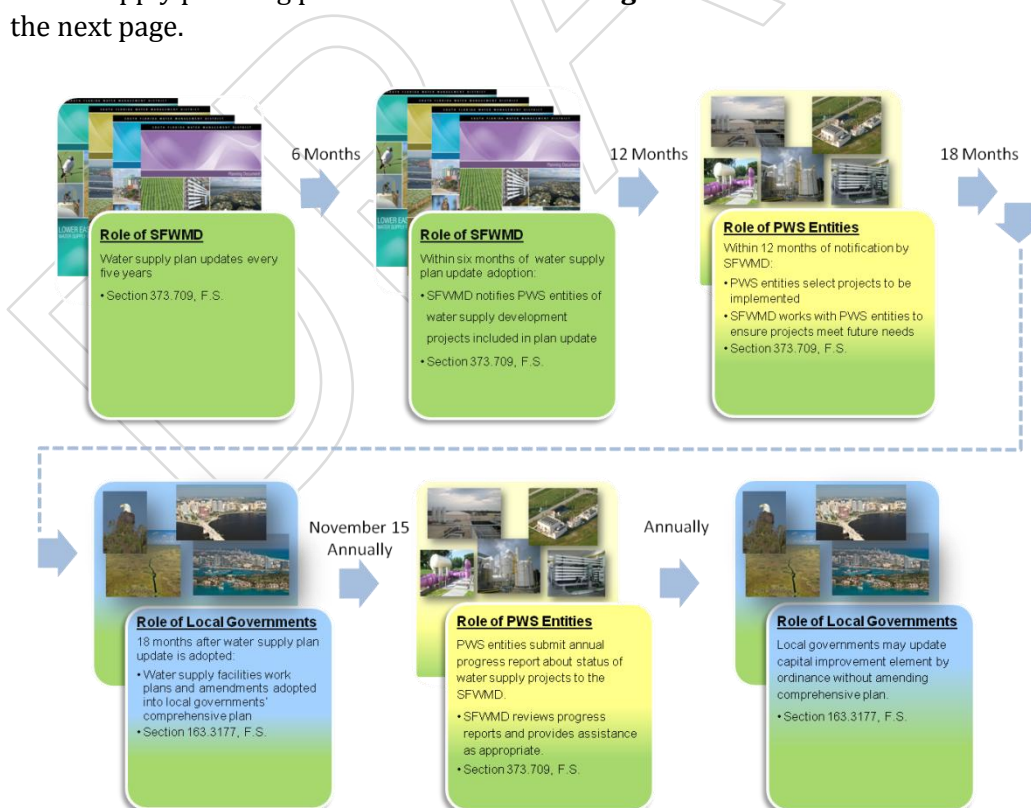


Figure 1. Linking regional water supply planning with local government comprehensive planning.
(Note: F.S. – Florida Statutes.)

Regional and Local Water Supply Planning Process

The SFWMD is required to notify each PWS utility of the projects identified in this plan update for that utility to consider and incorporate into its corresponding government's required water supply facilities work plan in meeting future water demand. This notification must occur within six months following approval of the water supply plan update. Once the notice is received, PWS utilities then must respond to the SFWMD within 12 months about their intentions to develop and implement the projects identified by the plan or provide a list of other projects or methods to meet these needs (Section 373.709, Florida Statutes [F.S.]).

In addition to the utility requirements above, local governments are required to adopt water supply facilities work plans and related amendments into their comprehensive plans within 18 months following approval of the regional water supply plan. The work plans contain information to update the comprehensive plan's capital improvements element, which outlines specifics about the need for, and the location of, public facilities, principles for construction, cost estimates, and a schedule of capital improvements.

The local governments are required by Subsection 163.3177(6)(c)3, F.S. to modify the potable water sub-element of their comprehensive plan to do the following:

- ◆ Incorporate the water supply project or projects selected by the local government from those projects identified in the updated regional water supply plan or proposed by the local government.
- ◆ Identify water supply projects to meet the water needs identified in the updated regional water supply plan within the local government's jurisdiction.
- ◆ Include a work plan, covering at least a ten-year planning period, for building public, private, and regional water supply facilities, including the development of alternative water supplies, which are identified in the potable water element to meet the needs of existing and new development.

By November 15 of every year, all utilities are required to submit a progress report about the status of their water supply projects (completed, underway, or planned for implementation). Local governments are required to undertake an annual review of the Capital Improvements Element to update the Five-Year Capital Improvements Schedule and are encouraged to send updates to the Florida Department of Economic Opportunity and the SFWMD. **Figure 1** shows the linkage and sequence of the water supply planning process with local government water supply facilities work plans and comprehensive plans, beginning with the adoption of a water supply plan update.

Link to Consumptive Use Permitting

Although comprehensive plans, water supply facilities work plans, and consumptive use permit applications are prepared at different times, each use the latest and best data that is available at that time. Local governments' future water supply development projects should generally be consistent among plans and permits, and meet projected water demands. However, local economic conditions and population growth rates may affect when water is needed and projects are initiated.

For proposed projects, consumptive use permits are required for all water supply development projects, except for those using 100 percent seawater or reclaimed water. While this plan identifies a number of projects, it is important to point out that each proposed use of water must meet the conditions for permit issuance found in Section 373.223, Florida Statutes (F.S.), and the implementing criteria found in Chapters 40E-2 and 40E-20, Florida Administrative Code (F.A.C.). Section 373.223, F.S. requires applicants to establish that the proposed use of water 1) is a reasonable-beneficial use as defined in Section 373.019, F.S., 2) will not interfere with any presently existing legal use of water, and 3) is consistent with the public interest.

Additionally, a Florida Department of Environmental Protection's (FDEP) guidance memo addresses coordination between SFWMD's consumptive use permitting and water supply planning staff on projects included in water supply plans. By increasing coordination during the water supply planning process, consumptive use permit applicants planning one of the identified water supply projects will be assured that SFWMD staff is familiar with the projects, have supporting data, and will be able to facilitate the permitting process. The proposed projects considered for this plan update were reviewed by staff from SFWMD consumptive use permitting and water supply planning using the following set of questions:

- ◆ Does the proposed project use a source of limited availability?
- ◆ Is the project located in a Restricted Allocation Area?
- ◆ Is the proposed source from a Minimum Flow and Level (MFL) water body or is it connected, directly or indirectly, to a MFL water body? If yes, is the proposed use consistent with MFL recovery or prevention strategies?
- ◆ What other environmental water needs (i.e., Comprehensive Everglades Restoration Plan [CERP] targets, water reservations, etc.) may be impacted?
- ◆ What resource issues have been identified in recent permit applications in the general area for the same source (i.e., wetlands, saltwater intrusion, MFLs, etc.)?
- ◆ Have there been resource-related compliance issues by existing legal users of the same source?
- ◆ Are there any new technical studies related to source availability?

The availability of new freshwater supplies in the LEC Planning Area is limited due to existing water demand and source limitations, including source constraints, saltwater intrusion, and environmental protection criteria (see **Chapter 3**), and is reflected in existing permitted allocations. The availability and permissibility of freshwater supplies to meet

projected water demands through 2030 will be determined on an application-by-application basis. Some freshwater supply development may be feasible depending on local conditions.

PROJECTS IDENTIFIED FOR THIS PLAN UPDATE

A discussion of the demand and supply conditions for each of the six major water use categories follows. Because most of the growth in demand during the next 20 years will occur in the urban sector, more specifically within the PWS systems, all of the proposed projects are within the PWS category.

The demand for PWS in the LEC Planning Area is projected to increase through 2030. A combination of existing and additional capacity developed by new water supply development projects will be used to meet the demand. Each utility's proposed projects are displayed in their summary found at the end of this chapter and in **Appendix G**. The utility summaries indicate that all LEC utilities can meet their projected 2030 demand with existing capacity or by supplementing that capacity by developing one or more identified projects.

To manage the water resources in the region, this update promotes the diversification of sources for the water supply projects needed to meet future demands. Projects proposed for inclusion in this update were evaluated based on factors discussed in the previous section, level of detail provided (i.e., project scope, cost and schedule), and whether the project is expected to contribute to new water supply, resulting in a potentially permissible increase in their allocations or a treatment system's rated capacity.

QUICK FACTS

- ◆ Between 2010 and 2030, PWS demand is projected to increase by 150 MGD.
- ◆ Much of the new demand can be accommodated by existing treatment capacity or allocations.
- ◆ 127 MGD in new potable water capacity would be developed by 2030 if all projects proposed in the utility summaries are implemented.
- ◆ Additional development and diversification of sources, especially the Floridan aquifer, is expected by 2030.
- ◆ Of the 127 MGD in new potable water capacity, 99 MGD will be developed from a brackish source.

Public Water Supply

PWS demand includes all potable uses served by public and private utilities with a production capacity equal to or greater than 0.1 MGD. The PWS finished (net) demand is projected to grow by 149.5 MGD from 782.2 MGD in 2010 to 931.7 MGD in 2030. In aggregate, the utilities of the LEC Planning Area have both adequate permitted consumptive use capacity and adequate permitted potable water treatment capacity to meet the LEC Planning Area's 2030 demands. However, at the individual utility level, practical

considerations limit full utilization of all permitted capacities. The utility summaries should be consulted to understand the nuances of each utility's situation. Examples of limiting conditions at the level of the individual utility include the following:

- ◆ Treatment capacity that is “stranded” or without available raw water sources to fully supply it
- ◆ Permitted consumptive use volumes that cannot be utilized due to inadequate water treatment capacity
- ◆ Mismatches between treatment type and its capacity and the permitted consumptive use between freshwater and brackish sources

PWS demand is currently met by fresh groundwater from the SAS, surface water, brackish groundwater from the Upper Floridan aquifer, reclaimed water, and conservation practices. Approximately 87 percent of projected PWS finished water demand will be met using fresh water from the SAS, 10 percent will come from brackish groundwater from the Upper Floridan aquifer, and 3 percent will come from surface water. Although additional reclaimed water capacity and conservation of potable water do not produce potable water per se, it is a means to meet nonpotable demand or extend the existing potable supplies to meet future demand.

As noted above, many consumptive use permits contain provisions that limit the allocation of water that may be withdrawn from the SAS. Some utilities, such as the cities of Homestead, North Miami, and Dania Beach, will meet future supplemental demands by purchasing bulk or finished water through interconnections with nearby, utilities that currently have excess finished water capacity. Other utilities, such as Seacoast Utility Authority, Town of Davie and City of Lake Worth Utilities, are developing alternative water supplies such as brackish groundwater from the Floridan aquifer. Proposed brackish water projects in the LEC Planning Area include construction of reverse osmosis (RO) water treatment plants, expansion of existing plants, and construction of new production wells.

In total, the proposed potable water supply development projects will potentially create new treatment capacity yielding 126.6 MGD of finished water by fifteen utilities (**Table 1**). Together with existing capacity, this will meet the 2030 PWS total finished demand of 931.7 MGD. Of the 126.6 MGD of new potable treatment capacity across 33 projects, 99.3 MGD would be produced by 28 brackish water source projects and an additional 27.3 MGD would be produced by five freshwater source projects.

Table 1. Proposed potable water supply development projects and capacity for 2010–2030.

Water Source	Number of Projects ^a	Capacity (MGD)
Fresh groundwater (SAS)	5	27.3
Brackish groundwater (Floridan aquifer)	28	99.3
Totals	33	126.6

a. Some projects consist of more than one construction component and will be implemented in multiple phases.

PWS utilities identified 22 new reclaimed water projects with 101 MGD of new treatment capacity and 193 MGD of new distribution capacity (**Table 2**). The reclaimed water projects will meet multiple types of demand including: 1) landscape irrigation, including golf courses and parks, 2) groundwater recharge and 3) power generation. Some reclaimed water projects will produce new treatment capacity by construction or expansion of reclaimed water production facilities, while others involve increasing reuse distribution lines and storage facilities. It is significant to note that the two largest reclaimed water projects are in Miami-Dade County. These are proposed to supply a total of approximately 179 MGD for Biscayne Bay restoration and to Florida Power & Light (FPL) for expansion of the Turkey Point plant.

Table 2. Proposed nonpotable water supply projects and capacity for 2010–2030.

Project Type	Number of Projects ^a	Capacity (MGD)
Reclaimed water (new treatment capacity)	9	101
Reclaimed water (new distribution capacity)	13	193
Stored surface water/Stormwater/aquifer storage and recovery (ASR)	3	11

a. Some projects consist of more than one construction component and will be implemented in multiple phases.

Three utilities in the LEC Planning Area City of Boynton Beach, Miami-Dade Water and Sewer Department (MDWASD), and Florida Keys Aqueduct Authority (FKAA)—constructed components of aquifer storage and recovery (ASR) well systems within the past 10 years. These systems evaluated the technology of subsurface storage to accommodate additional water supply during the dry season to meet peak potable water demands. Boynton Beach constructed a second ASR well that has now been integrated into their water supply system; the MDWASD constructed a monitoring well that will provide hydraulic data when they initiate operational testing of their ASR systems; and the FKAA constructed an exploratory well that indicated conditions in the FAS were not favorable for ASR. The FKAA exploratory well was subsequently completed as a supplemental supply well for their system.

Conservation is an important component of utilities' plans for meeting future demands. Seventeen water utilities in the LEC Planning Area are participating in the Broward Water Partnership, a multiple year program that provides rebates and other water conservation tools and tips to businesses and homeowners. The program was recently expanded to include multiple family units, commercial buildings, and not-for-profit agencies, as well as single family homes. It is estimated that up to 30 MGD can be saved throughout Broward County by 2030 through this program. Additionally, three utilities are planning on implementing discrete water conservation programs that will result in a combined total of savings of 45.4 MGD by 2030.

Domestic Self-Supply

Domestic Self-Supply (DSS) includes potable water from a private domestic well serving a private residence, and utilities that produce less than 0.1 MGD on an annual basis. DSS finished demands in the LEC Planning Area are projected to increase by 0.8 MGD from

18.4 MGD in 2010 to 19.2 MGD in 2030. DSS needs are met almost exclusively with fresh groundwater from the SAS and will continue to do so in the future.

Agricultural Self-Supply

Total irrigated agricultural acreage in the LEC Planning Area is expected to increase from 543,684 acres in 2010 to 605,577 acres by 2030. Consequently, estimated AGR Self-Supply irrigation needs (gross demand) are expected to increase from 631.7 MGD in 2010 to 686.1 MGD by 2030 (9 percent). Agricultural water use accounts for 36 percent of the region's total gross demand. AGR Self-Supply is expected to remain the second largest water use category within the planning area after PWS.

The traditional water sources used for irrigation in the LEC Planning Area are fresh surface water in Palm Beach County, portions of Hendry County in the LEC Planning Area, and the portions of Okeechobee, Glades, St. Lucie counties within the Lake Okeechobee Service Area (LOSA), and fresh groundwater in Broward and Miami-Dade counties. Monroe County relies upon potable water and/or cisterns for the limited amount of supplemental irrigation needed by nurseries.

The Everglades Agricultural Area (EAA) within the LOSA will continue to rely on fresh surface water from Lake Okeechobee and connected conveyance canals consistent with the consumptive use permits for this basin. Currently, approximately 458,240 acres have been permitted within the EAA, with approximately 417,280 were irrigated in 2010. For the entire LOSA, which encompasses basins in the other three planning areas plus the C-21 and S-236 basins in the LEC Planning Area, up to an additional 156,171 acres will be provided supplemental irrigation by fresh surface water from the lake consistent with their consumptive use permits. In addition, county portion of the irrigated acres in Hendry County that fall outside of the LOSA is supplied by fresh groundwater.

The continued use of best management practices (BMPs), including water conservation, could reduce the amount of water needed to meet crop demands (FDACS 2010). These efforts are discussed in **Chapter 5**. In addition, the Florida Department of Agriculture and Consumer Services (FDACS) develops and adopts by rule agricultural BMPs addressing water quality. Some BMPs contain an implicit water conservation component. Growers who enroll in the FDACS voluntary BMP Program and implement BMPs are presumed to be in compliance with state water quality standards and are eligible for technical and financial assistance toward meeting water resource protection goals.

Agricultural alternative water supply projects are likely to target changes in the sources and efficiencies of water delivery to meet the crop supplemental irrigation demands. For instance, tailwater recovery could capture some of the water not effectively delivered to the root zone. By recapturing and recycling this water, withdrawals from the water resource could ultimately be reduced under average rainfall conditions or used to expand irrigated acreage.

Industrial/Commercial/Institutional Self-Supply

The Industrial/Commercial/Institutional (ICI) Self-Supply water use category is comprised of large facilities for production processing with the largest uses being mining (i.e., aggregates industry) and food processing (dominated by the sugar industry). In the LEC Planning Area, the water use projection for ICI Self-Supply assumes that growth for this region is proportional to the underlying economic activity that generates water demand in population in the area. The projected demand for this category is expected to be 56.6 MGD by 2030, 28 percent greater than the 2010 demand.

The ICI water use category has sufficient supply to meet future needs. That said, the increase in water demands from users in this category will still need to meet the requirements of the Consumptive Use Permitting Program and resource allocation rules. Although fresh groundwater supplies are generally considered adequate to meet the relatively small new demands projected for this use category, alternative water supply options should be considered based on location and local conditions. If reclaimed water is available to meet existing and new ICI Self-Supply water demands, the feasibility of such opportunities will be evaluated through the Consumptive Use Permitting Program. No specific projects for ICI Self-Supply were provided or identified in this plan update.

Recreational/Landscape Self-Supply

Recreational/Landscape (REC) Self-Supply includes the use of water for irrigation of large common areas, golf courses, parks, cemeteries, schools, commercial developments, and other self-supplied irrigation uses with demand of 0.1 MGD or greater. REC Self-Supply gross demand is projected to increase by 3 percent (148.9 MGD in 2010 compared to 152.8 MGD in 2030).

Historically, irrigation supplies for this category include local fresh groundwater and surface water captured from canals or ponds in stormwater management systems. In recent years, irrigation for new golf courses often includes reclaimed water and on-site blending of brackish groundwater with surface water. Four golf courses use brackish groundwater treated by RO.

The small demand increase for this category should be met, for the most part, by currently proposed reclaimed water projects or by locally derived groundwater. Projects submitted by utilities and wastewater treatment facilities indicate that use of reclaimed water will increase significantly in the future. Expansion of water reuse systems for REC Self-Supply may reduce withdrawal demands on the water resources. The additional supply may also provide an opportunity to allow current irrigation to change from fresh water to reclaimed water. Where reclaimed water is not available, users may qualify for limited freshwater withdrawals on an application-by-application basis.

In addition, Implementation of the Mandatory Year-Round Landscape Irrigation Conservation Measures (Rule 40E-24.201, Florida Administrative Code), water conservation methods using more efficient irrigation systems, and Florida-Friendly Landscaping™ offer potential cost savings and may reduce future demand. However, no specific projects for REC Self-Supply were provided or identified in this plan update.

Power Generation Self-Supply

The Power Generation (PWR) Self-Supply water use category is expected to grow by approximately 21.6 MGD (gross demand) during the next 20 years from 11.7 to 33.3 MGD as FPL plans to expand facilities in order to meet the demand for electrical power. FPL utilizes an assessment method incorporating environmental, economical and technical feasibility when selecting power generation and cooling technologies most appropriate for site-specific conditions, including water supply and wastewater disposal. Different technologies may require and utilize both traditional and alternative water supply sources.

Currently, two power generation plants in the LEC Planning Area are permitted to withdraw groundwater: 1) FPL Turkey Point Plant and 2) Homestead Municipal Power Plant. Both of these plants are in Miami-Dade County. FPL increased its power resources at the existing Turkey Point plant adding combined-cycle generating technology (Unit 5). This facility uses groundwater (Floridan aquifer) and water from a closed-loop cooling canal system. The Homestead Municipal plant is a peaking plant that only supplies electricity when needed and uses Biscayne aquifer water. In addition, FPL has several generation plants that use seawater (Cutler, Lauderdale, Port Everglades and Riviera Beach). These plants are not addressed in the water supply plans because seawater is not a regulated source of water.

The FPL West County Energy Center, located in northwestern Palm Beach County, West County Energy Center was approved to use reclaimed water (approximately 22 to 29 MGD contracted) supplied by the Palm Beach County Water Utilities Department since late 2010. Prior to Palm Beach County supplying reclaimed water, the facility temporarily was supplied by the groundwater and surface water sources.

In the future, Miami-Dade County will be providing up to 90 MGD of reclaimed water to meet FPL cooling needs at Turkey Point for the planned nuclear generating expansion units (Units 6 and 7) and the upgrade of the existing nuclear generating units (Units 3 and 4).

FUNDING

Funding of water supply development and water conservation at the local level is the shared responsibility of water suppliers and users. The State of Florida and the water management districts have provided funding assistance to local water users developing alternative water supplies and measurable water conservation programs. One criterion for funding consideration is the project has to be included in, or be consistent with, a regional water supply plan update. Some projects not in this update, but consistent with the plan's goals, may also be funded.

When the SFWMD deems it appropriate, a plan update may specifically identify the need for multijurisdictional approaches to project options based on analysis, the ability to permit and finance, and technical feasibility. The SFWMD provides funding for alternative water supply and measurable water conservation through its Alternative Water Supply and Water Savings Incentive (WaterSIP) funding programs. Funds for these programs are allocated annually through the Governing Boards approval of the SFWMD's budget. An alternative water supply or water conservation project identified in this update makes that project eligible for future funding, although funding is not guaranteed. An application must be submitted during the program solicitation period and processed for the determination of an award.

Alternative Water Supply Program

Alternative water supply sources in the LEC Planning Area include brackish water from the Upper Floridan aquifer, reclaimed water, seawater, capture of surface or storm water, new storage capacity, and conservation. Although declining per capita use rates (PCURs) help to reduce or defer development of new water production capacity, in some cases, new water supplies will also be needed to accommodate the region's future growth. The SFWMD's Alternative Water Supply Program funds up to 40 percent of an alternative water supply project's construction cost to qualified applicants seeking cost-sharing assistance.

Since 1997, the SFWMD, in cooperation with the state through the Florida Water Protection and Sustainability Program, has approved over \$204 million in cost-share funding for the construction of 474 alternative water supply projects throughout the SFWMD boundaries. Funds provided by the state are matched dollar for dollar with SFWMD funds. While the legislature has not provided funding to the program since 2009, the SFWMD has continued appropriating ad valorem revenues to the program at significantly reduced levels since Fiscal Year (FY) 2011. In FY12 and FY13, budgeted Alternative Water Supply Program funding was \$1.25 million and \$1.6 million including reallocated funds from prior fiscal years, respectively. In the LEC Planning Area, \$53.8 million was allocated to 121 projects from FY 2006 to FY 2012. The projects created 112 MGD of new water capacity within the LEC Planning Area.

Water Savings Incentive Program

As described in **Appendix E**, the WaterSIP provides 50-50 cost-share funding for implementation of water savings projects that reduce urban water use. The SFWMD provides matching funds up to \$50,000 to water providers and users (i.e., cities, utilities, industrial groups, schools, hospitals and homeowners associations) for water saving technologies. These technologies include low flow plumbing fixtures, rain sensors, fire hydrant flushing devices, and other hardware. Program funds are budgeted annually. From FY 2005 to FY 2012, the SFWMD allocated \$2.4 million for projects in the LEC Planning Area, which represents an estimated potential savings of 1.5 billion gallons per year (4.1 MGD).

SUMMARY

Economic trends in south Florida over the past five years have resulted in a lowering of population and demand projections for the next twenty years when compared to the projections provided in the 2005–2006 LEC Plan Update, as discussed in **Chapter 2**. During the 20-year planning horizon period, the PWS category projects only a 16 percent increase in finished demand. This, combined with PWS utilities water treatment facilities expansions over that same time period, has resulted in most LEC Planning Area PWS utilities possessing sufficient treatment capacity and permitted allocations to meet their estimated 2030 demands. A small number of utilities will need to modify their existing consumptive use permit allocations to meet future demands. Other utilities will meet future demands by purchasing water from other suppliers. However, future increases in withdrawals from Lake Okeechobee and the SAS must comply with the Restricted Allocation Area criteria for the Lake Okeechobee and LEC service areas.

Utilities have proposed and SFWMD staff evaluated more than 45 new PWS projects for this update, which includes projects that develop fresh and brackish groundwater sources, provide reclaimed water treatment or storage of surface and stormwater. As a result, potential new PWS supply capacity is significantly greater than the projected increase in demand for the planning horizon of this update. The proposed design capacity includes the need to meet peak demands, backup capacity, and operational capacity of the treatment facility. Most water supply development options require significant upfront investments and ongoing maintenance costs. Individual utilities may find that a portion of future water needs can be met in a more immediate and cost-effective way through a demand management program, purchasing water from neighboring utilities, or a reclaimed water project.

PUBLIC WATER SUPPLY UTILITY SUMMARIES

In this section, a utility summary sheet is provided for each PWS utility within the LEC Planning Area. The summary sheets are organized geographically by county. The utilities are then organized alphabetically within each county listing. An explanation of the utility summary can be found in the sample and descriptions provided on the next three pages.

No PWS utilities are located within the portion of Hendry County within the LEC Planning Area. However, a small portion of Clewiston Utilities' service area extends into Palm Beach County and the LEC Planning Area. Given that the majority of the service area and population served are located within the Lower West Coast Planning Area, Clewiston Utilities is discussed in the *Lower West Coast Water Supply Plan Planning Document* (SFWMD, 2012).

Descriptions of each numbered item are provided on the next two pages.

SAMPLE CITY

County: Broward County

Service Area: Sample City and portions of unincorporated Broward County.

Description: This description includes the number and type of water treatment plants, water sources, areas served, bulk sales or purchases, and other issues of concern to the utility. If the utility produces reclaimed water, information regarding the quantity and customers may also be included. Utilities that participate in the Broward Water Partnership conservation program are identified here.

POPULATION AND FINISHED WATER DEMAND					
1	2	3	Existing	Projected	
			2010	2020	2030
Population			100,000	110,000	120,000
Per Capita (gallons per day finished water)			100	100	100
Potable Water Demands (daily average annual finished water in MGD)			10.0	11.0	12.0
SFWMD CONSUMPTIVE USE PERMITTED (00-00000-W) ALLOCATION (MGD)					
4	Potable Water Source		Existing	Projected	
			2010	2020	2030
Fresh Water			14.00	14.00	14.00
Brackish Water			0.00	2.00	4.00
Total Allocation			14.00	16.00	18.00
POTABLE WATER TREATMENT CAPACITY					
FDEP Permitted Capacity			Cumulative Facility & Project Capacity (MGD)		
7			Existing	Projected	
			2012	2020	2030
Fresh Water			18.00	18.00	18.00
Brackish Water			0.00	0.00	0.00
Planned Project Capacity			0.00	2.00	3.00
Total Capacity			18.00	20.00	21.00
NONPOTABLE WATER TREATMENT CAPACITY					
Reclaimed Water			1.00	1.00	1.00
PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
New Floridan RO WTP (2MGD)	Brackish Water	2017	\$4.00	2.00	2.00
Additional RO Train (+1 MGD)	Brackish Water	2025	\$2.00	0.00	1.00
Total			\$6.00	2.00	3.00
Conservation and Irrigation Restrictions	Conservation	2025	\$0.00	0.10	0.10

Descriptions of numbered items on the sample utility summary provided on the previous page.

- 1. Population:** The 2010 population was determined using the map of the area served by the utility in 2010 and the census block data from the 2010 United States Census. Projections are generally based on the Bureau of Economic and Business Research (BEBR) population projections report published in *Projections of Florida Population by County, 2010 – 2040* in July 2011 (BEBR 2010). For some utilities, the growth rate to project the 2020 and 2030 populations were based on additional data provided by the utility (see **Appendix A**) for more information.
- 2. Per Capita Water Use:** This number was calculated by dividing the 2010 total finished water produced by the utility (from Monthly Operating Reports [MORs] submitted by each utility to the FDEP) by the 2010 population. It is expected that this number will differ from the per capita rate used during the consumptive use permitting process.
- 3. Potable Water Demands:** The 2010 amount is the daily average finished water produced by the utility in 2010 (from MORs). The 2020 and 2030 projected demands are the respective populations multiplied by the 2010 per capita (See Appendix A for more information) water use for that utility.
- 4. Allocation from the Current Consumptive Use Permit:** Total allocation is composed of fresh and brackish gross water allocations as described in the permit.
- 5. Projected Allocation 2020/2030:** If the current consumptive use permit specifies a change in the allocation, the 2020 or 2030 allocation is listed. Otherwise, the current allocation is assumed to continue through 2030.
- 6. Total Allocation:** The total gross water allocation from the consumptive use permit. The total allocation may be less than the sum of the fresh water and brackish water allocations providing the utility with some operational flexibility.
- 7. FDEP Permitted Capacity:** The total capacity of the water treatment plant(s) used by the utility as listed on the FDEP website. The capacity is split into the capacity available to process fresh water or brackish water.
- 8. Planned Project Capacity:** The volumes of water created by projects listed in the Project Summary as proposed by the utilities. Project capacity to be completed by 2020 are shown in the 2020 column and project capacity to be completed between 2021 and 2030 are shown in the 2030 column.
- 9. Total Capacity:** The existing capacity of the water treatment plants plus the volumes of water produced by future planned projects.

- 10. Reclaimed Water:** The capacity of the wastewater treatment plant(s) to produce reclaimed water. The 2010 capacity is from the FDEP 2010 Reuse Inventory published in May, 2011 (FDEP 2011). Additional capacity is from projects planned by the utility. These projects are listed under item 11.
- 11. Project Summary:** A description of the projects the utility is planning to construct. The projects produce additional water (i.e., wells, water treatments plants, etc.) or distribute water and do not include maintenance or replacement projects. Each project has an anticipated completion date, water source, estimated capital cost, and volume of water produced or planned treatment capacity. Water volumes associated with distribution only projects are not included in the volume summaries. The project information was provided by the utility. Not all utilities reported a project; however, all utilities that have a need for additional water did plan a project or projects.
- 12. Total Projected Cumulative Design Capacity for 2020:** The total volume of projects expected to be completed between 2012 and 2020. These totals are added to the existing total in items 8 or 10, as appropriate.
- 13. Total Projected Cumulative Design Capacity for 2030:** The total volume of projects expected to be completed between 2021 and 2030. These totals are added to the existing total in 8 or 10, as appropriate.
- 14. Conservation:** Conservation projects projected to save at least 0.1 MGD were included by some utilities. Because these save water, rather than producing additional water, they are not included in the Projected Cumulative Design Capacity total.

Palm Beach County Utilities

AG HOLLEY STATE HOSPITAL

County: Palm Beach County

Service Area: AG Holley State Hospital

Description: This utility is located at a State of Florida hospital in the Town of Lantana. Withdrawals were from the SAS (two wells), with an annual allocation of 32 MGD. The hospital was closed in July 2012; therefore future use of the existing water treatment facility is unknown at this time.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	32	0	0
Per Capita (gallons per day finished water)	0	0	0
Potable Water Demands (daily average annual finished water in MGD)	0.07	0.00	0.00
SFWMD CONSUMPTIVE USE PERMITTED (50-01092-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.09	0.09	0.09
Brackish Water	0.00	0.00	0.00
Total Allocation	0.09	0.09	0.09
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.36	0.36	0.36
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.36	0.36	0.36
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF BOCA RATON

County: Palm Beach County

Service Area: City of Boca Raton and unincorporated areas of Palm Beach County

Description: Water supply for the City of Boca Raton is from the SAS. The city owns and operates two water treatment facilities that blend a 1:2 ratio of lime softened and membrane softened water. The consumptive use permit was renewed in 2008 and provides for the completion of reclaimed water projects in 2013 that authorize the city to withdraw additional water based on the termination of identified base condition water use through the provision of reclaimed water to meet the projected increased demands in 2020. The city has implemented a fully operational reclaimed water system that has the capacity to utilize 100 percent of its annual average daily flow for reuse as authorized by the FDEP. In 2011, the city provided customers with an average of 7.0 MGD and a maximum of 10.09 MGD of reclaimed water for irrigation demands that would otherwise come from the Biscayne aquifer. The city is planning a membrane concentrate and reclaimed water blending project that will increase the availability of reclaimed water.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	107,224	120,539	133,854
Per Capita (gallons per day finished water)	320	320	320
Potable Water Demands (daily average annual finished water in MGD)	34.31	38.57	42.83
SFWMD CONSUMPTIVE USE PERMITTED (50-00367-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	51.53	51.53	51.53
Brackish Water	0.00	0.00	0.00
Total Allocation	51.53	51.53	51.53
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	70.00	70.00	70.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	70.00	70.00	70.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	17.50	17.50	17.50

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Recycling of Membrane Concentrate for Reuse Water	Reclaimed Water	2012	\$2.00	4.25 ^a	4.25 ^a
Total			\$2.00	4.25	4.25

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

CITY OF BOYNTON BEACH

County: Palm Beach County

Service Area: City of Boynton Beach; towns of Briny Breezes, Hypoluxo, and Ocean Ridge; and unincorporated areas of Palm Beach County

Description: Water supply for the City of Boynton Beach is from the SAS. The city owns and operates two water treatment plants (WTPs) that use lime softening and nanofiltration processes. The water supply system is also augmented by the use of two ASR wells. The city's recent water supply plan includes a water conservation program and expanded use of reclaimed water. The city shares the South Central Regional Wastewater Treatment Plant (WWTP) with the City of Delray Beach. This plant produces reclaimed water, which is used by both cities. The city currently purchases 2 MGD of potable water from the Palm Beach County Water Utilities Department. This purchased amount will be reduced to 1 MGD after 2013. The city is planning a membrane concentrate blending project to decrease treatment losses.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	102,512	115,242	127,972
Per Capita (gallons per day finished water)	131	131	131
Potable Water Demands (daily average annual finished water in MGD)	13.43	15.10	16.76
SFWMD CONSUMPTIVE USE PERMITTED (50-00499-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	14.00	13.44	13.44
Brackish Water	6.42	6.42	6.42
Bulk Water Purchase (from Palm Beach County)	2.00	1.00	1.00
Total Allocation (including bulk water purchase)	22.42	20.86	20.86
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	19.24	19.24	19.24
Brackish Water	10.40	10.40	10.40
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	29.64	29.64	29.64
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	10.00	10.00	10.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Reclaimed Water Transmission – Phase 2 (US 1 Corridor & Cypress Creek)	Reclaimed Water	2014	\$2.00	1.00 ^a	1.00 ^a
Leisureville Golf Course	Reclaimed Water	2014	\$2.00	0.65 ^a	0.65 ^a
Galaxy Elementary	Reclaimed Water	2013	\$0.26	0.10 ^a	0.10 ^a
Total			\$4.26	1.75 ^a	1.75 ^a

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

CITY OF DELRAY BEACH WATER AND SEWER DEPARTMENT

County: Palm Beach County

Service Area: City of Delray Beach, Town of Gulf Stream, and unincorporated areas of Palm Beach County

Description: Water supply for the City of Delray Beach Public Utilities Department is from the SAS and Floridan aquifer. Delray Beach owns and operates one lime softening treatment system located in the vicinity of their Eastern Wellfield. The consumptive use permit provides for operation of the Eastern, Morikami, 20-series, and Golf Course wellfields, in addition to operation of an ASR well for backup supply. Delray Beach is committed to replacing permitted SAS irrigation withdrawals within its service area with reclaimed water.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	63,341	71,207	79,072
Per Capita (gallons per day finished water)	232	232	232
Potable Water Demands (daily average annual finished water in MGD)	14.70	16.52	18.34
SFWMD CONSUMPTIVE USE PERMITTED (50-00177-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	17.60	17.60	17.60
Brackish Water	1.50	1.50	1.50
Total Allocation	19.10	19.10	19.10
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	26.00	26.00	26.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	26.00	26.00	26.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	5.00	5.00	5.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Reclaimed Water (Area 12A Phase 1 – Barrier Island South, Atlantic Avenue to Casuarina Road – Gleason Street trunk line)	Reclaimed Water	2013	\$1.70	0.25 ^a	0.25 ^a
Reclaimed Water (Area 12A Phase 2 and Area 12B Barrier Island South)	Reclaimed Water	2014	\$1.20	0.25 ^a	0.25 ^a
Total			2.90	0.50 ^a	0.50 ^a

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

GLADES UTILITY AUTHORITY

County: Palm Beach County

Service Area: Cities of Belle Glade, Pahokee, and South Bay

Description: Water supply for the Glades Utility Authority comes from the Floridan aquifer, which is treated at a RO WTP. The consumptive use permit was renewed in 2010 and later modified to address an increase in the chloride concentrations in water produced from the wells. The three cities within the service area have been designated as Rural Areas of Critical Economic Concern.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	25,051	28,164	31,276
Per Capita (gallons per day finished water)	195	195	195
Potable Water Demands (daily average annual finished water in MGD)	4.88	5.49	6.10
SFWMD CONSUMPTIVE USE PERMITTED (50-06857-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.00	0.00	0.00
Brackish Water	9.43	9.43	9.43
Total Allocation	9.43	9.43	9.43
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.00	0.00	0.00
Brackish Water	10.00	10.00	10.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	10.00	10.00	10.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

VILLAGE OF GOLF

County: Palm Beach County

Service Area: Village of Golf and unincorporated areas of Palm Beach County

Description: The water supply for the Village of Golf is from the SAS. The water is treated by lime softening and ultrafiltration processes. Wastewater from the service area is treated at the South Central Reclamation Wastewater Treatment Facility with more than 1.62 MGD contracted irrigation reuse at golf courses and for groundwater recharge.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	2,755	3,097	3,439
Per Capita (gallons per day finished water)	145	145	145
Potable Water Demands (daily average annual finished water in MGD)	0.40	0.45	0.50
SFWMD CONSUMPTIVE USE PERMITTED (50-00612-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.60	0.54	0.54
Brackish Water	0.00	0.00	0.00
Total Allocation	0.60	0.54	0.54
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.86	0.86	0.86
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.86	0.86	0.86
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

TOWN OF HIGHLAND BEACH

County: Palm Beach County

Service Area: Town of Highland Beach

Description: The Town of Highland Beach is a residential community located on a barrier island east of the Intracoastal Waterway. The water supply for the town comes from the Floridan aquifer, treated by RO.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	3,631	4,082	4,533
Per Capita (gallons per day finished water)	372	372	372
Potable Water Demands (daily average annual finished water in MGD)	1.35	1.52	1.69
SFWMD CONSUMPTIVE USE PERMITTED (50-00346-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.00	0.00	0.00
Brackish Water	3.15	3.15	3.15
Total Allocation	3.15	3.15	3.15
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.00	0.00	0.00
Brackish Water	3.00	3.00	3.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	3.00	3.00	3.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

TOWN OF JUPITER

County: Palm Beach County

Service Area: Towns of Jupiter and Juno Beach, and unincorporated areas of Martin and Palm Beach counties

Description: The water supply for the Town of Jupiter is from the SAS and Floridan aquifer. The town owns and operates a RO plant for the Floridan source and a nanofiltration process for the SAS source. Wastewater is treated at the Loxahatchee River District facility, with 5 MGD of reclaimed water returned to the town for irrigation purposes. The consumptive use permit includes an overlap in allocations from SAS and Floridan sources to provide operational flexibility on a seasonal basis but has a maximum allocation from the two sources combined.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	70,840	86,224	101,608
Per Capita (gallons per day finished water)	188	188	188
Potable Water Demands (daily average annual finished water in MGD)	13.32	16.21	19.10
SFWMD CONSUMPTIVE USE PERMITTED (50-00010-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	18.80	18.80	18.80
Brackish Water	5.60	11.70	11.70
Total Allocation	24.40	30.50	30.50
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.30	16.30	16.30
Brackish Water	13.70	13.70	13.70
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	30.00	30.00	30.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF LAKE WORTH UTILITIES

County: Palm Beach County

Service Area: City of Lake Worth, Town of Lake Clarke Shores, and unincorporated areas of Palm Beach County

Description: The water supply for the City of Lake Worth Utilities is from the SAS and Floridan aquifer. Lake Worth had previously designated a Coastal Utility at Risk due to the vulnerability of its Eastern Wellfield to saltwater intrusion. In 2011, the utility constructed a Floridan aquifer wellfield and reverse osmosis water treatment plant. Additionally, the utility is implementing a program of plugging and abandoning SAS wells in its Eastern Wellfield and constructing replacement wells further inland.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	45,137	50,742	56,347
Per Capita (gallons per day finished water)	98	98	98
Potable Water Demands (daily average annual finished water in MGD)	4.42	4.97	5.52
SFWMD CONSUMPTIVE USE PERMITTED (50-00234-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	6.30	5.50	5.50
Brackish Water	0.00	9.00	9.00
Bulk Water Purchase (from Palm Beach County)	1.00	0.00	0.00
Total Allocation (including bulk water purchase)	7.30	14.50	14.50
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	12.90	12.90	12.90
Brackish Water	4.50	4.50	4.50
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	17.40	17.40	17.40
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

TOWN OF LANTANA

County: Palm Beach County

Service Area: Town of Lantana

Description: The water supply for the Town of Lantana is from the SAS. The town was previously designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion. The town recently constructed two additional wells farther from the coast to provide for additional wellfield operational flexibility and reduce the potential for saltwater intrusion.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	10,348	11,633	12,918
Per Capita (gallons per day finished water)	171	171	171
Potable Water Demands (daily average annual finished water in MGD)	1.77	1.99	2.21
SFWMD CONSUMPTIVE USE PERMITTED (50-00575-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	2.48	2.48	2.48
Brackish Water	0.00	0.00	0.00
Total Allocation	2.48	2.48	2.48
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	3.84	3.84	3.84
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	3.84	3.84	3.84
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

TOWN OF MANALAPAN

County: Palm Beach County

Service Area: Towns of Manalapan and Hypoluxo

Description: The water supply for the Town of Manalapan comes from the SAS and Floridan aquifer. The town operates a RO WTP that has the capability of blending the fresh and brackish water sources.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	2,421	2,722	3,022
Per Capita (gallons per day finished water)	440	440	440
Potable Water Demands (daily average annual finished water in MGD)	1.07	1.20	1.33
SFWMD CONSUMPTIVE USE PERMITTED (50-00506-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.58	0.58	0.58
Brackish Water	1.33	1.33	1.33
Total Allocation	1.91	1.91	1.91
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.65	0.65	0.65
Brackish Water	1.70	1.70	1.70
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	2.35	2.35	2.35
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

TOWN OF MANGONIA PARK

County: Palm Beach County

Service Area: Town of Mangonia Park

Description: The water supply for the Town of Mangonia Park is from the SAS.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	1,888	2,122	2,357
Per Capita (gallons per day finished water)	168	168	168
Potable Water Demands (daily average annual finished water in MGD)	0.32	0.36	0.40
SFWMD CONSUMPTIVE USE PERMITTED (50-00030-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.58	0.58	0.58
Brackish Water	0.00	0.00	0.00
Total Allocation	0.58	0.58	0.58
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	1.08	1.08	1.08
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	1.08	1.08	1.08
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

MARALAGO CAY

County: Palm Beach County

Service Area: Unincorporated area of Palm Beach County

Description: Maralago Cay is a manufactured home community. It is not expected to exceed its allocation in future years.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	1,008	1,133	1,258
Per Capita (gallons per day finished water)	182	182	182
Potable Water Demands (daily average annual finished water in MGD)	0.18	0.21	0.23
SFWMD CONSUMPTIVE USE PERMITTED (50-01283-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.27	0.27	0.27
Brackish Water	0.00	0.00	0.00
Total Allocation	0.27	0.27	0.27
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.42	0.42	0.42
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.42	0.42	0.42
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT

County: Palm Beach County

Service Area: Cities of Atlantis, Boynton Beach, Greenacres, Lake Worth, and West Palm Beach; towns of Cloud Lake, Glen Ridge, Haverhill, Lake Clarke Shores, and Loxahatchee Groves; villages of Palm Springs, Royal Palm Beach, and Wellington; and unincorporated areas of Palm Beach County.

Description: Palm Beach County Water Utilities Department includes two lime softening and two nanofiltration WTPs. The source of water is the SAS with brackish water from Floridan aquifer ASR wells to be used for blending. ASR wells are still planned as part of the alternative water supply plans in addition to expansion of reclaimed water facilities. Palm Beach County Water Utilities Department's current bulk sales are 9.63 MGD, which are distributed to FPL, the cities of Boynton Beach, Atlantis, and Lake Worth, and the Town of Lake Clark Shores. The 2003 consumptive use permit requires Palm Beach County to provide 33 MGD of alternative water supplies to avoid increased seepage from canals resulting from increased withdrawals at nearby wellfields. Palm Beach County Water Utilities Department is currently supplying reclaimed water to Century Village, Emerald Dunes, and between 22 and 29 MGD to the FPL West County Energy Center.

POPULATION AND FINISHED WATER DEMAND					
		Existing	Projected		
		2010	2020	2030	
Population		458,839	515,412	572,795	
Per Capita (gallons per day finished water)		115	115	115	
Potable Water Demands (daily average annual finished water in MGD)		52.77	59.30	65.90	
SFWMD CONSUMPTIVE USE PERMITTED (50-00135-W) ALLOCATION (MGD)					
Potable Water Source		Existing	Projected		
		2010	2020	2030	
Fresh Water		79.99	79.99	79.99	
Brackish Water		7.00	7.00	7.00	
Total Allocation		86.99	86.99	86.99	
POTABLE WATER TREATMENT CAPACITY					
FDEP Permitted Capacity		Cumulative Facility & Project Capacity (MGD)			
		Existing	Projected		
		2012	2020	2030	
Fresh Water		101.38	101.38	101.38	
Brackish Water		0.00	0.00	0.00	
Planned Project Capacity		0.00	0.00	8.50	
Total Capacity		101.38	101.38	109.88	
NONPOTABLE WATER TREATMENT CAPACITY					
Reclaimed Water		17.50	42.00 ^a	51.00 ^b	
PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
WTP 2 Expansion ^c	Fresh Water	2025	\$15.00	0.00	8.50
Nonpotable Water					
Morikami Reclaimed Pump Station	Reclaimed Water	2013	\$0.05	2.00 ^a	2.00 ^a

a. Based upon information contained in the 2008 Palm Beach County 20-Year Water Supply Work Plan (Palm Beach County 2008).

b. Based upon SFWMD staff estimation of anticipated flow quantities provided by the Palm Beach County Water Utilities Department.

c. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

VILLAGE OF PALM SPRINGS

County: Palm Beach County

Service Area: Village of Palm Springs, Town of Lake Clarke Shores, and unincorporated areas of Palm Beach County

Description: The SAS is the source of water for the Village of Palm Springs. The two water treatment facilities are interconnected and utilize ion exchange, followed by lime softening, filtration, and disinfection. The Town of Lake Clarke Shores purchases water from the Village of Palm Springs to serve 3,126 people. The village's consumptive use permit does not contain an allocation sufficient to meet anticipated demands through 2030. The village previously recognized the potential shortfall. Its *2008 Palm Beach County 20-Year Water Supply Work Plan* (Palm Beach County 2008) indicates it will purchase water from Palm Beach County. The village will need to execute a bulk purchase agreement or implement other projects to increase its water supply by 2030.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	45,204	50,817	56,431
Per Capita (gallons per day finished water)	84	84	84
Potable Water Demands (daily average annual finished water in MGD)	3.80	4.27	4.74
SFWMD CONSUMPTIVE USE PERMITTED (50-00036-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	4.74	4.62	4.62
Brackish Water	0.00	0.00	0.00
Total Allocation	4.74	4.62	4.62
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	10.00	10.00	10.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	10.00	10.00	10.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF RIVIERA BEACH

County: Palm Beach County

Service Area: City of Riviera Beach and Town of Palm Beach Shores

Description: The SAS is the source of water for the City of Riviera Beach. It is treated by lime softening.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	37,757	42,446	47,134
Per Capita (gallons per day finished water)	173	173	173
Potable Water Demands (daily average annual finished water in MGD)	6.53	7.34	8.15
SFWMD CONSUMPTIVE USE PERMITTED (50-00460-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	9.08	9.08	9.08
Brackish Water	0.00	0.00	0.00
Total Allocation	9.08	9.08	9.08
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	17.50	17.50	17.50
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	17.50	17.50	17.50
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

SEACOAST UTILITY AUTHORITY

County: Palm Beach County

Service Area: Towns of Juno Beach and Lake Park, Village of North Palm Beach, City of Palm Beach Gardens, and unincorporated areas of Palm Beach County

Description: Seacoast Utility Authority withdraws from the SAS and Floridan aquifer. The authority is replacing its lime softening plant with a nanofiltration treatment plant by the end of 2012. In addition, a new RO plant is anticipated to come online in 2013. The Seacoast Utility Authority also provided 7.9 MGD of reclaimed water in 2011.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	87,686	98,575	109,464
Per Capita (gallons per day finished water)	201	189	189
Potable Water Demands (daily average annual finished water in MGD)	17.62	18.63	20.69
SFWMD CONSUMPTIVE USE PERMITTED (50-00365-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	19.31	22.30	22.30
Brackish Water	0.00	4.33	4.33
Total Allocation	19.31	26.63	26.63
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	30.50	26.00	26.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	6.00	6.00
Total Capacity	30.50	32.00	32.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	12.00	12.00	12.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
Nanofiltration Concentrate Blending Pump Station and Reclaimed Water Main	Fresh Water	2012	\$4.50	3.00	3.00
Hood Road 4.5-MGD WTP RO System Including Three Floridan Wells and One RO Reject Well	Brackish Water	2013	\$59.00	3.00	3.00
Total			\$63.50	6.00	6.00

VILLAGE OF TEQUESTA

County: Palm Beach County

Service Area: Village of Tequesta and Town of Jupiter Inlet Colony

Description: The Village of Tequesta obtains water from the SAS and Floridan aquifer. The SAS water supply is treated with sand filtration. The Floridan aquifer supply is treated by RO.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	11,581	13,345	15,108
Per Capita (gallons per day finished water)	235	235	235
Potable Water Demands (daily average annual finished water in MGD)	2.72	3.14	3.55
SFWMD CONSUMPTIVE USE PERMITTED (50-00046-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	2.70	1.1	1.1
Brackish Water	1.67	3.43	3.43
Total Allocation	4.37	4.53	4.53
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	2.73	2.73	2.73
Brackish Water	3.60	3.60	3.60
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	6.33	6.33	6.33
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

WELLINGTON PUBLIC UTILITIES DEPARTMENT

County: Palm Beach County

Service Area: Villages of Wellington and Royal Palm Beach, and unincorporated areas of Palm Beach County

Description: The Wellington Public Utilities Department currently obtains water from the SAS. The village's northern wellfields are slightly brackish and are treated using membrane softening. Water from the southern and eastern wellfields is fresher and treated via lime softening.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	55,408	62,289	69,169
Per Capita (gallons per day finished water)	105	105	105
Potable Water Demands (daily average annual finished water in MGD)	5.82	6.54	7.26
SFWMD CONSUMPTIVE USE PERMITTED (50-00464-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	8.02	8.02	8.02
Brackish Water	0.00	0.00	0.00
Total Allocation	8.02	8.02	8.02
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	6.50	6.50	6.50
Brackish Water	6.30	6.30	6.30
Planned Project Capacity	0.00	0.50	3.20
Total Capacity	12.80	13.30	16.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	1.00	2.30	3.90

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
WTP Low Pressure RO Expansion (0.5 MGD)	Fresh Water	2017	\$0.00	0.50	0.50
WTP Low Pressure RO Expansion (0.9 MGD)	Fresh Water	2025	\$0.01	0.00	0.90
1.8-MGD Water Treatment Facility – Floridan Conversion and Low Pressure RO Upgrade	Brackish Water	2025	\$1.00	0.00	1.80
Total			\$1.01	0.50	3.20
Nonpotable Water					
Reclaimed System Expansion	Reclaimed Water	2011	\$0.01	1.30 ^a	2.90 ^a
Total			\$0.01	1.30	2.90

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

CITY OF WEST PALM BEACH PUBLIC UTILITIES

County: Palm Beach County

Service Area: City of West Palm Beach, and towns of Palm Beach and South Palm Beach

Description: The source of water for the City of West Palm Beach Public Utilities is surface water and a SAS wellfield. The city is currently constructing a forward pump and gate structure at Clear Lake to enable the city's intake system to remain operational during drought conditions when unusually low surface water levels persist. The city faced challenges during recent water shortages and is developing plans to address water shortages and long-term growth. Alternative water supply projects include urban stormwater treatment, advanced wastewater treatment at the East Central Regional Wastewater Reclamation Facility, wetland rehydration, and aquifer recharge. Future plans include ASR, capture water otherwise lost to tide from the C-17 and C-51 canals (via replacement of Control Structure 2 with a 300-cubic feet per second [cfs] pumping system and additional SAS wells along the M Canal.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	109,958	123,853	143,134
Per Capita (gallons per day finished water)	253	253	253
Potable Water Demands (daily average annual finished water in MGD)	27.87	31.33	36.21
SFWMD CONSUMPTIVE USE PERMITTED (50-00615-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	39.30	39.30	39.30
Brackish Water	0.00	0.00	0.00
Total Allocation	39.30	39.30	39.30
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	47.00	47.00	47.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	47.00	47.00	47.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	6.00	6.00	6.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
ASR Well Reactivation at Clear Lake	Surface Water	2020	\$10.00	10.00 ^a	10.00 ^a
SAS Wells Along the M Canal	Fresh Water	2015	\$4.80	14.40	14.40
Total			\$14.80	24.4	24.4

a. This project adds flexibility to the water distribution system but does not increase the actual treatment capacity of the potable water treatment plant.

Broward County Utilities

BROWARD COUNTY WATER AND WASTEWATER SERVICES DISTRICT 1

County: Broward County

Service Area: All or portions of the cities of Fort Lauderdale, Lauderdale Lakes, Lauderhill, North Lauderdale, Oakland Park, Plantation, Pompano Beach, and Tamarac, and unincorporated areas of Broward County

Description: The SAS provides the majority of the water supply; however the permit includes allocation from the Floridan aquifer. The county is expected to start drilling the Floridan wells in 2013. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	71,395	75,892	80,388
Per Capita (gallons per day finished water)	99	99	99
Potable Water Demands (daily average annual finished water in MGD)	7.05	7.49	7.93
SFWMD CONSUMPTIVE USE PERMITTED (06-00146-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	10.67	9.20	9.20
Brackish Water	3.23	4.70	4.70
Total Allocation	13.90	13.90	13.90
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.00	16.00	16.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	1.50	2.50
Total Capacity	16.00	17.50	18.50
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion	Total Capital Cost	Projected Cumulative Design Capacity (MGD)	
		Date	(\$ Million)	2020	2030
Potable Water					
District 1A Treatment Plant Expansion (includes RO treatment facility, Floridan raw production wells, and a RO concentrate disposal well)	Brackish Water	2017	\$41.10	1.50	2.50
Total			\$41.10	1.50	2.50

BROWARD COUNTY WATER AND WASTEWATER SERVICES DISTRICT 2A/NORTH REGIONAL WELLFIELD

Service Area: All or portions of the cities of Coconut Creek, Deerfield Beach, Lighthouse Point, Parkland, and Pompano Beach;; and unincorporated areas of Broward County.

Description: The SAS is the primary source of water supply for the District 2A system. The 2A wellfield includes SAS wells and a proposed Floridan wellfield to provide water to a proposed RO treatment plant. The demand projections developed for this plan update suggest the proposed Floridan aquifer project may not be needed until after the 2030 planning horizon so at this time, the county has postponed indefinitely the project. The North Regional Wellfield is one of two wellfields the county developed to provide raw water to Deerfield Beach and the District 2A WTP. The Broward County North Regional WWTP provides 4.4 MGD of reuse water. The 2008 Ocean Outfall statute requires the county to achieve 25 MGD of reuse by 2025. The City of Coconut Creek is currently developing a program to provide reclaimed water from North Regional WWTP throughout Coconut Creek.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	110,939	116,274	121,609
Per Capita (gallons per day finished water)	110	110	110
Potable Water Demands (daily average annual finished water in MGD)	12.20	12.79	13.38
SFWMD CONSUMPTIVE USE PERMITTED (06-01634-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	19.95	17.50	17.50
Brackish Water	4.60	4.60	4.60
Total Allocation	22.06	22.06	22.06
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	40.00	40.00	40.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	40.00	40.00	40.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	10.00	10.00	10.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Reclaimed Water Highlands Pompano Beach	Reclaimed Water	2013	\$6.50	0.30 ^a	0.30 ^a
Total			\$6.50	0.30 ^a	0.30 ^a

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

BROWARD COUNTY WATER AND WASTEWATER SERVICES SOUTH REGIONAL WELLFIELD

Service Area: The Broward County Water and Wastewater Services South Regional Wellfield, also known as the Brian Piccolo Wellfield, supplies raw water to FPL and the cities of Hollywood, Hallandale Beach, and Dania Beach. Since this system provides raw water to other facilities, no population assigned.

The county contracts with the City of Hollywood to treat water for the county's service area formerly known as System 3. The county distributes finished water to the Town of Pembroke Park, the City of West Park, the western portion of the City of Dania Beach, and unincorporated areas of Broward County. The System 3 WTPs have been dismantled, and the county has proposed to abandon the remaining System 3 water wells and transfer that allocation to the South Regional Wellfield.

Description: Modifications to the South Regional Wellfield have not been permitted as of the end of 2012. The existing proposal calls for the City of Hallandale to develop its own wellfield, using its share of the South Regional Wellfield allocation. In addition to the System 3 allocation, a portion of water previously allocated to the City of Dania Beach would be moved to the South Regional Wellfield. The currently proposed changes to the South Regional Wellfield permit would result in a reduction in allocation from 14.2 to 10.04 MGD. See related discussions on the utility summaries for the cities of Hallandale Beach and Dania Beach.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	0	0	0
Per Capita (gallons per day finished water)	0	0	0
Potable Water Demands (daily average annual finished water in MGD)	0.00^a	0.00^a	0.00^a
SFWMD CONSUMPTIVE USE PERMITTED (06-01474-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	14.20	14.20	14.20
Brackish Water	0.00	0.00	0.00
Total Allocation	14.20	14.20	14.20
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.00	0.00	0.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.00	0.00	0.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

a. Since this system provides raw water to other facilities, no population assigned.

CITY OF COOPER CITY UTILITY DEPARTMENT

County: Broward County

Service Area: City of Cooper City

Description: The water supply for the City of Cooper City is obtained from the SAS and treated via membrane softening. The city is projected to have minimal growth beyond 2020. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	28,543	33,335	33,585
Per Capita (gallons per day finished water)	95	95	95
Potable Water Demands (daily average annual finished water in MGD)	2.71	3.17	3.19
SFWMD CONSUMPTIVE USE PERMITTED (06-00365-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	4.55	4.55	4.55
Brackish Water	0.00	0.00	0.00
Total Allocation	4.55	4.55	4.55
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	7.00	7.00	7.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	7.00	7.00	7.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF CORAL SPRINGS

County: Broward County

Service Area: A portion of the City of Coral Springs

Description: The water supply for the City of Coral Springs is obtained from the SAS. Portions of the city are served by other utilities: Coral Springs Improvement District, North Springs Improvement District, and Royal Utilities Corporation. The information on this page addresses only the city's service area. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	58,029	60,820	63,610
Per Capita (gallons per day finished water)	114	114	114
Potable Water Demands (daily average annual finished water in MGD)	6.62	6.93	7.25
SFWMD CONSUMPTIVE USE PERMITTED (06-00102-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	9.44	9.44	9.44
Brackish Water	0.00	0.00	0.00
Total Allocation	9.44	9.44	9.44
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.00	16.00	16.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	16.00	16.00	16.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CORAL SPRINGS IMPROVEMENT DISTRICT

County: Broward County

Service Area: A portion of the City of Coral Springs

Description: The water supply for the Coral Springs Improvement District is obtained from the SAS. The water is treated using a lime softening process.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	36,969	38,747	40,525
Per Capita (gallons per day finished water)	103	103	103
Potable Water Demands (daily average annual finished water in MGD)	3.81	3.99	4.17
SFWMD CONSUMPTIVE USE PERMITTED (06-00100-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	5.42	5.42	5.42
Brackish Water	0.00	0.00	0.00
Total Allocation	5.42	5.42	5.42
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	7.20	7.20	7.20
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	7.20	7.20	7.20
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF DANIA BEACH

County: Broward County

Service Area: A portion of the City of Dania Beach

Description: The water supply for the City of Dania Beach comes from the SAS. Its service area covers the eastern portion of the city. City of Dania Beach is designated a Coastal Utility at Risk due to the vulnerability of its Eastern Wellfield to saltwater intrusion. The city's wellfield is limited to 1.1 MGD, approximately 60 percent of its allocation. To meet its current and future demand above its allocation, the city purchases and treats raw water from the Broward County's South Regional Wellfield at Brian Piccolo Park. The city has requested that its permit allocation be reduced to 1.1 MGD and a portion of its remaining allocation be incorporated into the South Regional Wellfield permit and is under review. The city does not have a WWTP. The city's wastewater is treated by Hollywood's Southern Regional Water Reclamation Facility. This city is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	14,840	15,554	16,267
Per Capita (gallons per day finished water)	154	154	154
Potable Water Demands (daily average annual finished water in MGD)	2.29	2.40	2.51
SFWMD CONSUMPTIVE USE PERMITTED (06-00187-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	1.80 ^a	1.10	1.10
Brackish Water	0.00	0.00	0.00
Bulk Water Purchase (from Broward County Water and Wastewater Services South Regional Wellfield)	1.30	2.20	2.50
Total Allocation (including bulk water purchase)	3.10	3.30	3.60
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	5.02	5.02	5.02
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	5.02	5.02	5.02
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

a. The City of Dania Beach allocation of 1.80 MGD was further restricted to 1.10 MGD, which is the SFWMD estimated safe yield of the aquifer at this location.

TOWN OF DAVIE

County: Broward County

Service Area: A portion of the Town of Davie and the Seminole Tribe of Florida Hollywood Reservation

Description: The water supply for the Town of Davie is currently obtained from the SAS. The town is constructing a RO plant to treat water from the Floridan aquifer, which will be operational by 2013. The town is also developing a reclaimed water system. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	27,548	59,320	91,091
Per Capita (gallons per day finished water)	146	146	146
Potable Water Demands (daily average annual finished water in MGD)	4.02	8.66	13.30
SFWMD CONSUMPTIVE USE PERMITTED (06-00134-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	6.18	5.02	5.02
Brackish Water	14.83	14.83	14.83
Total Allocation	21.01	19.85	19.85
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	7.40	7.40	7.40
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	5.00	6.00
Total Capacity	7.40	12.40	13.40
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	3.50	3.50

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
Potable Water				2020	2030
RO Addition to New WTP	Brackish Water	2012	\$16.00	5.00	6.00
Nonpotable Water					
3.5-MGD Reclaimed Water Facility	Reclaimed Water	2017	\$7.50	3.50	3.50

CITY OF DEERFIELD BEACH

County: Broward County

Service Area: City of Deerfield Beach

Description: The City of Deerfield Beach operates two interconnected WTPs. The East WTP utilizes lime softening while the West WTP has three separate treatment systems: lime softening, nanofiltration, and RO treatment systems. The RO unit treats brackish water from the city's Floridan wellfield. Future demands will be met 75 percent from the SAS and 25 percent from the Floridan aquifer. The city's consumptive use permit capped the East Wellfield at 3.35 MGD due to saltwater intrusion concerns. The city also purchases 0.59 MGD of raw water from Broward County's District 2A/North Regional Wellfield. This city is a contributing member to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	51,842	54,335	56,828
Per Capita (gallons per day finished water)	191	191	191
Potable Water Demands (daily average annual finished water in MGD)	9.90	10.38	10.85
SFWMD CONSUMPTIVE USE PERMITTED (06-00082-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	11.90	11.90	11.90
Brackish Water	4.00	4.00	4.00
Bulk Water Purchase (from Broward County)	0.59	0.59	0.59
Total Allocation (including bulk water purchase)	16.49	16.49	16.49
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	34.80	34.80	34.80
Brackish Water	3.00	3.00	3.00
Planned Project Capacity	0.00	3.00	4.50
Total Capacity	37.80	40.80	42.30
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
West WTP Brackish Water RO Treatment Improvements – Phase I	Brackish Water	underway	\$5.00	1.50	1.50
West WTP Brackish Water RO Treatment Improvements – Phase II	Brackish Water	underway	\$2.50	1.50	3.00
Total			\$7.50	3.00	4.50

CITY OF FORT LAUDERDALE

County: Broward County

Service Area: Cities of Fort Lauderdale, Oakland Park, Wilton Manors, and Hollywood; portions of the City of Tamarac; towns of Lauderdale-By-The-Sea and Davie; and villages of Lazy Lake and Sea Ranch Lakes.

Description: The SAS currently provides the water supply for the City of Fort Lauderdale. The city has two water treatment facilities. The Fiveash WTP has a 70-MGD design capacity and uses lime softening. The city's membrane plant (Peele-Dixie) was completed in 2008 and has a design capacity of 12 MGD. Before growth slowed in 2008, the city planned to construct a 6.0-MGD RO plant. Current projections indicate the RO plant may not be needed during the 20-year planning horizon. This utility is a contributing member to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND					
	Existing	Projected			
	2010	2020	2030		
Population	212,945	223,045	233,145		
Per Capita (gallons per day finished water)	190	190	190		
Potable Water Demands (daily average annual finished water in MGD)	40.46	42.38	44.30		
SFWMD CONSUMPTIVE USE PERMITTED (06-00123-W) ALLOCATION (MGD)					
Potable Water Source	Existing	Projected			
	2010	2020	2030		
Fresh Water	52.55	52.55	52.55		
Brackish Water	8.64	8.64	8.64		
Total Allocation	61.19	61.19	61.19		
POTABLE WATER TREATMENT CAPACITY					
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)				
	Existing	Projected			
	2012	2020	2030		
Fresh Water	82.00	82.00	82.00		
Brackish Water	0.00	0.00	0.00		
Planned Project Capacity	0.00	6.00	6.00		
Total Capacity	82.00	88.00	88.00		
NONPOTABLE WATER TREATMENT CAPACITY					
Reclaimed Water	0.00	0.00	0.00		
PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
Dixie Floridan Water Supply/ Treatment Facility	Brackish Water	2017	\$22.90	6.00	6.00
Total			\$22.90	6.00	6.00

CITY OF HALLANDALE BEACH

County: Broward County

Service Area: City of Hallandale Beach

Description: The water supply for the City of Hallandale Beach comes from the SAS. Modifications, which include significant location changes for the city's water wells, to its consumptive use permit are currently pending. As part of its proposal, the city seeks to abandon its existing eastern wells, which are at risk of saltwater intrusion, and develop a new wellfield further inland. The city is designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion. The existing wellfield allocation is capped at 3.5 MGD. The rest of the city's demand is met with raw water purchased from Broward County's South Regional Wellfield. The city hopes to combine the 3.5-MGD allocation of its existing wells with its share of the South Regional Wellfield allocation and develop a new 9.8-MGD wellfield. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	37,113	38,898	40,683
Per Capita (gallons per day finished water)	146	146	146
Potable Water Demands (daily average annual finished water in MGD)	5.42	5.68	5.94
SFWMD CONSUMPTIVE USE PERMITTED (06-00138-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	3.50	3.50	3.50
Brackish Water	0.00	0.00	0.00
Bulk Water Purchase (from Broward County)	3.80	3.80 ^a	3.80 ^a
Total Allocation (including bulk water purchase)	7.30	7.30	7.30
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.00	16.00	16.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	16.00	16.00	16.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

a. The City of Hallandale will continue to purchase water from the Broward County Water and Wastewater Services' South Regional Wellfield until it is able to bring a new city wellfield online.

TOWN OF HILLSBORO BEACH

County: Broward County

Service Area: Town of Hillsboro Beach

Description: The water supply for the Town of Hillsboro Beach comes from the SAS and is treated using a lime softening process. The town is designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion. The town is currently replacing its existing plant with new lime softening treatment equipment. This utility is one of 17 contributing members to the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide .

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	1,875	1,965	2,055
Per Capita (gallons per day finished water)	351	351	351
Potable Water Demands (daily average annual finished water in MGD)	0.66	0.69	0.72
SFWMD CONSUMPTIVE USE PERMITTED (06-00101-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.88	0.88	0.88
Brackish Water	0.00	0.00	0.00
Total Allocation	0.88	0.88	0.88
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	2.25	2.25	2.25
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	2.25	2.25	2.25
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF HOLLYWOOD

County: Broward County

Service Area: Cities of Hollywood and West Park, portions of the City of Dania Beach, Town of Davie, Seminole Tribe Hard Rock Casino, and portions of unincorporated Broward County

Description: The majority of the City of Hollywood's water supply comes from the SAS. The city operates three distinct WTPs, utilizing lime softening, membrane, and RO treatment technologies. It is anticipated that the Floridan aquifer will provide about 25 percent of future demands. The city also purchases bulk water from the Broward County's South Regional Wellfield. The city provides treated water to Broward County for distribution to the Pembroke Park, West Park, and the western portions of Dania Beach. The city operates a regional WWTP that is subject to the requirements of the 2008 Ocean Outfall statute. More than 23 MGD of reclaimed water projects are expected to be developed by 2025. This city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND					
	Existing	Projected			
	2010	2020	2030		
Population	186,798	198,559	210,320		
Per Capita (gallons per day finished water)	111	111	111		
Potable Water Demands (daily average annual finished water in MGD)	20.73	22.04	23.35		
SFWMD CONSUMPTIVE USE PERMITTED (06-00038-W) ALLOCATION (MGD)					
Potable Water Source	Existing	Projected			
	2010	2020	2030		
Fresh Water	24.80	24.80	24.80		
Brackish Water	8.67	8.67	8.67		
Bulk Water Purchase (from Broward County Water and Wastewater Services' South Regional Wellfield)	5.90	5.90	5.90		
Total Allocation (including bulk water purchase)	39.37	39.37	39.37		
POTABLE WATER TREATMENT CAPACITY					
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)				
	Existing	Projected			
	2012	2020	2030		
Fresh Water	55.50	55.50	55.50		
Brackish Water	4.00	4.00	4.00		
Planned Project Capacity	0.00	2.00	4.00		
Total Capacity	59.50	61.50	63.50		
NONPOTABLE WATER TREATMENT CAPACITY					
Reclaimed Water	3.00	4.00a	23.40a		
PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
New Floridan Wells F14 & F15	Brackish Water	2018	\$5.00	0.00	0.00
New Floridan Wells F16 & F17	Brackish Water	2024	\$5.00	0.00	0.00
New Floridan Wells F18 & 19	Brackish Water	2027	\$5.00	0.00	0.00
Additional RO Train E	Brackish Water	2017	\$2.10	2.00	2.00
Additional RO Train F	Brackish Water	2020	\$2.10	0.00	2.00
Total			\$19.20	2.00	4.00

a. Projection conveyed by city staff regarding anticipated compliance with the 2008 Ocean Outfall statute.

CITY OF LAUDERHILL

County: Broward County

Service Area: City of Lauderhill

Description: The water supply for the City of Lauderhill is obtained from the SAS and treated using a lime softening process. The city anticipates construction of Floridan aquifer wells and a RO plant to meet future demands. Current projections indicate the Floridan wells and RO plant may not be needed during the 20-year planning horizon. The city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	58,114	60,909	63,704
Per Capita (gallons per day finished water)	95	95	95
Potable Water Demands (daily average annual finished water in MGD)	5.52	5.79	6.05
SFWMD CONSUMPTIVE USE PERMITTED (06-00129-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	7.70	7.70	7.70
Brackish Water	1.02	1.02	1.02
Total Allocation	8.72	8.72	8.72
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.00	16.00	16.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	1.00	3.00
Total Capacity	16.00	17.00	19.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
Floridan Well Drilling Equipment and Testing (Phase 1)	Brackish Water	2016	\$2.50	0.00	0.00
Deep Injection Well Drilling, Equipping, and Testing (Phase 1)	Brackish Water	2016	\$5.00	0.00	0.00
Construction of RO Facility (Phase 1)	Brackish Water	2017	\$20.00	1.00	1.00
Floridan Well Drilling Equipment and Testing (Phase 2)	Brackish Water	2017	\$2.50	0.00	0.00
Construction of RO facility (Phase 2)	Brackish Water	2018	\$3.00	0.00	2.00
Total			\$33.00	1.00	3.00

CITY OF MARGATE

County: Broward County

Service Area: City of Margate and a portion of the City of Coconut Creek

Description: The water supply for the City of Margate is obtained from the SAS and treated through a lime softening process. The city intends to utilize reclaimed water to irrigate three golf courses and two residential communities. In the future, the city intends to modify its consumptive use permit to account for reclaimed water usage. This city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide .

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	58,314	61,118	63,923
Per Capita (gallons per day finished water)	98	98	98
Potable Water Demands (daily average annual finished water in MGD)	5.71	5.99	6.26
SFWMD CONSUMPTIVE USE PERMITTED (06-00121-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	9.30	8.51	8.51
Brackish Water	0.00	0.00	0.00
Total Allocation	9.30	8.51	8.51
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	18.00	18.00	18.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	18.00	18.00	18.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	1.50	1.50

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
WWTP Effluent Reuse System	Reclaimed Water	2015	\$9.50	1.50	1.50
Total			\$9.50	1.50	1.50

CITY OF MIRAMAR

County: Broward County

Service Area: City of Miramar

Description: The water supply for the City of Miramar is obtained from the SAS and Floridan aquifer. The city obtained an SAS allocation above its 11.68-MGD base condition water use by providing reclaimed water to golf courses that were using groundwater for irrigation. As a result, the city has a SAS allocation of 13.33 MGD. The city also constructed a RO treatment plant and Floridan aquifer wells. All future demands will come from the Floridan aquifer and the expansion of the RO plant. This city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide .

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	116,715	125,225	133,734
Per Capita (gallons per day finished water)	97	97	97
Potable Water Demands (daily average annual finished water in MGD)	11.32	12.15	12.97
SFWMD CONSUMPTIVE USE PERMITTED (06-00054-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	13.33	13.33	13.33
Brackish Water	2.67	2.67	2.67
Total Allocation	16.00	16.00	16.00
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	15.25	15.25	15.25
Brackish Water	2.50	2.50	2.50
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	17.75	17.75	17.75
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	2.00 ^a	4.00 ^a	6.00 ^a

a. Based upon information contained in the 2008 Palm Beach County 20-Year Water Supply Work Plan (Palm Beach County 2008).

CITY OF NORTH LAUDERDALE

County: Broward County

Service Area: City of North Lauderdale

Description: The water supply for the City of North Lauderdale is obtained from the SAS and is treated using a lime softening process. The city's consumptive use permit was modified in 2005 and does not anticipate a substantial increase in demand in the future. This is consistent with the demand projections provided in this plan.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	32,994	34,581	36,167
Per Capita (gallons per day finished water)	76	76	76
Potable Water Demands (daily average annual finished water in MGD)	2.51	2.63	2.75
SFWMD CONSUMPTIVE USE PERMITTED (06-00004-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	3.64	3.24	3.24
Brackish Water	0.00	0.00	0.00
Total Allocation	3.64	3.24	3.24
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	7.50	7.50	7.50
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	7.50	7.50	7.50
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

NORTH SPRINGS IMPROVEMENT DISTRICT

County: Broward County

Service Area: A portion of the City of Coral Springs and the City of Parkland

Description: The water supply for the North Springs Improvement District (NSID) is obtained from the SAS. The utility incorporated the “wedge” land parcel recently annexed from Palm Beach County into their service area. If zoning in the wedge changes from agricultural to residential, NSID plans to modify its consumptive use permit to add Floridan aquifer wells and an RO plant to meet future water demands. NSID wastewater is currently treated at the Broward County’s North Regional WWTP. However, NSID is planning to develop a reuse facility by 2020.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	34,895	36,573	38,251
Per Capita (gallons per day finished water)	124	124	124
Potable Water Demands (daily average annual finished water in MGD)	4.33	4.54	4.74
SFWMD CONSUMPTIVE USE PERMITTED (06-00274-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	5.18	5.18	5.18
Brackish Water	0.00	0.00	0.00
Total Allocation	5.18	5.18	5.18
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	6.80	6.80	6.80
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	6.80	6.80	6.80
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	4.00	4.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Water Reuse Plant	Reclaimed Water	2017		4.00	4.00
Total				4.00	4.00

PARKLAND UTILITIES, INC.

County: Broward County

Service Area: City of Parkland

Description: Parkland Utilities, Inc. is a private utility that obtains its water supply from the SAS and treats it using a lime softening process.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	2,161	2,265	2,369
Per Capita (gallons per day finished water)	113	113	113
Potable Water Demands (daily average annual finished water in MGD)	0.24	0.26	0.27
SFWMD CONSUMPTIVE USE PERMITTED (06-00242-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.35	0.35	0.35
Brackish Water	0.00	0.00	0.00
Total Allocation	0.35	0.35	0.35
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.58	0.58	0.58
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.58	0.58	0.58
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF PEMBROKE PINES

County: Broward County

Service Area: City of Pembroke Pines and Town of Southwest Ranches (five homes)

Description: The water supply for the City of Pembroke Pines is obtained from the SAS and treated using a lime softening process. The city has two wellfields: East and Central. The city owns and operates a WWTP and has investigated the feasibility of producing reclaimed water for aquifer recharge in the future. At this time, the city has indicated it will not proceed with the reuse project. This city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	152,002	159,312	166,622
Per Capita (gallons per day finished water)	78	78	78
Potable Water Demands (daily average annual finished water in MGD)	11.86	12.43	13.00
SFWMD CONSUMPTIVE USE PERMITTED (06-00135-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	15.60	15.60	15.60
Brackish Water	0.00	0.00	0.00
Total Allocation	15.60	15.60	15.60
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	18.00	18.00	18.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	18.00	18.00	18.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF PLANTATION

County: Broward County

Service Area: City of Plantation

Description: The water supply for the City of Plantation is obtained from the SAS and treated at two treatment facilities that use membrane filtration. Each plant has a 12-MGD capacity. The city operates a WWTP and treats a portion of the wastewater for irrigation, process water, and equipment washdown at the plant. This city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	91,812	97,595	103,377
Per Capita (gallons per day finished water)	127	127	127
Potable Water Demands (daily average annual finished water in MGD)	11.66	12.39	13.13
SFWMD CONSUMPTIVE USE PERMITTED (06-00103-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	17.24	17.24	17.24
Brackish Water	0.00	0.00	0.00
Total Allocation	17.24	17.24	17.24
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	24.00	24.00	24.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	24.00	24.00	24.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.77	0.77	1.77

CITY OF POMPANO BEACH

County: Broward County

Service Area: Cities of Pompano Beach and Lighthouse Point, and the Town of Lauderdale-By-The-Sea

Description: The water supply for the City of Pompano Beach is obtained from the SAS from eastern and western wellfields (Airport and Palm Aire, respectively). The eastern wellfield has seasonal pumpage limits due to salt water intrusion. The city operates one WTP that utilizes lime softening and membrane processes. The city also operates a reclaimed water facility that serves residential neighborhoods, golf courses, parks, and road medians. The expansion of the city's reclaimed water system is ongoing. The city does not have a wastewater treatment facility. The source of water for reuse is the ocean outfall line from Broward County's North Regional Water Reclamation Facility.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	79,917	83,765	87,613
Per Capita (gallons per day finished water)	170	170	162
Potable Water Demands (daily average annual finished water in MGD)	13.59	14.24	14.19
SFWMD CONSUMPTIVE USE PERMITTED (06-00070-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	17.75	17.75	17.75
Brackish Water	0.00	0.00	0.00
Total Allocation	17.75	17.75	17.75
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	50.00	50.00	50.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	50.00	50.00	50.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	7.50	7.50	7.50

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Reuse Distribution Expansion FY 2007–FY 2025	Reclaimed Water	underway	\$5.70	1.40 ^a	2.20 ^a
Broward County Reuse	Reclaimed Water	underway		0.10 ^a	0.10 ^a
Conservation Projects					
Conservation and Irrigation Restrictions	Conservation	2025	\$0.00	0.10	0.10

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

ROYAL UTILITY CORPORATION

County: Broward County

Service Area: A portion of the City of Coral Springs

Description: The water supply for the Royal Utility Corporation is obtained from the SAS. The utility operates a lime softening WTP with a capacity of 1 MGD.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	3,234	3,390	3,545
Per Capita (gallons per day finished water)	98	98	98
Potable Water Demands (daily average annual finished water in MGD)	0.32	0.33	0.35
SFWMD CONSUMPTIVE USE PERMITTED (06-00003-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.48	0.48	0.48
Brackish Water	0.00	0.00	0.00
Total Allocation	0.48	0.48	0.48
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	1.00	1.00	1.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	1.00	1.00	1.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

SEMINOLE TRIBE OF FLORIDA

County: Broward County

Service Area: Seminole Tribe of Florida Hollywood Reservation

Description: The water supply for the Seminole Tribe of Florida Hollywood Reservation is obtained from the SAS. The SFWMD does not issue a consumptive use permit to the Seminole Tribe of Florida for this location. Rather, the Water Rights Compact Among the Seminole Tribe of Florida, the State of Florida and the South Florida Water Management District provides information about water supply planning through an annual work plan. The information recently submitted by the Seminole Tribe of Florida is contained in the Fourth Amendment to the Seventeenth Annual Work Plan.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	1,368	1,434	1,500
Per Capita (gallons per day finished water)	810	810	810
Potable Water Demands (daily average annual finished water in MGD)	1.11	1.16	1.21
SFWMD CONSUMPTIVE USE PERMITTED ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	2.40	2.40	2.40
Brackish Water	0.00	0.00	0.00
Total Allocation	2.40	2.40	2.40
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	2.00	2.00	2.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	2.00	2.00	2.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF SUNRISE

County: Broward County

Service Area: Cities of Sunrise and Weston, Town of Southwest Ranches, a portion of the Town of Davie, and unincorporated Broward County

Description: The City of Sunrise obtains its water supply from the SAS and Floridan aquifer. The city operates four wellfields and three WTPs primarily utilizing lime softening and membrane processes. The city is adding RO treatment systems, first at its Springtree Plant and later at the Sawgrass complex. The city is upgrading the treatment system at its Southwest WWTP to provide 1 MGD of reclaimed water capacity and is in the design phase to develop reuse facilities at its Sawgrass WWTP. The city is a contributing member of the Broward Water Partnership conservation program, which has the goal of saving a total of 30 MGD countywide.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected ^a	
	2010	2020	2030
Population	211,403	221,570	231,736
Per Capita (gallons per day finished water)	116	116	116
Potable Water Demands (daily average annual finished water in MGD)	24.52	25.70	26.88
SFWMD CONSUMPTIVE USE PERMITTED (06-00120-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	31.39	29.09	29.09
Brackish Water	4.76	10.98	10.98
Total Allocation	36.15	40.70	40.07
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	50.00	50.00	50.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity (Brackish)	0.00	4.50	9.00
Total Capacity	50.00	53.00	59.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.80	2.80	4.80

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
Sawgrass RO WTP Expansion (2 Phases)	Brackish Water	2019–2024	\$21.60	3.00	6.00
Springtree RO WTP Expansion	Brackish Water	2021	\$9.60	0.00	3.00
Nonpotable Water					
Irrigation Reuse at the Sawgrass WWTP	Reclaimed Water	2018	\$0.00	2.00	4.00

a. The city estimates that there are currently 10,000 vacant housing units. If these units become occupied at a rate than is higher than medium Bureau of Economic and Business Research (BEBR) growth rates, then demands could increase above projections.

CITY OF TAMARAC

County: Broward County

Service Area: City of Tamarac

Description: The water supply for the City of Tamarac is obtained from the SAS and treated using a lime softening process. City officials indicated that the city is experiencing a change in demographics that could result in more rapid growth in population and water demand than those anticipated by the analysis presented in this plan. The city is considering the construction of Floridan aquifer wells and a 2-MGD RO treatment system to meet future demands.

POPULATION AND FINISHED WATER DEMAND					
	Existing	Projected			
	2010	2020	2030		
Population	56,064	58,760	61,456		
Per Capita (gallons per day finished water)	105	105	105		
Potable Water Demands (daily average annual finished water in MGD)	5.89	6.17	6.45		
SFWMD CONSUMPTIVE USE PERMITTED (06-00071-W) ALLOCATION (MGD)					
Potable Water Source	Existing	Projected			
	2010	2020	2030		
Fresh Water	7.19	7.19	7.19		
Brackish Water	0.00	0.00	0.00		
Total Allocation	7.19	7.19	7.19		
POTABLE WATER TREATMENT CAPACITY					
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)				
	Existing	Projected			
	2012	2020	2030		
Fresh Water	20.00	20.00	20.00		
Brackish Water	0.00	0.00	0.00		
Planned Project Capacity	0.00	0.00	2.00		
Total Capacity	20.00	20.00	22.00		
NONPOTABLE WATER TREATMENT CAPACITY					
Reclaimed Water	0.00	0.00	0.00		
PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
2.0-MGD RO System	Brackish Water	2022	\$19.00	0.00	2.00
Total			\$19.00	0.00	2.00

TINDALL HAMMOCK IRRIGATION AND SOIL CONSERVATION DISTRICT

County: Broward County

Service Area: Town of Davie

Description: The water supply for the Tindall Hammock Irrigation and Soil Conservation District (formerly known as Ferncrest Utilities) is obtained from the SAS. The district reuses the wastewater generated by the service area for aquifer recharge.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	2,639	2,766	2,893
Per Capita (gallons per day finished water)	158	158	158
Potable Water Demands (daily average annual finished water in MGD)	0.42	0.44	0.46
SFWMD CONSUMPTIVE USE PERMITTED (06-00170-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.74	0.74	0.74
Brackish Water	0.00	0.00	0.00
Total Allocation	0.74	0.74	0.74
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	1.00	1.00	1.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	1.00	1.00	1.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.60	0.60	0.60

Miami-Dade County

AMERICANA VILLAGE

County: Miami-Dade County

Service Area: Unincorporated areas of Miami-Dade County

Description: The water supply for this mobile home community is obtained from the SAS. The demand for this community is not expected to exceed its allocation in future years.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	1,582	1,727	1,871
Per Capita (gallons per day finished water)	138	138	138
Potable Water Demands (daily average annual finished water in MGD)	0.22	0.24	0.26
SFWMD CONSUMPTIVE USE PERMITTED (13-02004-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	0.26	0.26	0.26
Brackish Water	0.00	0.00	0.00
Total Allocation	0.26	0.26	0.26
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	0.50	0.50	0.50
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	0.50	0.50	0.50
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

FLORIDA CITY WATER AND SEWER DEPARTMENT

County: Miami-Dade County

Service Area: City of Florida City

Description: The water supply for the Florida City Water and Sewer Department is obtained from the SAS and treated using a lime softening process. The city is designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion. The city anticipates the construction of Floridan aquifer wells and a RO plant to meet future demand. Current projections indicate that the Floridan aquifer wells and RO plant may not be needed during the 20-year planning horizon.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	11,230	12,256	13,283
Per Capita (gallons per day finished water)	156	156	156
Potable Water Demands (daily average annual finished water in MGD)	1.75	1.91	2.07
SFWMD CONSUMPTIVE USE PERMITTED (13-00029-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	2.44	2.44	2.44
Brackish Water	0.00	0.00	0.00
Total Allocation	2.44	2.44	2.44
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	4.00	4.00	4.00
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	5.00	5.00
Total Capacity	4.00	9.00	9.00
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	1.00	1.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion	Total Capital Cost	Projected Cumulative Design Capacity (MGD)	
		Date	(\$ Million)	2020	2030
Potable Water					
RO Plant/Brine Treatment RO	Brackish Water	planned	\$25.60	4.50	4.50
Satellite Treatment	Brackish Water	planned	\$12.20	0.50	0.50
Nonpotable Water					
Stormwater Reuse	Storm/Surface Water	planned	\$13.50	0.35	0.35
Friedland Manor Stormwater for Indirect Potable Use	Storm/Surface Water	planned	\$30.30	0.65	0.65

CITY OF HOMESTEAD

County: Miami-Dade County

Service Area: Cities of Homestead and Florida City, and unincorporated areas of Miami-Dade County

Description: The water supply for the City of Homestead is obtained from the SAS and treated using a lime softening process. The city is designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion. Demand greater than their existing allocation are met by bulk purchase from the MDWASD, which has agreed by contract to provide the city with up to 3 MGD of finished water.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	65,679	71,682	77,686
Per Capita (gallons per day finished water)	157	157	157
Potable Water Demands (daily average annual finished water in MGD)	10.31	11.25	12.20
SFWMD CONSUMPTIVE USE PERMITTED (13-00046-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	10.55	10.55	10.55
Brackish Water	0.00	0.00	0.00
Bulk Water Purchase (from MDWASD)	0.40	1.00	2.00
Total Allocation (including bulk water purchase)	10.95	11.55	12.55
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	16.90	16.90	16.90
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	16.90	16.90	16.90
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	6.0	6.0	6.0

MIAMI-DADE WATER AND SEWER DEPARTMENT

County: Miami-Dade County

Service Area: Cities of Aventura, Coral Gables, Doral, Hialeah*, Hialeah Gardens*, Homestead*, Miami, Miami Beach*, Miami Gardens, Miami Springs, North Bay Village*, North Miami*, Opa-Locka*, South Miami, Sweetwater, and West Miami*; towns of Bay Harbor Islands*, Cutler Bay, Key Biscayne, Medley*, Miami Lakes, Surfside*; villages of Bal Harbour*, El Portal, Indian Creek*, Miami Shores, Palmetto Bay, Pinecrest, Virginia Gardens*; and unincorporated areas of Miami-Dade County. Those cities marked by an asterick are wholesale customers of the MDWASD. The MDWASD handles distribution and billing for the other municipalities.

Description: The water supply for the MDWASD is obtained from the SAS, the Floridan aquifer, and operation of ASR wells. MDWASD is the largest water and sewer utility in Florida. It operates three large regional and five small WTPs. MDWASD is designated a Coastal Utility at Risk due to the vulnerability of its South Dade Wellfields to saltwater intrusion. Due to this risk, MDWASD is proposing to construct a FAS wellfield and accompanying RO treatment plant in the vicinity. Two of the county's three regional WWTPs are subject to the requirements of the 2008 Ocean Outfall statute. The county is required to achieve 117.5 MGD of reuse by 2025.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	2,141,885	2,337,660	2,533,436
Per Capita (gallons per day finished water)	141	141	141
Potable Water Demands (daily average annual finished water in MGD)	302.01	329.61	357.21
SFWMD CONSUMPTIVE USE PERMITTED (13-00017-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	388.56	386.50	386.50
Brackish Water	19.95	46.60	46.60
Total Allocation	408.51	433.10	433.10
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	453.93	447.18	447.18
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	27.45	34.95
Total Capacity	453.93	474.63	482.13
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	16.49	16.49	281.59

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
South Miami Heights (17.45 RO and 2.55 Nanofiltration)	Brackish Water	2014	\$194.70	17.45	17.45
Hialeah Floridan Aquifer 10-MGD RO WTP Phase 1 (including concentrate disposal)	Brackish Water	2012	\$112.30	10.00	10.00
Hialeah Floridan Aquifer RO WTP Phase 2 – a 5-MGD expansion (including concentrate disposal)	Brackish Water	2026	\$25.60	0.00	5.00
Hialeah Floridan Aquifer RO WTP Phase 3 – a 2.5-MGD expansion (including concentrate disposal)	Brackish Water	2026	\$12.20	0.00	2.50
Nonpotable Water					
North District WWTP Reuse	Reclaimed Water	2025	\$13.50	7.00	7.00
Central District WWTP Reuse	Reclaimed Water	2025	\$0.00	0.00	27.10
West District Canal Water Reclamation Plant Recharge Phase 2	Reclaimed Water	2021	\$623.00	0.00	29.50
West District Canal Water Reclamation Plant Recharge Phase 3	Reclaimed Water	2026	\$654.00	0.00	22.50
Biscayne Coastal Wetlands Rehydration	Reclaimed Water	2022	\$1,120.00	0.00	89.00 ^a
FPL — South District WWTP	Reclaimed Water	2023	\$95.00	0.00	90.00 ^a
Conservation					
Conservation Program	Conservation	2030	\$20.00	12.01	15.19

a. This project adds capacity to the reclaimed water distribution system, but does not increase the actual treatment capacity of the reclaimed water plant.

CITY OF NORTH MIAMI

County: Miami-Dade County

Service Area: City of North Miami, Village of Biscayne Park, and unincorporated areas of Miami-Dade County

Description: The water supply for the City of North Miami is obtained from the Biscayne aquifer, treated using a lime softening process, and augmented with the purchase of bulk water from the MDWASD. The City of North Miami has a 20-year contract to purchase water from the MDWASD. Future demands are expected to be met by development of water supply from the Floridan aquifer by 2018. However the city has deferred the project. Without the RO plant, the city will need to continue purchases from the MDWASD to meet 2020 and 2030 demands.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	90,397	98,660	106,922
Per Capita (gallons per day finished water)	117	117	117
Potable Water Demands (daily average annual finished water in MGD)	10.58	11.54	12.51
SFWMD CONSUMPTIVE USE PERMITTED (13-00059-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	9.30	9.30	9.30
Brackish Water	7.97	7.97	7.97
Bulk Water Purchase (from MDWASD)	3.20	3.00*	4.00*
Total Allocation (including bulk water purchase)	20.47	20.27	21.27
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	9.30	9.30	9.30
Brackish Water	0.00	0.00	0.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	9.30	9.30	9.30
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

CITY OF NORTH MIAMI BEACH

County: Miami-Dade County

Service Area: Cities of North Miami Beach, Aventura, Miami Gardens, North Miami, and Sunny Isles Beach, Town of Golden Beach, and unincorporated areas of Miami-Dade County

Description: The water supply for the City of North Miami Beach is obtained from the SAS and Floridan aquifer, and treated using a lime softening process and RO, respectively.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population	161,968	176,772	191,577
Per Capita (gallons per day finished water)	125	129	129
Potable Water Demands (daily average annual finished water in MGD)	20.25	22.80	24.72
SFWMD CONSUMPTIVE USE PERMITTED (13-00060-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	26.30	26.30	26.30
Brackish Water	12.07	12.07	12.07
Total Allocation	38.37	38.37	38.37
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	25.50	25.50	25.50
Brackish Water	6.50	6.50	6.50
Planned Project Capacity	0.00	12.50	17.50
Total Capacity	32.00	44.50	49.50
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.00	0.00	0.00

PROJECT SUMMARY					
Water Supply Projects	Source	Completion	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Potable Water					
Floridan RO Wells, Lines, Mains, and Treatment Facility Phase II–III	Brackish Water	planned	\$8.21	12.50	12.50
Floridan RO Wells, Lines, Mains, and Treatment Facility Phase IV	Brackish Water	planned	\$37.50	0.00	5.00
Total			\$45.71	12.50	17.50

Monroe County

FLORIDA KEYS AQUEDUCT AUTHORITY

County: Monroe County

Service Area: Cities of Key Colony Beach, Key West, Layton, and Marathon, Village of Islamorada, and unincorporated areas of Monroe County. The FKA also has a contract to provide up to 2.4 MGD to the United States Navy.

Description: The water supply for the FKA comes from the SAS and the Floridan aquifer, and is treated using a lime softening process and RO, respectively. The FKA also has two desalinization plants that can produce up to 3.0 MGD of finished water from seawater. These plants are used for emergencies and extreme peaks in demand. The FKA had previously been designated a Coastal Utility at Risk due to the vulnerability of its wellfield to saltwater intrusion, however, steps have been taken to reduce their reliance on a single source. The FKA's seasonal population in Monroe County now exceeds the permanent population on an annual basis. Current projections suggest a continued decline in permanent population and an increase in seasonal population (according to analyses developed by Monroe County). Data from Monroe County and FKA indicates that the growing seasonal population appears to be driving PCURs upward.

POPULATION AND FINISHED WATER DEMAND			
	Existing	Projected	
	2010	2020	2030
Population (permanent)	73,090	71,195	69,300
Population (seasonal)	78,401	82,151	86,855
Per Capita (gallons per day finished water)	109	124	139
Potable Water Demands (daily average annual finished water in MGD)	16.45	19.00	21.70
SFWMD CONSUMPTIVE USE PERMITTED (13-00005-W) ALLOCATION (MGD)			
Potable Water Source	Existing	Projected	
	2010	2020	2030
Fresh Water	17.79	17.79	17.79
Brackish Water	6.18	6.18	6.18
Total Allocation	23.97	23.97	23.97
POTABLE WATER TREATMENT CAPACITY			
FDEP Permitted Capacity	Cumulative Facility & Project Capacity (MGD)		
	Existing	Projected	
	2012	2020	2030
Fresh Water	23.80	23.80	23.80
Brackish Water	6.00	6.00	6.00
Planned Project Capacity	0.00	0.00	0.00
Total Capacity	29.80	29.80	29.80
NONPOTABLE WATER TREATMENT CAPACITY			
Reclaimed Water	0.62	1.62	2.72

PROJECT SUMMARY					
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ Million)	Projected Cumulative Design Capacity (MGD)	
				2020	2030
Nonpotable Water					
Reclaimed Water Systems in Unincorporated Monroe County	Reclaimed Water	2015	\$12.00	1.00	2.10
Conservation					
Low Flow Fixture Distribution	Conservation	2011	\$0.25	0.10	0.15

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