

**STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS**

RAINBOW RIVER CONSERVATION,
INC., MICHELLE BLASINGAME,
GRETCHEN MARTIN, SENATOR
DENNIS JONES, GORDON HART,
and WILLIAM VIBBERT

Petitioners,

DOAH Case Number: 19-002517

v.

SOUTHWEST FLORIDA WATER
MANAGEMENT DISTRICT

Respondent.

PETITIONERS' PROPOSED FINAL ORDER

Petitioners Rainbow River Conservation, Inc., Michelle Blasingame, Senator Dennis Jones, and William Vibbert ("Petitioners") hereby submit their Proposed Final Order as follows:

FINAL ORDER

Pursuant to notice a final hearing was held in this matter on June 10, 11, and 12, 2019, in Brooksville, Florida, before Robert J. Telfer, III, an Administrative Law Judge with the Division of Administrative Hearings (DOAH).

APPEARANCES

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STATEMENT OF THE ISSUES

The issues to be determined in this proceeding are: (1) whether the Petitioners have proven by a preponderance of the evidence that they would be substantially affected by the proposed rule; and (2) whether Respondent has proven by a preponderance of the evidence that Proposed Rule 40D-8.041(22) is not an invalid exercise of delegated legislative authority as to the objections raised by the Petitioners.

PRELIMINARY STATEMENT

On March 26, 2019, Respondent Southwest Florida Water Management District (“District”) published a Notice of Proposed Rule in the Florida Administrative Register to adopt Rule 40D-8.041(22), Fla. Admin. Code, which establishes the Minimum Flow for the Rainbow River System. On May 9, 2019, the District held a public hearing on the proposed rule, at the request of the Petitioners. On May 15, 2019, the Petitioners initiated this proceeding by timely filing a Petition to Invalidate the proposed rule. On May 20, 2019, the Petitioners filed an Amended Petition to Invalidate the proposed rule. On May 24, 2019, an Order Granting Leave to Amend was issued over objection from the District. During this proceeding Petitioners Gordon Hart and Gretchen Martin filed Notices of Voluntary Dismissal from this proceeding. All the other Petitioners remain as parties.

The proposed rule, 40D-8.041(22), is an attempt to establish the Minimum Flow for the Rainbow River System (RRS), which includes the watercourse from the Rainbow Springs Group headsprings to the Withlacoochee River. The proposed rule defines the Minimum Flow by stating that “The Minimum Flow for the Rainbow River System is 95% of the natural flow” as measured at a specific United States Geological Survey (USGS) gage. The rule goes on to state that “natural flow is defined for the purposes of this rule as the flow that would exist in the absence of water withdrawal impacts.” The definition is concluded with the statement “The Minimum Flow is based on a 5% reduction from the natural flow of 683 cubic feet per second, which was adjusted for groundwater withdrawals using hydrologic modeling for a period of 1965-2015” at the specific USGS gage. The rule establishes annual status assessments for the Minimum Flow to determine whether the flow is below or projected to fall below the Minimum Flow. If the status assessment indicates the Minimum Flow is not being met, the rule indicates the District will conduct a causation analysis to evaluate the “potential causes of impacts on the Rainbow River System.” Based on this causation analysis, the District will either re-evaluate the Minimum Flow, or adopt a recovery or prevention strategy consistent with Section 373.0421(2) of the Florida Statutes.

The District filed the following motions immediately preceding the hearing:

Motion to Dismiss for Lack of Subject Matter Jurisdiction and Failure to State a Cause of Action.

Motion to Dismiss for Lack of Standing.

Motion in Limine Regarding the Withlacoochee River;

Motion in Limine Regarding the Florida Department of Environmental Protection’s Total Maximum Daily Load.

Motion in Limine Concerning the Expert Testimony of James Gross.

Motion in Limine Concerning the Expert Testimony of Dr. Robert Knight.

All of these motions were denied without prejudice at the beginning of the hearing.

At the final hearing the Petitioners presented the testimony of Michelle Blasingame, William Vibbert, and Senator Dennis Jones for the purpose of establishing their individual standing. The Petitioners presented the testimony of Dr. Burton Eno, President of Rainbow River Conservation, Inc., for the purpose of establishing standing for that organization. Petitioners presented the expert testimony of James Gross, Dr. Robert Knight, and Michael Flannery. Petitioners' exhibits 9, 10, 16-21, 40, 59, 92, 101, 102, 112, 128-139 were received into evidence. The District presented the expert testimony of Douglas Leeper, Ron Basso, and Dr. Christopher Anastasiou. District exhibits 1-18, 22, 23, 25-37, 39, 40-51, 57, 58, 64, 67, 70-72, 75 were received into evidence.

The burdens of proof for this proposed rule challenge proceeding are set forth in Section 120.56(2)(a), Fla. Stat., as follows:

The petitioner has the burden to prove by a preponderance of the evidence that the petitioner would be substantially affected by the proposed rule. The agency then has the burden to prove by a preponderance of the evidence that the proposed rule is not an invalid exercise of delegated legislative authority as to the objections raised. (Emphasis supplied)

The plain language of this statute indicates that once one or more of the Petitioners in this case have established their standing, the burden of proof then lies with the District to prove by a preponderance of the evidence that their proposed rule is not an invalid exercise of delegated legislative authority as to the objections raised by the Petitioners in their Amended Petition. The District's Motion to Dismiss for Lack of Subject Matter Jurisdiction and Failure to State a Cause of Action essentially seeks to strike two objections in the Amended Petition (flow impact on algal problems and flow impact on water quality). This motion is denied, as will be addressed in

the Conclusions of Law herein. The District's motion to dismiss for lack of standing is also denied, as will be addressed in the Conclusions of Law. As noted in the Pre-Hearing Stipulation, all objections to the proposed rule as stated in the Amended Petition remained unresolved at the time of the final hearing.

The objections to proposed rule 40D-8.041(22) as stated in the Petitioners' Amended Petition and as reflected in the Pre-Hearing Stipulation are as follows:

- The District's reliance on the Northern District Groundwater Flow Model Versions 4 and 5 (NDM4/5) to estimate the impact from groundwater withdrawals on flow in the Rainbow River System is not "using the best information available" as required by Section 373.042(1), Fla. Stat. and thus contravenes the specific provisions of law that the proposed rule is implementing. Included in this issue is:
 - Whether the proposed Minimum Flow misuses a regional model to estimate local groundwater impacts.
 - Whether the period of record used to calculate historical flows of the Rainbow River is arbitrary or the best information available.
 - Whether best scientific tools like uncertainty analyses, confidence intervals, error bars, and other quantitative analytical checks were used to evaluate uncertainty associated with the use of NDM4 for MFL status.
- The District's failure to address the impact of algal accumulation and its documented relationships to flow velocity in the estimation of "significant harm" is arbitrary because it is not supported by necessary facts.

- Section 40D-8.041(22)(c) of the proposed rule is vague and vests unbridled discretion in the District regarding the amount of flow in the Rainbow River that can be reduced due to withdrawals and still comply with the Minimum Flow.
- The District's failure to address the unexplained recent reduction in flow in the Rainbow River System is arbitrary because it is not supported by necessary facts.
- The District's failure to cap current levels of groundwater withdrawal in the Rainbow River System springshed to address water quality impacts in the Rainbow River System is arbitrary and not supported by the necessary facts.
- As a matter of law Sections 40D-8.041(22)(4) and (5) of the proposed MFL rule directly contravene Section 373.0421(2) of the Florida Statutes. This statute, which the proposed rule is implementing, requires the District to expeditiously adopt a recovery or prevention strategy upon failure to meet the Minimum Flow level. However, the proposed rule does not require adoption of a recovery or prevention strategy; rather, it only authorizes the District to conduct a causation analysis after failure to meet the Minimum Flow, and thereafter either to "re-evaluate" the Minimum Flow or to adopt a recovery or prevention program.

FINDINGS OF FACT

THE PARTIES

1. Michelle Blasingame has a home and resides on the Rainbow River at 10237 SW 186th Avenue. She has been using the river since 1992 and has permanently resided on the river since 2007. She uses the river almost daily, snorkeling, scuba diving, swimming, boating, kayaking, fishing and viewing the wildlife and beauty of the river. Periods of flow reduction have reduced her ability to navigate her boat and decreased her enjoyment of snorkeling and

swimming. The low flows and levels have resulted in damage to her boat and motor and have caused shoreline and dock damage. She is a member of Rainbow River Conservation, Inc., (RRC) and volunteers monthly to help collect water quality information for the Florida Springs Institute. She has participated in this rulemaking procedure, sharing her concerns with the District at public hearings. (T. 101-120; Pet. Ex. 132).

2. William Vibbert resides in Rainbow Springs Villages, approximately 10 minutes from the river. He is a retired parks manager of 33 years for the State of New Jersey with experience in resource management. He retired 17 years ago so he could live permanently near the Rainbow River. He sees the river every day and uses the river several times a week for snorkeling, swimming, boating, underwater photography, and fishing. He is very active in Rainbow River Conservation, Inc., and has contributed to many programs to protect and preserve the Rainbow River System (RRS). He has participated throughout this Minimum Flows and Levels (MFL) rulemaking process, expressing his concerns orally and in writing about the rapid deterioration of the RRS due to increased nutrients and lack of flows, including the increase in nitrates, lack of water clarity, and the lack of periodic higher flows that reduce increasing growths of noxious filamentous algae. He has provided written and oral comments about his concerns that lack of flow is impacting noxious algae, water quality and water clarity. (T. 130-146; Pet. Ex. 134, 135, 136, 137).

3. Dennis Jones is a retired Florida State Senator who resides on the Rainbow River at 9129 SW 190th Avenue with 400 feet of river frontage. He has resided permanently on the river since 2012 and has used the river since he was a young boy. Senator Jones and his family use the river every day for boating, paddle boarding, swimming, fishing, underwater photography, and aesthetic enjoyment. Over the years, he has observed a drop in river flows and

levels, an increase in invasive aquatic plants and siltation, and a reduction in water clarity, all of which adversely affect his use and enjoyment of the river. Senator Jones is a member of the RRC. (T. 150-162; Pet. Ex. 133).

4. The association now designated as Rainbow River Conservation, Inc. (RRC) is an organization formed to protect the Rainbow River System (RRS). It was first established in 1962 as a homeowners' association (Rainbow River Homeowners' Association) by persons living on the Rainbow River. As time went on and more persons became interested in joining the group, in 1982 the association changed its name to Rainbow River Conservation, Inc. In 1991 the association was granted 501(c)3 status. RRC's mission is to protect and preserve the Rainbow River and its environment. It has approximately 230 to 240 members. It has monthly meetings and an annual meeting. It carries out many projects to preserve and protect the RRS, including an annual river clean-up that has been held for over 30 years, constructing and maintaining 50 wood duck boxes on the river, providing educational booths about the RRS at annual events, assisting in a 4th grade education program at the Rainbow Springs State Park, and assisting the Florida Springs Institute's citizen science Spring Watch project by collecting water quality data and fish population baseline data. Many of the RRC members participate in these activities. The RRC has actively participated in this rulemaking process, providing written and oral comments to the District about its concerns over the consequences of declining flows in the RRS, including problems with increased noxious algae, water quality impairments, and reduced water clarity. An average of 150 members participate in the annual Rainbow River clean-up every year. At 6:00 p.m. the day before he testified at the final hearing, the President of RRC, Dr. Burton Eno, requested by email confirmation from RRC members as to whether they used the river. He

received 66 positive responses and no negative responses in that short time period. (T. 62-74; Pet. Ex. 128, 130, 131).

5. RRC has actively participated in the development of this proposed rule, expressing their concerns in writing and at public hearings. Those concerns ultimately were not addressed and resulted in RRC filing the petition in this matter along with the other Petitioners. RRC has also been actively involved in other public forums in advocating for the protection and preservation of the RRS. RRC was instrumental in facilitating the public purchase of property to preclude development along the river, which included a \$3 million grant from the Florida Communities Trust to purchase 32 acres adjacent to the river. RRC has also actively participated in other governmental programs affecting the RRS, including its membership in the task force for the Surface Water Improvement Management (SWIM) plan for the RRS, and providing input for the Basin Management Action Plan (BMAP) for the RRS. (T. 74-90; Pet. Ex. 129).

6. The Southwest Florida Water Management District (District) is a water management district created by Section 373.069 of the Florida Statutes. Under Section 373.016(2) the District has the responsibility to conserve, protect, manage and control water resources within its geographic boundaries, and under Section 373.042 has authority to establish Minimum Flows and minimum water levels for waters in the District, including Outstanding Florida Springs.

THE RAINBOW RIVER SYSTEM (RRS)

7. The Rainbow River System is located in southwestern Marion County adjacent to the City of Dunnellon. The Rainbow Springs Group forms the headwaters of the Rainbow River which flows 5.7 miles south into the Withlacoochee River. (SWF-2 (MFL Report), page 13).

8. The Rainbow Springs Group is considered a first-magnitude springs system, which means it discharges on average more than 100 cubic feet per second (cfs). It is one of the largest spring-fed rivers in the United States and qualifies as an Outstanding Florida Spring under Section 373.802 of the Florida Statutes. (SWF-2, page 14; T. 353, 354).

9. The upper river has exceptional water clarity (over 200 horizontal feet) that declines to an average of 38 to 47 feet in the lower river. (SWF-2, page 14; T. 357, 766).

10. The RRS has been designated by the Florida Department of Environmental Protection (DEP) as an Outstanding Florida Water (OFW). (SWF-2, page 14). Under this designation, DEP rules require that there be no degradation of water quality in the RRS. *See* Rules 62-302.700(1) and 62-4.242, Fla. Admin. Code.

11. The RRS is also designated as an Aquatic Preserve under Section 258.39(34) of the Florida Statutes. (SWF-2, page 14). Aquatic Preserves are state-owned submerged lands in areas that have exceptional biological, aesthetic, or scientific value, and which are to be set aside forever for the benefit of future generations. Section 258.36, Fla. Stat.

12. The RRS is also designated as a Surface Water and Improvement Management (SWIM) priority water body. (SWF-2, page 14). Pursuant to Rule 62-43.030, Fla. Admin. Code, the District designated the RRS as a priority for restoration and protection. Consequently, multiple SWIM plans have been prepared by the District to protect and restore the RRS.

13. A “springshed” is the area within the groundwater basin which contributes to the discharge of the springs as defined by potentiometric surface maps. *See* 373.802(6), Fla. Stat. The RRS springshed averages approximately 741 square miles in size and is largely located in eastern Levy, western Marion, and southern Alachua Counties. The RRS is almost entirely groundwater supplied. Approximately 38% of the RRS springshed is in agricultural production,

29% is mapped as upland forest, and 14% is residential. (SWF-2, page 37). The U.S. Geological Survey estimates that the RRS springshed has declined in size from 824 square miles in 1975 to 735 square miles in 2005, or by 11 percent (T. 714; SWF-2, page 42).

14. The Rainbow River has been designated as “impaired” by the Florida Department of Environmental Protection for nitrates. The total maximum daily load of nitrate in the contributing springshed area must be reduced by 82% to achieve a monthly average concentration of 0.35 mg/L. (SWF 2, page 44, T. 357-358, 785-786).

NMD4

Description and Limitations of NDM4

15. The District based the Minimum Flow on the Northern District Groundwater Flow Model, Version 4 (NDM4). (SWF Ex. 2, page 7, Pet. Ex. 12). NDM4 includes a section on “model limitations” and was not subjected to formal peer review. (T. 697, 698).

16. NDM5 (Pet. Ex. 13), a version of the model very similar to NDM4, was peer-reviewed. (T. 409, 698, 699) The reviewers had a number of critiques and cautions, including: a large proportion of water comes out of the springs from unidentified sources; the model’s failure to use a parameter-estimating tool (PEST); there is calibration in the model to precise flows at certain springs but not to groundwater levels; there are large errors in the model domain for water levels; and a failure to quantify model prediction errors and uncertainty. (T. 410, 411; Pet. Ex 20, pages 2-7).

17. NDM5 is nearly identical to NDM4 in most of its domain, and is identical in the springshed feeding the RRS, indicating that the model limitations described for NDM4 apply equally to NDM5. (T. 409, 698-699).

18. The NDM4/5 model has value for estimating approximate groundwater flows over large geographic areas, but its results should be treated with caution in smaller geographic areas, as indicated by HydroGeoLogic, Inc., the developers of the NDM4/5 models. As stated on page 4-17 of NDM4: “Potential users of the NDM should note that because of recognized data deficiencies, model simulation is more appropriate at the sub-regional and regional scales rather than at the local or site-specific scales for simulation of hydrologic conditions.” (SWF Ex. 34, Section 4-7 (Limitations Section of NDM4)).

19. Petitioners’ experts in mathematical modeling and the application of groundwater flow models for assessments of MFLs agreed with this limitation and testified that the NDM4/5 is not designed to apply to a localized site such as Rainbow Springs. (T. 256-257, 329, 418). The District’s expert in modeling testified that he believed the limitation meant that NDM4/5 should not be used to evaluate water-use permit applications, even though the limitation does not so specify. (T. 701-705). The District did not provide a representative from HydroGeoLogic, Inc. to clarify model uncertainty when applied to a localized site such as Rainbow Springs.

20. The Rainbow Springs well, about a mile west of Rainbow Springs, is the well that the United States Geological Survey (USGS) uses for assessing flows in Rainbow Springs. As such, it plays a critical role in establishing the Rainbow MFL. Concern about using a large-domain groundwater model like NDM4/5 to simulate flows at a specific spring or well is highlighted by the fact that the average error between the model simulation estimating the USGS Rainbow Springs well levels and the actual observed level at the Rainbow Springs well is four feet, with individual errors up to seven feet or more. (T. 326, 416-418; Pet. Ex. 20, pages 8,9).

21. This four-foot error equates to a potential error of 453 cubic feet per second (cfs) in the District’s estimation of flow in the Rainbow River, which is over 60 percent of the river’s

flow, assuming the average natural flow is around 700 cfs. (T. 424, 425, 432; Pet. Ex. 20, page 12; Pet. Ex. 19, page 7). This large-scale error strongly suggests that the use of the regional NDM4/5 model is not appropriate to determine the MFL in this case. Yet despite this large-scale error, the District uses the NDM4/5 model to come up with the very specific estimation of ground water pumping impact of 1.7 percent, or approximately 12 cfs (1.7 percent of a natural average flow of around 700 cfs). When addressing the four-foot error, the District’s modeling expert testified that “We always want to do better with these models, but it is a regional model.” (T. 632).

22. NDM4 and NDM5 do not provide “error bars” or probability ranges around estimates generated by the model. The District’s modeling expert did not think it was necessary to provide confidence intervals around estimates in groundwater flow models. (T. 325, 423-425, 464, 465, 723, 724). The Petitioners’ experts testified that estimates of uncertainty are standard scientific practice for assessing the validity of model output. (T. 325, 423-425, 464,465).

Alternative Water Models and Alternative Calculations of Pumping Impacts

23. Water mass balance models are an alternative to complex regional groundwater flow models like NDM4/5 for estimating the impacts of groundwater pumping on spring flows. Water mass balance models are widely used, including use by the USGS. SWFWMD also works with water mass balance models, although it did not in its development of the Rainbow MFL. (T. 427, 428, 686; Pet. Ex. 19, page 3).

24. Relative to more complex regional groundwater models like NDM4/5, water mass balance models rely more on real-world “empirical” measurable data (rain, evapotranspiration, pumping, spring discharge, and groundwater storage) and less on subjective “best professional

judgment” assumptions about model boundaries, transmissivities, and other variables. (T. 428-meas 430; Pet. Ex. 19, pages 4,5,37,38).

25. Dr. Knight constructed a water mass balance model for predicting the impact of groundwater pumping on flows in the Rainbow River using empirical measurable data from 1929 to 2012. (T. 457-462; Pet. Ex. 19, pages 37-42). Instead of the 1 to 2 percent impact predicted by NDM4/5, Dr. Knight’s water mass balance model predicts Rainbow flow declines from pumping both from the springshed and regionally at about 11 percent. (T. 460-462). R^2 is a “coefficient of determination” that provides a statistical measure of goodness of fit. Dr. Knight’s empirical water balance model has a far better R^2 value (0.63) than does the NDM4/5 model (0.30). (T. 459, 519; Pet. Ex. 19, pages 39, 40). The difference between these two R^2 values is highly significant – the Petitioners’ empirical water mass balance model was more than twice as accurate as the District’s NDM4/5 model. (T. 459, 519).

26. RRS spring flows for a given amount of annual rainfall have fallen significantly over the past 20 years. When declines in spring flow cannot be explained by changes in rainfall totals, the most likely explanation for these declines is excessive groundwater pumping. (T. 448, 449; Pet. Ex. 19, pages 23, 26).

27. As found in paragraph 13 above, the RRS springshed has shrunk by an estimated 11 percent since 1975 (T. 488, 714). Changes in springshed area and boundaries are a result of areal distributions of groundwater pumping and regionally variable rainfall patterns (T. 298, 442, 488, 711-712). A decline in springshed area equates to a reduction in spring flows (T. 716-717). The observed 11 percent decline in springshed area compares well with Dr. Knight’s estimate of declines in RRS flows due to groundwater pumping.

28. Dr. Knight utilized three other data-driven (empirical) analyses to cross-check the water mass balance model results. First, he calculated that, for the 238 named springs in the SWFWMD, measured flows have been reduced by about 380 million gallons a day from historic levels, or about an 18 percent reduction. (T. 436, 437; Pet. Ex. 19, page 19). Second, he utilized a normalization technique – rainfall data in the vicinity of Rainbow Springs plotted with flow data from Rainbow Springs but normalized by dividing by the standard error. This analysis indicated a spring flow decline independent of rainfall of 14 percent. (T. 444-448; Pet. Ex. 19, pages 20, 21). Third, he compared annual average spring flows for a given amount of annual rainfall and found that in historic times a 50-inch annual rainfall resulted in an annual average flow of 700 cfs, but more recently a 50-inch annual rainfall in 2017 only led to a flow of about 560 cfs. From this data analysis, he concluded that about 3 percent of the observed decline in Rainbow flows is due to lower average rainfall and about 17 percent is directly or indirectly due to groundwater pumping and resulting changes in aquifer storage. (T. 448-450, Pet. Ex. 19, page 23,25).

29. Averaging the results of these four valid but independent analyses, Dr. Knight estimated that the recent flow declines of approximately 20 percent in the Rainbow are largely due to groundwater pumping (14 percent with a range from 11 to 17 percent) and to a lesser extent due to declines in rainfall. (T. 498, 515, 518).

30. Mr. Gross's independent estimate for total flow reductions at Rainbow due to all causes is 23 percent, based on data from the USGS and other sources. (T. 312).

31. This is the heart of this MFL challenge: Petitioners' expert witnesses determined that groundwater pumping accounts for about a 14 percent decline in flow in the RRS, while the

District believes pumping currently only accounts for about a 1 to 1.7 percent decline. (T 498, 515).

Additional Concerns Regarding the Use of the Best Information Available:
Data on Rainfall and Climate

32. Witnesses representing both the District and the petitioners agreed that flow in the Rainbow River has declined by about 20 percent since 2000. (T. 263-264, 312, 450, 460, 466, 653, 725).

33. The two most likely factors explaining this decline are (1) local and regional groundwater pumping and (2) long-term declines in rainfall and the resulting recharge that replenishes the aquifer. However, the District's modeling expert indicated that of this 20 percent decline, almost all the decline was due to rainfall variation (18 to 19 percent). (T. 429-432, 725, Pet. Ex. 19, page 4).

34. Contrary to the testimony of the District's chief modeler, the District's MFL report (June 2017 "Recommended Minimum Flow for the Rainbow River System – Revised Final Draft", page 31) notes for the 2000-2015 period that: "While it has been drier than normal for the 15-year period, low rainfall conditions alone do not explain these very low flows given the historical flow record". (SWF-2, page 31).

35. The Atlantic Multi-Decadal Oscillation is a long-term climate cycle that the District uses to explain high versus low periods of rainfall in many geographic areas, including Florida. (T. 269-270, 602-610). However, testimony of the District's chief modeler confirmed that the link between AMO and rainfall patterns affecting the Rainbow is weak or non-existent, that AMO "wet" cycles may produce above average rainfall amounts in central Florida at certain times and below average amounts at other times. The current AMO "wet" cycle, in place since

the 1990s, corresponds not with high rainfall totals but rather with a period of lower-than-average rainfall and lower-than-average spring flow in the Rainbow basin. (T. 605).

36. Although AMO wet/dry cycles do not predict rainfall patterns well in Florida, it is true that rainfall in the Rainbow area has been slightly below average since 2000. The District's modeling expert testified that over the past 25 years, there has been a cumulative rainfall deficit of 26 inches – in other words, only about a one inch per year deficit over this period. This is only about 2 percent below normal annual rainfall totals. (T. 605). The Petitioners' expert in application of groundwater flow models for regional water supply planning indicated little change in long-term rainfall amounts regionally and statewide. (T. 264-265).

37. Even if one accepts the District's claim of a two percent decline in annual rainfall totals over the past 25 years, the District's MFL documentation contains no scientific information or quantitative analysis whatsoever on how such a shortfall would be reflected in spring flow. The District's MFL analysis is silent on the question of what specific flow reduction may be attributable to a two percent rainfall deficit. (SWF-2, Chapter 2).

38. The District asserts that 18 to 19 percent of the 20 percent decline in Rainbow flow over the past 20 years is due to diminished rainfall. (T. 725). No independent data analysis was provided to support this assertion. The District simply subtracted the NMD4/5 model output for the impact of groundwater pumping on flow (1 to 1.7 percent) from the observed decline in spring flow of 20 percent. (T. 726). There was no attempt in the MFL or in the District's testimony to independently verify that diminished rainfall in fact led to an 18 to 19 percent decline in spring flow. The District's modeling expert described this key conclusion, central to the MFL, as "intuitive" rather than scientific. (T. 726).

39. In his water mass balance model, Dr. Knight determined that reduced rainfall since 2000 has led to an estimated 3 to 5 percent decline in Rainbow River flow. This determination was based on an analysis of all empirical data regarding RRS flows and rainfall from 1929 to 2016. (T. 448-450, Pet. Ex. 19, pages 22-26).

40. The closest that the District's MFL report or experts come to establishing a quantitative link between diminished rainfall totals and diminished spring flows is the assertion that a small percentage reduction in annual rainfall can be magnified into a much larger percentage reduction to re-charge and spring flow. For example, the District's modeling expert stated that a 10 percent reduction in rainfall may be magnified into a 25 percent reduction in re-charge and spring flow. (T. 607). However, he acknowledged the reverse will also be true – namely, that a 10 percent *increase* in rain should lead to a 25 percent *increase* in re-charge and spring flow. (T. 705-709). Rainfall and spring flow records from the 1930s, 1940s, and 1950s do not support the District's contention of "magnification". (SWF Ex. 22, slides 9 and 10). Under the District's theory, in those decades much higher than average rainfall totals should have been "magnified" into much higher spring flows. But, in fact, the large percentage increase in rainfall for that period (slide 10) is not reflected in a larger percentage increase in flow for the same period (slide 9) -- a strong indication that the "magnification" theory is not a reliable scientific tool for providing a quantitative link between rainfall patterns and spring flows.

41. In short, the District failed to make their case that the predominant cause of declining spring flows in the Rainbow is a long-term decline in rainfall.

Additional Concerns Regarding the Use of the Best Information Available:
Measurements

42. For its calculation of natural flow, corrected for groundwater withdrawals, the District assumes that groundwater withdrawals were zero in 1965, the start of the District's chosen period-of-record. (T. 613). This is clearly incorrect because there were well-documented and significant agricultural and mining operations in west central Florida in 1965. (T. 461, 462). The District relies primarily on a 1983 paper by Ryder as justification for their zero-pumping assumption, but Ryder's paper is hardly definitive; he made no quantitative estimation whatsoever of the impacts of pumping and prefaced his estimate on pumping with the vague word "relatively". (T. 670-676). Setting pumping at zero at the start of the chosen period-of-record inevitably results in a lower MFL than one in which a reasonable estimate of 1965 pumping was factored in.

43. Similarly, selection of a period-of-record from 1965 to 2015 for calculating "natural" baseline flows results in a lower MFL than one in which the period-of-record was extended back to 1929, the start of regular and reliable measurements of flow in the Rainbow. This is because flow averages from 1929 to 1965 were higher than those in later years, due to variations in rainfall and lesser rates of pumping in the earlier years. (T. 446-448, 453, 462). The District justifies the shorter period-of-record on the basis that environmental assessments for the MFL depend upon daily flow data, whose collection began in 1965. However, this is not a persuasive explanation, because while daily data may be useful for environmental assessments, the flow data from 1929 to 1965 was reliable data collected by the United States Geological Survey (USGS) and validated, and therefore appropriate for establishing a "natural" baseline flow. (T. 448).

44. The District's modeling expert acknowledged that pre-1965 flows on average were higher than flows after 1965. (T. 675). He also acknowledged that USGS started relatively

continuous flow measurements by 1931. (T. 676). He also acknowledged that it is scientifically important to look at the long-term historical data on flows back to 1931. (T. 679). The District's modeling expert, who was responsible for the hydrologic evaluation of the Rainbow River springshed, stated that he did not use the pre-1965 data because District environmental scientists told him they needed daily data to run their analysis for MFL criteria. (T. 677). The District did not provide any testimony from their environmental scientists to justify why the pre-1965 monthly and annual data should not be considered when establishing a "natural" baseline flow for this MFL.

45. The District's calculation of "natural" baseline flow in the Rainbow MFL (683 cfs) is lower, and often considerably lower, than every value listed in previous District, DEP, and USGS publications. In fact, at the time of the hearing, the District's own website indicated average RRS flows of 763 cfs. (T. 451; Pet. Ex. 19, page 29).

Conclusions Regarding Use of NDM to Establish Minimum Flow

46. The Petitioners' estimate of a 14 percent (range 11 to 17) decline in RRS long-term average flow due to groundwater pumping is based on an average of four quantitative techniques. The District's estimate of 1 to 1.7 percent is based on two inputs: (1) a non-peer-reviewed regional groundwater model with limited applicability in an individual springshed and (2) a non-quantitative assessment of the impact of rainfall variations on spring flow. The District's modeling expert stated that the 1 to 1.7 percent flow reduction predicted by the NDM4/5 model was taken "at face value" (T. 723) and that it does not include a statistical estimate of uncertainty nor a confidence interval (T. 723), as is standard practice in hydrological science. (T.723-724). Yet the District's expert stated that "... there is a trend in the industry to go with uncertainty analysis". (T. 724).

47. In summary, the documented declines in flow in the RRS are already about 20 percent – far exceeding the five percent reduction from historic baseline flows allowed by the proposed rule. The District utilized a groundwater flow model which estimated that less than 2 percent of the observed RRS flow decline is due to existing groundwater pumping, without any attempt to estimate uncertainty in the model results or to independently calculate the contribution of changes in rainfall. The Petitioners did evaluate uncertainty in the District’s model predictions of the Dunnellon USGS well level and found the model’s predicted well level would reflect a potential error of 453 cfs at Rainbow Springs, over 60 percent of the natural flow. The Petitioners also used four lines of analysis of actual rainfall, pumping, and flow data to estimate that about 14 percent of the RRS long-term flow has been lost due to pumping, with the remainder of the observed loss due to rainfall variability

ALGAL ACCUMULATION

48. The Rainbow MFL is based on the premise that a 5 percent reduction from the natural flow will not lead to more than a 15 percent decrease in availability and magnitude of sensitive environmental criteria. (T. 543). In other words, the District’s proposal of a 5 percent reduction in RRS flow will not lead to “significant harm”.

49. However, the MFL fails to acknowledge that “significant harm” is already evident throughout the RRS. Nitrate levels are approximately five times higher than the State standard of 0.35 milligrams per liter. Florida’s Department of Environmental Protection characterizes the Rainbow as impaired based on these elevated nitrate levels as evidenced by the large quantities of algal mats that result from them. (T. 358, 396; Pet. Ex. 21 page 20).

50. As in many Florida springs, filamentous algae in the Rainbow River are a significant problem and are present in much greater density than in historic times. (T. 363-366,

371, 379, 380; SWF Ex. 2, page 64; SWF Ex. 3, page 13). In the Rainbow River, according to District data, about half the river is covered one-third by algae and about one-third of the river has a filamentous algal cover of 75 percent or more. (T. 379, 380).

51. There are ten environmental resource values identified for consideration in the water resources implementation rule that are relevant to the question of whether proliferation of filamentous algae constitutes significant harm to the Rainbow River (T. 556, 819-821). Dr. Knight explained how unnatural accumulations of filamentous algae compromise many of these ten water resource values. (T. 360 et seq.) For example, filamentous algal accumulations have obvious negative ramifications for recreation on the river and for aesthetic enjoyment of the river. Mr. Leeper, the District's expert on these water resource values, confirmed this view when he stated that potentially all ten water resource values could be negatively affected by the proliferation of algae, particularly filamentous algae. (T. 854).

52. There are clear links between flow, velocity, and filamentous algal cover. In general, higher flows are associated with higher velocities. (T. 366-372; SWF Ex. 2, page 64)

53. Dr. Knight testified that he has observed for many years and in many instances a clear link between water velocities in streams and the occurrence and persistence of filamentous algae. Above certain threshold velocity values, filamentous algae are likely to be dislodged and washed out of the spring/river system. This cleansing action does not require persistent high velocities; in fact, a single instance of sufficient velocity may suffice to flush out the system. Threshold values for these "cleaning" velocities are directly related to flow values. (T. 365-371, 387-391, 808; SWF Ex. 2, page 64; SWF Ex. 3, page 13; Pet. Ex. 21, page 10).

54. The District argues that they were aware of the algae/velocity link but lacked the data and analyses to include a velocity component in the proposed MFL (T. 812). The reality is

that there were sufficient data available for the District to do so (T. 470-473; Pet. Ex. 41, page 11).

55. The District's response to this issue has been unreasonably slow, given (a) that many or all of the ten rule-based environmental values are compromised by filamentous algae, (b) that such values reflect harm to the water resources or ecology of the Rainbow River area, and (c) that there are clear links between flow, velocity, and algal accumulation. More than two and one-half years since the peer-review report for the MFL concluded that the District's allowable flow reduction is not protective of most of the ten rule-based water resource values, largely because of algae (T. 402), the District's position is that they will continue to evaluate the issue. (SWF Ex. 3, page 64). Yet the relationship between velocity and the abundance of algae has been observed since the 1950's. (T. 808). Research establishing this link has been going on since the 1990s. (T. 366, Pet. Ex. 21, page 10; SW Ex. 2, page 64). The District has extensive historical information on algal cover and could have correlated that information with data extracted from USGS routine flow measurements and HEC-RAS model data. (T. 470-473). In fact, USGS data alone may have been sufficient to establish velocity/algae correlations even without resorting to the extensive HEC-RAS data set. (T. 390). The District's Chief Environmental Scientist testified that the District has started to study the issue but has only collected data and has not yet moved on to the analysis phase. (T. 811). However pursuant to the proposed rule, the District is not required to re-evaluate the Minimum Flow until December 2027.

VAGUENESS

56. Section 40D-8.041(22)(b) of the proposed rule reads as follows:

The Minimum Flow for the Rainbow River System is 95% of the natural flow as measured at the United States Geological Survey Rainbow River at Dunnellon, FL Gage No. 02313100. Natural flow is defined for the purposes of this rule as the flow that would exist in the absence of water withdrawal impacts. The Minimum Flow is based on a 5% reduction from the natural flow of 683 cubic feet per second, which was adjusted for groundwater withdrawals using hydrologic modeling for the period of record from 1965-2015 at the United States Geological Survey Rainbow River at Dunnellon, FL Gage No. 02313100.

The logical reading of the proposed rule language is that the “Minimum Flow” is 95% of the “natural” flow of 683 cfs, which mathematically is 649 cfs. However, it is not clear how the District is going to define “Minimum Flow” in this proposed rule.

57. The proposed Minimum Flow Rule was adapted from a Minimum Flow Rule adopted under emergency rule procedures on June 27, 2017 (T. 83-84, 181-182, 196, 847). That rule interpreted the 649 cfs as a long-term average Minimum Flow limit applied to the average flow calculated for all years beyond 1965, which could lead to regulatory acceptance of extremely large flow reductions in future years. A zero flow could occur in the for two years that would not “ring the MFL bell” because large flow reduction years would get “masked” when averaged with flows going back to 1965. (SWF Ex. 2, pages 109-110, T. 82-83, 182-185). That interpretation of the long-term average Minimum Flow was abandoned, but in developing the proposed rule, the District did not specify the time frames over which meeting the Minimum Flow is to be evaluated (one day flow averages, average monthly flows, average yearly flows) (T. 195-196, 199).

58. The lack of specificity for the time frame and period of record for critical flow terms makes the rule vague and not understandable for the application of the Minimum Flow. Michael Flannery, a retired Chief Environmental Scientist with the District who worked on its Minimum Flows program for over 29 years, including developing rule language and interpreting

Minimum Flows as they apply to consumptive use permits (Pet. Ex. 92), testified that future water users and regulators would find the rule vague and ambiguous (T. 196-197, 199-200).

59. The rule language and the testimony provided by the District are also unclear as to what the Minimum Flow represents and the resource protection it provides. The proposed rule establishes only one natural baseline flow (683 cfs) and only one Minimum Flow (95% of the natural flow, or apparently 649 cfs). However, the District's MFL Program Lead testified that the District evaluated percent flow reductions over the full flow regime of the river (T. 560-561, 822, 824-825) and the 5% flow reduction limit identified by the Minimum Flow is to apply to low, medium, and high flows throughout the year (T. 847-848). Mr. Flannery also testified that the percentage flow reductions in Minimum Flow rules are intended to cover the entire flow regime of a given river (T. 175-176, 177-178, 195-197). Yet, the proposed rule has only one value for Minimum Flow. This is contrary to the use of multiple Minimum Flows in other water management districts and contrary to the directive in Rule 62-40.473(2), Fla. Admin. Code, that Minimum Flows and levels should be expressed as multiple flows or levels defining a hydrologic regime (T. 187-188, 198).

60. Mr. Flannery testified that the proposed rule language indicates there is a single Minimum Flow rate for the river, suggesting that all flows above 649 cfs would be available for supply (T. 197). He testified this does not protect the flow regime of the river and is a deviation from how the District has formulated Minimum Flow rules in the past (T. 196-197, 198-200).

61. The District's MFL Program Lead testified that a groundwater withdrawal "will be based upon the long-term period with the daily flows being used" (T. 849-850), which corresponds to how the District intends to use the Northern District Model to assess the effects of groundwater withdrawals on the average flow of the river over a multi-year period. On the other

hand, with regard to surface water withdrawals from the river, the District's MFL Program Lead testified that "surface (mis-transcribed as "service") water withdrawal is "presumably a condition to the previous day's flow" (T. 849). He went on to acknowledge that reference to daily or previous day's flow is not contained in the proposed Minimum Flow rule for the RRS (T. 850).

62. Mr. Flannery testified that surface water withdrawals from un-impounded rivers are regulated as percentages of previous day's flow and that Minimum Flow rules for other rivers, including spring-fed rivers, contain language that percent flow reductions for such withdrawals are based on the previous day's flow (Pet. Ex. 102, p. 1318, 1327, T. 175-176, 191-192, 199).

63. Mr. Flannery twice contributed draft rule language to the District providing a blueprint for a more rational MFL. His first submittal contained three flow duration values to serve as multiple Minimum Flows (T. 190-191, 193, 198-200). After that was not accepted, he submitted draft rule language describing how the previous day's flow can be used to calculate percent flow reductions where applicable and how an average flow for a range of years can be used to assess compliance with hydrological modeling (Pet. Ex. 101, T. 191-194).

WATER QUALITY

64. The Rainbow River is designated by the Florida Department of Environmental protection as impaired for nitrates. An 82% reduction of nitrates is required under the Total Maximum Daily Load due to the observed positive relationship between nitrates and nuisance algal growth, as well as between nitrates and or a springs ecological productivity. (T. 396). The District found that in one section of the Rainbow River there was a strong correlation between lower flow and higher nitrate levels. (T. 395, Pet. Ex. 21, page 19). The Peer Review expressed

concern suggesting that the District should consider a cap on current groundwater withdrawals (or a minimal increase) until this issue was clarified. (Pet. Ex. 4, page 12).

65. There is a reduction of transparency when waters exit Blue Cove and return to the Rainbow River. This appears to be due to the extended hydraulic residence time in this deeper water and is exacerbated by low flows. (T. 781, 782; SW Ex. 2, page 52).

CONCLUSIONS OF LAW

JURISDICTION

66. The Division of Administrative Hearings has jurisdiction of the subject matter and the parties to this proceeding. Sections 120.569 and 120.57(1), Fla. Stat.

67. Section 120.56(1)(a) provides that “any person substantially affected by a rule or a proposed rule may seek an administrative determination of the invalidity of the rule on the ground that the rule is an invalid exercise of delegated legislative authority.”

STANDING

68. A petitioner in a rule challenge has the burden of proving its standing by a preponderance of the evidence. See Section 120.56(2)(a), Fla. Stat.

69. Generally, to establish standing, a party must show the challenged agency action will result in a real and immediate injury in fact, and the alleged interest is within the zone of interest to be protected or regulated. See *Jacoby v. Fla. Bd. of Med.*, 917 So. 2d 358 (Fla. 1st DCA 2005).

70. A less demanding test for standing is applicable in rule challenge cases than in licensing cases. See *Florida Department of Professional Regulation, Board of Dentistry v. Florida Dental Hygienists Association*, 612 So.2d 646, 651, 652 (Fla. 1st DCA 1993).

71. The nature of the interests that can furnish the basis for standing to challenge a proposed rule are those that are to be protected or regulated by the proposed rule. See *Abbot Labs v. Mylan Pharms, Inc.*, 15 so.3d 642 (Fla. 1st DCA 2009).

72. A Minimum Flow and Level, the subject of the proposed rule being challenged, is the limit at which further withdrawals would be significantly harmful to water resources or ecology of the area. See Section 373.042(1), Fla. Stat.

73. Individual Petitioners Blasingame, Vibbert, and Jones established through testimony and the evidence that their interests and concerns about the water resources and ecology of the RRS are those that would be protected or regulated by the proposed rule.

74. RRC is an association formed and acting specifically for the protection and preservation of the RRS. Association standing to bring a rule challenge is generally set forth in *Florida Home Builders Assn' v. Dep't of Labor and Emp. Sec.*, 402 So.2d 351 (Fla. 1982), wherein it was held:

- The subject matter of the rule must be within the association's general scope of interest and activity.
- The relief requested must be the type appropriate for the association to receive on behalf of its members.
- A substantial amount of the association's members, although not necessarily a majority, are "substantially affected" by the challenged rule.

75. Based on the testimony of Dr. Burton Eno, President of the RRC, and the evidence presented, the RRC easily passes the first two tests for association standing. The District contends that the RRC fails the third test, contending that it has not been shown that a "substantial number" of its members are substantially affected by the RRS Minimum Flow Rule.

76. As stated in *Florida Home Builders*, supra, a "substantial number" does not necessarily mean a majority. Further, as the Florida Supreme Court noted in that case involving

association standing, “Expansion of public access to the activities of governmental agencies was one of the major legislative purposes of the new Administrative Procedures Act.” Id., at 352.

77. The Florida Supreme Court continued to emphasize the right of associations to have access to challenge agency rules in NAACP, Inc., v. Florida Board of Regents, 863 So.2d 294 (Fla. 2003). In that case the NAACP and two of its members challenged a proposed agency rule concerning elimination of certain affirmative action policies by Florida’s state universities. The association claimed that in addition to its traditional role as an advocacy group for minority rights, its membership included a large number of middle school, high school, and university students who would be affected by this change in policy. Without addressing the percentage of NAACP members who were students, the Court accepted the association’s assertion that a “substantial number” of the association’s members were both prospective applicants to the State University System and were minorities that would obviously be affected by any change in policy concerning minority admissions. The Court went on to state “without specifically identifying its student membership as current applicants to the university system, the association has demonstrated a sufficient impact on its student members as genuine prospective candidates for admission to the state university system to meet the requirement of substantial impact.” Id., at 300.

78. Like the situation in NAACP, a specific number or percentage of members of the RRC who would be substantially affected by the proposed rule has not been designated. However, also as in NAACP, the proposed rule, which addresses how to prevent significant harm to the RRS, would obviously affect a substantial number of the association’s members, an association formed to protect and preserve the RRS. Additionally, the record reflects the actual substantial interests of the RRC members who live on the river, who actively use the river, who

participate in yearly river clean-ups, who participate in monthly meetings and monthly data collection for use in river research, and who participate in training grade school children and the public about the conditions of the RRS. See also Rosenzweig v. Department of Transportation, 979 So. 2d 1050, 1054C (1st DCA 2008) (“Considering the APA’s policy, the supreme court’s decision in NAACP, and the factors enunciated in Agrico, it is clear that if *anyone* has the ability to challenge the Department’s interpretation of Section 33.065, which specifically relates to bicycle lanes, it would be those seriously involved in bicycling.”); Hillsborough County v. Florida Restaurant Association, Inc., 603 So.2d 587 (2d DCA 1992) (37 out of 2,766 association members was a “substantial number” to establish standing).

79. Based on the above review, RRC meets the “substantial number” requirement for association standing.

80. The District filed a “Motion to Dismiss for Petitioners’ Lack of Standing” immediately prior to the final hearing. The District’s motion to dismiss was denied without prejudice at the start of the hearing.

81. The District asserts that the proposed rule does not regulate or protect the Petitioners’ “zone of interest”. The basis for their argument is that this MFL rule is merely a planning tool and will not directly affect the interests of the Petitioners. Although more properly addressed under the second standing test (“real or immediate injury in fact to Petitioner’s interests”), the District’s argument is still misplaced. The Minimum Flow establishes a criterion that Water Use Permittees must meet. The rule is not a plan that can be ignored. See Rule 40D-8.011(4), Fla. Admin. Code (“Minimum flows and levels prescribed in Chapter 40D-8, F.A.C., are used in water use planning, as one of the criteria in evaluating applications for water use permits under Chapter 40D-2, F.A.C., ...”). See also Rule 40D-2.301(2), Fla. Admin. Code

which establishes the District's permitting criteria that must be met to obtain a water use permit ("In order to provide reasonable assurance that the consumptive use is reasonable and beneficial, an applicant shall demonstrate that the consumptive use: (a) ... (h) Is in accordance with any Minimum Flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.")

82. The District's argument that only those entities who would seek water use permits should have standing to challenge the Minimum Flow rule is also misplaced. A criterion is being established for water-use permittees to meet, as well as for third parties substantially affected by agency-issued water-use permits to use as a basis to challenge the water use permit. Once the criterion is established, it will be too late to challenge this criterion for both the water-use permittee seeking the permit and the substantially affected third party who may want to challenge the permit for not meeting the MFL rule criterion. Both future water-use permittees and future third parties who may challenge a permit issuance need to challenge the permitting criterion now if they have legitimate concerns with the rule. The Second District Court of Appeal has recognized the substantial interest of citizens like the Petitioners in the establishment and implementation of an MFL. See Southwest Florida Water Mgmt. Dist. V. Charlotte Cty., 774 So2d 903,923 (Fla. 2d 2001) ("We recognize that the establishment and implementation of Minimum Flows and levels is a decision that is of utmost importance to the citizens who live within the District's jurisdiction and one that will affect future generations.").

83. Based on the testimony and evidence provided at the hearing, and based on the above review, I find by a preponderance of the evidence that Petitioners Michelle Blasingame, William Vibbert, Dennis Jones, and Rainbow River Conservation, Inc., have standing in this case.

MOTION TO DISMISS FOR LACK OF SUBJECT MATTER JURISDICTION AND FAILURE
TO STATE A CAUSE OF ACTION

84. Immediately prior to the hearing the District filed a “Motion to Dismiss for Lack of Subject Matter Jurisdiction and Failure to State a Cause of Action.” The motion was dismissed without prejudice at the hearing. The District preserved the right to continue to address its motion in its Proposed Final Order.

85. In its motion, the District contended that algal accumulation impacts and water quality impacts were beyond the scope of this proceeding, and that the peer review of this MFL rule cannot be given “significant weight”.

86. The Petitioners filed a Response in Opposition to the District’s motion on the morning of the hearing. In addition to the matters raised in that response, I have considered the following additional matters.

87. On page 3 of its motion the District states that “the failure to address the impact of algal accumulation or water quality degradation in developing the MFL cannot form the basis for a determination that the proposed MFL is an invalid exercise of delegated legislative authority as a matter of law.”

88. The District’s basis for this argument is that the Petitioners’ Amended Petition refers to Rule 62-40.473, Fla. Admin. Code. This rule is part of Chapter 62-40, a Department of Environmental Protection (FDEP) rule entitled the “Water Resource Implementation Rule”. Rule 62-40 is to provide water resource implementation goals, objectives, and guidelines for development and review of programs, rules and plans related to water resources (Rule 62-40.110(2), Fla. Admin. Code). Specifically, Rule 62-40.473 provides this guidance for MFL rules. Included in the rule are 10 water resource values that require consideration when

developing MFL rules, including recreation, fish and wildlife habitat, aesthetic and scenic attributes, and water quality.

89. Section 373.114(2) of the Florida Statutes states that the FDEP shall have the exclusive authority to review rules of the water management districts to ensure consistency with the Water Resources Implementation Rule. Within 30 days after the adoption of a water management district rule, any affected party may request a hearing be held before the Secretary of FDEP where evidence and argument may be presented relating to the consistency of the rule with the Water Resource Implementation Rule.

90. The District points out that in their Amended Petition the Petitioners have referred to water resource values from the Water Resources Implementation Rule when expressing concerns about adverse algal and water quality impacts. They argue that this is not a proceeding under Section 373.114(2), and therefore issues relating to alleged adverse algal impacts and adverse water quality impacts must be stricken from this rule challenge.

91. The District cites City of Sanibel, et al. v. South Florida Water Management District, Case No. 18-5114RP (Fla. DOAH March 8, 2019), where in paragraphs 81 and 82 the ALJ states:

A proposed rule challenge is not the proper forum to determine whether a proposed rule is consistent with the Water Resource Implementation Rule. Such a determination is within the exclusive jurisdiction of the Department of Environmental Protection under section 373.114(2), Florida Statutes.

Consistency of the District's Proposed Rule with the Water Resources Implementation Rule of the Department of Environmental Protection is not a basis in this proceeding fore a finding that the Proposed Rule is an invalid exercise of delegated legislative authority.

92. It is true that a proposed rule challenge is not the proper forum to determine whether a proposed rule is consistent with the Water Resource Implementation Rule. Such a

determination is within the exclusive jurisdiction of the Department of Environmental Protection under section 373.114(2), Florida Statutes.

93. Similarly, the court in Southwest Fla. Water Mgmt. District v. Charlotte Cnty., 774 So.2d 903, 910 (Fla. 2d DCA 2001) recognized the difference between a proceeding under section 373.114(2) and a rule challenge under section 120.56. The court approved an ALJ's finding that "consistency with State Water Policy is not properly resolved under sections 120.54 and 120.56 and does not provide a basis for invalidating an existing or proposed rule."

94. While the Amended Petition does refer to water resource values within the Water Resource Implementation Rule, this is a rule challenge under section 120.56. The Petitioners did not initiate a proceeding under section 373.114(2) challenging whether the proposed rule is consistent with the Water Resource Implementation Rule. Whether algal and water quality impacts are relevant to this proceeding depends on if these issues are relevant when considering whether the rule is an invalid delegation of legislative authority under section 120.56, Fla. Stat. (i.e., whether algal and water quality impacts are relevant when considering whether the proposed rule contravenes sections 373.042 and 373.0421, is vague or fails to establish adequate standards for agency decisions implementing sections 373.042 and 373.0421, or is arbitrary or capricious).

95. The fact that algal proliferation and water quality impacts would also be issues under a challenge to an FDEP consistency review under section 373.114(2) does not preclude the Petitioners from raising these issues in a 120.56 rule challenge.

96. Also, in its motion the District argued that the Petitioners' contention that failure to address water quality problems caused by increased groundwater pumping and reduced flow must be dismissed on another basis. The District relied on a FDEP order relating to a

consistency review under Section 373.114(2). See In re: Florida Administrative Code Rules 40D-8.041(16) and (17), 2014 WL 7649082 *6 (Fla. Dept. Env. Prot. Nov. 25, 2014). The order distinguishes water *quality* standards from MFLs, which are water *quantity* requirements. However, the order makes clear that MFLs must address water quality impacts.

97. Finally, the District argues in its motion that the Amended Petition improperly alleged that “significant weight” must be given to the peer review of the proposed review. The District’s argument is based on the reading of Section 373.042(6)(b), Fla. Stat., that indicates that when a peer review is requested by a substantially affected person, it shall be given “significant weight”. The District argues that in this case the peer review was initiated by the District itself, not as a result of a request from substantially affected parties.

98. However, the statute also states that MFL rules shall be subject to peer review when a peer review is established on the MFL priority list by the water management districts (section 373.042(3)), or by a decision of FDEP or water management districts (373.042(6)(a)). The Legislature would not have required peer reviews in these situations only to give them little or no weight. Therefore, I will consider the peer review of this rule to have relevance and significance.

THE DAUBERT STANDARD

99. The District filed Motions in Limine concerning the expert testimony of Dr. Knight and Mr. Gross, contending their testimony should be limited under the “Daubert” requirements for expert testimony. See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed. 469 (1993). Regardless of whether motions in limine are filed, the Daubert standard is applicable to all experts who testified in this hearing. The most significant expert opinions in this case involve the testimonies of Dr. Knight and Mr. Basso

concerning the type and quality of models that provide the best information for establishing the proposed MFL.

100. The Daubert standard is encoded in Section 90.702 of the Florida Statutes and states as follows:

Testimony by experts. – If scientific, technical, or other specialized knowledge will assist the trier of fact in understanding the evidence or in determining a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify about it in the form of an opinion or otherwise, if:

- The testimony is based upon sufficient facts or data;
- The testimony is the product of reliable principles and methods; and
- The witness has applied the principles and methods reliably to the facts of the case.

101. I find that both Dr. Knight and Mr. Basso are qualified as experts in the field of water modeling as it pertains to MFLs based on their education, knowledge and experience. I also find that their testimony was based on sufficient facts or data and reliable methodology, and that they applied the methodology reliably to the facts of this case. However, the record indicates that Dr. Knight's testimony complied more fully with the Daubert standard and is more credible.

102. In a case based on science such as this case, the expert's opinion must be derived by the scientific method. Perez v. Bell South Telecommunications, Inc., 138 So.2d 492 (Fla. 3d DCA 2014), citing Daubert. The basis of the scientific method is empirical testing - developing hypotheses and testing them through blind experiments to see if they can be verified.

103. In this case Dr. Knight has followed the scientific method to arrive at his opinion regarding groundwater withdrawal impacts on the Rainbow River System. He used a water mass balance model of the type that is widely used in the scientific community. (T. 427, 428, 687 Pet. Ex. 19, page 3). He relied on empirical data from USGS and other reliable sources and less on

his own “professional judgment” to arrive at his conclusions. (T. 428-430, 688, 689). He relied on the longest relevant “period of record” to collect data to formulate his opinions. (T. 446-448, 453, 468). He verified the water mass balance model results with three data-driven quantitative tests. (T. 436,437, 448-450; Pet. Ex. 19, pages 19, 20, 21). Finally, the water mass balance model results had a 0.63 R^2 coefficient of determination, an excellent statistical measure of goodness. (T. 459, 519, Pet. Ex. 19, pages 39, 40).

104. Mr. Basso did not follow the scientific method as closely as Dr. Knight to arrive at his opinions. Mr. Basso’s opinions were based on the use of a hydrologic groundwater flow model, NDM4/5, that is accepted by the scientific community, and is a model that has been used as a basis for other MFLs. (T. 626, 627).

105. However, Mr. Basso did not use certain quantitative tests to verify the accuracy of the model, such as the use of “error bars” or “confidence intervals”. (T. 423-425, 723, 724; Pet. Ex. 20, page 12). A peer review of NDM5 (essentially the same model as NDM4 – T. 698) indicated several technical concerns with the hydrological model, including the failure to use an automated parameter estimation tool (PEST). (T. 410, 411; Pet. Ex. 20, pages 2-7). Mr. Basso testified that he would rather rely more on his own subjective calibration than on PEST. (T. 717-721).

106. HydroGeoLogic, Inc., the developer of NDM4, the hydrologic groundwater flow model relied upon by the District, specifically warned that “because of recognized data deficiencies, model simulation is more appropriate at the sub-regional and regional scales rather than at the local or site-specific scales for simulation of hydrologic conditions.” (SWF Ex. 34, Section 4-7). Mr. Basso and the District did not have HydroGeoLogic, Inc. testify as to how this limitation, based on the company’s concern about data deficiencies, would apply in this case.

107. The hydrological groundwater flow model's 4-foot discrepancy simulating the water level at the Dunnellon well leaves significant doubt about the model's accuracy. (T. 416-418, 705, 706; Pet. Ex 20, pages 8, 9). Mr. Basso's conclusion that rainfall variations were the cause of a 19 percent decline in flow at Rainbow Springs was not based on scientific analysis – it was “intuitive”. (T. 725-727).

108. Finally, the R^2 coefficient of determination for the NDM4/5 in this case is only 0.3 as compared to 0.63 for Dr. Knight's water mass balance model test.

109. While Dr. Knight's testimony was based on more scientific rigor under the Daubert test than Mr. Basso's testimony, I will consider the expert opinions offered by both, with the appropriate weight based on their credibility.

110. The other experts who testified in this case (Mr. Gross, Mr. Flannery, Mr. Leeper, and Dr. Anastaciou) all were shown to have the education, experience, and knowledge necessary to testify as experts in their offered fields, and all met the qualifications of Section 90.702 of the Florida Statutes.

NATURE OF PROCEEDING AND BURDEN OF PROOF

109. This is a de novo proceeding. Section 120.56(1)(e), Fla. Stat.

110. The Petitioners have the burden to prove by a preponderance of the evidence that they will be substantially affected by the proposed rule. The District then has the burden to prove by a preponderance of the evidence that the proposed rule is not an invalid exercise of delegated legislative authority as to the objections raised. Section 120.56(2)(a), Fla. Stat.

111. The relevant challenges from the Petitioners as to why the rule is “an invalid exercise of delegated legislative authority” as defined in Section 120.52(8) are as follows:

A proposed or existing rule is an invalid exercise of delegated legislative authority if any one of the following applies:

.....

(c) The rule enlarges, modifies, or contravenes the specific provisions of law implemented, citation to which is required by s. 120.54(3)(a);

(d) The rule is vague, fails to establish adequate standards for agency decisions, or vests unbridled discretion in the agency;

(e) The rule is arbitrary or capricious. A rule is arbitrary if it is not supported by logic or the necessary facts; a rule is capricious if it is adopted without thought or reason or is irrational;

112. The proposed rule is not presumed to be valid or invalid. Section 120.56(2)(c), Fla. Stat.

113. The District's interpretation of statutes and rules shall not be given deference. Section 21 of Article V, Florida Constitution. See also Kanter Real Estate, LLC. V. DEP, City of Miramar, and Broward County, 267 So.3d 483 (Fla. 1st DCA 2019).

MFL STATUTES AND RULES AT ISSUE

114. Section 373.042(1):

Within each section, or within the water management district as a whole, the department or the governing board shall establish the following:

(a) Minimum flow for all surface water courses in the area. The Minimum Flow for a given watercourse is the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.

.....

(b) The Minimum Flow and minimum water level shall be calculated by the department and the governing board using the best information available. When appropriate, Minimum Flows and minimum water levels may be calculated to reflect seasonal variations. The department and the governing board shall consider, and at their discretion may provide for, the protection of non-consumptive uses in the establishment of Minimum Flows and minimum water levels.

115. Section 373.0421(2), Fla. Stat.

If, at the time a Minimum Flow or minimum water level is initially established for a water body pursuant to s. 373.042 or is revised, the existing flow or water level in the water body is below, or is projected to fall within 20 years below, the

applicable Minimum Flow or minimum water level, the department or governing board, as a part of the regional water supply plan described in s. 373.709, shall concurrently adopt or modify and implement a recovery or prevention strategy. If a Minimum Flow or minimum water level has been established for a water body pursuant to s. 373.042, and the existing flow or water level in the water body falls below, or is projected to fall within 20 years below, the applicable Minimum Flow or minimum water level, the department or governing board shall expeditiously adopt a recovery or prevention strategy.

116. Rule 40D-8.011(5), Fla. Admin. Code

The Minimum Flows and Levels established in this chapter 40D-8, F.A.C., are based on the best information available at the time the Flow or Level was established. The best available information in any particular case will vary in type, scope, duration, quality and quantity and may be less than optimally desired. In addition, in many instances the establishment of a Minimum Flow or Level requires development of methodologies that previously did not exist and so are applied for the first time in establishing the Minimum Flow or Level.

117. Rule 40D-8.011(7), Fla. Admin. Code

“Minimum Flow” means the flow for a surface watercourse at which further withdrawals would be significantly harmful to the water resources and ecology of the area and which may provide for the protection of non-consumptive uses (e.g., recreational, aesthetic, and navigation).

118. Rule 62-40.473(1), Fla. Admin. Code

In establishing Minimum Flows and levels pursuant to Sections 373.042 and 373.0421, F.S., considerations shall be given to natural seasonal fluctuations in water flows and levels, non-consumptive uses, and environmental values associated with coastal, estuarine, spring, aquatic, and wetlands ecology, including:

- (a) Recreation in and on the water;
- (b) Fish and wildlife habitats and the passage of fish;
- (c) Estuarine resources;
- (d) Transfer of detrital material
- (e) Maintenance of freshwater storage and supply;
- (f) Aesthetic and scenic attributes
- (g) Filtration and adsorption of nutrients and other pollutants;
- (h) Sediment loads
- (i) Water quality; and

(j) Navigation

119. Rule 60-40.473(2), Fla. Admin. Code

Water bodies experience variations in water flows and levels that often contribute to significant functions of the system, such as those described in subsection 62-40.473(1), F.A.C. Minimum flows and levels should be expressed as multiple flows or levels defining a minimum hydrologic regime, to the extent practical and necessary to establish the limit beyond which further withdrawals would be significantly harmful to water resources or ecology of the area as provided in Section 373.042(1), F.S. However a Minimum Flow or level need not be expressed as multiple flows or levels if other resource protection tools, such as reservations implemented to protect fish and wildlife or public health and safety, that provide equivalent or greater protection of the hydrological regime of that water body, are developed and adopted in coordination with the Minimum Flow or level.

ISSUES AT LAW FOR DISPOSITION

Whether the Use of the NDM4 Contravenes Section 373.042 of the Florida Statutes by Not Using the Best Information Available to Calculate the Minimum Flow

120. The District used NDM4 as the basis for developing the Minimum Flow in this rule. The NDM4 is a hydrologic groundwater flow model that has been used for developing MFLs in the past. As far as hydrologic groundwater flow models are concerned, NDM4 and its similar model, NDM5, are well regarded for their intended purpose. However, as noted in Rule 40D-8.011(5), “in many instances the establishment of a Minimum Flow or Level requires development of methodologies that previously did not exist and so are applied for the first time in establishing the Minimum Flow or Level.” The Petitioners have provided a methodology that is very straight-forward and is based on significant relevant data that reflects the actual situation at Rainbow Springs.

121. The NDM4’s failure to reflect the actual situation at the Dunnellon USGS well, being off by four feet, raises doubt about its overall accuracy in a localized application of the model.

122. The District also did not consider the longest reasonably available period of record to analyze flow data. The Petitioners' water mass balance considered a longer period of record. This longer period of record with reliable data provided the water mass balance with a more accurate estimation of the impacts of rainfall and groundwater withdrawal. The District's only explanation for why this longer period of record was not considered was the District's environmental scientists' need for daily reports. Groundwater modelers, however, do not need daily records to generate a valid natural baseline flow.

123. Selection of a period-of-record from 1965 to 2015 for calculating natural baseline flows results in a lower MFL than one in which the period-of-record was extended back to 1929, the start of regular and reliable measurements of flow in the Rainbow. This is because flow averages from 1929 to 1965 were higher than those in later years, due to variations in rainfall and lesser rates of pumping in the earlier years. Similarly, setting pumping at zero at the start of the period-of-record also results in a lower MFL than one in which a reasonable estimate of 1965 pumping was factored in. In determining a value for the MFL, the District made two key decisions concerning data records, both of which resulted in a lower MFL value than would have been the case with more plausible alternative decisions.

124. Also, the District did not provide clear evidence that the NDM4 or NDM5 can be applied to a localized situation such as the Rainbow Springs MFL, despite the specific limitation in the NDM4 that its use is more appropriate at the regional or sub-regional level. The District did not provide any testimony from the developer of the NDM4 to explain why this limitation should not apply to the Rainbow Springs MFL.

125. Water mass balance models are widely used. The Petitioners developed a water mass balance model specifically for the Rainbow Springs area. Its model had a much better R^2

fit than the NDM4 model, indicating 63 per cent of the variation in actual discharge is accounted for in the Petitioners' model versus only 30 per cent for the NDM4 model. The Petitioners' model was supported by three other data-driven tests.

126. Standard scientific tools like PEST, uncertainty analyses, and confidence intervals were not used in the development of the NDM4.

127. The District has presented a case that shows the NDM4 is a well-regarded groundwater flow model that has been used for the development MFLs in the past. It is the District's opinion that using NDM4 as the basis for determining the Minimum Flow is "using the best information" to satisfy the mandates of Section 373.043 of the Florida Statutes. However, under Section 21 of Article 5 of the Florida Constitution, I am not allowed to give deference to the District when considering the District's interpretation of the statutes and rules applicable to this case.

128. The District has failed to address legitimate objections raised by the Petitioners concerning the NDM4. The District did not use the best information available to calculate the Minimum Flow, in contravention of Section 373.042(1) of the Florida Statutes. Therefore, the District has not met its burden to prove by a preponderance of the evidence that the proposed MFL rule is not an invalid delegation of legislative authority.

Whether the District's Failure to Address Algal Accumulation and Its Impact from Flow Was Arbitrary and Contravenes the Law It Is Implementing

129. The evidence established that filamentous algae accumulation is a significant problem in the Rainbow River and has been getting worse in the last 20 years. It negatively affects recreation, aesthetic enjoyment, and fish and wildlife, as well as the seven other environmental values the District is required to consider under Rule 62-40.473(1) when

developing MFLs. While this proceeding is not a consistency review of the proposed rule under Section 373.114(2), Fla. Stat., most of the environmental criteria in Rule 62-40.473(1) are relevant to whether this proposed MFL rule will cause significant harm to the water resources or ecology of the area. See Section 373.042(1)(a), Fla. Stat. See also Rule 40D-8.021(7) (“Minimum Flow” means the flow for a surface watercourse at which further withdrawals would be significantly harmful to the water resources and ecology of the area and which may provide for the protection of non-consumptive uses (e.g., recreational, aesthetic, and navigation)). The District acknowledged that algal accumulation affects all the environmental values listed in Rule 62-40.473(1).

130. There is a clear link between flow, velocity, and the accumulation of filamentous algae. Higher flows are associated with higher velocities, and higher velocities help dislodge nuisance algae. Research regarding this issue has been going on since the 1990’s, and the peer reviewers for this MFL expressed concern that that the District had not addressed this issue in the initial draft of their MFL Report in 2016. Scientists have found certain velocities that would provide this cleansing action.

131. The District’s response to this significant harm has been unreasonably slow. Though District research is occurring, no analysis has been done yet to determine what Minimum Flow is needed to address this issue. Under the proposed rule, the District is not required to re-evaluate the Minimum Flow until December 2027.

132. Failure to fully and timely address the problem of algal accumulation as it relates to flow in the Rainbow River System contravenes Section 373.042(1)(a) of the Florida Statutes, which requires the establishment of a Minimum Flow at which further withdrawals would not be significantly harmful to the water resources or ecology of the area. This failure to address this

issue is also arbitrary because existing facts do not support the District's failure to act on this issue. The District should establish a Minimum Flow that will address this issue.

Whether the Proposed Rule Is Vague, Fails to Establish Adequate Standards for District Decisions, or Vests Unbridled Discretion in the District

133. The District's proposed rule as written is vague and confusing with regard to hydrologic terms that are necessary to determine both the water supply availability and natural resource protection intended by the rule. The proposed rule states that "The Minimum Flow is based on a 5% reduction from the natural flow of 683 cubic feet per second" but does not identify the time frame for that minimum flow rate or other critical flow terms in the rule. It is therefore unclear what time frames for these minimum flow terms will be used (prior day, month, year, long term average) to determine how much water exists for a permit applicant and to determine whether the MFL is being met in the annual status reports. This could lead to arbitrary application of the rule and negate the resource protection intended by the 5% limit to flow reductions identified by the District's technical analysis and Minimum Flow reports.

134. The confusion about how to apply the rule is enough to invalidate the rule, but confusion also pertains to what the Minimum Flow actually represents. The rule establishes a single Minimum Flow value (649 cfs, which equals 95% of 683 cfs), but the District testimony was that the 5% limit to flow reductions applies to low, medium, and high flows throughout the year. A retired Chief Environmental Scientist with over 29 years of experience in the District's MFL program testified that the rule was nebulous and ambiguous and would be confusing to future water users and regulators.

135. A rule is vague when it forbids or requires the performance of an act in terms that are so vague that persons of common intelligence must guess at its meaning and differ as to its

application. See State v. Peter R. Brown Const., Inc., 108 So.3d 723, 728 (Fla. 1st DCA 2013); See also Witmer v. Department of Business and Professional Regulation, 662 So.2d 1299,1302 (Fla. 1st 1995). Here, the District is establishing an MFL that leaves “person of common intelligence” at a loss as to what the “Minimum Flow” in this rule means and how it will be applied. The rule also gives the District discretion without clear standards as to how it will determine the MFL when considering water use permit applications or annual status assessments. See Cortez v. State Board of Regents, 655 So.2d 132 (Fla. 1st DCA 1995) (part of rule held invalid for vagueness that gave discretion without standards to university presidents to decide whether to have a “positive” or “negative” checkoff for students to decide if they would contribute to funding public interest research). Therefore the rule is invalid because it is vague, fails to establish adequate standards for the District’s decisions, and vests unbridled discretion in the District.

Whether the Failure to Address the Unexplained Decrease in Flow that Has Been Occurring in Recent Times Is Arbitrary

136. Even though the District’s MFL report stated that the reduction in RRS flows in recent times is unexplained, the District’s modeling expert testified that it was not caused by groundwater withdrawals. However, the District’s reliance on the NDM model does not provide an explanation, which again shows the limitations of that model. The District’s modeling expert contended that nearly all of the recent decreases in flow are due to changes in rainfall patterns. However, the District’s modeling expert never established a science-based, quantitative link between rainfall patterns and RRS flows, attributing his conclusion about the relative roles of groundwater pumping (1 percent) and rainfall (19 percent) to “intuition”. The Petitioners’ expert did perform a quantitative analysis of the importance of both groundwater pumping and rainfall

on RRS flows, but the District did not. The District's position is arbitrary in that it is not supported by the necessary facts.

Whether the District's Failure to Cap Current Levels of Groundwater Withdrawals in the Rainbow River Springshed to Address Water Quality Problems Is Arbitrary

137. The nitrate concentrations in the Rainbow River have risen rapidly in the last few years. An 82% reduction of nitrates is required by FDEP. Because there may be a correlation between low flows and higher nitrate levels, the peer review suggested the District should consider a cap on groundwater withdrawals at current levels (or with a minimal allowable increase) until the issue was clarified. Transparency concerns also exist near Blue Cove due to residency times or water levels in the Cove. The District has agreed to study these water quality issues as they relate to flow, yet the District has not set a reasonable time to finish the studies and address the issues. Such an approach is arbitrary and not supported by the necessary facts.

Whether Rule 40D-8.041(22)(c)4 and 5 Contravene Section 373.0421(2) of the Florida Statutes

138. As a matter of law, proposed Rule 40D-8.041(22)(c)4 and 5 contravene Section 373.0421(2) of the Florida Statutes. Sections (22)(c)4 and 5 of the Proposed Rule read:

4. If the annual evaluation indicates the flow is below the Minimum Flow, or if the flow is projected to fall below the Minimum Flow within 20 years based on the evaluation performed as part of the regional water supply planning process, the District will conduct a causation analysis to evaluate the potential causes of the impacts on the Rainbow River System.

5. Based on the causation analysis, the District will re-evaluate the Minimum Flow for the Rainbow River System, or adopt a recovery or prevention strategy consistent with the provisions of Section 373.0421(2), F.S. (emphasis supplied)

The relevant portion of 373.0421(2) reads:

If a Minimum Flow or minimum water level has been established for a water body pursuant to s. 373.042, and the existing flow or water level in the water body falls below, or is projected to fall within 20 years below, the applicable Minimum

Flow or minimum water level, the department or governing board shall expeditiously adopt a recovery or prevention strategy. (emphasis supplied)

The District has no statutory authority to not expeditiously adopt a recovery or prevention plan when a Minimum Flow falls below the Minimum Flow established in the rule. It does not have the option “re-evaluate” the Minimum Flow after doing a causation analysis. Under the statute the District shall expeditiously adopt a recovery or prevention strategy, regardless of the cause of the failure to meet the Minimum Flow. The Proposed Rule clearly contravenes the specific provisions in section 373.0421(2), Fla. Stat., the law the rule is implementing.

ORDER

Based on the foregoing Findings of Fact and Conclusions of Law, it is ORDERED that:

1. The Petitioners have proved by a preponderance of the evidence that they are substantially affected by the proposed rule and therefore have standing to challenge it.
2. The District has not proved by a preponderance of the evidence that the proposed rule is not an invalid delegation of legislative authority. Therefore, pursuant to Section 120.56(2)(b), the proposed rule shall not be adopted.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was filed using the eALJ Electronic Filing portal and sent via electronic mail to Adrienne Vining, Esq., adrienne.vining@swfwmd.state.fl.us; Michael Bray, Esq., mike.bray@swfwmd.state.fl.us; Christopher Tumminia, Esq., chris.tumminia@swfwmd.state.fl.us; Hillary Ryan, Esq., hillary.ryan@swfwmd.state.fl.us; on this 8th day of August, 2019.

/s/ JW

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