

Notice of Proposed Rule

WATER MANAGEMENT DISTRICTS

Southwest Florida Water Management District

RULE NO: RULE TITLE

40D-8.041: Minimum Flows

PURPOSE AND EFFECT: This rulemaking is to comply with Section 373.042, F.S. and will amend Rule 40D-8.041, F.A.C., to establish Minimum Flows for the estuarine reach of the lower Peace River located within the District's Peace River Basin.

SUMMARY: The proposed revision adopts minimum flow rules for the tidal reaches of the lower Peace River. Significant harm was defined as occurring when modeled withdrawals from the baseline or unaltered flow conditions caused more than a 15 percent decline in any one of several ecologically based habitat metrics. In addition to determination of an allowable percent flow reduction, a low flow threshold (LFT) of 130 cubic feet per second (cfs) has also been proposed. A LFT is defined to be the flow that serves to prohibit withdrawals under very low flow conditions throughout the year.

The lower Peace River minimum flow was determined based on the sum of the combined flows of the Peace River at Arcadia, Horse Creek and Joshua Creek.

For the low flow period (Block 1, which runs from April 20 through June 25), it was determined that more than 15 percent of the historically available habitat would be lost, if flows were reduced by more than 16 percent based on the combine flows of the three gages noted above as long as total daily withdrawals from Peace River were limited to 400 cfs.

For the medium flow period (which runs from October 27 of one year through April 19 of the next), it was determined that more than 15 percent of historically available habitat would be lost if flows were reduced by more than 16 percent at or below a flow of 625 cfs based on the combined flows of three gages, but that when flows exceeded 625 cfs, up to 29 percent of the combined flows could be taken without causing significant harm to the available habitat as long as total daily withdrawals from off the Peace River were limited to 400 cfs.

For the high flow season of the year (which runs from June 26 through October 26), it was determined that more than 15 percent of historically available habitat would be lost if flows were reduced by more than 16 percent at or below a flow of 625 cfs based on the combined flows of the three gages, but that when flows exceeded 625 cfs, up to 38 percent of the combined flows could be taken without causing significant harm to the available habitat as long as total daily withdrawals from off the Peace River were limited to 400 cfs.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS: A seasonal minimum flow regime is proposed for the Lower Peace River to minimize disruptions to estuarine processes and estuarine dependent species. The flows are based on the sum of flow at the Peace River, Horse Creek and Joshua Creek. Small water users exempt from water use permitting are not subject to the minimum flow restrictions. Aside from the Peace River Manasota Water Supply Authority (PRMWSA), there have been too few applications for withdrawals affecting the flow of the Lower Peace River to estimate a future number of applicants that could be impacted by the proposed minimum flows. It is not anticipated that the proposed revisions will significantly increase permitting, monitoring or enforcement costs to the District. No other state or local governments are responsible for the implementation or enforcement of the proposed minimum flows. The proposed minimum flows will not have an impact on state or local revenues. It is anticipated that there will be quantities available for permitting but they may be seasonal and require storage for a reliable year round supply. Additional sources of water are available in the area from brackish groundwater, local utilities and the PRMWSA ranging in costs from \$.31 to \$6.69 per thousand gallons. The seasonal nature of water availability from the river, due to existing Chapter 40D-2, F.A.C. criteria, makes it unlikely that a small business would apply for withdrawals from the river. Small businesses with withdrawal facilities and quantities that do not exceed Chapter 40D-2, F.A.C. permitting thresholds will not be affected by the proposed minimum flows. Commercial and recreational fishing and related businesses in the area will benefit from the protection of estuarine-dependent fish, invertebrate and shellfish species. Most such businesses are small businesses. It is unlikely that any small cities or counties will be affected by the proposed revisions as they lie upstream of the Lower Peace River.

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a

proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: [373.044](#), [373.113](#), [373.171 FS](#).

LAW IMPLEMENTED: [373.036](#), [373.0361](#), [373.042](#), [373.0421 FS](#).

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN FAW.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: The Southwest Florida Water Management District Human Resources Director, 2379 Broad Street, Brooksville, Florida 34604-6899; telephone (352)796-7211, ext. 4702 or 1(800)423-1476 (FL only), ext. 4702; TDD (FL only) 1(800)231-6103; or email to ADACoordinator@swfwmd.state.fl.us. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Barbara Martinez, Office of General Counsel, 2379 Broad St., Brooksville, FL 34604-6899, (352)796-7211 (4660) (OGC #2007102)

THE FULL TEXT OF THE PROPOSED RULE IS:

40D-8.041 Minimum Flows.

(1) through (7) No change.

(8) Minimum Flows for the lower Peace River

(a) The Minimum Flows are to ensure that the minimum hydrologic requirements of the water resources or ecology of the natural systems associated with the estuarine reach of the lower Peace River are met.

(b) Minimum Flows for the estuarine reach of the lower Peace River are based on the sum of the combined flows of the USGS Peace River near Arcadia Gage # 02296750 plus the flow at the USGS Horse Creek near Arcadia Gage # 02297310, and the USGS Joshua Creek at Nocatee Gage #02297100, and are set forth in Table 8-19 below. Minimum Flows for the lower Peace River are both seasonal and flow dependent. One standard, the Minimum Low Flow Threshold, is flow based and applied continuously regardless of season. No surface water withdrawals shall be permitted that would cumulatively cause the flow to be reduced below the Minimum Low Flow Threshold of 130 cfs based on the sum of the mean daily flows for the three gages listed above. Additionally, permitted withdrawals shall cease when flows are below the Minimum Low Flow Threshold of 130 cfs. The total permitted maximum withdrawals on any day shall not exceed 400 cfs. There are also three seasonally dependent or Block specific Minimum Flows that are based on the sum of the mean daily flows for the three gages denoted above that would occur in the absence of any permitted upstream withdrawals. The Block Minimum Flows are based on potential changes in habitat availability for select salinity ranges within a season.

<u>Table 8-19-Minimum Flow for Lower Peace River based on the sum of flows from Horse Creek, Joshua Creek, and the Peace River at Arcadia gages.</u>			
<u>Period</u>	<u>Effective Dates</u>	<u>Where Flow on Previous Day Equals:</u>	<u>Minimum Flow Is</u>
<u>Annually</u>	<u>January 1 through December 31</u>	<u><130 cfs</u> - <u>>130 cfs</u>	<u>Actual flow (no surface water withdrawals permitted)</u> - <u>Seasonally dependent see Blocks below</u>
<u>Block 1</u>	<u>April 20 through June 25</u>	<u><130 cfs</u> - <u>>130 cfs</u>	<u>Actual flow (no surface water withdrawals permitted)</u> - <u>previous day's flow minus 16% but not less than 130 cfs</u>
<u>Block 2</u>	<u>October 28 through April 19</u>	<u><130 cfs</u> - <u>>130 cfs and <625 cfs</u> - <u>625 cfs</u>	<u>Actual flow (no surface water withdrawals permitted)</u> - <u>previous day's flow minus 16% but not less than 130 cfs</u> - <u>previous day's flow minus 29%</u>
<u>Block 3</u>	<u>June 26 through October 27</u>	<u><130 cfs</u> - <u>>130 cfs and <625 cfs</u> - <u>625 cfs</u>	<u>Actual flow (no surface water withdrawals permitted)</u> - <u>previous day's flow minus 16% but not less than 130 cfs</u> - <u>previous day's flow minus 38%</u>

(c) Minimum five-year and ten-year moving mean and median flow values are set forth in Table 8-20 as a tool to assess whether flows to the lower Peace River remain above flow rates that are expected to occur with implementation of the Minimum Flow described in Table 8-19 and a daily maximum withdrawal rate of 400 cfs. The means and medians are based on evaluation of daily flow records for the three gages listed above for the period 1951 through 2008. Yearly means and medians were computed for January 1 through December 31 of each year, then moving five-year and ten-year averages were calculated from these yearly values. Therefore, the five-year and ten-year means and medians are hydrologic statistics that represent the flows that will be met or exceeded if compliance with the Minimum Flow and the 400 cfs maximum withdrawal rate is maintained during hydrologic

conditions similar to the 1951-2008 period. Climatic changes or future structural alterations in the watershed could potentially affect surface water or groundwater flow characteristics within the watershed and flows in the river. Therefore, as additional information relevant to Minimum Flows development becomes available, the District is committed to periodically evaluate whether any declines in these minimum moving average values below that expected with the application of the Minimum Flow are due to factors other than permitted water use.

(d) The Minimum Flows for the lower Peace River will be reevaluated to incorporate additional ecological data for the Lower Peace River within 5 years of adoption of this rule.

<u>Minimum Flow</u>	<u>Hydrologic Statistic</u>	<u>Flow (cfs)</u>
<u>Annual Flow</u>	<u>10-Year Mean</u>	<u>713</u>
	<u>10-Year Median</u>	<u>327</u>
	<u>5-Year Mean</u>	<u>679</u>
	<u>5-Year Median</u>	<u>295</u>
<u>Block 1</u>	<u>10-Year Mean</u>	<u>284</u>
	<u>10-Year Median</u>	<u>264</u>
	<u>5-Year Mean</u>	<u>204</u>
	<u>5-Year Median</u>	<u>114</u>
<u>Block 2</u>	<u>10-Year Mean</u>	<u>429</u>
	<u>10-Year Median</u>	<u>383</u>
	<u>5-Year Mean</u>	<u>330</u>
	<u>5-Year Median</u>	<u>235</u>
<u>Block 3</u>	<u>10-Year Mean</u>	<u>1260</u>
	<u>10-Year Median</u>	<u>930</u>
	<u>5-Year Mean</u>	<u>980</u>
	<u>5-Year Median</u>	<u>595</u>

(8) through (11) renumbered (9) through (12) No change.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.036, 373.0361, 373.0395, 373.042, 373.0421 FS. History—Readopted 10-5-74, Amended 12-31-74, Formerly 16J-0.15, 40D-1.601, Amended 10-1-84, 8-7-00, 2-6-06, 4-6-06, 1-1-07, 11-25-07, 2-18-08, 3-2-08, 5-12-08, 5-10-09, _____.

NAME OF PERSON ORIGINATING PROPOSED RULE: Marty Kelly, Minimum Flows and levels Program Director, Resource Projects Dept. Southwest Florida Water Management District

NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: Southwest Florida Water Management District Governing Board

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: May 25, 2010

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: June 4, 2010