## SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

#### IN RE:

DECLARATION OF MODIFIED
PHASE IV CRITICAL WATER SHORTAGE
FOR WATER USES SUPPLIED BY
TAMPA BAY WATER, ITS MEMBER
GOVERNMENTS, THEIR WHOLESALE
CUSTOMERS, AND ALOHA UTILITIES, INC.

**ORDER SWF 09-012** 

## ORDER DECLARING MODIFIED PHASE IV WATER SHORTAGE

The Governing Board of the Southwest Florida Water Management District (District), during a public hearing held on March 31, 2009, at the District's headquarters in Brooksville, Florida, received information, including data and recommendations from District staff, Tampa Bay Water and comment from the public regarding hydrologic conditions, water supply sources, and the need for additional conservation within the Tampa Bay area. Based upon the information, data, staff recommendations and public comment, the Governing Board makes the following Findings of Fact and Conclusions of Law.

## FINDINGS OF FACT

- 1. Rule 40D-21, Florida Administrative Code (F.A.C.), the District's Water Shortage Plan (the "Plan") specifies that the District will monitor certain sources of national predictions, indices and conditions and current hydrologic data, including specific Drought Indicators, including, at a minimum: rainfall, stream flow, ground water levels and certain sources of national data. The Plan further establishes how these Drought Indicators are classified as Moderately, Severely, Extremely and Critically Abnormal based on their current value.
- 2. Based on a consideration of factors set forth in the Plan, on January 9, 2007, the Executive Director, upon authority delegated by the Governing Board, declared a District-wide modified Phase II Severe Water Shortage. The Governing Board concurred with the Executive Director's decision to issue Water Shortage Order No. SWF 07-02 during its meeting on January 30, 2007. Furthermore, on July 31, 2007, September 25, 2007, November 26, 2007, June 24, 2008, September 30, 2008, and February 24, 2009, the Governing Board determined that a modification to extend the expiration date of the Order was necessary on each of these occasions. The most recent modification extended the terms of the Order to June 30, 2009. Water Shortage Order No. SWF 07-02, as modified, is hereinafter referred to as "Order SWF 07-02".

- 3. The City of Tampa relies primarily on its Hillsborough River reservoir to meet the potable water needs of approximately 656,000 residents within Tampa's city limits and portions of unincorporated Hillsborough County. During droughts or water shortages, the City of Tampa may need to augment its water supply with water obtained from Tampa Bay Water.
- 4. Tampa Bay Water relies on the conjunctive use of several sources within its Interconnected Regional Water Supply System to meet the water needs of approximately 2.4 million residents served by its member governments, which include the City of New Port Richey, the City of St. Petersburg, the City of Tampa, Hillsborough County, Pasco County and Pinellas County (the "Member Governments"), all with water utility service areas within Pinellas, Pasco and Hillsborough Counties (the "Counties").
- 5. Tampa Bay Water's sources include: the Alafia River, the wellfields associated with the Consolidated Permit, the South Central Hillsborough County Regional Wellfield, the Brandon Urban Dispersed Wellfield, the Carrollwood Community Wellfield, the Eagles Water System, the Tampa Bay Seawater Desalination Project, the Tampa Bypass Canal Water Supply Project (including Hillsborough River Water Source), and water from the Alafia River and the Tampa Bypass Canal Water Supply Project stored in the C.W. Bill Young Regional Reservoir. All of Tampa Bay Water's sources are located within the Counties.
- 6. Of the water Tampa Bay Water provides to its Member Governments, a portion of that water is provided by Member Governments to other local governments within the Counties for use by these nonmember local governments' utility customers. Additionally, other water utilities exist, including Aloha Utilities, Inc., within the Counties that depend on some of the same sources as Tampa Bay Water and Aloha Utilities, Inc., is exceeding its permitted quantities.
- 7. Due to a continuing decline in rainfall, streamflows, and water supply in storage, since the issuance of Order SWF 07-02 and a need for further demand management measures within the Counties, on October 15, 2008, Tampa Bay Water requested that the Governing Board declare a Phase III "Extreme Water Shortage".
- 8. In response, on October 28, 2008, the Governing Board issued Order SWF 08-044 declaring a modified Phase III "Extreme Water Shortage" as defined in the District's Water Shortage Plan, for all ground and surface waters within the Counties that are used for public supply, those used for specific lawn and landscape irrigation practices, and other water uses as specified in Order SWF 08-044. Order SWF 08-044 has been modified two times since its original issuance in order to increase water use restrictions and water conservation in light of a continuing decline in rainfall, streamflows and water supply in storage. Order SWF 08-044, as modified, expires June 30, 2009.
- 9. In addition to the Governing Board's issuance of Order SWF 07-02 and Order SWF 08-044 to achieve reductions in water use, emergency orders have been issued

by the Executive Director to authorize Tampa Bay Water and the City of Tampa to augment their water supply in storage from various surface water sources as follows:

- a. May 18, 2007: Order SWF 07-33 authorizing the drawdown of the Tampa Bypass Canal Middle Pool to augment the City of Tampa's Reservoir;
- b. August 3, 2007: Order SWF 07-042 authorizing the drawdown of the Tampa Bypass Canal Lower Pool to augment the City of Tampa's Reservoir and to make diversion from the Hillsborough River;
- c. August 3, 2007: Order SWF 07-043 authorizing additional withdrawals from the Alafia River to augment the C.W. Bill Young Regional Reservoir;
- d. July 22, 2008: Order SWF 08-024 authorizing recommencement of additional withdrawals from the Alafia River to augment the C.W. Bill Young Regional Reservoir;
- e. October 16, 2008: Order SWF 08-043 authorizing recommencement of a drawdown of the Tampa Bypass Canal Middle Pool to augment the City of Tampa's Reservoir;
- f. February 11, 2009: Order SWF 09-005 authorizing withdrawals from Sulphur Springs to augment the City of Tampa's Reservoir; and
- g. February 12, 2009: Order SWF 09-008 authorizing additional withdrawals from the Tampa Bypass Canal Lower Pool to increase production at the regional surface water treatment plant as a means of reducing groundwater pumping from wells authorized by Tampa Bay Water's Consolidated Permit.
- 10. The current applicable Drought Indicators are summarized as follows for the area encompassing the Counties:
- a. The Hillsborough River is both a source of water for Tampa Bay Water and a primary water source for the City of Tampa. Stream flow conditions remain well below normal in the Hillsborough River watershed. Normal stream flow is defined as the 25th to 75th percentile range. As measured at the United States Geological Survey (USGS) Zephyrhills gauge, the 8-week average stream flow is at the 2<sup>nd</sup> percentile as of March 24, 2009, and has been below the 5<sup>th</sup> percentile since October 24, 2008. This condition is categorized as "Critically Abnormal".
- b. The Alafia River is one of the sources of water for Tampa Bay Water. Stream flow is also below normal conditions in the Alafia River watershed. As measured at the Lithia gauge, stream flow is at the 2<sup>nd</sup> percentile as of March 24, 2009, and has been below the 5<sup>th</sup> percentile since January 8, 2009. This condition is categorized as "Critically Abnormal".

- c. Ground water is a source of water supply for Tampa Bay Water and other water utilities, including Aloha Utilities, Inc., located within the Counties. As of March 24, 2009, ground water conditions were at the 10<sup>th</sup> percentile, and have been below the 16<sup>th</sup> percentile since January 8, 2009. These ground water levels are categorized as "Extremely Abnormal".
- d. Rainfall, another designated water resource indicator in the Plan, is also below normal. During the past twelve months (March 2008 through February 2009), only 41.22 inches have fallen in the portion of the District that includes the Hillsborough River watershed, compared to a typical value of 53.59 inches for this time period, resulting in a deficit of 12.37 inches.
- e. During the past twelve months (March 2008 through February 2009), only 40.30 inches have fallen in the portion of the District that includes the Alafia River watershed, compared to a typical value of 52.66 inches for this time period, resulting in a deficit of 12.36 inches.
- f. Climate Prediction Center predictions are currently indicating that belownormal rainfall conditions are expected from April through June 2009.
- g. The U.S. Drought Monitor, as of March 24, 2009, indicates that the Counties are experiencing "Moderate" to "Severe" drought conditions as defined by the Plan.
- 11. The Drought Indicators for the area encompassing the Counties indicate that the drought is continuing or worsening.
- 12. For the month of February 2009, Tampa Bay Water experienced a potable water demand of approximately 230 mgd, on a 12-month running average.
- 13. Tampa Bay Water has reported the following concerns regarding the status of its sources:
- a. Executive Director Order No. SWF 08-024 is currently in effect that modifies Tampa Bay Water's Water Use Permit No. 20011794.001 to authorize increased withdrawals from the Alafia River due to a water shortage threatening public health, safety and welfare. However, due to low streamflow conditions, no river withdrawals have occurred since September 19, 2008, except on approximately eight separate days, the last of which was February 8, 2009.
- b. Pursuant to Tampa Bay Water's agreement with the Florida Department of Environmental Protection, the C.W. Bill Young Regional Reservoir is limited to only 6.5 billion gallons of storage, compared to a storage capacity of 15 billion gallons, in order to facilitate ongoing inspection and investigation of the reservoir's soil cement layer.

- c. Due to low river flows, on September 27, 2008, Tampa Bay Water stopped adding water to the C.W. Bill Young Regional Reservoir and began withdrawing water from it. This is approximately six months ahead of when this would occur under normal conditions. As of March 11, 2009, withdrawals from the C.W. Bill Young Regional Reservoir were discontinued due to depletion of water in storage.
- d. As of March 22, 2009, on a 12-month moving average basis, Tampa Bay Water was producing 93.7 mgd from the eleven wellfields associated with the Consolidated Permit. Production from these wellfields must be managed such that the 12-month running average is equal to or below 90 million gallons per day. This Consolidated Permit requirement is intended to foster the ongoing recovery of wellfield-influenced impacts to minimum flows and levels established for wetlands and lakes.
- e. SWF Order 08-043 and SWF Order 09-008 continue in effect and authorize additional withdrawals from the Tampa Bypass Canal. However, on March 11, 2009, Tampa Bay Water had to cease withdrawals from the Lower Pool of the Tampa Bypass Canal because the water elevation fell below 6.0 feet. Tampa Bay Water continues to move water from the Middle Pool to the City of Tampa's reservoir; averaging about 24 mgd over the last seven days.
- 14. Tampa reports the following concerns regarding the status of its Reservoir:
- a. As of March 27, 2009, the level in the Reservoir was at 20.02 feet NGVD (1929), which is about 1.75 feet lower than the mean level of 21.77.
- b. As of March 27, 2009, natural inflow to the Reservoir, as approximated at the USGS Morris Bridge gauge on the Hillsborough River, was only 35 cubic feet per second (approximately 22.6 mgd), an amount that meets less than 28% of Tampa's current daily potable water demand. This inflow is expected to continue declining, resulting in fewer days of drinking water supply in the Reservoir, until summer rainfall in the water shed results in increased streamflow.
- 15. Tampa Bay Water and its Member Governments are taking the following demand-management actions:
- a. Since October 2006, Tampa Bay Water has been requesting its Member Governments implement water conservation measures consistent with applicable levels of activation of its Drought Mitigation Plan.
- b. Tampa Bay Water, in consultation and coordination with its Member Governments and the District, has increased media messaging, urging increased water conservation efforts.
- 16. In addition, Tampa approved Ordinance No. 2006-104 on May 4, 2006. This emergency ordinance limited lawn and landscape irrigation to a once-per-week watering schedule, banned irrigation between the hours of 8 a.m. and 6 p.m., reduced the new

lawn establishment period exemption, and provided other stringent mandatory restrictions for its potable water customers.

- 17. Due to the hydrologic conditions, further declines in and depletion of water supply in storage, and a need for additional demand management measures, on February 2, 2009, Tampa Bay Water requested that the Governing Board declare a Phase IV "Critical Water Shortage".
- 18. A Phase III Extreme Water Shortage calls for a voluntary 10% reduction in water use. By February, 2009, water use in the Counties had only reduced by approximately 5% since the same time last year.
- 19. A Phase IV Critical Water Shortage calls for a voluntary 20% reduction in water use and may include significant cutbacks in outdoor water use.
- 20. On February 25, 2009, the Governing Board issued the Second Modification to SWF 08-044 determining that before declaring a Phase IV Water Shortage, additional efforts could be made by local governments and residents within the Counties to further implement the water conservation measures ordered in Order SWF 08-044. Order SWF 08-044 also ordered additional actions by local governments in an attempt to obtain further reductions in water use.
- 21. Following the Second Modification to SWF 08-044, Tampa approved Ordinance No. 2009-48 containing water use restrictions to be effective on April 3, 2009. This emergency ordinance includes restrictions on water use, including permitting hand watering only of established turf on a once-per-week watering schedule contained therein, and handwatering or micro-irrigation of new and established non-turf landscaping as necessary, but not between the hours of 8 a.m. and 6 p.m. The emergency ordinance also contains restrictions pertaining to the establishment of new turf and other water uses. The cumulative effect of the water use restrictions for those using water supplied by Tampa's water utility system is that they are more restrictive than the restrictions imposed by this Order.
- 22. As required by SWF Order 08-044, Member Governments have reported their demand management activities showing an increase in enforcement and messaging. Water use by customers of the Member Governments has reduced by approximately 5% since this time last year.
- 23. In addition to evaluating and analyzing quantifiable Drought Indicators to determine the degree to which geographic area(s) and water source(s) are affected by a water shortage, the Plan specifies that the District shall take into account several qualitative factors when considering what phase of restrictions and other response mechanisms should be declared. Pertinent factors include:
- a. Tampa Bay Water's C.W. Bill Young Reservoir, designed with a capacity of 15 billion gallons has been empty since March 12, 2009.

- b. Tampa Bay Water's desalination plant production is limited to approximately 10 to 15 mgd of its full production capacity of 25 mgd due to mechanical failures.
- c. The combination of insufficient water use reductions to date, the depletion of surface water supplies and the limited production capacity of the desalination plant has caused increased pumping from Tampa Bay Water's groundwater sources to meet the water demands of the Member Governments.
- d. Tampa Bay Water's eleven wellfields associated with its consolidated permit for those wellfields (Consolidated Permit) are located within the Northern Tampa Bay Minimum Flows and Levels Recovery Area as described in 40D-80, F.A.C (Recovery Area). The 90 mgd 12-month running production average from these wellfields was established as a condition of the Consolidated Permit as part of the recovery of wellfield-influenced impacts to minimum levels established for lakes and wetlands in the Recovery Area.
- e. Production levels exceeding the 90 mgd 12-month running production average interfere with assessing the recovery of the minimum level lakes and wetlands.
- 24. As described above, the Drought Indicators demonstrate that the drought and water shortage is continuing or worsening for the Tampa Bay Water and the City of Tampa water supply sources. Further, the above-described demand-management measures and emergency supply-management actions have not been sufficient to address the utility water shortage of Tampa Bay Water and its Member Governments.

## **CONCLUSIONS OF LAW**

- 25. The Governing Board of the District is duly authorized by 373.246(2), Florida Statutes (F.S.), and Chapter 40D-21, F.A.C., to issue Orders declaring the existence of a water shortage within all or part of the District and to impose such restrictions and require such measures as may be necessary to reduce demand on available water.
- 26. County and city officials and all law enforcement authorities are required to enforce orders lawfully issued by the Governing Board pursuant to the Plan and Section 373.609, F.S.

## **ORDERED**

THEREFORE, based upon the foregoing Findings of Fact and Conclusions of Law, it is hereby ORDERED:

27. A modified Phase IV "Critical Water Shortage" as defined in the Plan, is declared for surface and ground waters within the Counties that are used for the activities as restricted and specified in Attachment A, when supplied, directly or indirectly, by any of

the entities listed in Attachment B. Each entity listed in Attachment B shall report to the District by April 17, 2009, the local governments, utilities, communities and subdivisions to which it supplies water.

- 28. In addition, SWF Order 08-044, remains in full force and effect in accordance with its terms, including all water use restrictions, except as modified herein.
- 29. Where a water use activity is supplied by Tampa's water utility system and is addressed by Tampa's ordinances providing for critical emergency measures restricting water use and curtailing nonessential uses of water, which will become effective April 3, 2009 (Tampa's Emergency Ordinances), the activity shall be conducted in accordance with Tampa's Emergency Ordinances as the more restrictive of water use under this Order and Tampa's Emergency Ordinances. In the event Tampa's Emergency Ordinances expire or are otherwise terminated prior to the expiration or termination of this Order, water use activities conducted with water from the City of Tampa's water utility system shall comply with this Order.
- 30. Water shortage declarations and restrictions enacted prior to this Order by county and city officials affecting their local jurisdictions ("Local Action") that are at least as restrictive as this Order are hereby ratified and are authorized to continue in effect according to their terms. In the event that a Local Action is less restrictive than this Order, this Order shall supersede the Local Action, unless the county or city officials obtain a variance or waiver from this Order from the District.
- 31. County and city officials and all law enforcement authorities shall enforce this Order when requested pursuant to the Plan and Section 373.609, F.S.
- 32. This Order shall expire on June 30, 2009, unless extended or rescinded by Governing Board or Executive Director action on or before that date.

DONE AND ORDERED in Hernando County, Florida, on this 31st day of March, 2009.

Approved As to Content and Form

Attorney

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

C.A. "Neil" Combee

Governing Board Chairman

Governing Board Secretary

Agency Clerk

Filed this

#### ATTACHMENT A

The following provisions supersede 40D-21.631(6)(c)2.a. and 40D-21.641(6)(c)11, F.A.C. and any other provisions of SWF Orders No. 07-02, as modified, and 08-044, as modified that may conflict with these provisions:

- 1. **Lawn irrigation** may occur, if necessary, on the applicable once-perweek allowable day, as specified below:
- a. **Properties less than one acre in size** with rotor and spray systems may be used to irrigate from 12:01 a.m. to 4 a.m.
- b. **Properties one acre or larger in size** with rotor and spray systems may be used to irrigate from 12:01 a.m. to 4 a.m. and from 8 p.m. to midnight.
- c. Any size property may be irrigated by handwatering with a sprinkling can or a hose equipped with an automatic cancelling nozzle and portable sprinklers may be used to irrigate from 6 a.m. to 8 a.m., and from 6 p.m. to 10 p.m.
  - 2. **Non-Lawn irrigation** may occur, if necessary, as specified below.
- a. Properties less than one acre in size with rotor and spray systems may be irrigated on the applicable once-per-week allowable day from 12:01 a.m. to 4 a.m.
- b. **Properties one acre or larger with rotor and spray systems** may be irrigated on the applicable once-per-week allowable day from 12:01 a.m. to 4 a.m. and from 8 p.m. to midnight
- c. Any size property may be irrigated by handwatering with a sprinkling can or a hose equipped with an automatic cancelling nozzle, **portable sprinkler or micro-irrigation** may be irrigated from 6 a.m. to 8 a.m. and from 6 p.m. to 10 p.m. on the following days:
  - Even addresses: Tuesday, Thursday, Saturday
  - Odd addresses: Wednesday, Friday, Sunday

The Non-Lawn New Plant Materials restrictions contained in SWF Order No. 08-044, as modified are superseded with the following:

- 3. The establishment period for Non-Lawn New Plant Materials shall be "15/30/15." This means that the material can be watered on any day for a 15-day period starting the day it is installed, then up to three days a week during the next 30-day period, then only two days a week during the final 15-day period.
- a. When "three days a week" establishment period watering is allowed on properties less than one acre in size, Even Addresses may only water on Tuesday, Thursday and Saturday; whereas, Odd Addresses may only water on Wednesday, Friday and Sunday.

- b. When "two days a week" establishment period watering is allowed on properties less than one acre in size, Even Addresses may only water on Tuesday and Saturday, whereas, Odd Addresses may only water on Wednesday and Sunday.
- c. When "three days a week" or "two days a week" irrigation is allowed in cemeteries or on other properties one acre in size or larger, each property shall maintain a written schedule of its establishment period watering.

The following provisions supersede 40D-21.631(7)(b)1.:

4. Cooling towers, geothermal units and similar water-using devices used in government facilities, common areas inside shopping malls, lobbies of multi-tenant office buildings and similar interior public spaces may only cool to a minimum of 78 degrees Fahrenheit and heat to a maximum of 68 degrees Fahrenheit, except as otherwise required for health or medical reasons.

The following provision supersedes 40D-21.631(7)(c)1.relating to fountains, waterfalls and other artistic water features, but does not affect SWF Order 08-044 regarding stormwater ponds augmented with reclaimed water:

5. Aesthetic Use - Operating fountains, waterfalls and other artistic water features only for an aesthetic purpose is prohibited. In public spaces, the owner or manager of such features shall use signs, when practical, to indicate that this action was taken in compliance with current Water Shortage restrictions.

The following provision supersedes 40D-21.631(7)(f):

6. Washing or cleaning outdoor impervious surfaces - Washing or cleaning of buildings, structures, driveways and other outdoor impervious surfaces, including Pressure Washing, is prohibited, except when conducted by a commercial business and for an allowable activity. Allowable activities include: preventing or removing a health or safety hazard than cannot be addressed by other means, in preparation for painting or similar necessary maintenance, to maintain a warranty and to meet federal, state, or local health or safety standards. These standards specifically allow for government-required dust control.

The following provisions supersede 40D-21.631(7)(g)

- 7. Mobile Equipment Washing
- a. Washing of cars or trucks in residential settings and car wash fundraisers held on behalf of a non-profit organization is prohibited.
- b. Commercial car washes, hand-detailing operations and similar establishments shall comply with Rule 40D-21.631(4), F.A.C.
- c. Cleaning of cars, trucks and other Mobile Equipment in other settings is also prohibited, with the following exceptions:
- i. Washing of fire trucks and other emergency vehicles done in accordance with 40D-21.631(3)(a)3.;

- ii. Rinsing of boats and other vehicles and flushing boat engines after exposure to saltwater or sewage or to prevent the transportation of exotic plant or animal material;
- iii. Washing of any vehicle immediately prior to sale, rent or lease (including lease termination, but excluding daily car or truck rentals); and
- iv. Cleaning agricultural vehicles in accordance with canker abatement procedures, animal husbandry practices and other activities endorsed by the University of Florida's Institute of Food and Agricultural Sciences or United States Department of Agriculture is allowed, as necessary.

# **ATTACHMENT B**

Tampa Bay Water
Hillsborough County
City of Tampa (but follow Tampa's restrictions)
Pasco County
New Port Richey
Port Richey
Aloha Utilities, Inc.
Pinellas County
St. Petersburg
Clearwater
Oldsmar
Pinellas Park
Safety Harbor
Tarpon Springs

## **NOTICE OF RIGHTS**

Persons to whom this Order is directed, or whose substantial interests are affected, may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S., and Chapter 28-106, Florida Administrative Code (F.A.C.). A request for a hearing must: 1) explain how the petitioner's or other person's substantial interests will be affected by the District's action; 2) state all material facts disputed by the petitioner or other person, or state that there are no disputed facts; and 3) otherwise comply with Chapter 28-106, F.A.C.

A request for hearing must be filed with and received by the Agency Clerk of the District at District Headquarters, 2379 Broad Street, Brooksville, Florida 34604-6899 within twenty-one (21) days of receipt of this notice. Receipt is deemed to be the fifth day after the date on which this notice is deposited in the United States mail. Failure to file a request for hearing within this time period shall constitute a waiver of any right you or any other person may have to request a hearing under Sections 120.569 and 120.57, F.S.

Mediation pursuant to Section 120.573, F.S., and Rule 28-106.111, F.A.C., to settle an administrative dispute regarding the District's action in this matter is not available prior to the filing of a request for hearing.

In accordance with subsection 120.569(1), F.S., the following additional administrative or judicial review may be available.

A party who is adversely affected by final agency action may seek review of the action in the appropriate District Court of Appeal pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within thirty (30) days after the rendering of the final action by the District.