3

Demand Management: Water Conservation

Demand management through water conservation is an important element of water supply planning and entails reducing the quantity of water required to meet regional demands through water use efficiency improvements and the prevention or reduction of unnecessary uses or losses of water. Water conservation contributes to the sustainability of water supply resources. Section 373.709(2), Florida Statutes (F.S.), requires that water conservation be considered when determining if the total capacity of the water supply development project options included in a water supply plan (**Chapter 8**) exceed the increase in projected demands for the planning horizon (**Chapter 2**).

TOPICS

- Conservation Measures
- Conservation Programs
- Regulatory Initiatives
- Potential for Water Conservation Savings
- Summary of Water Conservation

All water sources are finite; therefore, conservation and efficiency measures should be maximized, regardless of the water source, before more costly development options are implemented. Water conservation can reduce, defer, or eliminate the need to develop new water supply sources to meet current or future demands, which has the same effect as expanding the existing water supply. Moreover, conservation and demand management have been shown to reduce costs to utilities and rate payers over the long term (Feinglas et al. 2013, Chesnutt et al. 2018). Improving water use efficiency can reduce operational costs for most other users as well.

This chapter describes water conservation measures and programs and provides an estimate of potential water savings (demand reduction) achievable by 2045 in the Upper East Coast (UEC) Planning Area of the South Florida Water Management District (SFWMD or District). Additional conservation information can be found in the *Support Document for the 2021-2024 Water Supply Plan Updates* (2021-2024 Support Document; SFWMD 2021a), in the Comprehensive Water Conservation Program (SFWMD 2008), and on the SFWMD website (www.sfwmd.gov/conserve).

CONSERVATION MEASURES

The average per capita water use rate in the UEC Planning Area has decreased from 167 gallons per capita per day (gpcd) in 2000 to approximately 130 gpcd in 2019. This is partly due to passive water savings, which result from the introduction of water-efficient fixtures and appliances into the marketplace, replacing older devices with more water-efficient models. Federal, state, and local codes and standards foster the development and use of more efficient devices, increasing passive savings. However, relying on passive savings alone would delay or exclude substantial conservation savings potential. Therefore, many local governments, utilities, and state agencies have conservation measures and programs in place encouraging use of high-efficiency equipment or improved water use behaviors that yield water savings. Local governments, utilities, and large water users are encouraged to research which types of programs would be most appropriate and cost-effective for their residents and specific user groups, and develop goal-based water conservation plans. Cost-share funding and other collaborative opportunities may be available to help implement conservation strategies and programs. The following subsections include a brief description of conservation measures that can be implemented for indoor and outdoor water use applications.

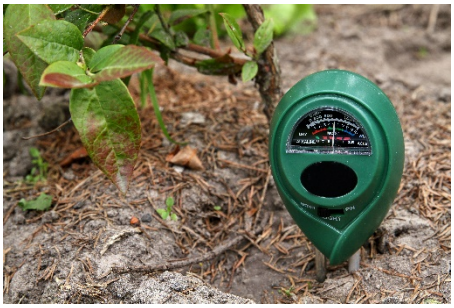
Outdoor Water Use (Irrigation)

A large proportion of water used outdoors in the UEC Planning Area is for irrigation. Irrigation of food and other commodity crops is practiced by agricultural water users, while lawns and landscapes are irrigated by residential and commercial property owners. Many irrigation efficiency principles are common across these user groups; however, use patterns, scales of use, system design, typical hardware and components used, and knowledgeability of system managers vary widely between them.

Agriculture

There are many options for agricultural operations to improve irrigation efficiency and conserve water. Generally, agricultural water conservation measures fall under three categories: 1) converting from one irrigation method (or system type) to a more efficient one; 2) improving the precision management capabilities of the irrigation system; and 3) implementing best management practices. The efficiency of any system can be optimized if the operator has real-time information on soil moisture and weather conditions and if the irrigation systems are remotely operated to allow quick irrigation adjustments in response to changing weather conditions. Hardware and technology that can improve system management, reduce water needs, and minimize water losses include the following:

- Flowmeters
- Weather stations
- Soil moisture sensors
- Variable-frequency pump drives
- Automated control systems
- Best management practices (e.g., laser leveling, irrigation system maintenance)



Urban

In Florida, where irrigation occurs year-round, the largest portion of water used by urban water users served by utilities often is for irrigation. Moreover, the United States Environmental Protection Agency (USEPA) estimates approximately 50% of water used outdoors is wasted due to inefficient watering methods and systems. Therefore, improvements to irrigation efficiency are considered a primary factor in conservation savings potential among urban water users.

Irrigation efficiency improvements can be achieved at single- and multi-family residences, commercial and institutional properties, recreational areas (e.g., parks, athletic fields, golf courses), and other landscaped areas (e.g., roadway medians) by replacing outdated irrigation system timers with newer, weather and soil moisture-based controllers. These controllers should be tested and shown to meet the USEPA's WaterSense program specifications for water efficiency and performance. More information on the WaterSense program and labeled irrigation controllers is available at www.epa.gov/watersense.

Non-hardware measures include proper irrigation system design, conducting irrigation system performance audits, and use of Florida-Friendly Landscaping™ Program principles (Boyer and Dukes 2014). On-site capture of stormwater in cisterns to reuse for irrigation can also reduce demand on traditional water sources.

Golf courses typically are irrigated with a high degree of efficiency. However, opportunities to improve efficiency may exist using many of the same types of hardware and technology as described above. Additional practices for efficient golf course water use can be found in the *Best Management Practices Planning Guide & Template* published by the Golf Course Superintendents Association of America (2007) for golf course managers.

Indoor Water Use

Another area of potential conservation savings is indoor water use in single- and multi-family residences and commercial/institutional buildings (e.g., office buildings, restaurants, movie theaters, long-term care facilities, hospitals). Potential measures include detecting and repairing water leaks and replacing older, inefficient plumbing fixtures (e.g., toilets, urinals, faucets, showerheads) with models that have been tested and shown to meet the USEPA's WaterSense program specifications for water efficiency and performance. Older, inefficient appliances can be replaced with water-efficient models that have received the ENERGY STAR label. For more information on the ENERGY STAR program and to find labeled products, visit www.energystar.gov.

Common water efficiency improvement measures for commercial and industrial users are outlined in the SFWMD's (2013) *Water Efficiency Audit Guide*, which is discussed in greater detail in the 2021-2024 Support Document (SFWMD 2021a). Measures for improving water efficiency in non-residential settings may be applicable to specific operations or facilities such as autoclaves in hospitals; pre-rinse spray valves, food steamers, and waste grinders in restaurants; heating, ventilation, and air conditioning (HVAC) system efficiency upgrades; converting water-based cooling devices to air based; and water reuse/recycling in industrial operations. Other applicable measures may exist for specific industrial processes.

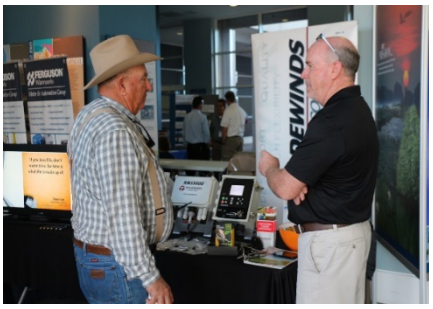
CONSERVATION PROGRAMS

Conservation programs help educate water users and facilitate adoption of effective water conservation measures (e.g., specific actions or hardware that improve water use efficiency). Utilities and local governments are the primary entities that develop and implement conservation programs. Other regional and state agencies may also assume a leadership role in promoting and providing cost-share funding for water conservation. Utilities and local governments are encouraged to analyze their service areas and jurisdictions to determine potential user groups and programs that may be most suitable for them. The following subsections contain brief descriptions of established conservation programs that may be applicable to different water use categories.

Education, Outreach, and Marketing

Although water savings attributed to education, outreach, and marketing campaigns are difficult to quantify, such campaigns are essential to reducing water use and instilling a lasting conservation ethic in businesses and communities. Developing a conservation ethic and educating water users enable people to know why conservation is important and necessary, what conservation measures are available to them, and how they can implement them. Campaigns usually are conducted by regional/local agencies or utilities and are designed to reach specific user groups (e.g., residents, schools, commercial properties).

The SFWMD has conducted an annual Conservation Expo since 2009 to provide education, outreach, and marketing opportunities to a variety of user groups on technological advances in the water conservation field. Each expo focuses on specific water conservation applications (e.g., industrial use, public water supply, agricultural irrigation) or measures (e.g., outreach, education).



Cost-Share Funding Programs

SFWMD Cooperative Funding Program

The SFWMD Cooperative Funding Program (CFP) provides financial incentives to local governments and utilities, homeowners' associations, commercial entities, and agricultural operations to implement technology and hardware-based water conservation projects. Historically, funding for the CFP has come from both ad valorem taxes and the Florida Legislature through the Florida Department of Environmental Protection. CFP funding is considered annually during the SFWMD's budget development. Since the 2016 UEC Plan Update, the SFWMD has provided approximately $3 million in water conservation funding for 60 projects Districtwide. Over the same time period [Fiscal Year (FY) 2016 through FY2021], 8 water conservation projects were funded in the UEC Planning Area for a total of $433,000. Currently funded projects are listed in **Chapter 8**. Additional information regarding the CFP can be found on the SFWMD's website (www.sfwmd.gov; Search: Cooperative Funding Program). The CFP is expected to continue, although future funding levels are uncertain.

Environmental Quality Incentives Program

The Environmental Quality Incentives Program (EQIP), implemented through the United States Department of Agriculture – Natural Resources Conservation Service, promotes agricultural production and environmental quality. Financial and technical assistance is offered to participants to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved groundwater and surface water, reduced soil erosion and sedimentation, and improved or created wildlife habitat. From FY2016 through FY2021, 21 irrigation efficiency projects were funded by EQIP in the UEC Planning Area. Two projects (837 acres) were in Martin County, 15 projects (976 acres) were in St. Lucie County, and 4 projects (240 acres) were in Okeechobee County. EQIP is expected to continue, although future funding levels are uncertain.

Certification and Recognition Programs

There are several national and statewide certification and recognition programs that direct builders, property owners, and building managers toward meeting environmentally friendly standards. Such programs include the Florida Green Building Coalition's Green Certification Program, the Florida Green Lodging Program, Leadership in Energy and Environmental Design (LEED), and Green Globes. These holistic programs typically include criteria affecting water use, energy efficiency, climate-adaptive landscaping, sustainable building material, site selection, indoor environmental quality, and greenhouse gas emissions.

INFO ⓘ

Florida-Friendly Landscaping™ means using low-maintenance plants and environmentally sustainable landscaping practices to conserve water, reduce pollution and erosion, and create wildlife habitat.

With respect to growing development and finite water resources, there are single-focus programs that target water use efficiency. These programs often are less expensive for builders and property managers than holistic ones. Two single-focus programs endorsed by all Florida water management districts are Florida Water Star℠ and Florida-Friendly Yard Recognition™. The Florida Water Star℠ program certifies buildings and associated outdoor spaces that have been designed or retrofitted to meet high water efficiency standards and offers training for landscape and irrigation professionals to obtain program accreditation. The Florida-Friendly Yard Recognition™ program promotes low-maintenance and drought-tolerant plants, environmentally sustainable landscaping, and high-efficiency irrigation practices by providing recognition to properties where Florida-Friendly Landscaping practices have been successfully implemented. More information on these programs can be found on their individual program webpages and on the SFWMD's water conservation webpage (www.sfwmd.gov/conserve).

Other Programs

Agricultural Best Management Practices Program

The Florida Department of Agriculture and Consumer Services (FDACS) develops and adopts agricultural best management practices (BMPs) by rule for different types of agricultural operations. These BMPs have been designed primarily to reduce negative impacts on water quality while maintaining or enhancing agricultural production. However, some BMPs also improve water use efficiency and could reduce the amount of water needed to meet crop demands in average to wet years. Enrollment in the FDACS BMP program is voluntary. Within the UEC Planning Area, there currently are 142,501 acres in Martin County, 163,374 acres in St. Lucie County, and 41,756 acres in the northeastern portion of Okeechobee County enrolled in the FDACS BMP program. In addition, the FDACS Agricultural-Environmental Leadership Award recognizes environmentally innovative farming practices of the state's growers and ranchers. All agricultural water users are encouraged to enroll in the FDACS BMP program and learn about the Agricultural-Environmental Leadership Award. Local governments and agencies should consider promoting these programs to agricultural operations.

Agricultural Mobile Irrigation Labs

The FDACS Mobile Irrigation Lab (MIL) program performs free evaluations of irrigation system efficiency on agricultural lands and makes recommendations for physical and operational improvements. Such recommendations may include modification of irrigation systems and equipment, alteration of irrigation scheduling, and other aspects of system management. Of the eight MILs operating in Florida, one (the St. Lucie MIL) serves Martin, St. Lucie, and Okeechobee counties.

Florida Automated Weather Network

The Florida Automated Weather Network (FAWN), operated by the University of Florida – Institute of Food and Agricultural Sciences (UF-IFAS), provides weather information throughout the state at 15-minute intervals. FAWN management tools provide decision support functions to growers using historical and real-time weather data and crop modeling technology to help with short- and long-term planning, thereby maximizing the efficiency of irrigation practices (UF-IFAS 2019). There currently is one FAWN station (St. Lucie West) supported by the SFWMD in the UEC Planning Area. It is located in western St. Lucie County, south of State Road 70 and west of I-95. Additional information for this station is available at http://www.fawn.ifas.ufl.edu.

REGULATORY INITIATIVES

Regulations or mandates can be used to accelerate improved practices or devices into mainstream use. Conservation-related ordinances that local governments can adopt include those requiring greater water efficiency in construction, such as the International Green Construction Code and standards derived from the Florida Water Star℠ program and Florida Green Building Coalition. Ordinances and codes can be adopted wholly or partially, depending on conditions within a service area. Water efficiency measures are required statewide by statute, regionally by water management district rule, or locally by local government ordinance. In addition, utilities may be able to require builders meet efficiency codes in new construction as a condition of service.

The SFWMD promotes water conservation practices through water use permitting. In order for a proposed use of water to be considered reasonable-beneficial, the applicant must include water conservation practices in the permit application. Section 2.3.2 of the *Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District* (SFWMD 2021b) includes specific water conservation requirements for various water use categories.

The SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures Rule [Chapter 40E-24, Florida Administrative Code (F.A.C.)] was adopted to help protect South Florida's water resources by addressing the largest area of residential water use and greatest potential for viable water use reduction. In short, the rule limits landscape irrigation to 2 or 3 days per week, depending on location and local circumstances, and contains provisions for new landscaping and other situations that require a deviation from the rule requirements. Adoption of local ordinances that fully comport with Chapter 40E-24, F.A.C., is crucial to reducing landscape irrigation water use. When local governments implement irrigation ordinances, it demonstrates a commitment to water resource protection through conservation.

To assist local governments in adopting such an ordinance, the SFWMD has created a model ordinance, a model code, and several customizable outreach materials designed to educate residents on their local irrigation ordinance. As of May 2021, 4 of 11 local governments within the UEC Planning Area had adopted a year-round irrigation ordinance. The remaining seven were either in the process of adopting one or were reviewing the SFWMD's examples. Additional information and example documents for local implementation are available on the SFWMD's webpage (https://www.sfwmd.gov/doing-business-with-us/local-government-model-ordinances-and-codes).

POTENTIAL FOR WATER CONSERVATION SAVINGS

Potential water savings for the UEC Planning Area were estimated for the following water use categories (**Table 3-1**): Agriculture (AG), Public Supply (PS), Domestic Self-Supply (DSS), and Landscape/Recreational (L/R). For the Commercial/Industrial/Institutional (CII) and Power Generation (PG) water use categories, potential water savings were estimated only for potable indoor water use, which was assumed to be provided by a PS utility. Therefore, those potential savings are accounted for under PS.

For this 2021 UEC Plan Update, eight frequently implemented measures were selected and quantified to generate the potential water savings for PS and DSS. Greater conservation savings may be possible in all water use categories if additional measures are implemented or if increased participation rates are realized. For example, the Central Florida Water Initiative (2015) identified 80 conservation programs and measures applicable to non-AG users and 47 programs and measures directly applicable to AG users.

Table 3-1. Potential water saved (in mgd) in the UEC Planning Area based on demand reduction estimates achievable by 2045.

Use Category	County			Total by Sector
	Martin	St. Lucie	Okeechobee[1]	
Agriculture	3.67	2.31	0.15	**6.13**
Public Supply[2]	1.39	1.98	--	**3.37**
Domestic Self-Supply[2]	0.08	0.30	--	**0.38**
Landscape/Recreational	1.02	1.71	0.01	**2.74**
Total	**6.16**	**6.30**	**0.16**	**12.62**

mgd = million gallons per day; UEC = Upper East Coast.

1 Values listed are only for the area within the UEC Planning Area boundary. There are no Public Supply utilities or golf courses located in the portion of Okeechobee County within the UEC Planning Area. The permanent resident population in the Domestic Self-Supply category is too small to realize potential water savings.

2 Includes passive savings.

Agriculture

AG is the largest water use category in the UEC Planning Area, accounting for 60% [174.72 million gallons per day (mgd)] of the total demand in 2019. Although AG demands are projected to decline to 130.10 mgd in 2045, AG is projected to remain the largest water use category. As discussed in **Chapter 2** and **Appendix A**, the annual Florida Statewide Agricultural Irrigation Demand (FSAID) report published by FDACS includes 20-year estimates and projections of agricultural acreage and water demands. Estimated efficiency improvement (i.e., conservation estimate) is one of the parameters calculated by the FSAID model, and the spatially based data that contribute to the water demand estimates and projections are available by water management district planning area. The potential AG conservation savings within the UEC Planning Area were determined using the FSAID geodatabase (https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning). The methodology for calculating the potential AG conservation savings is more fully described in Appendix E of the FSAID VII report (FDACS 2020), but generally is based on estimated historical use determined from the United States Department of Agriculture's Farm and Ranch Irrigation Surveys and actual water savings data from MILs. The projected conservation savings are based primarily on irrigation system changes, changes in scheduling, and sensor-based automation.

The total savings calculated by the FSAID model for any given year depends on the crops produced, the acreage of each crop, and the irrigation systems employed, as projected to exist in that year. Because these variables change over the planning horizon (2019 to 2045), projected savings also change and may be nonlinear. The estimated conservation potential for the AG water use category in the UEC Planning Area in 2045 is 6.13 mgd (**Table 3-1**).

Irrigated AG acreage in the UEC Planning Area is projected to decline approximately 26% (from 107,383 acres in 2019 to 79,004 acres in 2045). Some of this abandoned acreage likely will consist of older irrigation systems, which may have been available for efficiency upgrades (i.e., conservation savings). Additionally, any new AG projects likely will be installed with efficient irrigation systems. Therefore, the availability of efficiency upgrades overall will decrease.

Public Supply and Domestic Self-Supply

PS is the second largest water use category in the UEC Planning Area and is projected to increase through the planning horizon. PS accounted for an estimated 47.37 mgd of finished water demand in 2019 and 67.83 mgd in projected 2045 demands (**Chapter 2**). Historical conservation efforts in PS are reflected in the per capita use rate, which has declined approximately 22% between 2000 and 2019. This decline likely is the result of new construction using higher-efficiency fixtures and/or designed for more efficient water use, the SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures Rule (Chapter 40E-24, F.A.C.), conservation rate structures, public education, and other conservation factors.

Estimates of active and passive water conservation potential for each county in the UEC Planning Area were made for residential and non-residential users (in both PS service areas and DSS areas) using the AWE Conservation Tracking Tool (Ver. 3) (AWE Tool). The AWE Tool calculates active water savings for user-selected conservation measures based on the number of measures implemented annually over the planning horizon, and the per unit savings and service lives of each measure. Passive savings are generated by the AWE Tool based on natural replacement of toilets, showerheads, and water-using appliances at the end of their service lives, whose current or future minimum efficiency is dictated by national, state, or local code requirements. Baseline data include Florida Department of Revenue parcel information, Bureau of Economic and Business Research household data and population projections, and Florida Department of Environmental Protection finished water monthly operating reports (as used in this plan update for demand projections; **Appendix A**). Conservation potential for DSS was analyzed with PS users and extracted in proportion to its percentage of the total population in each county.

Conservation measures included in the estimates for residential users supplied by PS utilities were limited to the following measures: high-efficiency toilets, showerheads, and clothes washers; irrigation and landscape evaluations; and advanced irrigation controllers. For many types of permit holders, including CII and PG, indoor potable water use often is provided by a PS utility. Conservation measures for non-residential users served by PS utilities included high-efficiency toilets and urinals as well as HVAC efficiency improvements.

For all measures except HVAC water use, the conservation (demand reduction) estimate assumes a participation rate of 30% of the total annual potential implementations for each applicable measure. This assumption means 30% of all possible implementations would be accomplished over the planning horizon (2019 to 2045), which is thought to be an achievable participation rate for most conservation measures. For HVAC efficiency improvements, a flat rate of five implementations per year was used to represent an achievable participation level, based on land use parcel data for the UEC Planning Area.

The AWE Tool estimates passive savings for PS will reach 1.00 mgd in Martin County and 1.60 mgd in St. Lucie County by 2045. The portion of Okeechobee County included in the UEC Planning Area currently has no PS users, and the DSS community consists of fewer than 200 homes. Therefore, conservation potential for those user groups was not analyzed. The combined estimated conservation potential by PS and DSS users (active and passive savings) in the UEC Planning Area in 2045 is 3.75 mgd (**Table 3-1**).

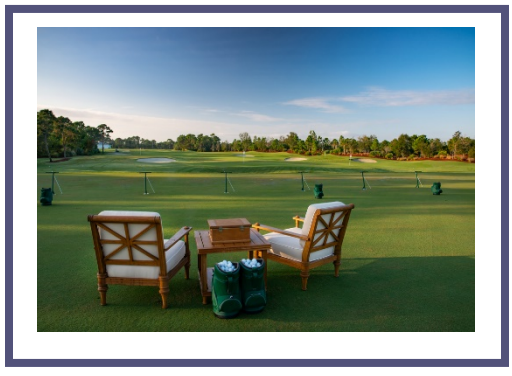
Landscape/Recreational

The L/R use category includes irrigation of landscaped areas such as parks, athletic fields, roadway medians, commercial spaces, large private residential properties, and golf courses. Because their demands are estimated in different ways, golf course potential water savings are discussed separately from other permitted landscape irrigation. The total conservation potential for the L/R use category in 2045 is 2.74 mgd (**Table 3-1**).

There are approximately 1,650 active landscape irrigation water use permits in the UEC Planning Area. Landscape irrigation is projected to use a total of 28.48 mgd in 2045. To estimate the potential water conservation savings for landscaped areas, a variety of irrigation efficiency measures were applied to 30% of the permits over the planning horizon, yielding a 30% savings. Assuming an average per permit use for each county, the estimated conservation potential for landscape irrigation in 2045 is 2.57 mgd.

Golf Courses

There are 41 active water use permits in the UEC Planning Area for golf course irrigation. These golf courses are projected to use 12.16 mgd of water in 2045. Indoor potable water use at golf courses is assumed to be provided by a PS utility.



Most golf courses are irrigated with a high degree of efficiency. According to a 2019 statewide survey of Florida Golf Course Superintendents Association members, 55% of golf courses use advanced irrigation controllers (Irwin and Wanvestraut 2020). A conservation program would therefore aim to affect the golf courses not yet using advanced irrigation controllers.

To estimate the potential water conservation savings for golf courses, a variety of irrigation efficiency measures were applied to 30% of the 41 permitted golf courses over the planning horizon, yielding a 10% savings. Assuming an average per permit use for each county, the estimated conservation potential for golf courses in 2045 is 0.17 mgd. There are no active golf course permits in the portion of Okeechobee County within the UEC Planning Area boundary.

In addition to the 41 active, permitted golf courses in the UEC Planning Area, there are an additional 17 courses that use reclaimed water for irrigation and do not have a permit for backup supply (or supplementation). While all water should be used efficiently regardless of its source and the same measures applicable to other courses could increase water use efficiency on courses using (or supplementing with) reclaimed water, the SFWMD does not have water use data for the golf courses without water use permits. Therefore, potential water savings for those courses were not calculated.

Commercial/Industrial/Institutional

For CII permit holders, indoor potable water use is assumed to be provided by a PS utility. Therefore, conservation savings estimates were captured during the PS analysis by the measures targeting non-residential users (i.e., high-efficiency restroom fixtures and HVAC efficiency improvement measures). CII permitted water use was not analyzed for conservation potential as those uses were assumed to be process specific and, therefore, difficult to estimate within the scope of a regional analysis.

Power Generation

PG facilities use large quantities of water for cooling, but most of the water is returned to the source from which it was obtained. As a result, there are minimal efficiency gains to be had from the cooling process. Potential savings for PG were not estimated as part of this analysis. As with the CII use category, indoor potable water use at PG facilities is assumed to be provided by a PS utility. Therefore, conservation savings estimates were captured during the PS analysis in the AWE Tool by the measures specifically targeting non-residential users (i.e., high-efficiency restroom fixtures and HVAC efficiency measures).

SUMMARY OF WATER CONSERVATION

Conservation programs that achieve increased water savings through education, rebates, and new technologies are much less expensive than alternative water supply projects, which typically involve construction of new treatment plants, groundwater wells, reservoirs, or other costly infrastructure. In addition, decreased per capita water use resulting from conservation helps utilities avoid or reduce supply and treatment costs as populations increase and potentially reduces the necessity and overall magnitude of rate increases for customers. Therefore, regardless of the water source(s) used, conservation should be maximized before more costly development options are implemented.

Potential water savings achievable by 2045 for the AG, PS, DSS, and L/R (including golf) water use categories are estimated to be 12.62 mgd (**Table 3-1**). These savings would be achieved if the measures and programs discussed in this chapter are implemented at reasonable levels over the planning horizon. Greater conservation savings would be possible by all user groups if additional measures are implemented or if increased participation rates are realized. Utilities and local governments should conduct potential water conservation savings and cost analyses for their service areas and jurisdictions. Such analyses can inform the decision-making process regarding investment in alternative water supply projects.

Local, regional, and state government agencies as well as PS utilities in the UEC Planning Area can develop conservation strategies to encourage and assist water users in improving their water use efficiency. Because PS utilities typically promote conservation only within their service areas, government agencies should consider conducting educational outreach to promote and incentivize conservation among DSS and L/R users. Cost-share funding may be available to local governments (and in some cases, directly to large users) to foster the adoption of conservation measures. Agricultural operations are encouraged to take advantage of the FDACS BMP program as well as funding opportunities (through EQIP or CFP), site audits via MILs, and FAWN to make weather-based irrigation decisions. Individual users are encouraged to seek out resources to improve water use efficiency and reduce expenses.

SFWMD staff are available to assist conservation program developers in the UEC Planning Area with technical support, collaborative program implementation, ordinance review, long-term demand management planning, and funding assistance via the District's CFP. In addition to the programs and strategies discussed in this chapter, conservation program resources are discussed further in the 2021-2024 Support Document (SFWMD 2021a).

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