

SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
3301 Gun Club Road  
West Palm Beach, Florida 33406

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Order No. 2011- 095-DAO-WS

SOUTH FLORIDA  
WATER MANAGEMENT DISTRICT

IN RE:

Emergency Order for the  
Purpose of Immediate Water  
Supply Relief for the City of  
West Palm Beach and its  
Public Water Supply Utility  
Service Area

**EMERGENCY ORDER**

The Executive Director of the South Florida Water Management District ("District"), pursuant to Section 373.119(2), Florida Statutes ("Fla. Stat."), and Rule 40E-1.611, Florida Administrative Code ("Fla. Admin. Code"), after considering the recommendations of District staff and being otherwise fully apprised of the matter, issues the following Emergency Order containing the following Findings of Fact, Ultimate Facts and Conclusions of Law:

**FINDINGS OF FACT**

1. The District is a public corporation of the State of Florida, existing pursuant to Chapter 25270, Laws of Florida, 1949, and operating pursuant to Chapter 373, Fla. Stat., and Title 40E, Fla. Admin. Code, as a multi-purpose water management district with its principal office at 3301 Gun Club Road, West Palm Beach, Florida. The District has the power and duty to protect Florida's water resources and to administer and enforce the provisions of Chapter 373, Fla. Stat., and the rules promulgated there under, Title 40E, Fla. Admin. Code. The District has jurisdiction over the matters addressed in this Order.

2. The City of West Palm Beach ("City"), as authorized by the District, provides drinking water to a service area of approximately 35,900 acres, including the Town of Palm Beach, Town of South Palm Beach, and unincorporated sections of Palm Beach County.

3. The City received Consumptive Use Permit #50-00615-W, from the District on October 12, 2006. The City has a maximum allocation not to exceed 1,339 million gallons per month ("MGM") at its Clear Lake Water Treatment Plant.

4. The City primarily receives its drinking water from 8 surface water pumps at two locations on Clear Lake. Clear Lake receives discharges from Lake Mangonia and the M-Canal. The M-Canal is supplied by rainfall/runoff collected in the City's Water Catchment Area, flows from the City's Wellfield, and two 65,000 gallon per minute pumps at the L-8 Tieback Canal (through the Control 2 pump station), as authorized by Consumptive Use Permit No. 50-07890-W.

5. The conditions of Permit #50-00615-W authorize the City to withdraw groundwater from the Surficial Aquifer System ("SAS") at the Wellfield, located adjacent to the East Central Regional Wastewater Treatment Plant on a one-to-one basis relative to the contemporaneous delivery of reclaimed water from the Wetlands-Based Water Reclamation Project to the Wellfield. These permit conditions were incorporated into Permit #50-00615-W for the purpose of protecting wetland resources and other existing legal users. Water is discharged from the Wellfield to the M-Canal which then flows to Clear Lake where it is withdrawn for the City's water supply.

6. So far this dry season, the City of West Palm Beach, including the Water Catchment Area, has received fairly limited rainfall. October 1, 2010 to June 23, 2011,

about 13.08 inches of rain fell over Palm Beach County. This is only 36% of the historic average for Palm Beach County.

7. The National Drought Mitigation Center's Drought Monitor recently increased the drought condition in Eastern Palm Beach County from extreme to exceptional; its most severe drought condition. Average rainfall would not significantly ameliorate the rainfall deficit in Palm Beach County.

8. Dry weather conditions have led to a decline in the City's water supply sources. The lack of rainfall has led to low water levels in the City's surface water supply sources. On June 23, 2011, the water level in Clear Lake was 10.6 feet National Geodetic Vertical Datum ("NGVD").

9. On June 23, 2011, the water level in the City's Water Catchment Area, as measured at the G-161 structure, was 16.07 feet NGVD. At 16.2 feet NGVD, water supply becomes severely limited and environmental impacts are aggravated. The City estimates the Water Catchment Area declines at a rate of about 0.1 foot every 2 days.

10. As of June 23, 2011, the water level in the M-Canal was 15.97 feet NGVD, as measured at the City's Control 4 structure.

11. These extreme dry conditions have led to the City being unable to effectively recharge Clear Lake or the Water Catchment Area. During non-drought times, Sub-basin C (West Palm Beach Canal Basin) of the Everglades Agricultural Area and the Interior Palm Beach County Water Use Basin generate considerable runoff during the wet season and the first half of the dry season with annual runoff volume on the order of 70,000 acre-feet per year. The runoff from these basins usually extends for months after the wet season because of its size and the proportion of natural areas

within the basins.

12. When local basin runoff is unavailable, Lake Okeechobee provides surface water via gravity flow to the L-8 Canal, via the C-10A Culvert and S-76 Structure, to recharge the City's drinking water supply. Flow through C-10A is substantially reduced when the Lake Okeechobee stage falls below 11.75 feet NGVD.

13. On May 12, 2011, the District issued Order No. 2011-061-DAO-WS, imposing modified phase III water shortage restrictions on users that withdraw surface water from Lake Okeechobee or waters hydraulically connected to Lake Okeechobee. C&SF Project system deliveries to permitted users reflected a 45% cutback in supplies needed to meet the user demands during 1-in-10 rainfall conditions.

14. Since the effective date of Order No. 2011-061-DAO-WS, Lake Okeechobee water levels have declined. On June 23, 2011, Lake Okeechobee water level measured 9.55 feet NGVD. This has resulted in diminished flow through C-10A to a daily average of approximately 30 cfs. As of June 24, 2011, the water level downstream of C-10A was 9.45 ft NGVD. This flow is insufficient to maintain the L-8 Canal stages high enough for the City to pump for meaningful times with its Control 2 pump station.

15. In order to equitably distribute remaining water supplies, on March 21, 2011, the Executive Director issued Order No. 2011-040-DAO-WS, imposing modified phase I water shortage restrictions on various water use classes, including the diversion and impoundment use class. A copy of this Order is available from the District Clerk. Under this Order, the City's withdrawals via Control 2 were reduced by 15% and pumping hours were restricted in order to accommodate the various users withdrawing

from the L-8 Canal.

16. The above occurrences have reduced water levels in the L-8 Canal, impacting existing legal users and the water resources in the basin.

17. To deal with declining water sources, on June 10, 2011, the District issued Emergency Order No. 2011-080-DAO-WS. A copy of the Order is also available from the District Clerk. The Emergency Order restricted landscape irrigation within the City's utility service area to one day per week to limit demand for the declining water supply. Initial reports suggest this has reduced the City's water use demand from an average weekly basis of 31.7 million gallons per day ("MGD") to about 27.45 MGD.

18. To help meet the demand within its service area, the City is withdrawing water from Clear Lake at 22-26 MGD. The City is also purchasing an average of 3.25 MGD of treated water from Palm Beach County Utilities.

19. Simultaneously with the execution of Order No. 2011-080-DAO-WS, the District evaluated water sources that could potentially supplement regional water supplies. The District concluded the L-8 Reservoir Project ("Reservoir") was a suitable and available source of supplemental water for the Interior Palm Beach County Water Use Basin, West Palm Beach Canal Basin, and the M-Canal Water Use Basin.

20. On June 20, 2011, the District received authorization from the Florida Department of Environmental Protection ("FDEP") to discharge water from the Reservoir into the L-8 Canal to supplement flows in the L-8, M, and C-51 Canals to help meet the various water demands.

21. The District began making deliveries from the Reservoir on June 23, 2011. The City planned to operate its pumps at Control 2 to divert water from the Reservoir

into the M-Canal and pass through to its lake system.

22. However, on June 23, 2011, the City was only able to operate Control 2 for about 1.5 hours before water levels declined below the intake pumps. It is expected that with continuous pumping from the Reservoir the City will be able to pump for an average of 8 hours per day. This limited pumping time combined with the low flow rates required to prevent pump cavitation due to the extremely low L-8 stages results in an expected daily average flow rate of about 20 MGD.

23. Even with these two additional sources of water and the reduced demand, the water use demands within the City currently exceed the available water supply, for example:

a. The existing pumping infrastructure within Reservoir (75 cfs or 48 MGD) limits the quantity of water that can be delivered to the City and other users. Without the use of high head pumps, water can only be withdrawn from the reservoir down to -2 feet NGVD. This equates to about 3 weeks of pumping from the L-8 Reservoir to augment the City's water supply system.

b. The delivery of Reservoir water to the City via the Control 2 pump station, M-Canal, and the Water Catchment Area also has significant limitations. In a recent pilot test, up to 54% of the water delivered to the City from the Reservoir was lost to seepage, evapotranspiration, or storage within the Water Catchment Area. Even with the isolation of the Water Catchment Area from the M-Canal through the use of earthen plug/operation stage below 17 feet NGVD, as required by the FDEP order, there are seepage losses from the M-Canal. These seepage losses are higher when the canal is initially filled and when the surrounding areas are dry. It is expected that with the dry

conditions, even after filling, the M-Canal will lose several million gallons per day to seepage.

c. In summary, the current water supply and potential water quality limitations of the Reservoir and the limited amount of water that can be delivered to the City from the Palm Beach County interconnect system has the potential to impact the health, safety and welfare of the residents of the City of West Palm Beach, population 100,000.

24. As a result of these circumstances, the City has looked to other sources of water to meet its public water supply needs. The City believes C-51 Canal stormwater may be intercepted in order to augment its water supply sources during this drought.

25. West Palm Beach could intercept C-51 Canal water and convey the water through the Stub Canal and into West Palm Beach's Renaissance Project by opening the Boyd Street Structure to intercept water that would otherwise be discharged to tide. A map of depicting these features is attached hereto as Exhibit "A."

26. The intercepted water will be treated in West Palm Beach's existing permitted Renaissance Project. The Renaissance Pump Station will then discharge the treated water into the south end of Clear Lake.

#### **ULTIMATE FACTS AND CONCLUSIONS OF LAW**

27. Section 373.119(2), Fla. Stat., authorizes the Executive Director of the District, in the event of an emergency requiring immediate action to protect the public health, safety or welfare, with the concurrence of the Governing Board and without prior notice, to issue an order reciting the existence of such an emergency and requiring that such action be taken as deemed necessary. Pursuant to Section 373.119(3), Fla. Stat.,

any person to whom an emergency order is directed pursuant to subsection (2), shall comply therewith immediately, but on petition to the Board shall be afforded a hearing as soon as possible.

28. Rule 40E-1.611, Fla. Admin. Code, states an emergency exists when immediate action is necessary to protect, in part, public health, safety, welfare, or the health of animals and recreational or agricultural uses of land.

29. The C-51 Canal is part of the C&SF Project for which the District is the designated local sponsor pursuant to Section 373.1501, Fla. Stat. Pursuant to Sections 373.085 and 373.086, Fla. Stat., the District is authorized to operate the works of the District, including the S-155 structure and regulate water in the C-51 Canal.

30. The Governing Board has authority to prescribe the manner in which local works provided by private persons will connect with and make use of the works or land of the District. § 373.085(1), Fla. Stat. (2010).

31. The Governing Board may to “[i]ssue orders to implement or enforce any provisions of th[e] chapter or regulations.” § 373.083(2), Fla. Stat. (2010).

32. The Governing Board is also able to issue any orders for the modification of any existing uses, diversion facilities, or storage facilities to obtain the most beneficial use of the water resources and to protect the public health, safety, and welfare and the interest of the water users affected. § 373.171(1), Fla. Stat. (2010).

33. The Governing Board may impose such reasonable conditions as are necessary to assure that the operation or maintenance of any stormwater management system, dam, impoundment, reservoir, appurtenant work, or works will comply with the provisions of Part IV of Chapter 373, will not be inconsistent

with the overall objectives of the District and will not be harmful to the water resources of the District. § 373.416(1), Fla. Stat. (2010).

34. Pursuant to Section 373.119(2), Fla. Stat., and the facts described above, the Executive Director finds that an emergency exists requiring immediate action necessary to protect the public welfare.

### **ORDER**

Pursuant to Section 373.119(2), Fla. Stat., and Rule 40E-1.611, Fla. Admin. Code, and based upon the above Findings of Fact, Ultimate Facts and Conclusions of Law, the Executive Director hereby orders that:

35. The following limited activities are temporarily authorized and/or ordered:

a. From June 24, 2011 to July 13, 2011, the City is authorized to intercept and capture water from the C-51 Canal through the Boyd Street Structure when: 1) water is being discharged to tide through the S-155 Structure; or, 2) the stage at the Water View Gauge (WATER or WTVW) is at or above 8.2 feet NGVD.

b. This water shall be diverted via a gravity connection to the C-51 Canal at the Boyd Structure. The City is not authorized to install any infrastructure pursuant to this Emergency Order.

c. Prior to the interception of water, the City must contact the District's Operational Control Room at (561) 681-2570 to confirm water availability and receive written confirmation of the same from the District.

36. The City shall provide the District with a summary report documenting the quantity of water withdrawn under this Emergency Order.

37. This Emergency Order is temporary in nature and shall not relieve the City of any obligation to obtain necessary federal, state, local, or special district approvals.

38. This Emergency Order shall not be construed as a substitute for, or waiver of, any right of way, surface water management, water use, or other permits required of the City under the District's rules and regulations.

39. This Emergency Order shall not constitute waiver of the District's regulatory jurisdiction, nor be construed to authorize any activity within the jurisdiction of the District except in accordance with the express terms of this Emergency Order. In addition, it shall not be construed as relieving the City from any responsibilities, duties or liabilities it may have to other local, state, or federal agencies exercising authority over the areas covered by this Emergency Order.

40. This Emergency Order is meant to provide authorization for a short-term testing scenario and shall not be construed as a substitute for any solution, temporary or long-term, that may be proposed and/or approved by the District.

41. This Emergency Order does not convey any property rights or any rights or privileges other than those specified in the Emergency Order.

42. Failure to comply with the conditions contained within this Emergency Order shall constitute a violation of a District Order under Chapter 373, Fla. Stat., and enforcement proceedings may be brought in any appropriate administrative or judicial forum.

43. If, for any reason, including any adverse water quality, water quantity, or other negative impacts occur as a result of this Emergency Order, the District reserves the right to immediately withdraw this Emergency Order upon notice.

44. The City shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of this Emergency Order.

45. If the District petitions or sues for enforcement of the terms of this Emergency Order, the District reserves the right to initiate appropriate legal action, to impose civil penalties, and collect attorney's fees and costs.

46. Persons whose substantial interests are affected by this Emergency Order shall have a right, pursuant to Chapter 120 and Section 373.119(3), Fla. Stat., and as stated in the Notice of Rights to petition for an administrative hearing.

47. This Emergency Order shall take effect upon execution by the Executive Director and shall expire at 11:59 PM, July 13, 2011. This Emergency Order is subject to the Governing Board's concurrence at its next regularly scheduled meeting.

**NOTICE OF RIGHTS**

Any party substantially affected by this order has the right to seek judicial review of it under Section 120.62, Fla. Stat., by filing a notice of appeal under Rule 9.110, Fla. Admin. Code, with the District Clerk at 3301 Gun Club Road, West Palm Beach, Florida 33406, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this Order is filed with the District Clerk.

DONE AND ORDERED in West Palm Beach, Florida, on this 24<sup>th</sup> day of June 2011.



SOUTH FLORIDA WATER  
MANAGEMENT DISTRICT  
By its Executive Director

  
MELISSA L. MEEKER

Attest:

  
District Clerk/Assistant Secretary  
Dated: June 24, 2011

Legal Form Approved:

  
Jennifer Bokankowitz, Esq.

# EXHIBIT A

