

# MANATEE COUNTY GOVERNMENT

## AGENDA MEMORANDUM

40

<b>SUBJECT</b> Report on Water Supply Status and Water Conservation Issues	<b>TYPE AGENDA ITEM</b> Regular
<b>DATE REQUESTED</b> January 9, 2001	<b>DATE SUBMITTED/REVISED</b> January 5, 2001
<b>BRIEFINGS?/WHO?</b> None	<b>CONSEQUENCES IF DEFERRED</b>
<b>DEPARTMENT/DIVISION</b> Public Works Water Division	<b>AUTHORIZED BY TITLE</b> Dave Rothfuss Interim Public Works Director
<b>CONTACT PERSON TELEPHONE/EXTENSION</b> John Zimmerman/Gwen Pagington X5284/X5428	<b>PRESENTER/TITLE TELEPHONE/EXTENSION</b> John Zimmerman, Water Manager Extension 5284
<b>ADMINISTRATIVE APPROVAL</b>	

**ACTION DESIRED**

INDICATE WHETHER <sup>1</sup>REPORT or <sup>2</sup>DISCUSSION, <sup>3</sup>FORM OF MOTION, or <sup>4</sup>OTHER ACTION REQUIRED:

Report on the water supply status and discussion of water conservation issues.

**ENABLING/REGULATING AUTHORITY**

Federal/State law(s), administrative ruling(s), Manatee County Comp Plan/Land Development Code, ordinances, resolutions, policy.)

Manatee County Comprehensive Plan establishes the level of service for water supply at 65gpcpd for residential use and prohibits the use of drinking water for landscape irrigation and encourages the use of Xeriscape and water conservation by all residents.

**BACKGROUND/DISCUSSION**

See Page Two

HAS COUNTY ATTORNEY REVIEW BEEN REQUESTED? Indicate "NO" or "YES" @ right. (If "NO," proceed to 1) below; and if "YES," proceed to 2) below.)

**APPROVED IN OPEN SESSION** <sup>No</sup>

**JAN 09 2001**

**BOARD OF COUNTY COMMISSIONERS**  
**MANATEE COUNTY, FLORIDA** N/A

1) IF "NO" TO ABOVE,  
A) PLEASE EXPLAIN BELOW: (see also following section 1B) re: contract, agreement, lease, etc.:

B) IF A CONTRACT, AGREEMENT, LEASE OR OTHER DOCUMENT WAS PREVIOUSLY APPROVED, STATE YEAR OF LAST USE @ RIGHT:

2) IF "YES" TO FIRST QUESTION IN THIS SECTION,  
A) HAS ENTIRE MATTER, OR ONLY A PORTION, BEEN REVIEWED? IF ONLY A PORTION, WHICH PORTION?  
B) HAVE ALL COMMENTS/SUGGESTIONS RAISED BY COUNTY ATTORNEY BEEN ADDRESSED/INCORPORATED; IF NOT, PLEASE EXPLAIN. A COPY OF FINAL COUNTY ATTORNEY MEMO RE THIS MATTER **MUST BE ATTACHED** (if comments were verbal, so indicate.)

<b>ATTACHMENTS: (List in order as attached)</b> 1. Executive Director Order No. SWF 00-18 2. November 20, 2000 letter from SWFWMD & Action List 2. December 22, 2000 letter from SWFWMD	<b>INSTRUCTIONS TO BOARD RECORDS:</b>  none
<b>COST</b> N/A	<b>SOURCE (ACCT# &amp; NAME)</b> N/A
<b>COMMENTS</b> None	<b>AMT./FREQ. OF RECURRING COSTS (ATTACH FISCAL IMPACT STATEMENT)</b> None

46

**BACKGROUND/DISCUSSION:**

- The Manatee County Comprehensive Plan, adopted in 1990, contained the objective to reduce potable water use to 110 gpcpd by 2001 (Obj 3.2.3, policy 9.5.1.1) and policies requiring all users to use the lowest quality of water for irrigation through stormwater reuse, gray water, shallow wells or reclaimed water systems (3.2.3.2, 9.4.4.6, 9.4.4.9, 9.6.1.3, and 9.1.5.4). Policy 9.6.1.3 prohibits the use of potable water for landscape irrigation in new development. Policies 3.2.3.3 and 3.2.3.4 require the use of native xeric plants in post development landscapes and the promotion of Florida Yards.
- Part II, Manatee Code of Ordinances, Chapter 2-31, Article III establishes emergency drought condition water procedures. under these procedures the Board can adopt temporary conservation rates for all users in the drought area. In addition, the code requires local enforcement by the sheriff of water shortage requirements established by the Southwest Florida Water Management District.
- Drought conditions began to develop in the region and for Manatee County in October, 1999, these conditions have continued to date and the severity of the drought has continued to intensify. Rainfall deficits for the Lake Manatee watershed for the period October, 1999 to September, 2000 exceed 15 inches.
- In May, 2000, the district issued Executive Director Order No. SWF 00-18 restricting landscape irrigation to one day per week. Additional orders have extended the restrictions into 2001 and reduced the establishment period for new landscape materials in certain areas of the District.
- In November, 2000, the district sent an emergency notice to all local Government officials with a local government action list. The same letter and action list were sent to all water use permit holders.
- Public Works staff will report to the Board on the local water supply status and review the effectiveness of local conservation efforts, the local government action list, and discuss water conservation issues.

MANATEE COUNTY GOVERNMENT

**M E M O R A N D U M**

**DATE:** January 5, 2001

**TO:** Board Records

**FROM:** Evelyn Lloyd, Administrative Agenda Coordinator *Evelyn*

**SUBJECT: ADDITIONAL AGENDA MATERIALS FOR THE 1/9/01 BOARD MEETING**

---

Attached are the agenda materials which were not available at the time of the initial distribution of the agenda for January 9, 2001:

**PUBLIC WORKS**

40. **Water Conservation Issues** - Agenda packet is attached

Please insert the materials appropriately.

If you have any questions, or need any additional information, please let me know. Thank you.

/eml

Attachment

cc: Board of County Commissioners  
Ernie Padgett, County Administrator  
Teddy N. Williams, Jr., County Attorney  
James W. Seuffert, Director, Financial Management Department  
Bradenton Herald & Sarasota Herald-Tribune  
Reading File, Counter Copy, Office Copy

County Administrator's Office - X3717  
"To Serve With Excellence"

[ [Home](#) ] [ [News Releases](#) ]

## SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

### IN RE:

### DECLARATION OF WATER SHORTAGE EMERGENCY RELATING TO REGIONAL HYDROLOGIC CONDITIONS AND TEMPORARY MODIFICATION OF EXISTING WATER SHORTAGE RESTRICTIONS

#### EXECUTIVE DIRECTOR ORDER NO. SWF 00-18

E.D. Vergara, Executive Director of the Governing Board of the Southwest Florida Water Management District ("District"), received evidence and information from District Staff regarding rapidly changing hydrologic conditions during an ongoing drought with a current and anticipated impact on regional water resources that constitutes a public health, safety and welfare emergency. Based upon that evidence and information, the Executive Director finds and determines:

#### FINDINGS OF FACT

1. Districtwide, rainfall amounts have been below normal monthly values since December 1999.
2. During the past twelve months, the prevailing La Niña weather pattern has brought only 83% of the average annual rainfall to the region encompassed by the District. As a result of this rainfall deficit, hydrologic indicators are generally below values normally experienced in late May (the typical end of the region's annual dry season).
3. As of April 17, 2000, average lake levels were as follows: 3.35 feet below adopted Minimum Low Management (MLM) levels in the northern counties of the District, 2.24 feet below MLM in the Tampa Bay area, 0.23 foot below MLM in the Polk Uplands area, and 1.95 feet below MLM in the Lake Wales area. The MLM level of a lake reflects conditions that are generally experienced in late May during a normal rainfall year.
4. As of March 2000, 24 of 75 key lakes were below their adopted Minimum Extreme Low Management levels (MELMs) and the level on one lake was below the period-of-record low reading. The MELM level of a lake reflects conditions that are generally experienced in late May during a drought year.
5. As of April 17, 2000, Ground Water Index (GWI) values were as follows: 4 in the northern counties of the District, 4 in the Tampa Bay area, and 19 in the southern counties of the District. According to District staff, a GWI value of less than 10 is considered to be "poor" and a GWI value between 10 and 49 is considered to be "fair."
6. As of April 17, 2000, 15 of the 29 key ground-water monitoring stations were at or below monthly record low levels. A monthly record low represents the lowest value a station has experienced during the month of interest.
7. As of April 17, 2000, six (6) key ground-water monitoring stations were at or below period-of-record low levels, with four (4) of these six stations located in the northern counties of the District. A period-of-record low represents the lowest value a station has experienced during its entire period of record.
8. As of April 17, 2000, average stream flows were as follows: 0 percentile in the northern portion of the District, 7 percentile in the Tampa Bay area, and 30 percentile in the southern portion of the District. Within the southern portion of the District, both key Peace River stations had a value of 0 percentile. A value of 0 percentile does not necessarily represent a no-flow condition; rather, it indicates that stream flow is at or

(USGS), a stream flow value of 25 or less is considered "below normal." According to the USGS, a stream flow value in the range of 25 to 75 is considered "normal."

9. As of April 17, 2000, both the Hillsborough River near Zephyrhills and the Peace River at Arcadia were both experiencing record low discharge rates. This assessment is based on data posted on the USGS website.

10. As of April 24, 2000, data posted on the USGS website indicated that the Hillsborough River near Zephyrhills and Peace River at Arcadia stations were still registering values below those experienced during the same time period during the 1994 drought, as were the other three major Public Supply reservoirs within the District (Shell Creek, Lake Manatee, and Evers Lake).

11. The National Drought Mitigation Center indicates that the entire 16-county region encompassed by the District is in a drought.

12. Current short-term and mid-term forecasts from the National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center (CPC) and associated agencies indicate that the region will continue to experience below normal rainfall and above normal temperatures through the remainder of April and May.

13. Current long-lead forecasts from the CPC indicate that rainfall will return to seasonally normal amounts in June and trend toward wet conditions during July. Long-lead forecasts also indicate that above-normal rainfall will continue in August, September, and October.

14. The District's water shortage plan was adopted as Rules of the District on November 19, 1984. The Water Shortage Rule is codified in Chapter 40D-21, Florida Administrative Code (F.A.C.).

15. Chapter 40D-21.231 (1), F.A.C. states that the District may declare a water shortage for any affected source class and may declare a water shortage for any geographic portion of the District which impacts that source class.

16. The District's current regional water shortage restrictions were declared and modified by Board Orders 92-12, 92-21, 92-60, and SWF 93-105 in accordance with Chapter 40D-21, F. A. C.

17. Current Board Orders specifically request that local governments assist the District with the enforcement of water restrictions pursuant to Section 373.609, Florida Statutes (F.S.), and the provisions of Section 373.609, F.S. can also be invoked during a water shortage emergency.

18. In addition to current regional restrictions, several local governments have chosen to declare stricter local water restrictions than those ordered by the District within their jurisdictions in response to local short-term and long-term water supply concerns.

19. On March 28, 2000, the District's Governing Board passed a resolution that: reaffirmed current regional restrictions, expressed support for local governments taking local action in response to local water supply concerns, and requested additional voluntary water conservation. Subsequently, District staff has determined that voluntary measures may not be sufficient to address current hydrologic conditions.

20. District staff has determined that the provisions of Sections 373.175 and 373.246, F. S. and Part II of Chapter 40D-21, F.A.C. are now not sufficient to protect the public health, safety or welfare of the 16-county region.

#### CONCLUSIONS OF LAW

21. The Executive Director of the District is duly authorized by Subsections 373.119(2), 373.175(4) and 373.246(7), F.S. and Rule 40D-21.331(5), F.A.C. to declare a water shortage emergency and to issue emergency orders reciting the existence of an emergency and requiring that action be taken as deemed necessary to meet the emergency.

22. Chapter 40D-21.051(1), F.A.C. defines a "water shortage" as any "situation in all or part of the District when insufficient water is available to meet the present and anticipated needs of the permit system, or when conditions are such as to require temporary reduction in total use within a particular area to protect water resources from serious harm."

23. Section 373.609, F.S. requires local governments to assist water management districts with the enforcement of District Rules upon request.

## ORDER

Therefore, based upon the foregoing Findings of Fact and Conclusions of Law, it is hereby Ordered that:

1. A water shortage emergency is declared for the entire 16-county region that encompasses the District.
2. Executive Director Order Numbers SWF 00-16 and SWF 00-17 are not affected by this regional declaration.
3. Board Orders 92-12, 92-21, 92-60, and SWF 93-105 remain in effect, except as temporarily modified by either stricter, locally imposed restrictions or the additional District restrictions listed below.
4. The additional restrictions listed below may be temporarily modified or superceded by stricter, locally imposed water restrictions.
5. The District's variance or "approved alternative irrigation plan" process shall remain available to impacted parties (such as local utilities with system constraints that lead to water pressure concerns).
6. Variances and approved alternative irrigation plans previously issued in relation to Board Orders 92-12, 92-21, 92-60, and SWF 93-105 are temporarily modified by additional District restrictions as indicated below.
7. Irrigation of existing lawns and landscaping shall be temporarily limited to once per week as follows, unless modified or superceded by stricter local water restrictions:
  - a. All properties (single family and multifamily residences, industrial and commercial establishments, schools, federal/state/local government facilities, and other institutions) with an even address ("house number" ending with a 0, 2, 4, 6, or 8) may only water on Tuesdays;
  - b. All properties (single family and multifamily residences, industrial and commercial establishments, schools, federal/state/local government facilities, and other institutions) with an odd address ("house number" ending with a 1, 3, 5, 7, or 9) may only water on Sundays; and,
  - c. All properties (single family and multifamily residences, industrial and commercial establishments, schools, federal/state/local government facilities, and other institutions) with a valid District variance or alternative irrigation plan may only water each section of the property on the first calendar day of the week currently assigned to that section of the property (for example, if an alternative irrigation plan stipulates that a certain section of the property can be watered on Wednesdays and Sundays, it may now only be watered on Sundays);
8. Irrigation of existing lawns and landscaping shall also be subject to the following restrictions and exemptions, unless modified or superceded by stricter local water restrictions:
  - a. Irrigation shall be accomplished during the hours of 12:01 a.m. to 10 a.m. or the hours of 4 p.m. to 11:59 p.m., and shall be limited to the minimum quantity necessary to apply no more than 3/4 inch of water to each zone, once, on each allowable watering day;
  - b. Flower beds, vegetable gardens, and other non-lawn areas may be irrigated as needed using handwatering, microirrigation, and other forms of horticulturally-appropriate "low volume" irrigation without respect to the day of week or time of day; and,
  - c. All other standard exemptions from the District's lawn and landscape restrictions remain in effect, except as temporarily modified below.
9. Newly planted lawn and landscape areas may be watered on any day of the week for a 60-day establishment period that begins the day that the plant material is installed, unless modified or superceded by stricter local water restrictions. With the exception of water use on the day of plant installation, all

10. With respect to lawn and landscape watering, District staff shall also request that all properties voluntarily conserve reclaimed water by only irrigating during the hours of 12:01 a.m. to 10 a.m. or the hours of 4 p.m. to 11:59 p.m. District staff shall request that this water use be limited to the minimum quantity necessary to apply no more than 3/4 inch of water to each zone. In addition to this voluntary conservation request, local governments and other reclaimed water utilities may continue to restrict reclaimed water use as needed.

11. All agricultural operations shall do the following, unless modified or superceded by stricter local water restrictions:

a. Immediately review the water conservation plan associated with each corresponding Water Use Permit and implement all appropriate measures contained in the plan;

b. Use best management practices as recommended by the University of Florida's Institute of Food and Agricultural Sciences (IFAS), the USDA Natural Resource Conservation Service (NRCS), and other appropriate science-based information sources for irrigation and other water use activities that are essential to their operation;

c. Temporarily curtail all water use activities that are not essential to their operation; and,

d. Continue to abide by all applicable District restrictions (including irrigation time-of-day and surface water run-off limits) and standard exemptions (including crop heat stress and chemical applications), except as temporarily modified below.

12. All agricultural operations shall specifically do the following, unless modified or superceded by stricter local water restrictions:

a. If equipped to use a combination of high volume (i.e., surface irrigation, seepage irrigation, and impact sprinklers) and low volume (i.e., drip, micro-jet, and capillary mat) irrigation technologies, low volume irrigation technology shall be used when available, practical and appropriate; and

b. Limit water use for pre-planting of row crops (such as bed preparation and fumigation) on any particular parcel to a period not to exceed 30 days of continuous use prior to planting.

13. With respect to agricultural operations, District staff shall:

a. Apply the heat stress exemption to nurseries that may need to apply water to containerized plant material immediately prior to shipping;

b. Continue to coordinate with appropriate professional associations, IFAS and NRCS as a means of both communicating and expanding information about best-available water conservation techniques;

c. Strategically review Water Use Permits for compliance with water conservation plans and other conservation-related requirements; and,

d. Increase field observation activities in regards to conservation-related requirements.

14. All golf courses, other athletic and recreational establishments, and cemeteries shall do the following, unless modified or superceded by stricter local water restrictions:

a. Immediately review the water conservation plan associated with each corresponding Water Use Permit and implement all appropriate measures contained in the plan;

b. Use best management practices as recommended by IFAS, NRCS and other appropriate science-based information sources for turfgrass, landscape and other water use activities that are essential to their operation;

c. Temporarily curtail all water use activities that are not essential to their operation;

d. Continue to accomplish normal supplemental irrigation during the hours of 12:01 a.m. to 10 a.m. or the hours of 4 p.m. to 11:59 p.m.; and,

e. Continue to abide by all other applicable existing District restrictions and exemptions, except as temporarily modified below.

15. All golf courses, other athletic and recreational establishments, and cemeteries shall specifically do the following, unless modified or superceded by stricter local water restrictions: a. Temporarily reduce the irrigation of all cemetery turf and each golf course fairway, rough, or non-play area to no more than one application per week, and apply no more than 3/4 inch of water per application;

b. Temporarily reduce the irrigation of each golf course green and tee to no more than 3 applications per week; and

c. Raise mowing heights to the maximum acceptable level as a means of increasing grass drought tolerance.

16. With respect to golf courses, other athletic and recreational establishments, and cemeteries, District staff shall:

a. Continue to coordinate with appropriate professional associations, IFAS and NRCS;

b. Strategically review Water Use Permits for compliance with water conservation plans and other conservation-related requirements; and,

c. Increase field observation activities in regards to conservation-related requirements.

17. All mining, industrial and commercial establishments, including hospitality businesses, shall do the following, unless modified or superceded by stricter local water restrictions:

a. Immediately review the water conservation plan associated with each corresponding Water Use Permit and implement all appropriate measures contained in the plan;

b. Use best management practices for water use activities that are essential to their operation; and,

c. Temporarily curtail all water use activities which are not essential to their operation.

18. With respect to mining, industrial and commercial establishments, including hospitality businesses, District staff shall:

a. Continue to coordinate with appropriate professional associations, IFAS and NRCS;

b. Strategically review Water Use Permits for compliance with water conservation plans and other conservation-related requirements; and,

c. Increase field observation activities in regards to conservation-related requirements.

19. All schools, federal/state/local government facilities and other public institutions shall, unless modified or superceded by stricter local water restrictions:

a. Immediately review the water conservation plan associated with any corresponding Water Use Permit and implement all appropriate measures contained in the plan;

b. Use best management practices for water use activities that are essential to their operation;

c. Temporarily curtail all water use activities that are not essential to their operation; and,

d. Eliminate the use of any fountain or other water feature that does not recycle water and does not provide a necessary water quality benefit.



20. All local governments and water suppliers shall, unless modified or superceded by stricter local water restrictions:

- a. Immediately review the water conservation plan associated with each corresponding Water Use Permit and implement all appropriate measures contained in the plan;
- b. Aggressively enforce current District and locally-imposed water restrictions, directly or via support from local enforcement agencies;
- c. Determine the status of their primary and back-up water sources, and report any current or projected supply problems to the District;
- d. Implement any other appropriate local water shortage actions. Such actions may include, but are not limited to: heightened customer education, adoption of additional local water restrictions, and temporary curtailment of any maintenance practice which is not immediately vital to public health and; and,
- e. Consider the use of emergency potable or reclaimed water rates as an additional short-term water conservation tool.

21. All local governments shall also:

- a. Consider waiving the requirement for the installation of lawn and landscape materials prior to issuance of a Certificate of Occupancy on a temporary basis; and,
- b. Consider incorporating "Build Green and Profit" and Xeriscape principles into all applicable local codes as a means of minimizing the impact of future droughts.

22. With respect to local governments and water suppliers, District staff shall continue working with appropriate agencies to ensure: coordinated messaging, enhanced restriction enforcement, and other appropriate cooperative water conservation efforts.

23. These temporary additional District restrictions become effective on Monday, May 1, 2000 at 12:01 a.m. and may be rescinded at any time by the Executive Director.

24. These temporary additional District restrictions shall end on June 30, 2000 unless extended by order of the District Governing Board.

DONE AND ORDERED in Hernando County, Florida, as of April \_\_\_\_, 2000.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

By: \_\_\_\_\_ E.D. Vergara Executive Director

Filed this day of April, 2000.

\_\_\_\_\_ Agency Clerk

Southwest Florida Water Management District  
2379 Broad Street, Brooksville, FL 34604-6899  
352-796-7211 or 800-423-1476 (FL only)  
E-Mail: Executive, Webmaster



An Equal Opportunity Employer

# Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899  
(352) 796-7211 or 1-800-423-1476 (FL only)  
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)  
World Wide Web: <http://www.swfwmd.state.fl.us>

**Tampa Service Office**  
7601 Highway 301 North  
Tampa, Florida 33637-6759  
(813) 985-7481 or  
1-800-836-0797 (FL only)  
SUNCOM 578-2070

**Bartow Service Office**  
170 Century Boulevard  
Bartow, Florida 33830-7700  
(863) 534-1448 or  
1-800-492-7862 (FL only)  
SUNCOM 572-6200

**Venice Service Office**  
115 Corporation Way  
Venice, Florida 34292-3524  
(941) 486-1212 or  
1-800-320-3503 (FL only)  
SUNCOM 526-6900

**Lecanto Service Office**  
3600 West Sovereign Path  
Suite 226  
Lecanto, Florida 34461-8070  
(352) 527-8131  
SUNCOM 667-3271

November 20, 2000

Dear Public Supply Water Use Permit Holder:

Based upon the water resource monitoring in your area, the Water Management District has serious concerns about the availability of sufficient water supplies to meet the needs of water users through this severe two-year drought. This summer's rains did not replenish water resources in the District's 16-county region. As a result, hydrologic conditions are declining. Aquifer levels range from two feet to more than six feet below the low end of their normal ranges. Rivers and lakes have extraordinarily low flow rates and levels. With the dry season normally lasting until June, further declines in hydrologic conditions are expected. Presently, we are tracking conditions which could produce a more severe scenario than the record lows of last spring.

To address these conditions, the District's regional water shortage emergency restrictions remain in effect. These emergency measures limit lawn irrigation to one application per week and place additional restrictions on agriculture, golf courses, and other water users. In communities where local water restrictions are in effect, the stricter measures apply. The District's emergency restrictions also mandate intensified District compliance efforts for all permit holders and renew our request for local enforcement involving non-permitted water users (such as individual homes, churches, and small businesses).

In addition to an increased emphasis on enforcement, options being pursued to help mitigate drought impacts include extensive public awareness messages and possible short-term supply augmentation. Some utilities have already identified potential sources for supply augmentation; please contact BJ Jarvis at our Brooksville office for specific information.

The purpose of this letter is to urge you to consider action, above and beyond long-term water conservation and emergency actions that you may have already taken. In addition to regional actions by the District, we believe it is vital that each water supplier consider definite steps to ensure the protection of public safety, health, and welfare in the coming months. A list of such steps is enclosed for your consideration. Also enclosed is a copy of the District's most recent media advisory. For weekly updates or additional information, please visit the District's website at [www.swfwmd.state.fl.us](http://www.swfwmd.state.fl.us) and click on the "Drought Continues" icon.

The District appreciates your support in these challenging times. Please let me know how the District can help you to ensure adequate water to your service area.

Sincerely,

E. D. "Sonny" Vergara  
Executive Director

EDV:BJJ

Enclosures: 2 (Public Supply Suggestion List and Media Advisory)

November 20, 2000

Dear Local Government Official:

Based upon the water resource monitoring in your area, the Water Management District has serious concerns about the availability of sufficient water supplies to meet the needs of all water users through this severe two-year drought. We need your help at the local level to combat effects of the drought. This summer's rains did not replenish water resources in the District's 16-county region. As a result, hydrologic conditions continue to decline. Throughout the District, aquifer levels range from two feet to more than six feet below the low end of their normal ranges. Rivers and lakes have extraordinarily low flow rates and levels. With the dry season normally lasting until June, further declines in hydrologic conditions are expected. Presently, we are tracking conditions which could produce a more severe scenario than the record lows of last spring.

To address these conditions, the District's regional water shortage emergency restrictions remain in effect. These emergency measures limit lawn irrigation to one application per week and place additional restrictions on agriculture, recreation, and other water users. The emergency restrictions also mandate intensified District compliance efforts and renew our request for enforcement assistance from local governments.

I am asking for your help in locally addressing this serious water supply situation brought about by the drought. In addition to regional actions by the District we believe it is also vital that each local government continue to take definite steps, appropriate to its specific circumstances, to ensure the public safety, health, and welfare in the coming months. A list of these steps is enclosed for your immediate consideration. Also enclosed is a copy of the District's most recent drought advisory. For weekly updates or additional information, please visit the District's website at [www.swfwmd.state.fl.us](http://www.swfwmd.state.fl.us) and click on the "Drought Continues" icon.

The District appreciates your support in these challenging times. Please let me know how the District can help you to assure adequate water in your area.

Sincerely,

E. D. "Sonny" Vergara

Executive Director

EDV:BJJ

Enclosures

---

## **LOCAL GOVERNMENT**

### ***WATER SHORTAGE (DROUGHT CONTINGENCY) MANAGEMENT***

#### **ACTION LIST**

##### **Immediate Action:**

- Evaluate the effectiveness of existing local responses:
- water conserving rate structures,
- local enforcement of water shortage restrictions,
- communication vehicles (i.e., press releases, bill inserts, speaking engagements) used to communicate the severity of the drought, and
- other short-term demand management efforts, such as fast-track expansion of existing plumbing rebate or retrofit programs.
- Examine the status of primary and back-up water supplies expected to meet demands through July 2001.
- Continue and enhance enforcement of water shortage restrictions.

##### **Planning Activities:**

- Designate primary and back-up contacts on water shortage issues. Supply contact information to the District's Water Shortage Coordinator (fax number 352-544-5148 or e-mail address [Lois.Sorensen@swfwmd.state.fl.us](mailto:Lois.Sorensen@swfwmd.state.fl.us)).
- Coordinate projected water supply shortfalls with back-up source.
- Review and update ordinances and internal procedures to enforce water restrictions.
- Review and update the internal procedures to identify any distribution problems.
- Review and update crisis communication plans related to potable water service.
- Identify key points (supply and/or demand "triggers") that may indicate the need for additional local emergency action.
- Prepare mechanisms to impose an emergency rate surcharge.
- Prepare mechanisms needed for the possible temporary suspension of the enforcement of certain local codes and deed restrictions which require extensive new plantings.
- Prepare for possible emergency water service/pressure cut-backs.
- Institute additional measures appropriate to mitigate drought impacts.

11/20/2000

[ Home ] [ Water Restrictions ] [ News Releases ]

December 22, 2000

Dear Local Government Official:

I am writing to inform you about recent changes to the District's regional water shortage emergency restrictions.

At their December 19, 2000 meeting, the District's Governing Board received information about worsening hydrologic conditions. These conditions are becoming particularly acute in the counties served by Tampa Bay Water and the communities currently served by the Peace River / Manasota Regional Water Supply Authority. In response to these conditions, taking into account both seasonal variations in watering needs and current irrigation standards, the following restriction changes are effective immediately:

- The establishment period exemption for turfgrass shall immediately be reduced to 30 calendar days in Hillsborough, Pasco and Pinellas counties as well as for Charlotte County Utilities customers (retail and wholesale), the Lake Susie community in DeSoto County, and the North Port area of Sarasota County. During the exemption period, new turfgrass sod, seed, plugs and sprigs may only be watered every other day. Properties with an even address ("house number") may water new turfgrass on only even-number calendar days, and properties with an odd address or without a physical address may water on only odd-number calendar days. Any stricter local restrictions still apply.
- The District's current low-volume irrigation exemption for non-turfgrass plant materials remains unchanged. This standard exemption should be used to water any new or established non-turf plant materials that need irrigation more than once per week.
- All local governments in the effected areas shall review and consider modification of the applicable ordinances and local codes to require appropriate use of low-volume irrigation technology and proper irrigation system zoning.

For weekly media advisories or additional information, please visit the District's website and click on the "Drought Continues" icon.

The District appreciates your ongoing support in these challenging times.

Sincerely,

E. D. "Sonny" Vergara

Executive Director

EDV:LAS

# REPORT ON WATER SUPPLY STATUS AND WATER CONSERVATION ISSUES January 9, 2001

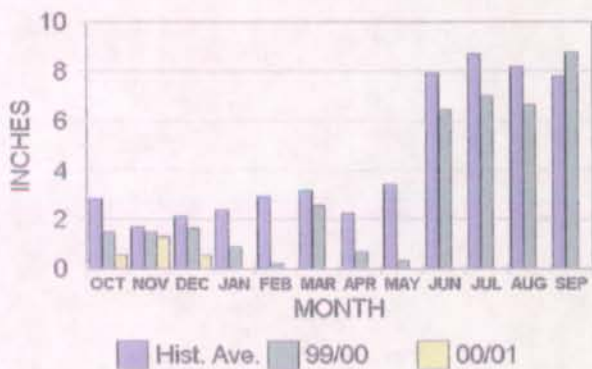
- HYDROLOGIC CONDITIONS
- LOCAL GOVERNMENT ACTION LIST
- WATER RESTRICTIONS
- WATER CONSERVATION RATES
- WATER CONSERVATION OPTIONS
- EMERGENCY DROUGHT WATER RATES

1

# HYDROLOGIC CONDITIONS

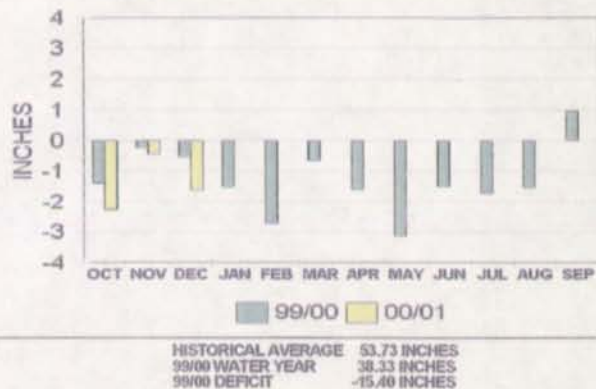
2

## RAINFALL LAKE MANATEE WATERSHED



3

## MONTHLY RAINFALL DEVIATION FROM NORMAL



4

January 2, 2001 04847 10:01 AM EST

# U.S. Drought Monitor



Map shows current widespread drought. Ext of conditions may vary.

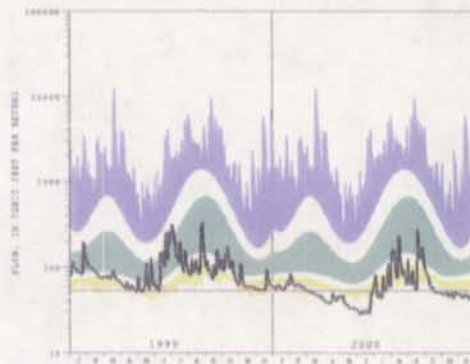
D0 - No Drought  
 D1 - Slight Drought  
 D2 - Moderate Drought  
 D3 - Severe Drought  
 D4 - Extreme Drought  
 D5 - Exceptional Drought

DROUGHT RISK INDEX  
 0 - 100% (Very High)  
 10 - 20% (High)  
 20 - 30% (Moderate)  
 30 - 40% (Low)  
 40 - 50% (Very Low)

Released Thursday, Jan 4, 2001  
 Author: Mark Swadlow

5

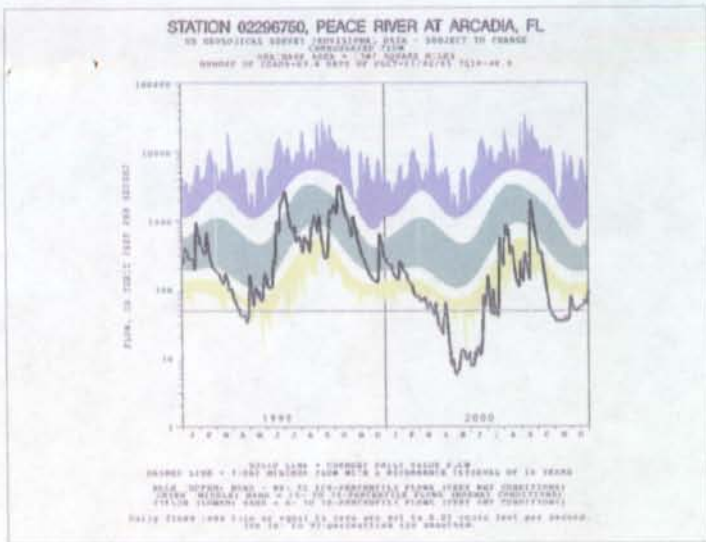
STATION 023003000, HILLSBOROUGH R NR ZEPHYRHILLS, FL  
 AN OBSERVATIONAL STATION (WATER GAUGE) - SUBJECT IN CARE  
 OPERATIONAL SINCE 1950  
 MONITORING PERIOD 1950-01-01 TO 2000-12-31



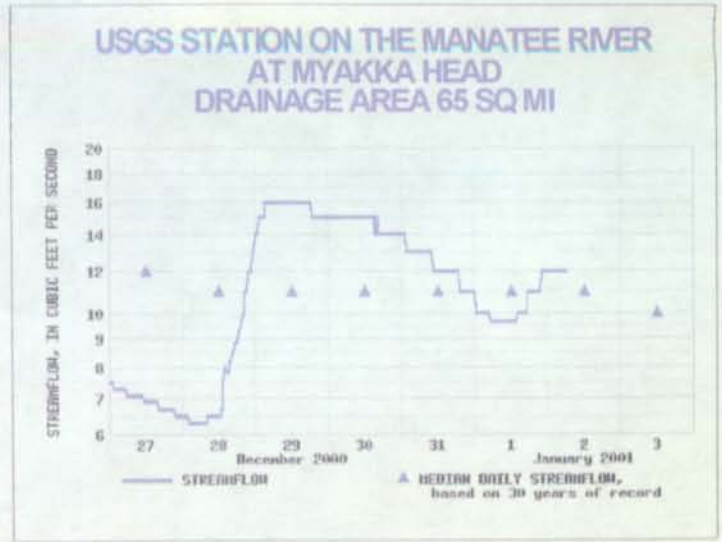
15-YEAR MOVING AVERAGE  
 30-YEAR MOVING AVERAGE  
 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000

6

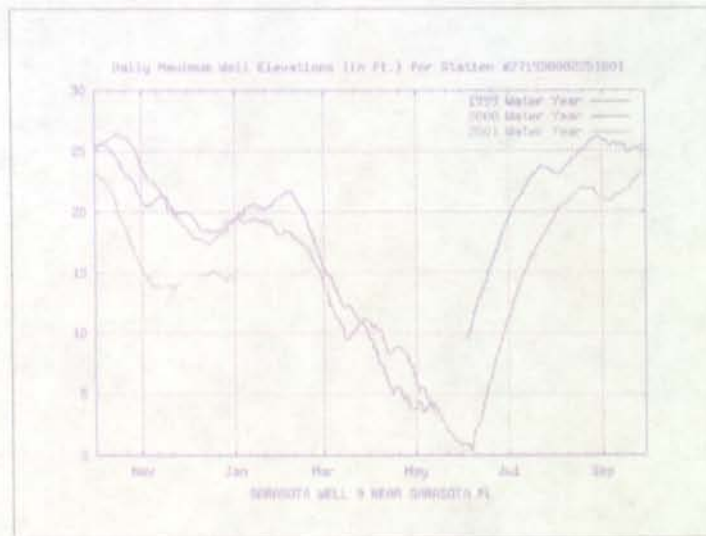
EXHIBIT DG  
 BOC  
 WATER  
 SLIDE 1/9/01



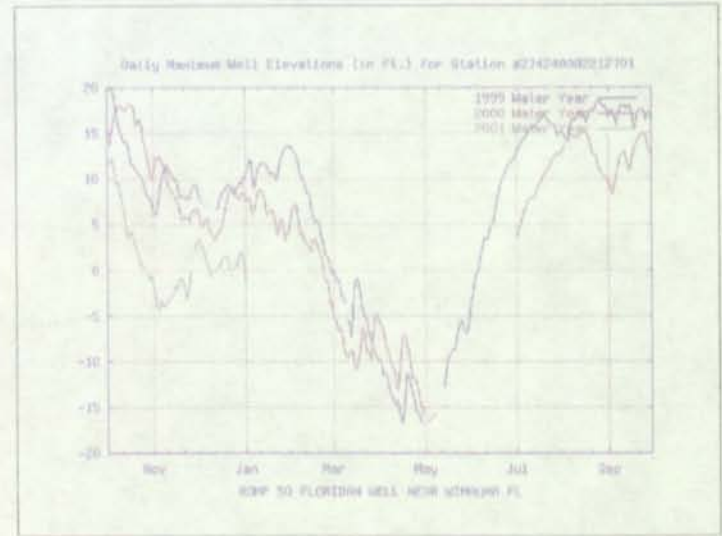
7



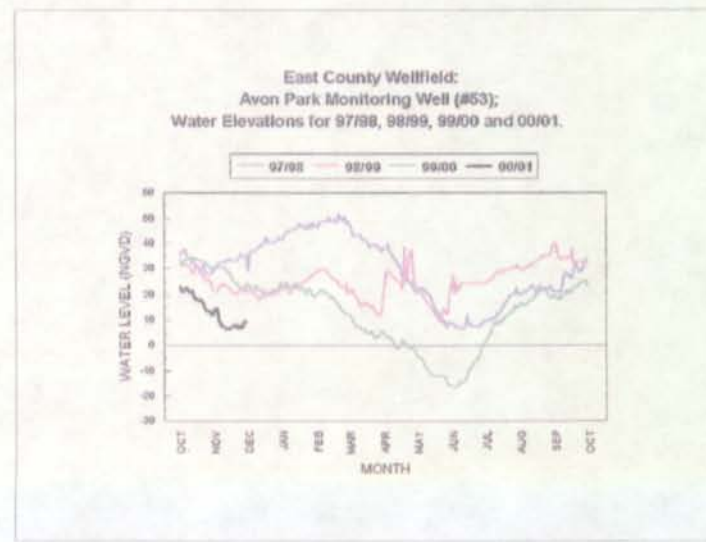
8



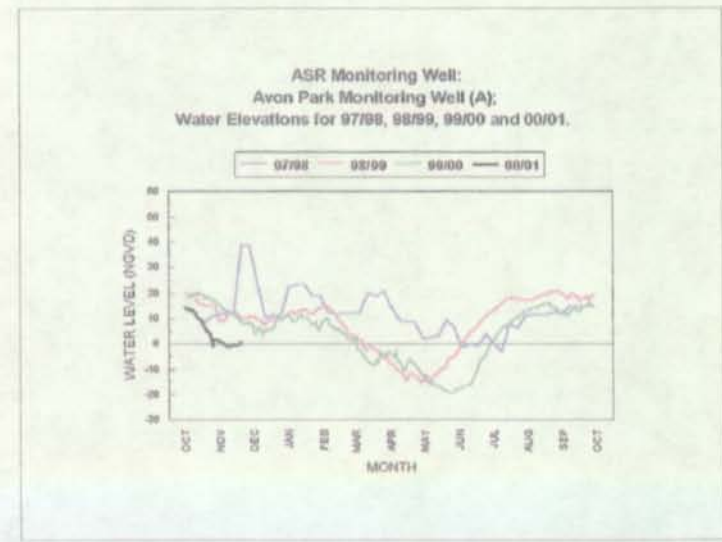
9



10



11



12

**Lake Manatee Elevations:**  
 Years: 1984/1985 drought, 1988/1989 drought, 1999/2000, 2000/2001 and 16 year average.



13

Climate Outlook  
 January 2001  
 Temperature



Climate Outlook  
 January 2001  
 Precipitation



Climate Outlook  
 January 2001 - March 2001  
 Temperature



Climate Outlook  
 January 2001 - March 2001  
 Precipitation



Source: The Weather Channel, 11/2000

14

**LOCAL GOVERNMENT  
 WATER SHORTAGE (DROUGHT CONTINGENCY) MANAGEMENT  
 ACTION LIST**

- Evaluate the effectiveness of existing local responses;
  - Water Conservation Rates,
  - Local enforcement of water shortage restrictions,
  - Public Information Program, and
  - Short term demand management efforts, i.e. reuse programs, plumbing rebates or retrofits programs, etc.
- Examine the status of primary and back-up water supplies expected to meet demands through July 2001.
- Continue and enhance enforcement of water shortage restrictions.
- Update ordinances and procedures to enforce restrictions.
- Prepare mechanism to impose an emergency rate surcharge.
- Identify key points (supply and/or demand triggers) that may indicate the need for additional local emergency action.
- Prepare mechanisms needed for the possible suspension of the enforcement of certain codes and deed restrictions which require extensive new plantings.

15

**WATER  
 RESTRICTIONS**

16

**CURRENT MANDATORY WATER  
 CONSERVATION RESTRICTIONS**

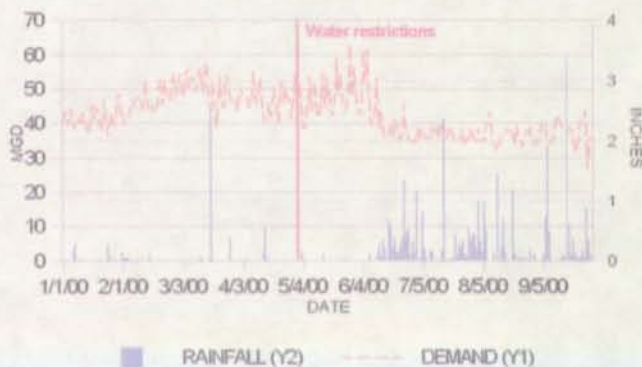
**ONE DAY A WEEK WATERING**

**ODD NUMBERED ADDRESSES                      SUNDAY**  
**EVEN NUMBERED ADDRESSES                      TUESDAY**

Watering only from 12:01am to 10 am or 4pm to 11:59pm  
 Newly Planted lawn and landscape areas maybe watered any day of the week for 60day establishment period.  
 Washing of paved surfaces not permitted except for health/safety reasons.  
 Flower beds, vegetable gardens, and other non-lawn areas maybe irrigated as needed using hand watering, microirrigation, or other low volume methods.

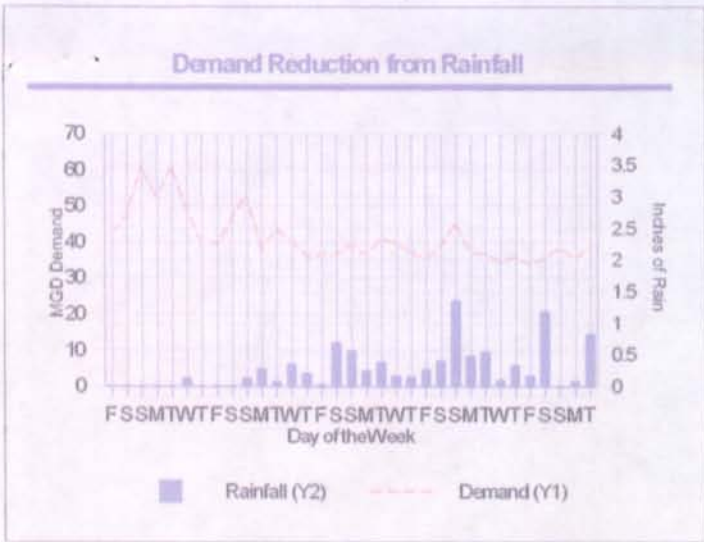
17

**Demand vs Rainfall for Year 2000.**

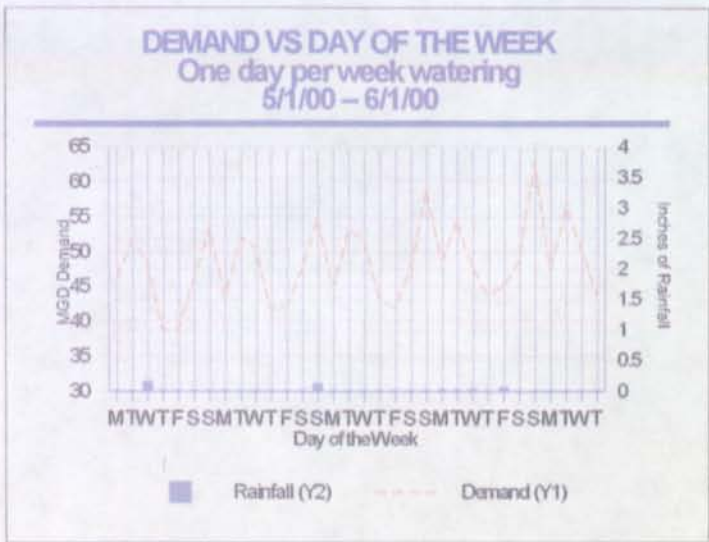


18

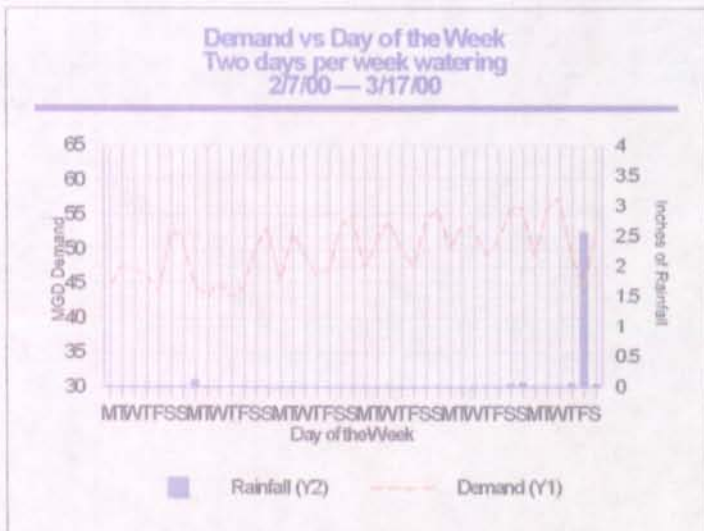




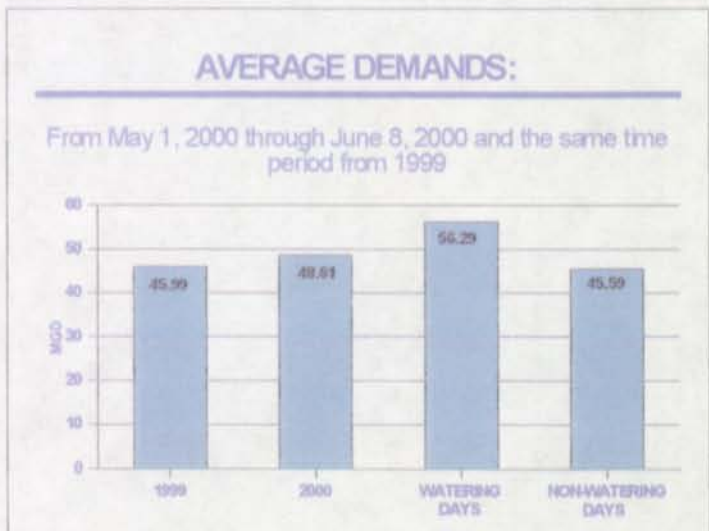
19



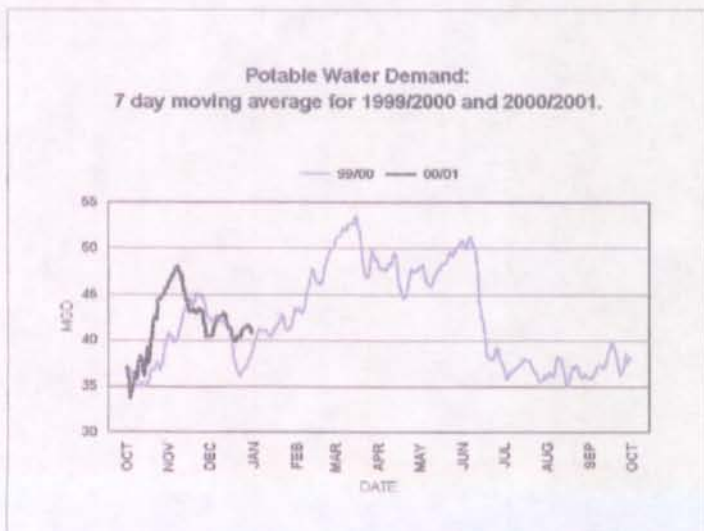
20



21



22



23

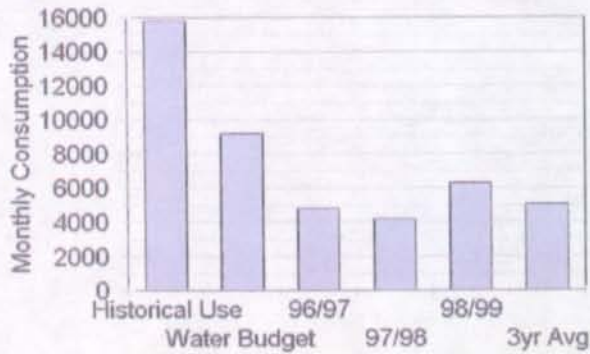
### PROBLEMS WITH WATER RESTRICTIONS

- SIGNIFICANT ENFORCEMENT EFFORT IS NEEDED.  
SOLUTION: CONTRACT ENFORCEMENT
- SIGNIFICANT DEMAND INCREASES ON WATERING DAYS.  
SOLUTION: SCHEDULE MORE WATERING DAYS
- OVERALL EFFECTIVENESS (DEMAND REDUCTION) IS MINIMAL SINCE IRRIGATION DEMAND IS JUST RESCHEDULED.  
SOLUTION: IMPLEMENT COMMUNITY LEVEL WATER BUDGET PROGRAM
- COMMUNITY BACKLASH; RESIDENTS BLAME DROUGHT RELATED WATER SHORTAGE ON GROWTH.  
SOLUTION: GROWTH NEEDS TO IMPROVE OVERALL WATER RESOURCE AND SUPPLY SITUATION

24

## Water Budget Project

Residential Irrigation Use ( 5 homes)



25

## WATER CONSERVATION RATES

26

### MANATEE COUNTY COMPREHENSIVE PLAN LEVEL OF SERVICE STANDARDS

#### POTABLE WATER SERVICE

- RESIDENTIAL USERS.....85gpcpd
- BUSINESS, INDUSTRY, COMMERCIAL.....30gpcpd
- MISCELLANEOUS, UNACCOUNTED.....15gpcpd

#### ALLOCATED MONTHLY HOUSEHOLD USE

$$85\text{GPCPD} \times 30.42\text{ DPM} \times 2.5\text{ PPH} = 4943\text{ GPH/MONTH}$$

27

### MANATEE COUNTY COMPREHENSIVE PLAN OBJECTIVES AND POLICIES

**POLICY 3.2.3.3** REQUIRE THE USE OF NATIVE XERIC PLANTS IN POST-DEVELOPMENT LANDSCAPING....

**POLICY 9.4.4.6** REQUIRE NEW DEVELOPMENT TO PROVIDE IRRIGATION FROM NON-POTABLE SOURCES

**POLICY 9.4.4.9** REQUIRE THE DESIGN AND USE OF STORMWATER RETENTION/DETENTION FACILITIES AS SOURCES FOR LANDSCAPE IRRIGATION...

**POLICY 9.6.1.3** PROHIBIT THE USE OF POTABLE WATER FOR LANDSCAPE IRRIGATION IN NEW DEVELOPMENT....

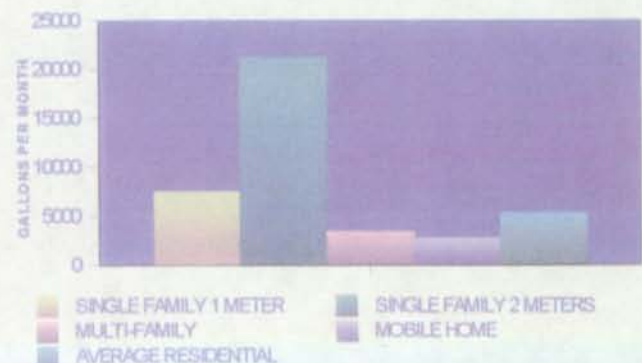
28

### MANATEE COUNTY WATER RATES

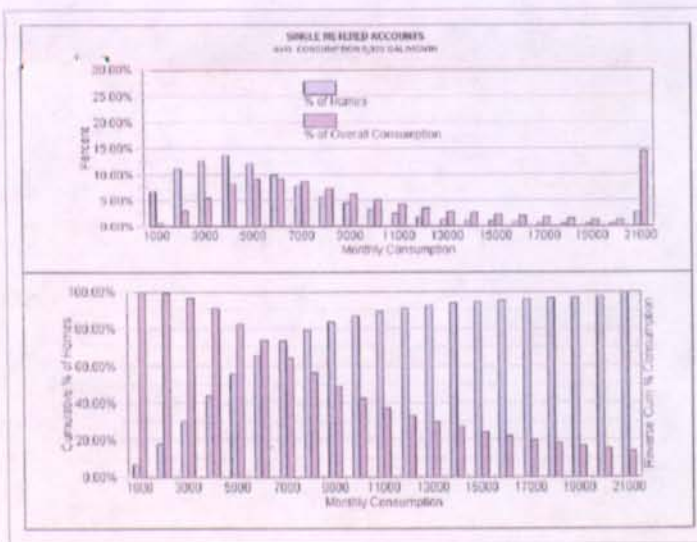
BASE RATE	RESIDENTIAL	IRRIGATION	WHOLESALE
	\$5.46	\$8.19	\$6,976/MGD
<b>CONSUMPTION CHARGES (\$/1000 GALLONS) (CONSERVATION RATES)</b>			
0 - 6000	\$1.02	\$1.02	\$1.00
6000 - 15000	\$1.09	\$1.09	\$1.66 (<20%)
>15,000	\$1.59	\$1.59	\$2.35 (>20%)
	15k-30k	\$1.89	<b>SARASOTA</b>
	30K-60K	\$2.29	10 - 12 MGD \$1.96
	60K-100K	\$2.68	12 -15 MGD \$2.35
	>100K		>15 MGD \$3.30

29

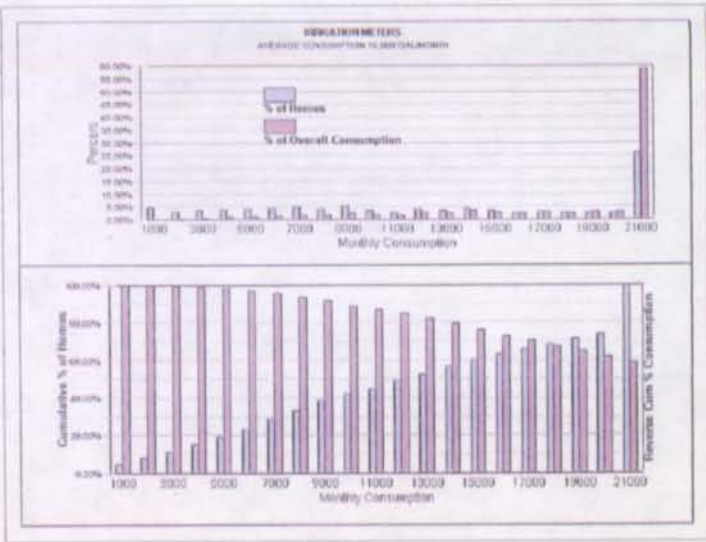
### 1998 WATER USE COMPARISON



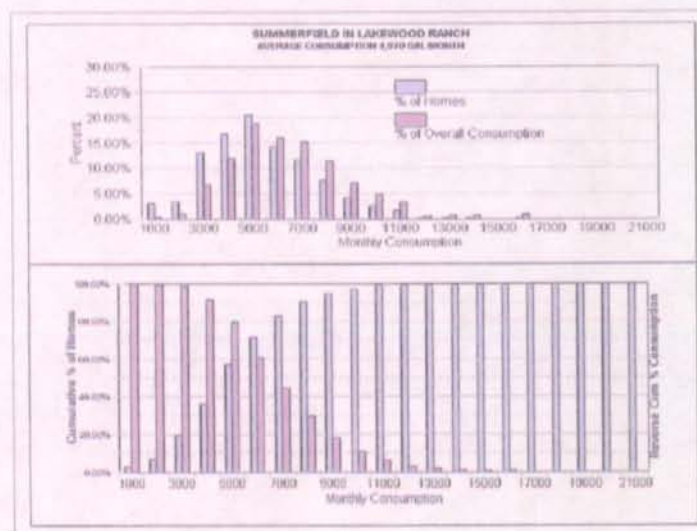
30



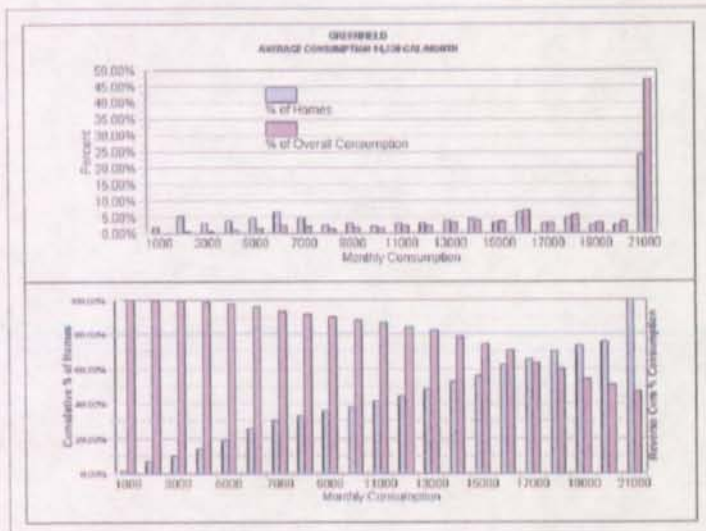
31



32



33



34

## WATER RATE COMPARISONS

CHARLOTTE COUNTY	HILLSBOROUGH COUNTY
CUSTOMER CHARGE \$2.72	CUSTOMER CHARGE \$3.80
BASE CHARGE \$14.16	BASE CHARGE \$7.05
<b>USAGE CHARGES: \$/1000 GALLONS (CONSERVATION RATES)</b>	
0 - 5K GALLONS .....\$3.65	0 - 5K GALLONS.....\$2.35
5K - 10K GALLONS .....\$4.25	5K - 15K GALLONS.....\$2.45
10K - 15K GALLONS .....\$5.25	15K - 30K GALLONS.....\$3.70
>15K GALLONS .....\$6.00	30K - 50K GALLONS.....\$4.30
	>50K GALLONS.....\$4.90

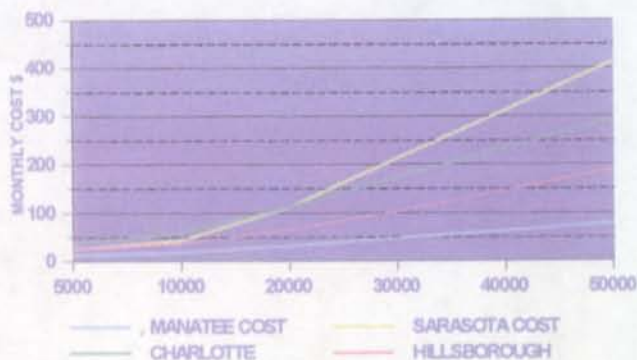
35

## WATER RATE COMPARISONS MANATEE - SARASOTA

	MANATEE	SARASOTA
<b>RESIDENTIAL BASE RATE</b>	\$6.46	\$12.28
<b>CONSUMPTION RATES (\$/1000 GALLONS)</b>		\$ 1.64
0-5000.....	\$1.02	\$1.78
5001-15000.....	\$1.09	\$2.58
>15000.....	\$1.59	\$4.35
		\$7.00
		\$10.00
<b>MONTHLY WATER COST COMPARISON</b>		
5000 GALLONS	\$10.50	\$ 23.62
10000 GALLONS	\$15.94	\$ 40.06
20000 GALLONS	\$29.34	\$110.76
30000 GALLONS	\$45.24	\$210.76
40000 GALLONS	\$61.14	\$310.76
50000 GALLONS	\$77.04	\$410.76

36

### WATER RATE COMPARISONS MANATEE - SARASOTA-CHARLOTTE-HILLSBOROUGH



37

### ALTERNATIVES TO IRRIGATING LANDSCAPES WITH DRINKING WATER

- NEIGHBORHOOD IRRIGATION SYSTEM FROM STORMWATER PONDS (WITH OR WITHOUT BACKUP WELLS)
- USE NATIVE PLANTS FOR LANDSCAPE WITHOUT IRRIGATION (OR LIMITED IRRIGATION), XERISCAPE OR FLORIDA YARD
- INDIVIDUAL SHALLOW (SURFICIAL) OR INTERMEDIATE AQUIFER WELLS
- INDIVIDUAL RAINFALL COLLECTION SYSTEMS, CISTERNS OR RAIN BARRELS
- GRAY WATER SYSTEMS
- RECLAIMED WATER

38

### RESIDENTIAL IRRIGATION WELL COST ANALYSIS

- ESTIMATE OF IRRIGATION WELL COST .....\$2,500
- 5-YEAR MONTHLY AMORTIZATION COST AT 8%.....\$61
- MONTHLY OPERATING & MAINTENANCE .....\$10
- MONTHLY COST TO PAY OFF WELL IN 5 YEARS.....\$61
- THE COST OF 16,000 GALLONS OF DRINKING WATER USED FOR IRRIGATION PURPOSES MUST APPROACH THE COST OF ALTERNATIVES SOURCES TO INSURE RESIDENTS WILL SELECT THE MOST COST EFFECTIVE LONG TERM ALTERNATIVE

39

### PROPOSED CONSERVATION RATE

#### RESIDENTIAL & IRRIGATION

BASE CHARGE (BY METER SIZE) \$5.46      \$8.19 IRRIGATION

CONSUMPTION RATES (\$/1000 GALLONS)

0-5000	\$1.02
5001-10000	\$2.04
> 10000	\$4.08

COST TO RESIDENT USING 5000 GALLONS IN HOUSEHOLD USE AND 16000 GALLONS FOR IRRIGATION WILL BE \$65.64 VS PRESENT COST OF \$30.93

40

## WATER CONSERVATION OPTIONS

41

### Water Conservation Projects Effectiveness

Completor	Project Description	Design C. (GPD)	Savings (GPD)	Customers (K)	Cost (\$)	Unit Cost	\$/gpd	\$/MGD
Charlotte County								
Punta Gorda	Water Saver Program	17	14000	992	\$40,000	\$20,434	\$0.66	\$2,796,179
Charlotte Harbor	Mobile Program	0	700	26	\$12,000	\$45,331	YTD	
Hillsborough County								
Tampa	Tank Rebate	36	599421	13552	\$1,062,000	\$95,960	\$0.81	\$5,702,605
Tampa Terrace	Tank Rebate	21	3432	102	\$15,825	\$7,913	\$1.11	\$4,611,305
Hillsborough Co.	Tank Rebate	13	142432	35653	\$11,272,920	\$1,725,000	\$1.48	\$6,144,535
Hillsborough Co.	Project Greenhouse (Water)	n/a	n/a	n/a	\$100,000	\$0,000	n/a	
Pasadena County								
Chapman	Tank Rebate	33	50000	1734	\$700,000	\$125,000	\$1.06	\$4,307,262
Chapman	Water Saver Rebate	15	4052	100	\$40,000	\$20,000	\$1.39	\$4,616,913
Tampa Bay Water								
St. Pete	Water Rebate (Study)	n/a	n/a	n/a	\$300,000	\$120,000	n/a	
St. Pete	Xeriscape (Study)	n/a	n/a	n/a	\$300,000	\$104,280	n/a	
St. Pete	Tank Rebate	32	542394	16320	\$1,500,000	\$1,500,000	\$1.23	\$5,531,137
St. Pete	Xeriscape Rebates	242	69480	200	\$75,200	\$36,120	\$0.97	\$1,114,760
St. Pete	Virginia Avails	6	700	400	\$200,000	\$100,000	YTD	
Pinellas Co.	Shallow Well Rebates	440	440,000	1000	\$700,000	\$100,000	\$0.23	\$903,552
Polk County								
Water Haven	Flushing Study	34	24000	1000	\$22,200	\$11,100	\$0.22	\$927,500
Lake Wales	Flushing Free etc.	46	14070	714	\$19,200	\$26,460	\$1.27	\$5,200,027
Highland Park	Water Saver Rebate	123	9736	68	\$3,600	\$1,300	\$0.16	\$408,730
Volusia County								
Volusia Co.	Tank Rebate	20	30000	1500	\$100,000	\$50,000	\$0.66	\$1,223,333
Volusia Co.	Tank Rebate	20	30000	1500	\$100,000	\$50,000	\$0.66	\$1,223,333
Totals			1100000	70000	\$10,194,204	\$1,199,227	\$1.00	

42

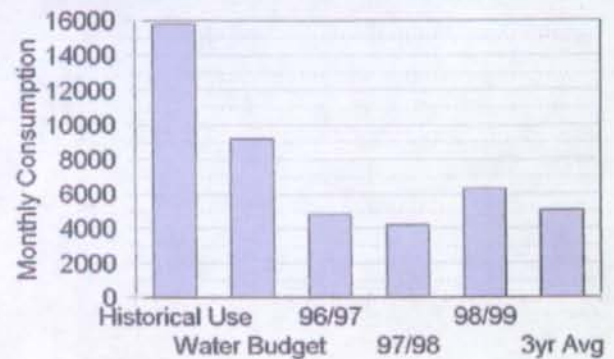
### WATER CONSERVATION PROJECTS RANKED BY WATER SAVINGS & COST EFFECTIVENESS

PROJECT	WATER SAVINGS GPOPC	\$/KGAL
SHALLOW WELL REBATE	345	\$0.23
XERISCAPE REBATE	342	\$0.37
RAIN SENSOR REBATES	15 - 123	\$0.15 - \$1.39
PLUMBING RETROFIT	24 - 46	\$0.22 - \$1.27
TOILET REBATES	20 - 38	\$0.80 - \$1.48

43

### Water Budget Project

Residential Irrigation Use ( 5 homes)



44

### EMERGENCY DROUGHT WATER RATES

45

### Lake Manatee Elevations:

Years; 1984/1985 drought, 1988/1989 drought, 1999/2000, 2000/2001 and 16 year average.



46

### PROPOSED EMERGENCY DROUGHT WATER RATE

RESERVOIR ELEVATION <36FT <32  
BASE RATE UNCHANGED  
CONSUMPTION RATES \$/1000 GALLONS

#### RESIDENTIAL & IRRIGATION

0 - 5000 GALLONS	\$1.02	\$1.02
5000 - 10000 GALLONS	\$3.06	\$4.08
>10000 GALLONS	\$6.12	\$8.16

#### WHOLESALE

UP TO 20% EXCESS	\$3.06	\$4.08
OVER 20%	\$6.12	\$8.16

47

### RATE COMPARISONS

USEAGE	MC	MC WC	MC ED1	MC ED2	Sarasota	Charlotte
5000	\$10.56	\$10.56	\$10.56	\$10.56	\$23.62	\$29.10
10000	\$15.94	\$20.76	\$25.86	\$30.94	\$40.06	\$50.35
20000	\$29.34	\$61.56	\$87.06	\$112.54	\$110.76	\$105.85
30000	\$45.24	\$102.36	\$148.26	\$194.14	\$210.76	\$165.85
40000	\$61.14	\$143.16	\$209.46	\$275.74	\$310.76	\$225.85
50000	\$77.04	\$183.96	\$270.66	\$357.34	\$410.76	\$285.85

48

**PHONE CALL**

FOR	JRB	all	DATE	1-9	TIME	9:50	A.M. P.M.
M	Michelle Griffin						
OF							<input checked="" type="checkbox"/> PHONED
PHONE	<input type="checkbox"/> FAX <input type="checkbox"/> MOBILE	755-9707			RETURNED YOUR CALL		
MESSAGE	AREA CODE	NUMBER	EXTENSION	<input checked="" type="checkbox"/> PLEASE CALL			
water rates. It is not fair to raise rates of 5,000. They have 3 in family, don't abuse & use more.							
SIGNED	7,000 - 8,000 would be realistic for a family of 3-4.						



**INFORM**

12-18-1994 04/11/2000 36  
WATER USAGE  
WATER USAGE  
WATER USAGE  
WATER USAGE  
WATER USAGE

ACCOUNT NUMBER: 30284-20101  
EMBERT DYKES  
2626 27TH AVENUE DR W

DATE TO BANK ACCOUNT: 1/1/95  
PENNSYLVANIA COLLEGE OF PODIATRY BALANCE

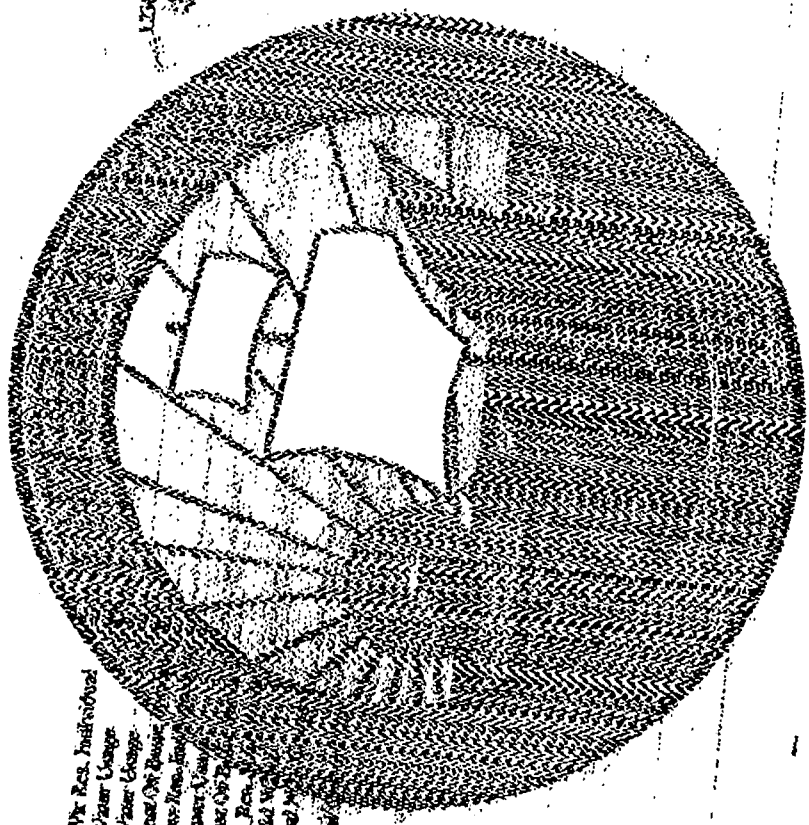
Previous Balance  
Payments Received  
Balance Forward

63.78  
0.00  
63.78

100  
60  
60  
100  
100

6.11  
6.76  
5.46  
27.34  
12.57

*34.20*  
*27.34*  
*63.78*  
*63.78*



Additional Info: After reading

12-18-1994	04/11/2000	36
12-18-1994	04/11/2000	37
12-18-1994	04/11/2000	37

*2 adults to children*

*Well used for watering  
No pool 2 baths  
D/W Washer*

RECEIVED  
JAN 08 2001  
BOARD OF COUNTY COMMISSIONERS  
MANATEE COUNTY

AESony

Amis Shirley  
745-3701

fax 745-3790



January 11, 2001

**AGENDA  
BOARD OF COUNTY COMMISSIONERS**

Page 1

**SARASOTA COUNTY ADMINISTRATION CENTER  
1660 RINGLING BOULEVARD  
COUNTY COMMISSION CHAMBERS  
SARASOTA, FLORIDA**

1:30 p.m.

**SARASOTA COUNTY**

David R. Mills, Chairman, District 2  
Nora Patterson, Vice Chair, District 4  
Paul Mercier, District 1  
Shannon Staub, District 3  
Jon Thaxton, District 5

**MANATEE COUNTY**

Joe McClash, Chairman, At Large  
Amy Stein, District 1  
Gwen Brown, District 2  
Jane von Hahmann, District 3  
George Harris, District 4  
Jonathan Bruce, District 5  
Pat Glass, At Large

**JOINT MEETING**

- 1. TRANSPORTATION PLANNING**
  - A. Regional Transit System
  - B. Transportation Relationships
  - C. State Road 70
  - D. Revenue Sources
- 2. GROWTH MANAGEMENT**
  - A. Land Use - Overview of Respective Comprehensive Plans
  - B. Village and Resource Management Area Status
- 3. WATER RESOURCE PLANNING**
- 4. COASTAL PLANNING OPPORTUNITIES**
- 5. MEDICAL EXAMINER**
- 6. INTERGOVERNMENTAL COORDINATION EFFORTS**
  - A. Commuter Assistance
  - B. Legislative Programs
  - C. Council of Governments
  - D. Convocations

