

Appendix B

**Recovery and Prevention Strategies for
Minimum Flows and Levels**

CHAPTER 40D-80
RECOVERY AND PREVENTION STRATEGIES FOR MINIMUM FLOWS AND LEVELS

40D-80.011	Policy and Purpose
40D-80.073	Hillsborough River Recovery Strategy
40D-80.074	Regulatory Portion of Recovery Strategy for the Southern Water Use Caution Area
40D-80.075	Regulatory Portion of Recovery Strategy for the Dover/Plant City Water Use Caution Area. (Repealed)

40D-80.011 Policy and Purpose.

This Chapter sets forth the regulatory portions of the recovery or prevention strategies to achieve or protect, as applicable, the Minimum Flows and Levels established for rivers, lakes, wetlands and aquifers in Chapter 40D-8, F.A.C., as required by Section 373.0421(2), F.S., (1997). The complete prevention or recovery strategy for a given area will be set forth in the District Water Management Plan. The complete prevention or recovery strategy may include, but not be limited to, water resource supply and development projects and funding assistance, environmental restoration projects, conservation programs and water shortage plans. In areas where existing flows or levels are below, or projected to fall within 20 years below, the applicable Minimum Flow or Level, the District is expeditiously implementing a prevention or recovery strategy for those waters with the intent to prevent water flows and levels from falling below, or to achieve recovery to the established Minimum Flow or Level as soon as practicable, whichever is applicable. This chapter comprises a portion of that strategy.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.042, 373.0421, 373.171 FS. History—New 8-3-00.

40D-80.073 Hillsborough River Recovery Strategy.

Beginning November 25, 2007, the Minimum Flow for the Lower Hillsborough River shall be as provided in subsection 40D-8.041(1), F.A.C., to be achieved on the time schedule as set forth below. The District and the City of Tampa (City) shall measure the delivery of water to the base of the dam relative to their respective elements as described below. The City shall report this information to the District monthly on the 15th day of the following month. In addition, the City shall submit a quarterly written report of all activities and all progress towards timely completion of its elements of the recovery strategy. Such reports will be submitted to the District within 15 calendar days after each calendar year quarter.

(1) The District and the City have entered into the Joint Funding Agreement Between The Southwest Florida Water Management District and The City of Tampa For Implementation of Recovery Projects To Meet Minimum Flows of The Lower Hillsborough River, dated October 19, 2007, (the Funding Agreement), which is incorporated herein by reference (<https://www.flrules.org/Gateway/reference.asp?No=Ref-13872>, effective 10/19/07). A copy of the Funding Agreement is available from the District upon request. The Funding Agreement and Rule 40D-80.073, F.A.C., constitute the District's recovery strategy for the Lower Hillsborough River required by Section 373.0421(2), F.S., and shall not compromise public health, safety and welfare.

(2) The schedule to achieve the Minimum Flows for the Lower Hillsborough River is as follows:

(a) Sulphur Springs.

Beginning on November 25, 2007, the City shall be required to provide ten cubic feet per second (cfs) of water to the base of the City's dam each day, provided such use will not compromise public health, safety and welfare.

(b) Tampa Bypass Canal Diversions.

By January 1, 2008, provided that any permit that may be required is approved, the District shall divert up to 7.1 million gallons of water on any given day from the District's Tampa Bypass Canal (TBC) to the Hillsborough River at the District's Structure 161. The District shall then deliver water from the Hillsborough River immediately above the City's dam to the base of the City's dam to help meet the minimum flow requirements of the Lower Hillsborough River. Such diversions shall not occur if public health, safety or welfare will be compromised.

1. The District shall complete a comprehensive analysis of these diversions within 90 days of the first year of operation to identify and subsequently make any mechanical or efficiency adjustments that may be necessary. The District shall use its best efforts to expedite obtaining any permit that may be needed to undertake these actions.

2. By October 1, 2013, provided that the transmission pipeline has been constructed and is operational, all of the water diverted from the TBC middle pool under this provision to help meet the minimum flow shall be provided to the Lower Hillsborough River per paragraph 40D-80.073(2)(g), F.A.C.

3. These diversions shall be prioritized as follows:

a. Priority Source One – Diversions From the TBC Middle Pool When the TBC Middle Pool is Above 12.0 feet NGVD (1929 or its 1988 equivalent), and There is Flow of at Least 11 cfs Over the District's Structure 162.

On days when the TBC middle pool is above 12.0 feet NGVD (1929 or its 1988 equivalent), as measured by the downstream gauge at the District's Structure 161, and there is flow of at least 11 cfs over the District's Structure 162, the District shall divert water from the TBC middle pool to the Hillsborough River.

(I) The District shall then deliver 75 percent of any water diverted from the TBC to the Hillsborough River under this provision to the Lower Hillsborough River. Delivery of 75 percent of the water diverted from the TBC addresses concerns about potential losses due to subsurface leakage, evaporation and transpiration. This delivery shall be from the Hillsborough River just above the City's dam to the base of the City's dam, and shall supplement diversions from Sulphur Springs, Blue Sink and Morris Bridge Sink, as they are implemented, and as described in paragraphs 40D-80.073(2)(a), (c), (f), and (h), F.A.C.

(II) The TBC middle pool diversions will be limited to the quantity needed to achieve the minimum flow requirements of the Lower Hillsborough River set forth in subsection 40D-8.041(1), F.A.C., but will not exceed 7.1 million gallons on any given day.

(III) Such diversions shall cease from the TBC middle pool if the elevation difference between the TBC middle and lower pools exceeds 7.0 feet.

(IV) On days when flow over the Hillsborough River Dam naturally exceeds 20 cfs during the months of July through March, or 24 cfs during the months of April through June and when diversions from the TBC middle pool are not needed to replenish the supply from Storage Projects described in subsections 40D-80.073(3) and (4), F.A.C., diversions from the TBC middle pool shall not occur and any flows in the TBC lower pool above elevation 9.0 feet NGVD (1929 or its 1988 equivalent), shall be available for water supply.

(V) Prior to October 1, 2013, and during the months of March through June, on days when some water is needed from the TBC middle pool to help meet the minimum flow for the Lower Hillsborough River, all available water from the TBC middle pool not needed to be diverted in accordance with SWFWMD Water Use Permit No. 20006675 but not exceeding 7.1 million gallons on any given day will be diverted to the Hillsborough River. Water delivered to the Hillsborough River in excess of that needed to help meet the minimum flow of the Lower Hillsborough River shall remain in the Hillsborough River above the dam. Keeping this water in the Hillsborough River above the dam will reduce the time and quantities of supplemental flow needed to help meet the minimum flow requirements.

(VI) During the months of July through February, on days when water is needed from the TBC middle pool to help meet the minimum flow of the Lower Hillsborough River, only that amount of water needed to help meet the minimum flow but not in excess of 7.1 million gallons on any given day shall be diverted from the TBC middle pool to the Hillsborough River, and any water in the TBC middle and lower pools above elevations 12.0 and 9.0 feet NGVD (1929 or its 1988 equivalent), respectively, shall be available for water supply.

b. Priority Source Two – Diversions When the TBC Middle Pool is Above 12.0 feet NGVD (1929 or its 1988 equivalent), and the Flow Over the District's Structure 162 is Less Than 11 cfs.

On days when the TBC middle pool is above 12.0 feet NGVD (1929 or its 1988 equivalent), as measured by the downstream gauge at the District's Structure 161, and the flow over the District's Structure 162 is less than 11 cfs, the District shall divert water from the TBC middle pool to the Hillsborough River.

(I) The District shall then deliver 75 percent of any water diverted from the TBC middle pool to the Hillsborough River under this provision to the Lower Hillsborough River. Delivery of 75 percent of the water diverted from the TBC addresses concerns about potential losses due to subsurface leakage, evaporation and transpiration. This delivery shall be from the Hillsborough River just above the City's dam to immediately below the City's dam, and shall supplement diversions from Sulphur Springs, Blue Sink and Morris Bridge Sink, as they are implemented, and as described in paragraphs 40D-80.073(2)(a), (c), (f), and (h), F.A.C.

(II) The TBC middle pool diversions will be limited to the quantity needed to achieve the minimum flow requirements of the Lower Hillsborough River, but will not exceed 7.1 million gallons on any given day.

A. On days such diversions occur, the District will divert from the TBC lower pool to the TBC middle pool quantity equivalent to that diverted by the District from the TBC middle pool to the Hillsborough River.

B. Such diversions shall cease from both the TBC middle and lower pool when the stage of the TBC lower pool reaches 6.0 feet NGVD (1929 or its 1988 equivalent), as measured by the gauge at the District's Structure 160, or the elevation difference between the TBC middle and lower pools exceeds 7.0 feet.

(III) Once the stage in the TBC lower pool is below 8.7 feet NGVD (1929 or its 1988 equivalent), withdrawals from this priority source to help meet the minimum flow for the lower Hillsborough River are considered withdrawals from the storage of the TBC lower pool. When the stage in the TBC lower pool is below 8.7 feet NGVD (1929 or its 1988 equivalent), the following restrictions apply:

A. At no time shall withdrawals from the lower pool to help meet the minimum flow for the lower Hillsborough River cause the stage in the lower pool to go below 6.0 feet NGVD (1929 or its 1988 equivalent), or cause the elevation difference between the TBC middle and lower pools to exceed 7.0 feet, as measured on either side of the District's Structure 162.

B. If supplemental flows are required to help meet the lower Hillsborough River minimum flow from this Priority Source, once withdrawals begin from storage they will continue until the TBC lower pool reaches an elevation of 6.0 feet NGVD (1929 or its 1988 equivalent). At such time as either of the conditions set forth in sub-sub-sub-subparagraph 40D-80.073(2)(b)3.b.(III)A., F.A.C., above, are met, the District shall cease withdrawals from the TBC lower pool. The District shall only reinstate withdrawals from the TBC lower pool when its elevation equals or exceeds 9.0 feet NGVD (1929 or its 1988 equivalent), for 20 consecutive days, which is defined as the TBC lower pool replenishment.

C. The total withdrawn from storage on any given day shall not exceed 7.1 million gallons on any given day.

D. Withdrawals from storage will be limited to the quantity needed to help achieve the minimum flow requirements of the Lower Hillsborough River after utilizing the quantity diverted from all other sources, as they are implemented, and as described in subsections 40D-80.073(2), (3), and (4), F.A.C.

c. Priority Source Three – Diversions When TBC Middle Pool Elevations are Between 10.0 and 12.0 Feet NGVD (1929 or its 1988 equivalent).

The District will make all reasonable efforts to obtain authorization from the United States Army Corps of Engineers to allow the withdrawals of up to 7.1 million gallons on any given day from the TBC middle pool to aid in the Lower Hillsborough River minimum flow requirements when the TBC middle pool is below 12.0 feet and above 10.0 feet NGVD (1929 or its 1988 equivalent).

(I) These diversions will only occur when the stage of the TBC lower pool has reached 6.0 feet NGVD (1929 or its 1988 equivalent), or the TBC lower pool is in a state of replenishment as described in sub-sub-sub-subparagraph 40D-80.073(2)(b)3.b.(III)B., F.A.C. These diversions will be limited to the quantity needed to help achieve the minimum flow requirements of the Lower Hillsborough River after utilizing the quantity diverted from all other sources, as they are implemented, and as described in subsections 40D-80.073(2), (3), and (4), F.A.C., but will not exceed 7.1 million gallons on any given day.

(II) These diversions shall cease if the elevation difference between the Hillsborough River and TBC middle pool exceeds 9.5 feet, if approved by the United States Army Corps of Engineers, as measured on either side of the District's Structure 161, or if the elevation difference between the TBC middle and lower pools exceeds 7.0 feet, as measured on either side of the District's Structure 162.

(III) Diversions associated with this provision will not occur until the water transmission pipeline as set forth in paragraph 40D-80.073(2)(g), F.A.C., is completed or by October 1, 2013, whichever is sooner. Once the stage in the TBC middle pool is below 12.0 feet NGVD (1929 or its 1988 equivalent), withdrawals to help meet the minimum flow for the Lower Hillsborough River are considered withdrawals from the storage of the TBC middle pool. When the stage is below 12.0 feet NGVD (1929 or its 1988 equivalent), the following restrictions apply:

A. At no time shall withdrawals from the TBC middle pool to help meet the minimum flow for the Lower Hillsborough River cause the stage in the middle pool to go below 10.0 feet NGVD (1929 or 1988 equivalent), or cause the elevation difference between the TBC middle pool and Hillsborough River to exceed 9.5 feet, as measured on either side of the District's Structure 161, or cause the elevation difference between the TBC middle and lower pools to exceed 7.0 feet, as measured on either side of the District's Structure 162.

B. If supplemental flows are required to help meet the Lower Hillsborough River minimum flow from this Priority Source, once withdrawals begin from storage they will continue until the TBC middle pool reaches an elevation of 10.0 feet NGVD (1929 or its 1988 equivalent). At such time as either of the conditions set forth in sub-sub-sub-subparagraph 40D-80.073(2)(b)3.c.(III)A., F.A.C., above, are met, the District shall cease withdrawals from the TBC middle pool. The District shall only reinstate withdrawals from the TBC middle pool when its elevation equals or exceeds 12.0 feet NGVD (1929 or its 1988 equivalent), for 20 consecutive days, which is defined as the TBC Pool Replenishment, and there is less than 11 cfs of flow over the District's Structure 162.

C. The total withdrawn from storage on any one day shall not exceed 7.1 million gallons.

D. Withdrawals from storage will be limited to the quantity needed to help achieve the minimum flow requirements of the Lower Hillsborough River after utilizing the quantity diverted from all other sources, as they are implemented, and as described in subsections 40D-80.073(2), (3), and (4), F.A.C.

(c) Sulphur Springs Project.

1. By October 1, 2009, and as specified in the Funding Agreement incorporated in subsection (1) above, the City shall complete the modification of the lower weir to provide to the base of the dam all available flow from Sulphur Springs not needed to maintain the minimum flow for manatees as set forth in paragraph 40D-8.041(2)(b), F.A.C.

2. By October 1, 2010, the City shall complete the construction of the upper gates and the pump station to provide to the base of the dam all available flow from Sulphur Springs not needed to maintain the minimum flow for manatees as set forth in paragraph 40D-8.041(2)(b), F.A.C.

3. By October 1, 2012, and as specified in the Funding Agreement incorporated in subsection (1) above, the City is to provide to the base of the dam, all available flow from Sulphur Springs not needed to maintain the minimum flow for Sulphur Springs as set forth in paragraph 40D-8.041(2)(a), F.A.C.

a. These diversions shall not exceed 11.6 million gallons on any given day.

b. The City is authorized to use any remaining quantities at Sulphur Springs for water supply purposes consistent with SWFWMD Water Use Permit No. 20002062.

4. Additionally, beginning on October 1, 2010, on days when the minimum flow requirements are being adjusted for the Lower Hillsborough River, as described in paragraph 40D-8.041(1)(b), F.A.C., and there is flow at Sulphur Springs in excess of the quantity needed to help meet the adjusted flow as described in paragraph 40D-8.041(1)(b), F.A.C., and the minimum flow requirements in paragraph 40D-8.041(2)(b), F.A.C., and the City is not using such flow to augment the Hillsborough River above the dam, the City shall move such quantity to the base of the City's dam up to the unadjusted quantities described in paragraph 40D-8.041(1)(b), F.A.C.

(d) Blue Sink Analysis.

By October 1, 2010, and as specified in the Funding Agreement incorporated in subsection (1) above, the City in cooperation with the District shall complete a thorough cost/benefit analysis to divert all available flow from Blue Sink in north Tampa to a location to help meet the minimum flow or to the base of the City's dam.

(e) Transmission Pipeline Evaluation.

By October 1, 2010, and as specified in the Funding Agreement incorporated in subsection (1) above, the City shall complete a thorough design development evaluation to construct a water transmission pipeline from the TBC middle pool to the City's David L. Tippin Water Treatment Facility, including a spur to just below the City's dam.

(f) Blue Sink Project.

By October 1, 2011, and as specified in the Funding Agreement incorporated in subsection (1) above, the City will provide all available flow from Blue Sink project to help meet the minimum flow provided that all required permits are approved, and it is determined that the project is feasible. Once developed, all water from this source shall be used to the extent that flow is available to help meet the minimum flow for the Lower Hillsborough River.

(g) Transmission Pipeline Project.

By October 1, 2013, and as specified in the Funding Agreement incorporated in subsection (1) above, the City shall complete the water transmission pipeline described in paragraph 40D-80.073(2)(e), F.A.C., and move the water the District will move as specified in paragraphs 40D-80.073(2)(b) and (h), F.A.C., to the Lower Hillsborough River directly below the dam as needed to help meet the minimum flow or to transport water in accordance with SWFWMD Water Use Permit No. 20006675.

1. This transmission line will eliminate all adjustment for losses described in paragraphs 40D-80.073(2)(b) and (h), F.A.C.

2. Additionally, the City will provide an additional flow of 1.9 million gallons each day to the base of the dam from the TBC middle pool provided that water is being transported in accordance with SWFWMD Water Use Permit No. 20006675. This additional 1.9 million gallons each day is anticipated to be part of the water savings associated with this transmission pipeline.

3. Once the pipeline is completed, the 1.9 million gallons each day of additional flow provided by the City as part of the water savings associated with the pipeline will be used in preference to all other sources except Sulphur Springs and Blue Sink to help meet the minimum flow for the Lower Hillsborough River.

4. In the event that this pipeline is not substantially completed by October 1, 2013, or that the City did not provide the District with a minimum ninety (90) days notice prior to October 1, 2013, of the delay of completion of the pipeline due to circumstances

beyond its control, then, the City will be responsible for delivering the flows the District was previously obligated to divert from the TBC middle pool to the Hillsborough River and then to immediately below the City's dam under paragraphs 40D-80.073(2)(b) and (h), F.A.C.; except that the District shall continue to be responsible to pump water from the TBC lower pool to the middle pool as described in subparagraph 40D-80.073(2)(b)2., F.A.C., and from Morris Bridge Sink to the TBC middle pool as described in paragraph 40D-80.073(2)(h), F.A.C.

5. The City shall also provide the 1.9 million gallons each day if needed to help meet the flow described in this provision, from some other permitable source and is obligated to do so pursuant to subparagraph (2)(b)4. above.

(h) Morris Bridge Sink Project.

1. By October 1, 2012, or earlier, and upon completion of the project, provided that any permit that may be required is approved, the District shall divert up to 3.9 million gallons of water on any given day from the Morris Bridge Sink to the TBC middle pool.

a. The Morris Bridge Sink diversions will be limited to the quantity needed to achieve the minimum flow requirements of the Lower Hillsborough River, after utilizing the quantity diverted from Sulphur Springs, Blue Sink and the 1.9 million gallons of water savings each day anticipated from the transmission pipeline, as they are implemented, and as described in paragraphs 40D-80.073(2)(a), (c), (f), and (g), F.A.C.

b. However, on days when Tampa Bay Water does not draw the TBC lower pool down to 9.0 feet NGVD (1929 or its 1988 equivalent) for water supply purposes, and supplemental flow is needed for the Lower Hillsborough River minimum flow requirements beyond water that can be delivered from Sulphur Springs, Blue Sink and the 1.9 million gallons of water savings each day anticipated from the transmission pipeline described in paragraphs 40D-80.073(2)(a), (c), (f), and (g), F.A.C., the District shall divert up to 7.1 million gallons on any given day from the TBC lower pool to the TBC middle pool prior to diverting flows from the Morris Bridge Sink to the TBC middle pool.

c. The District shall cease to divert water from the TBC lower pool under this provision once the elevation of the TBC lower pool reaches 9.0 feet NGVD (1929 or its 1988 equivalent).

2. Prior to the completion of the pipeline described in paragraph 40D-80.073(2)(g), F.A.C., the District shall transfer any water delivered to the TBC middle pool from the Morris Bridge Sink or the TBC lower pool under this provision to the Hillsborough River near the District's Structure 161.

a. These deliveries shall be made on the same day the District delivers water from the Morris Bridge Sink or the TBC lower pool.

b. The District shall then deliver 75 percent of any water diverted to the Hillsborough River under this provision to the Lower Hillsborough River. This delivery shall be from the Hillsborough River just above the City's dam to immediately below the City's dam.

c. The deliveries of the water from the Morris Bridge Sink to the TBC middle pool then on to the Hillsborough River are in addition to any other diversions from the TBC middle pool to the Hillsborough River described in paragraphs 40D-80.073(2)(b) and (h), F.A.C.

3. Once the City completes the water transmission pipeline described in paragraphs 40D-80.073(2)(e) and (g), F.A.C., or as may be otherwise responsible for delivering the flows the District was previously obligated to divert pursuant to paragraph 40D-80.073(2)(g), F.A.C., the City shall move any water the District delivers to the TBC middle pool from Morris Bridge Sink or the TBC lower pool under this provision to the Lower Hillsborough River directly below the dam. Such delivery by the City will occur on the same day the District delivers the water from the Morris Bridge Sink or the TBC lower pool to the TBC middle pool.

4. At no time shall withdrawals from the TBC under this provision cause:

a. The elevation difference between the TBC middle pool and Hillsborough River to exceed 9.5 feet as measured on either side of the District's Structure 161; or

b. The elevation difference between the TBC middle and lower pools to exceed 7.0 feet as measured on either side of the District's Structure 162.

(i) Beginning October 1, 2017, the City shall be required to meet the minimum flows at the base of the dam as set forth in subsection 40D-8.041(1), F.A.C.

(3) The City and the District shall, as specified in the Funding Agreement incorporated in subsection (1) above, cooperate in the evaluation of options for storage of water (Storage Projects) such as aquifer storage and recovery and additional source options (e.g., diversions from Morris Bridge Sink greater than those described in paragraph 40D-80.073(2)(h), F.A.C.), in sufficient permitable

quantities, that upon discharge to the base of the dam, together with the other sources of flow described in subsection 40D-80.073(2), F.A.C., will meet the minimum flows beginning October 1, 2017, or earlier.

(4) The City may propose for District approval additional source or storage projects that when completed may be used in lieu of all or part of one or more sources described in paragraphs 40D-80.073(2)(b)-(h), F.A.C.

(5) Any District sponsored project, which shall include evaluation of up to 3.9 million gallons per day of additional quantities other than those identified in paragraph 40D-80.073(2)(h), F.A.C., from the Morris Bridge Sink, shall be implemented by the District no later than October 1, 2017, provided that it is deemed feasible by the District, to eliminate or reduce the need to divert water from the TBC middle and lower pool storage as described in paragraph 40D-80.073(2)(b), F.A.C. Such projects shall be implemented only after receiving any required permits.

(6) Each spring, beginning in 2008, the District shall review the recovery strategy to assess the progress of implementation of the recovery strategy and report that progress to the Governing Board. This annual review and report shall include identification of the Storage Projects or other additional source options that will be operational by October 1, 2017. If and when developed, Storage Projects or other additional source options to supply supplemental flows to meet the minimum flow will be used in preference to removal of water from storage in either the middle or lower pools of the TBC as described in subsection 40D-80.073(2), F.A.C.

(7) The City and the District shall continue the existing monitoring and analysis of the water resources within the Lower Hillsborough River and the District shall provide this information to the Governing Board as part of the annual review and report described in subsection (6), above.

(8) In 2013, and for each five-year period through 2023, the District shall evaluate the hydrology, dissolved oxygen, salinity, temperature, pH and biologic results achieved from implementation of the recovery strategy for the prior five years, including the duration, frequency and impacts of the adjusted minimum flow as described in paragraph 40D-8.041(1)(b), F.A.C. As part of the evaluation, the District will assess the recording systems used to monitor these parameters. The District shall also monitor and evaluate the effect the Recovery Strategy is having on water levels in the Hillsborough River above the City's dam to at least Fletcher Avenue. The District will evaluate all projects described in this Recovery Strategy relative to their potential to cause unacceptable adverse impacts prior to their implementation.

(9) In conjunction with recovery of the Lower Hillsborough River and to enhance restoration of McKay Bay and Palm River estuary, the District intends to undertake a wetland restoration project adjacent to McKay Bay. The City agrees to contribute to the project by providing up to 7.1 million gallons on any given day of reclaimed water, as needed for the project. Within five years of completion of this wetland project, and for two subsequent five-year periods thereafter, the District shall review the hydrologic, dissolved oxygen, salinity, temperature, pH and biologic results achieved from the implementation of the restoration project and other similar District projects that may occur.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.036, 373.0361, 373.171, 373.0421, 373.0831, 373.1963 FS. History- New 8-3-00, Amended 8-3-00, 11-25-07, 5-26-10, 5-19-14, 11-24-21.

40D-80.074 Regulatory Portion of Recovery Strategy for the Southern Water Use Caution Area.

(1) Background.

Section 373.042, F.S., requires the District to establish Minimum Flows and Levels for priority waters within its boundaries. The District has established Minimum Flows and Levels (MFLs) within the Southern Water Use Caution Area (SWUCA), described in subsection 40D-2.801(3), F.A.C, which includes all or portions of Hillsborough, Polk, Highlands, Hardee, DeSoto, Manatee, Sarasota, and Charlotte counties. In establishing the MFLs, the District determined that the existing flow rates and water levels of some of the priority waters are below the MFLs established for them. In such circumstances Section 373.0421, F.S., requires the District to implement a recovery strategy. The District has developed a recovery strategy that includes both regulatory and non-regulatory mechanisms as described in the SWUCA Recovery Strategy, dated March 2006. The regulatory approach does not make impacts on an MFL water body from permitted quantities existing as of January 1, 2007, a basis for permit denial because the Recovery Strategy taken as a whole is intended to achieve recovery to the established minimum flows and levels as soon as practicable. The Recovery Strategy involves water supply planning, an emphasis on conservation, the development of alternative water supplies to meet growing demands and allows for reductions in existing ground water withdrawals that are impacting water bodies with established MFLs, restoration of water bodies and flow patterns, and the regulation of existing and new water withdrawals. This Rule 40D-80.074, F.A.C., describes the regulatory approach of the Recovery Strategy.

(2) Objectives of Recovery Strategy.

Long-term (as defined in the WUP Applicant's Handbook Part B, Section 3.9.2.6.2.1., incorporated by reference in Rule 40D-2.091, F.A.C.) flow rates and water levels for most MFL water bodies are below the MFLs predominantly because ground water withdrawals have lowered Floridan aquifer levels in the SWUCA. As a result of the lowered aquifer levels, salt water intrusion is occurring, and river flows and lake levels are impacted by reduced water levels, including some of those rivers and lakes for which MFLs have been established. The goals of the District's Recovery Strategy are the recovery of flows and levels to the MFLs and the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses. The Minimum Flows for rivers are described in Rule 40D-8.041, F.A.C. The Minimum Levels for lakes are described in subsection 40D-8.624(13), F.A.C. The Minimum Levels for aquifers are described in subsection 40D-8.626(2), F.A.C. The District intends to maintain on its website at www.watmatters.org a current listing of those water bodies for which a recovery or prevention strategy is in effect.

(3) Recovery Strategy Mechanisms.

(a) The non-regulatory mechanisms include conservation and water resource development efforts intended to increase the availability of alternative water supplies and to enhance the water resources of the SWUCA. Conservation, transitions in land use from agricultural to other use or changes in supply source, and the availability of alternative water supplies will help meet growing water demands in the SWUCA, and will also allow for reductions in ground water withdrawals.

(b) The guiding principles for the regulatory portion of the Recovery Strategy are that it should:

1. Contribute significantly to resource management and recovery;
2. Protect the investments of existing water use permit holders; and,
3. Allow for economic expansion and new economic activities in the SWUCA.

In addition, the District recognizes that the water resources in the SWUCA are subject to varying degrees of stress. The regulatory component of the Recovery Strategy has been designed in recognition of these variations. How water use permit applications will be affected by the regulatory mechanisms will vary depending on the resource conditions in the area affected by a proposed withdrawal and the extent to which the withdrawals will contribute to these resource conditions. For example, the regulatory mechanisms continue the existing "Most Impacted Area" (MIA) designation in coastal portions of southern Hillsborough, Manatee and northern Sarasota counties. The Salt Water Intrusion Minimum Aquifer Level is established within the MIA. New ground water withdrawals within the MIA and the area surrounding the MIA that impact salt water intrusion will be affected more by the MIA designation and the Salt Water Intrusion Minimum Aquifer Level, than will permit applications for new ground water withdrawals in the eastern portions of the SWUCA. Conversely, permit applications for new ground water withdrawals in the coastal areas will be much less affected by the MFLs established for the upper Peace River and the priority lakes in Polk and Highlands counties than permit applications for new ground water withdrawals on the Lake Wales Ridge.

(c) The water use permitting rules in Chapter 40D-2, F.A.C., address water conservation, alternative water supplies and recovery to MFLs. These water conservation and alternative water supplies rules include the amendments to Chapter 40D-2, F.A.C., November 15, 1990, January 1, 2003, as well as subsequent rules adopted as of January 1, 2007, developed in conjunction with the implementation of the Minimum Flows and Levels Recovery Strategy. In combination, these rules result in more efficient use of water and a lessening of impacts from withdrawals on water bodies with established MFLs.

(4) Restoration of river flows and lake levels.

In addition to the reduction of pumpage and permitted quantities, and the development of new water supplies, the supplemental augmentation of rivers and lakes that are below their established Minimum Flow or Level will contribute to the attainment of the objectives of the Recovery Strategy set forth in subsection 40D-80.074(2), F.A.C. The District will reserve quantities of water from water sources necessary for such augmentation.

(5) Periodic Review of Recovery Strategy.

(a) The Governing Board will measure progress based on an annual assessment of the water resource criteria and cumulative impact analysis described below.

1. The water resource criteria referred to above are:
 - a. Improving Upper Peace River flows and Ridge Lake water levels;
 - b. Maintaining or increasing ground water levels below the Upper Peace River and in the Ridge Lake area; and
 - c. Increasing ground water levels in the Upper Floridan aquifer within the Most Impacted Area and the reduction in the rate of salt water intrusion.
2. The cumulative impact analysis referred to above consists of the following:
 - a. The development of alternative water supplies;

- b. The effects of water conservation;
- c. The hydrologic conditions and patterns;
- d. The effects of climatic conditions;
- e. The effects of water resource development activities;
- f. The changes in amounts, distributions and use types of existing and new water use withdrawals (actual and permitted) within the SWUCA; and
- g. The effect of land use changes on the water resources.

(b) Results of the annual assessment referred to above will be reported to the Governing Board on an annual basis.

(c) In addition to the annual assessments referred to the District will review the Recovery Strategy at least every five years to assess its progress as part of updating its Regional Water Supply Plan. If the annual assessments or five-year reviews do not indicate progress, the Governing Board will revise the Recovery Strategy, as appropriate, to achieve progress.

(6) The provisions of subsections 40D-80.074(1)-(4), F.A.C., are informational, intended to provide an overview of resource conditions related to the water bodies for which minimum flows and levels have been established and the components of the Recovery Strategy. The provisions of the SWUCA minimum flows and levels and permitting rules in Chapters 40D-2, 40D-4 and 40D-80, F.A.C., shall control in the event of any conflict or inconsistency with the provisions of subsections 40D-80.074(1)-(4), F.A.C.

(7) The District recognizes that although the rate of salt water intrusion (SWI) will be reduced through implementation of the Recovery Strategy, some existing legal uses of water may be affected by the continued movement of the salt water interface. The District's water supply planning indicates that much of the area potentially susceptible to SWI is experiencing land use transition from traditionally agricultural lands to forms of urban development. The water needs of these new land uses are planned to be met with alternative water supplies funded all or in part by the District to the greatest extent practical. In those cases where the existing permittee, impacted by SWI, desires to continue the existing legal water use, the District has a number of programs that address that situation. The District has available various preventative and remedial programs to permittee's potentially at risk of salt water intrusion such as the Quality of Water Improvement Program (QWIP), the Facilitating Agricultural Resource Management Systems (FARMS) program, the New Water Source Initiative, the Water Supply and Resource Development Program, and the Cooperative Funding Program (as it relates to replacement of potentially affected water sources with alternative water supplies). For information on these programs, contact the District's headquarters by calling (352) 796-7211 or 1(800) 423-1476, or by emailing the District at executive@swfwmd.state.fl.us or by opening the District's website www.watermatters.org and clicking on the link "Contact Us".

Rulemaking Authority 120.54, 373.0421, 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.023, 373.036, 373.0363, 373.042, 373.0421, 373.171 FS. History—New 1-1-07, Amended 5-19-14.

40D-80.075 Regulatory Portion of Recovery Strategy for the Dover/Plant City Water Use Caution Area.

Rulemaking Authority 120.54, 373.0421, 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.023, 373.036, 373.042, 373.0421, 373.171 FS. History—New 6-16-11, Amended 5-19-14, Repealed 2-17-22.