

DOCKET NO. ████████ WS - GULF UTILITY COMPANY

WITNESS: Direct Testimony of William Scott Burns, South Florida Water Management District, Appearing on behalf of the Staff of the Florida Public Service Commission

DATE FILED: January 9, 1997

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DIRECT TESTIMONY OF WILLIAM SCOTT BURNS

1  
2 Q. Please state your name and business address.

3 A. William Scott Burns. My business address is 3301 Gun Club Road, West  
4 Palm Beach, Florida, 33406.

5 Q. State your occupation and position.

6 A. I am employed as the Director of Water Use with the South Florida Water  
7 Management District (SFWMD or District).

8 Q. Please state a brief description of your educational background and  
9 experience.

10 A. I received a B.A. in Geology from the University of South Florida in  
11 1979. I am a Certified Professional Geologist (State of Florida certificate  
12 no. 1251) I have been employed by SFWMD since July of 1979. My duties have  
13 included Research Geologist (1979-1987), Director of Hydrogeology (1987-1991),  
14 and Director of Water Use (1991-present).

15 Q. Please describe your present duties.

16 A. I review and approve Staff recommendations on applications for water use  
17 permits. I am responsible for developing and applying SFWMD's water use  
18 rules, and provide guidance and review regarding water use policy and rules  
19 to SFWMD's water supply planning process.

20 Q. What are the water management districts' objectives regarding water  
21 conservation?

22 A. The District strongly supports water conservation and diversification  
23 of water supply resources in order to meet the needs of the region. Reclaimed  
24 water is an integral part of the District's water conservation program and is  
25 an important water supply alternative that reduces the amount of water lost

1 from the water supply inventory through deep well injection and discharge to  
2 surface waters. District policies concerning water conservation and reuse  
3 are:

- 4 • The District will require water conservation and efficient use of  
5 water supplies.
- 6 • The District will engage in planning to assist counties,  
7 municipalities, regional water supply authorities, private  
8 utilities and others in meeting water supply needs.
- 9 • The District will maintain an aggressive public information/  
10 education program for conservation and demand management  
11 practices.
- 12 • The District will identify areas of critical water supply concern,  
13 and develop special criteria for efficient use of water resources  
14 in those areas.
- 15 • The District will require utilization of the lowest quality water  
16 appropriate for the intended application or use.
- 17 • The District will require a reasonable amount of wastewater reuse  
18 in water resource caution areas, consistent with State statutes  
19 and rules.
- 20 • The District will encourage regional planning to develop solutions  
21 to water supply problems. When appropriate, this will include the  
22 utilization of local sources such as utility interconnects,  
23 regional water supply planning, regional wellfields, regional  
24 water authorities or other measures which diversify supply sources  
25 without adding new demands on the regional supply system.

- 1           •     The District will implement applied research projects to identify  
2                     and promote alternative methods of wastewater treatment, disposal,  
3                     and reuse for the purpose of increasing the engineering, economic,  
4                     and environmental feasibility of water reclamation and reuse.

5           A comprehensive approach has been initiated by the District to fulfill  
6 the intent of these policies. The District has undertaken the development of  
7 regional water supply plans to identify regional water supply problems and  
8 potential water supply alternatives. These plans have been completed for the  
9 Lower West Coast Water Supply Planning Area and are in development for the  
10 remainder of the District. In addition, the District has designated water  
11 resource caution areas and adopted reuse provisions as part of the District's  
12 regulatory program. The District also has established a cooperative funding  
13 program to encourage the use of alternative water supply sources, including  
14 reuse, consistent with legislative direction.

15 Q.     What is the District's definition of water resource caution area?

16 A.     Water Resource Caution Areas (WRCA) are areas that have experienced or  
17 are anticipated to have water supply problems in the next 20 years. Criteria  
18 used to define these areas within the SFWMD are attached as District rule 40E-  
19 23.053, Florida Administrative Code. These areas were formerly referred to  
20 as Critical Water Supply Problem Areas and were required to be designated by  
21 rule by each water management district pursuant to Chapter 62-40, Florida  
22 Administrative Code. This chapter further states that a reasonable amount of  
23 reuse of reclaimed water from domestic wastewater facilities shall be required  
24 within these areas, unless such reuse is not economically, environmentally,  
25 or technically feasible. The SFWMD's Critical Water Supply Problem Area Rule.

1 Chapter 40E-23, Florida Administrative Code, was adopted in October of 1991.  
2 The SFWMD is currently in rule development to change Chapter 40E-23 to reflect  
3 the new nomenclature.

4 Q. Can you provide an overview of water resource and water quality problems  
5 in Lee County leading to the area in which Gulf Utility Company (Gulf) serves  
6 being designated by the SFWMD as a WRCA?

7 A. The following criteria are used to designate critical water supply  
8 problem areas:

- 9 (1) Areas that have been designated as a Reduced Threshold Areas as  
10 identified in rule 40E-23.02.
- 11 (2) Areas of special concern as determined through the water use  
12 permitting process;
- 13 (3) Areas that have frequently experienced water shortage  
14 restrictions;
- 15 (4) Areas that have been designated as a Restricted Allocation Area;
- 16 (5) Areas that are experiencing saline water intrusion; or
- 17 (6) Other areas with known water supply problems.

18 Lee County, including the Gulf utility area, was designated based on (1)  
19 and (3).

20 Q. What is the District's definition of reuse?

21 A. The SFWMD definition of reuse is consistent with Chapter 62-610, Florida  
22 Administrative Code, and is "The deliberate application of reclaimed water,  
23 in compliance with Department and District rules, for a beneficial purpose."  
24 Reclaimed water is defined as "wastewater that has received at least secondary  
25 treatment and is reused after flowing out of a wastewater treatment facility "

1 Q. What are the benefits of reuse and who are the recipients of these  
2 benefits?

3 A. Reuse water as a source of supply does not require a water use permit,  
4 which is a benefit in terms of time and expense. An additional benefit is  
5 that the application of reuse water is not restricted during water shortages,  
6 making the user drought-proofed for the volume of water contracted. Another  
7 benefit is that reclaimed water is often an affordable and reliable source of  
8 supply (depending on the agreement between the supplier and the end user) in  
9 areas where conventional supplies such as ground water are not available.

10 The recipients of the benefits are generally the supplier, in meeting  
11 the conditions of the wastewater permit with the Department, and the end user  
12 in the form of a reliable source of water supply.

13 Q. Does the SFWMD have any requirements for implementing reuse of reclaimed  
14 water?

15 A. All applicants are required to evaluate the use of reclaimed water as  
16 part of obtaining a permit for water use. For water users, this involves an  
17 evaluation of using reclaimed water as a source of water. For public water  
18 suppliers, who control a wastewater treatment facility either directly or  
19 indirectly, this involves an evaluation of implementing a reuse program.  
20 Rules governing the consumptive use of water are set forth in Chapter 40E-2,  
21 Florida Administrative Code, (Consumptive Use Rule). Factors considered by  
22 the District concerning the use of reclaimed water are discussed below.

23 All applicants for water use permits are required to evaluate the  
24 feasibility of utilizing reclaimed water as one of the conditions for issuance  
25 of a permit. As stated in Rule 40E-2.301(1)(h), Florida Administrative Code.

1 (Conditions for Issuance of Permits):

2

3 (1) In order to obtain a permit, permit renewal, or permit  
4 modification under this chapter, an applicant must give reasonable  
5 assurances that the proposed water use at the time the permit  
6 application is deemed complete:

7 (h) makes use of reclaimed water source unless the applicant, in  
8 any geographic location, demonstrates that its use is either not  
9 economically, environmentally, or technically feasible; or in  
10 areas not designated as Water Resource Caution Areas pursuant to  
11 Chapter 40E-23, Florida Administrative Code, the applicant  
12 demonstrates reclaimed water is not readily available.

13

14 In addition, all applicants for public water supply permits must submit  
15 a Water Conservation Plan as part of the water use permit application. An  
16 analysis of the feasibility for making reclaimed water available is one of the  
17 required elements of the Plan. Section 2.6.1.H of the Basis of Review for  
18 Water Use Permit Applications within the South Florida Water Management  
19 District (March, 1994) addresses this requirement:

20

21 For those potable public water supply utilities who control,  
22 either directly or indirectly, a wastewater treatment plant, an  
23 analysis of the economic, environmental and technical feasibility  
24 of making reclaimed water available [must be conducted as part of  
25 the application]. Use of the Guidelines for Preparation of Reuse

1        Feasibility Studies, published by the Department [DEP] in November  
2        1991 is suggested.

3  
4        In order to facilitate communication between reclaimed water suppliers  
5 and water users, District staff requests that all applicants for water use  
6 permits contact the nearest wastewater utility regarding the availability of  
7 reclaimed water. If reclaimed water is available for the project, the permit  
8 applicant is required to submit an evaluation of the technical, economical,  
9 and environmental feasibility of using reclaimed water. Consistent with the  
10 DEP's review of utility reuse feasibility studies, the applicant's  
11 determination of feasibility is considered final, and the conclusions are not  
12 independently reviewed by District staff.

13        Additional clarification of District policy regarding reclaimed water  
14 for areas inside water resource caution areas is found in Section 3.2.3  
15 (Reclaimed Water Reuse Criteria) of the Basis of Review:

16  
17        In those areas of the District which are designated as Water  
18 Resource Caution Areas pursuant to Chapter 40E-23, reclaimed water  
19 is required to be used, unless it is demonstrated by the Applicant  
20 that its use is either not environmentally, economically, or  
21 technically feasible.

22  
23 Q.     Does the SFWMD provide any incentives for applicants to implement reuse  
24 projects, such as CUP credits?

25 A.     For projects which need a supplemental backup source of ground water or



1 surface water for use in the event that the reuse water system is temporarily  
2 not available, the District has issued 20 year duration permits for the backup  
3 supply. These longer term permits are only issued in areas where regional  
4 water supply plans have been completed. The SFWMD does not offer CUP credits.

5 Q. Does SFWMD provide any other financial incentives for applicants to  
6 implement reuse projects?

7 A. In addition to the District's planning and regulation activities, the  
8 District has an ongoing local partnership (cooperative funding) program as  
9 part of its outreach program. The District's partnership program is designed  
10 to provide financial as well as technical assistance to local governments and  
11 other organizations for water resource related stormwater and water  
12 conservation projects. The District has an established process for soliciting  
13 and considering requests by local governments and other organizations for  
14 cost-share projects. The District will cost-share up to 50 percent of the  
15 project's cost up to \$300,000. In the past, this program has provided  
16 approximately \$9.3 million for wastewater reuse projects.

17 Q. Are you aware if Gulf has applied for such funding?

18 A. Gulf applied for and received an Alternative Water Supply grant from the  
19 District for their Effluent Reuse Mixing System in the Fiscal Year 1997. The  
20 District will cost-share up to \$300,000 of the project's cost.

21 Q. What is the present policy of the District in issuing or modifying  
22 consumptive use permits (CUPS) to applicants who utilize reuse or have reuse  
23 available to their property?

24 A. All applicants for Water Use permits are required to evaluate the  
25 feasibility of utilizing reclaimed water as one of the conditions of issuance

1 of the permit. In those areas of the District which are designated as Water  
2 Resource Caution Areas, reclaimed water is required to be used, unless it is  
3 demonstrated by the Applicant that its use is either not environmentally,  
4 economically, or technically feasible. The applicant would also need to  
5 provide reasonable assurances that the requested allocation would not result  
6 in adverse resource impacts.

7 Q. Gulf presently provides reuse to the San Carlos golf course (San  
8 Carlos), the Vines County Club (The Vines), The Villages of Country Creek (The  
9 Villages), and has a contract with the River Ridge Development (River Ridge).  
10 Do these four customers have active CUPs? If yes, please state the permitted  
11 withdrawal and expiration of the permits.

12 A. San Carlos, the Vines, and the Villages have existing consumptive use  
13 permits. River Ridge has applied for a water use permit and the application  
14 is currently under review. San Carlos is allocated for annual consumption of  
15 104 million gallons per year (MG/yr) with a maximum month of 20.70 million  
16 gallons per month (MG/mo). The Vines is allocated for 89 MG/yr and a maximum  
17 month of 13.69 MG/mo, and the Villages is allocated for 147 MG/yr and a  
18 maximum month of 23.60 MG/mo.

19 Each of these allocations take into account the available reclaimed  
20 water. They also contain an additional volume of water as back-up allocation  
21 in the even that reclaimed water flows are interrupted. These permits expire  
22 December 15, 1997.

23 Q. How does the District make a determination of whether an applicant  
24 should retain a CUP or what the appropriate permitted withdrawal should be if  
25 reuse is used or available?

1 A. All applicants for Water Use permits are required to evaluate the  
2 feasibility of utilizing reclaimed water as one of the conditions of issuance  
3 of the permit. In those areas of the District which are designated as Water  
4 Resource Caution Areas, reclaimed water is required to be used, unless it is  
5 demonstrated by the Applicant that its use is either not environmentally,  
6 economically or technically feasible. The applicant would also need to  
7 provide reasonable assurances that the requested allocation would not result  
8 in adverse resource impacts.

9 If reuse is demonstrated by the Applicant to be infeasible, District  
10 staff's recommended allocation would be based on the calculated supplemental  
11 crop requirement for the proposed irrigation. If reuse is demonstrated by the  
12 Applicant to be feasible, District staff's recommendation would also take into  
13 account the amount of available reclaimed water and an additional volume of  
14 water as a back-up allocation, in the event that reclaimed water flows are  
15 interrupted.

16 Q. Would customers already receiving reuse be able to increase withdrawals  
17 if they chose to decrease their usage of reuse?

18 A. The customer would only be able to decrease their utilization of  
19 reclaimed water if they demonstrated that its use is either not  
20 environmentally, economically, or technically feasible. In addition, the  
21 applicant would need to provide reasonable assurances that a higher allocation  
22 would not result in adverse resource impacts.

23 Q. Does this conclude your testimony?

24 A. Yes, it does.

25

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Application for increase ) DOCKET NO. 960329-WS  
in rates and service )  
availability charges in Lee )  
County by Gulf Utility Company )  

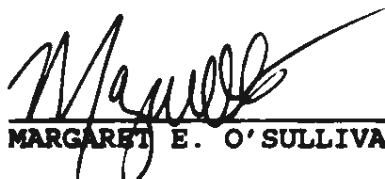
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In Re: Investigation of rates ) DOCKET NO. 960234-WS  
of Gulf Utility Company in Lee )  
County for possible overearnings ) FILED: January 9, 1997  

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Prefiled Direct Testimony of William Scott Burns, filed in this proceeding on behalf of the Staff of the Florida Public Service Commission on this date, has been furnished to Kenneth Gatlin, Esquire, Gatlin, Schiefelbein & Cowdery, P.A., 1709-D Mahan Drive, Tallahassee, Florida 32308 and Steve Reilly, Esquire, Office of Public Counsel, 111 West Madison Street, Tallahassee, Florida 32399-1400, by U.S. Mail, this 9th day of January, 1997.



MARGARET E. O'SULLIVAN, Staff Counsel

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