

**ST. JOHNS RIVER WATER MANAGEMENT DISTRICT**

**ST. JOHNS RIVERKEEPER, FLORIDA  
DEFENDERS OF THE ENVIRONMENT,  
SILVER SPRINGS ALLIANCE, and  
ALICE GARDINER,**

*Petitioners,*

**vs.**

**SLEEPY CREEK LANDS, LLC and  
ST. JOHNS RIVER WATER  
MANAGEMENT DISTRICT,**

*Respondents.*

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**SJR 2018-01  
DOAH CASE NO. 17-0119  
SJRWMD F.O.R NO. 2017-04**

**FINAL ORDER**

The Division of Administrative Hearings, by its designated Administrative Law Judge, the Honorable E. Gary Early (“ALJ”), held a formal administrative hearing in this case on April 10-11, 2017. Petitioners St. Johns Riverkeeper, Florida Defenders of the Environment, Silver Springs Alliance, and Alice Gardiner (“Petitioners”); Respondent Sleepy Creek Lands, LLC (“Applicant”); and Respondent St. Johns River Water Management District (“District”) each submitted Proposed Recommended Orders to the ALJ on August 25, 2017. The ALJ then submitted a Recommended Order to the District on November 17, 2017. The Recommended Order contains findings of fact and conclusions of law regarding consumptive use permit (“CUP”) application 2-083-91926-4.

The Applicant’s cattle farm is located in northern Marion County near Fort McCoy. The Applicant initially submitted an application for a new groundwater withdrawal of 13 million gallons per day (mgd) for a 20-year period in December 2011. The Applicant currently has a

permit for 1.46 mgd. District staff recommended approving an increase of 1.22 mgd, for a total of 2.68 mgd, but only from 2017 through 2023, after which the allocation would reduce back to 1.46 mgd from 2024 through 2034.

The ALJ's Recommended Order concludes that the Applicant provided reasonable assurance that the proposed use of water meets applicable standards and criteria contained in section 373.223, Florida Statutes; Florida Administrative Code Rule 40C-2.301; and the corresponding provisions of the Applicant's Handbook: Consumptive Uses of Water (November 3, 2015) ("CUP Applicant's Handbook") and recommends the District approve and issue the permit.

Once a recommended order is issued, the parties may file exceptions to it.<sup>1</sup> Exceptions may dispute findings of fact or conclusions of law in the Recommended Order.<sup>2</sup> If a party does not file exceptions to a recommended order, it waives its right to do so.<sup>3</sup> If exceptions are filed, the other parties may file responses.<sup>4</sup> In this case, Petitioners timely filed three exceptions. Attorneys for the District did not file exceptions, but filed a timely response to Petitioners' exceptions. The Applicant chose not to file either exceptions or responses.

### **Scope of Review**

The Governing Board has reviewed the record, which includes those matters identified in section 120.57(1)(f) of the Florida Statutes, the hearing transcript, the exhibits admitted into evidence, the ALJ's Recommended Order, the Petitioners' exceptions, and the District's response. The scope of this review is limited to accepting, rejecting, or modifying findings of fact and conclusions of law contained in the ALJ's Recommended Order.

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<sup>1</sup> § 120.57(1)(k), Fla. Stat., Rule 28-106.217(1), F.A.C.

<sup>2</sup> *Id.*

<sup>3</sup> *Env'tl. Coal. of Fla., Inc. v. Broward County*, 586 So. 2d 1212, 1212 (Fla. 1st DCA 1991).

<sup>4</sup> *Id.*

### **Findings of Fact**

The Governing Board must accept findings of fact if supported by competent substantial record evidence. The Governing Board may not consider evidence not contained in the record, make additional findings, or reweigh record evidence.<sup>5</sup> The ALJ's findings of fact may not be rejected or modified unless the Governing Board, after a review of the entire record, states specifically that a finding was not based upon *competent substantial evidence* or that the proceedings on which the finding was based did not comply with *essential requirements of law*.<sup>6</sup>

*Competent evidence* is "evidence sufficiently relevant and material to the ultimate determination 'that a reasonable mind would accept it as adequate to support the conclusion reached.'" <sup>7</sup> *Substantial evidence* "provides a factual basis from which a fact at issue may reasonably be inferred."<sup>8</sup> Thus, competent substantial evidence is record evidence that is sufficiently relevant and material, and adequately provides the factual bases to support the ALJ's findings of fact.

Failure to comply with the *essential requirements of law* means more than a mere mistake in law occurred.<sup>9</sup> For a proceeding to depart from the essential requirements of law, it must violate a clearly established principle of law that results in a miscarriage of justice.<sup>10</sup> For example, if an administrative law judge made a finding on his own, without the parties having an

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<sup>5</sup> See § 120.57(1)(k)-(l), Fla. Stat., *Walker v. Bd. of Prof'l Eng'rs*, 946 So. 2d 604, 605 (Fla. 1st DCA 2006) (weight of the evidence), *Fla. Power & Light v. State Siting Bd.*, 693 So. 2d 1025, 1026-27 (Fla. 1st DCA 1997) (additional findings).

<sup>6</sup> See § 120.57(1)(l), Fla. Stat. (emphasis added).

<sup>7</sup> *City of Hialeah Gardens v. Miami-Dade Charter Found., Inc.*, 857 So. 2d 202, 204 (Fla. 3d DCA 2003) (quoting *DeGroot v. Sheffield*, 95 So. 2d 912, 916 (Fla. 1957)).

<sup>8</sup> *City of Hialeah Gardens*, 857 So. 2d at 204.

<sup>9</sup> *Yang Enter., Inc. v. Georgalis*, 988 So. 2d 1180, 1182 (Fla. 1st DCA 2008).

<sup>10</sup> *Abbey v. Patrick*, 16 So. 3d 1051, 1053-54 (Fla. 1st DCA 2009).

opportunity to present evidence or argument on the matter, the proceeding did not comply with the essential requirements of law because the parties were not afforded due process.<sup>11</sup>

### **Conclusions of Law**

In considering the ALJ's legal conclusions, the Governing Board may reject or modify only those conclusions or administrative rule interpretations over which it has *substantive jurisdiction*.<sup>12</sup> Substantive jurisdiction in this context includes areas in which the District has expertise, including interpretation of District rules and provisions of the CUP Applicant's Handbook, and conclusions based on such interpretations. In contrast, technical matters of law generally resolved by judicial or quasi-judicial officers, such as evidentiary rulings, application of affirmative defenses, and attorney fee awards are not within the District's substantive jurisdiction.<sup>13</sup>

If rejecting or modifying a conclusion of law or interpretation of an administrative rule, the Governing Board must state its reasoning specifically and find that its substituted conclusion or interpretation is as or more reasonable than the one rejected or modified.<sup>14</sup>

### **Petitioners' Exceptions**

Petitioners filed three exceptions—two of which dispute many of the ALJ's findings of fact, and one of which disputes several of the ALJ's conclusions of law. The minimum requirements for ruling on exceptions are provided by statute:

An agency need not rule on an exception that does not clearly identify the disputed portion of the recommended order by page number or paragraph, that does not identify the legal basis for

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<sup>11</sup> *State, Dep't of Fin. Serv. v. Mistretta*, 946 So. 2d 79, 80 (Fla. 1st DCA 2006).

<sup>12</sup> See § 120.57(1)(I), Fla. Stat. (emphasis added), *State Contracting and Engineering Corp. v. Dept. of Transp.*, 709 So. 2d 607, 610 (Fla. 1st DCA 1998) (policy of deference to agency's expertise in interpreting its rules applies to administrative law judges' findings).

<sup>13</sup> See *G.E.L. Corp. v. Dept. of Environmental Protection*, 875 So. 2d 1257, 1263 (Fla. 5th DCA 2004) (attorney fees), *Deep Lagoon Boat Club, Ltd. v. Sheridan*, 784 So. 2d 1140, 1141-42 (Fla. 2d DCA 2001) (affirmative defenses), *Barfield v. Dept. of Health*, 805 So. 2d 1008, 1011 (Fla. 1st DCA 2001) (evidentiary rulings).

<sup>14</sup> See § 120.57(1)(I), Fla. Stat.

the exception, or that does not include appropriate and specific citations to the record.<sup>15</sup>

In general, the exceptions contain few specific citations to the record in this case. The exceptions lack a valid legal basis, and although disputed portions of the Recommended Order are referenced by paragraph number, they are done in summary fashion and include up to two-thirds of the ALJ's findings of fact in a single reference. This style of presentation makes it unclear exactly which paragraph is being disputed and for what reason. Although the exceptions do not meet minimum statutory requirements to require a ruling, effort was made to discern Petitioners' arguments and provide a ruling nonetheless.

#### Exception 1

In exception 1, Petitioners take issue with findings of fact 16-22, 28-29, 42-46, 51-57, and 42-90.<sup>16, 17</sup> The requirements for rulings on exceptions to findings of fact are provided by statute:

The agency may not reject or modify the findings of fact unless the agency first determines from a review of the entire record, and states with particularity in the order, that the findings of fact were not based upon competent substantial evidence or that the proceedings on which the findings were based did not comply with the essential requirements of law.<sup>18</sup>

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<sup>15</sup> § 120.57(1)(k), Fla. Stat.

<sup>16</sup> Citations to the transcript will reflect the page number and take the form T. \_\_\_. Citations to exhibits entered into evidence at the hearing will reflect the party and exhibit number. Petitioners' exhibits will take the form P. Ex. \_\_\_. Applicant's exhibits will take the form App. Ex. \_\_\_. District's exhibits will take the form Dist. Ex. \_\_\_. Joint exhibits presented by the Applicant and District will take the form Jt. Ex. \_\_\_. Citations to the Recommended Order will reflect the paragraph number and take the form R.O. ¶ \_\_\_. Citations to Petitioners' Exceptions will reflect the paragraph number and take the form P. Except. ¶ \_\_\_. Citations to the District's response will reflect the page number and take the form Dist. Resp. p. \_\_\_. Citations to the Petitioners' Proposed Recommended Order will reflect the page number and take the form P. P.R.O. ¶ \_\_\_.  
<sup>17</sup> P. Except. ¶ 1.

<sup>18</sup> § 120.57(1)(l), Fla. Stat.

Petitioners claim the ALJ concluded “that the dramatic decline in flows in Silver Springs and Silver River are not due to groundwater withdrawals”<sup>19</sup> and argue the ALJ’s conclusion is “manifestly contrary to patently obvious facts.”<sup>20</sup> The attorneys for the District correctly point out that Petitioners’ argument does not articulate any findings of fact that are not supported by competent substantial evidence or that the proceedings did not comply with the essential requirements of law.<sup>21</sup> Rather, Petitioners attack the evidence and argument presented to the ALJ by the District as “fallacious.”<sup>22</sup> Petitioners then present their alternative facts and, in place of evidence, offer that they go “without saying,” and are inescapably and so manifestly obvious that they require no factual proof.<sup>23</sup>

Petitioners suggest that the Governing Board make findings of fact that differ from the ALJ’s and that are not based on record evidence, but rather are obvious enough to require no proof. However, this is not a valid legal basis for rejecting a finding of fact. Exception 1 also does not contain appropriate or specific record citations sufficient to demonstrate the ALJ erred in the findings of fact listed. Therefore, no ruling is required.<sup>24</sup>

Notwithstanding that there is no requirement to do so, a complete review of the record reveals that competent substantial evidence supports the ALJ’s findings of fact in paragraphs 16-22, 28-29, 42-46, 51-57, and 42-90 of the Recommended Order.<sup>25</sup> Accordingly, Petitioners’ exception 1 is rejected.

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<sup>19</sup> P. Except. ¶ 1. This conclusion is not actually contained in the findings in the Recommended Order.

<sup>20</sup> P. Except. ¶ 1

<sup>21</sup> Dist. Resp. p. 4, 8.

<sup>22</sup> P. Except. ¶ 1d. It appears that Petitioners’ use of the word fallacious to characterize evidence is an attempt to undermine the credibility of District witnesses.

<sup>23</sup> P. Except. ¶¶ 1c., 1d.

<sup>24</sup> See § 120.57(1)(k), Fla. Stat. Also e.g. *Indian River Farms Water Control Dist. v. All Aboard Fla. Operations, LLC*, Case No. 16-6165 (Fla. DOAH Mar. 30, 2017; SJRWMD June 27, 2017), *Dep’t of Env’tl. Prot. v. South Palafox Prop., Inc.*, Case No. 14-3674 (Fla. DOAH Mar. 2, 2015; DEP May 29, 2015).

<sup>25</sup> R.O. ¶ 16: T. 196-97, 256, 264; Jt. Ex. 84i, p. 38. R.O. ¶ 17: T. 202-03, 207-09, 211-12. R.O. ¶ 18: T. 223, 226-28. R.O. ¶ 19: P. P.R.O., ¶¶ 7,9. R.O. ¶ 20: T. 279-80, 343, 344; Jt. Ex. 84, p. 7. R.O. ¶ 21: T. 280-81, 313-15, 343-

## Exception 2

Petitioners' exception 2 takes issue with the ALJ's findings of fact contained in paragraphs 20, 41-45, 50, and 79-88 of the Recommended Order.<sup>26</sup> All but paragraph 41 are also included in Petitioners' exception 1, but exception 2 contains additional argument. Similar to exception 1, Petitioners do not suggest the proceedings failed to comply with essential requirements of law.

The gravamen of Petitioners' argument in exception 2 is that the ALJ incorrectly found that the Northern District Model version 5 is a valid model. First, Petitioners claim the model is invalid because it is characterized as "new" or "updated."<sup>27</sup> Second, Petitioners claim the model contains a major error and is therefore invalid.

Petitioners' argument that the model is new cites to paragraph 20, but appears in substance to be more relevant to the finding of fact in paragraph 21. Both paragraphs contain findings about the development of the Northern District Model version 5, which the ALJ

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44, Jt. Ex. 84, p. 7. *R.O.* ¶ 22: T. 134; P. Ex. 78, pp. 32-34; Dist. Ex. 114, p. 44. *R.O.* ¶ 28: T. 278-307, 308-39, 340-54. *R.O.* ¶ 29: T. 146, 147, 152-54, 156, 160-61, 165, 170-72; P. Ex. 63, p. 102. *R.O.* ¶ 41: T. 171-72; P. Ex. 64. *R.O.* ¶ 42: T. 172-73. *R.O.* ¶ 43: T. 184-85. *R.O.* ¶ 44: T. 349-51. *R.O.* ¶ 45: T. 351-54; P. Ex. 63. *R.O.* ¶ 46: T. 349-53. *R.O.* ¶ 47: T. 163, 165; P. Ex. 102, p. 9. *R.O.* ¶ 48: T. 165-66. *R.O.* ¶ 49: T. 282-86; Dist. Ex. 104. *R.O.* ¶ 50: T. 286. *R.O.* ¶ 51: T. 276-353. *R.O.* ¶ 52: T. 82-113; Jt. Ex. 84b. *R.O.* ¶ 53: T. 84-86, 103-04; Jt. Ex. 84, p. 17; Jt. Ex. 84b, p. 10. *R.O.* ¶ 54: T. 84-85, 105; Jt. Ex. 84, p. 17; Jt. Ex. 84b, p. 10. *R.O.* ¶ 55: T. 85, 86; Jt. Ex. 84b, p. 10. *R.O.* ¶ 56: T. 105; Jt. Ex. 84b, pp. 16, 29. *R.O.* ¶ 57: T. 88, 90-93; Jt. Ex. 84b, pp. 30-33. *R.O.* ¶ 58: T. 106-10; Jt. Ex. 84b, pp. 35, 37-38. *R.O.* ¶ 59: T. 103-04, 108-09; Jt. Ex. 84b, pp. 33-35. *R.O.* ¶ 60: T. 110-11; Jt. Ex. 84b, pp. 38-41. *R.O.* ¶ 61: T. 111; Jt. Ex. 84b, pp. 40-41. *R.O.* ¶ 62: T. 112, Jt. Ex. 84b, pp. 41-43. *R.O.* ¶ 63: T. 86; Jt. Ex. 84b, p. 44. *R.O.* ¶ 64: T. 86, 87; Jt. Ex. 84b, p. 44. *R.O.* ¶ 65: T. 87-88; Jt. Ex. 84b, p. 57. *R.O.* ¶ 66: T. 88-89; Jt. Ex. 84b, pp. 55-57. *R.O.* ¶ 67: Jt. Ex. 84b, 55-57. *R.O.* ¶ 68: T. 89; Jt. Ex. 84b, pp. 55-57. *R.O.* ¶ 69: Jt. Ex. 84b, p. 58. *R.O.* ¶ 70: Jt. Ex. 84b, pp. 58-61. *R.O.* ¶ 71: Jt. Ex. 84b, pp. 62-63. *R.O.* ¶ 72: T. 92-93; Jt. Ex. 84b, pp. 62-63. *R.O.* ¶ 73: T. 93-94; Jt. Ex. 84b, pp. 63, 68. *R.O.* ¶ 74: Jt. Ex. 84b, pp. 68-71. *R.O.* ¶ 75: T. 93-94; Jt. Ex. 84b, p. 71. *R.O.* ¶ 76: T. 95-96; Jt. Ex. 84b, pp. 79-81. *R.O.* ¶ 77: Jt. Ex. 84b, p. 81. *R.O.* ¶ 78: Jt. Ex. 84b, pp. 82-83. *R.O.* ¶ 79: T. 224, 226-28. *R.O.* ¶ 80: Jt. Ex. 84b, pp. 82-83. *R.O.* ¶ 81: Jt. Ex. 84c. *R.O.* ¶ 82: Jt. Ex. 84c, pp. 1-2, 5. *R.O.* ¶ 83: Jt. Ex. 84c, p. 8; Jt. Ex. 84c6. *R.O.* ¶ 84: Jt. Ex. 84, p. 18. *R.O.* ¶ 85: Jt. Ex. 84, p. 17; Jt. Ex. 84a. *R.O.* ¶ 86: Jt. Ex. 84a. *R.O.* ¶ 87: Jt. Ex. 84a. *R.O.* ¶ 88: Jt. Ex. 84, p. 17; Jt. Ex. 84a; Jt. Ex. 84i. *R.O.* ¶ 89: Jt. Ex. 84b. *R.O.* ¶ 90: T. 393; Jt. Ex. 84, p. 8.

<sup>26</sup> P. Except. ¶¶ 2)a., 2)b.

<sup>27</sup> P. Except. ¶¶ 2)a.v.—2)a.vii.

concluded “is the most up-to-date tool available for determining the subsurface conditions of the model domain.”<sup>28</sup>

Petitioners seek to apply statutory construction principles—the legal way to interpret words used in statutes—to the ALJ’s findings of fact about whether the model is characterized as “new” or “updated.”<sup>29</sup> However, attorneys for the District argue that whether the model is characterized as “new” or “updated” is, at best, a distinction without a difference.<sup>30</sup>

Petitioners have not demonstrated that the findings of fact in paragraph 20 (or paragraph 21) are not supported by competent substantial evidence. Petitioners have not provided any legal authority to support their proposition that the legal principles used in statutory interpretation apply to an administrative law judge’s findings of fact. Nor have Petitioners explained how the distinction between a model being new or updated relates to its validity. Thus, Petitioners have not provided a valid legal basis for their exceptions to paragraphs 20 or 21, and no ruling as to the first part of their exception is required.

Second, Petitioners take further issue with the ALJ’s findings of fact in paragraphs 41-45, 50, and 79-88 of the Recommended Order.<sup>31</sup> Petitioners do not suggest the ALJ’s findings that the model is the best available are not supported by competent substantial evidence; rather, they point to testimony they consider un rebutted and evidence they consider undisputed, and conclude that that the model contains an error significant enough that it should not be used.<sup>32</sup> As discussed above, it is the ALJ’s province to consider, weigh, and reconcile testimony and evidence, and the

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<sup>28</sup> R.O. ¶ 20.

<sup>29</sup> P. Except. ¶¶ 2)a.v.—2)a.vii. See e.g. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996), *Raymond James Fin. Serv., Inc. v. Phillips*, 126 So. 3d 186, 190 (Fla. 2013). *State v. Debaum*, 129 So. 3d 1089, 1091 (Fla. 3d DCA 2013).

<sup>30</sup> Dist. Resp. p. 11.

<sup>31</sup> P. Except. ¶ 2)b.

<sup>32</sup> P. Except. ¶¶ 2)b., 2)c., 2)d.

Governing Board must accept findings of fact supported by competent substantial evidence.<sup>33</sup> To the extent Petitioners seek to have the Governing Board modify or reject the ALJ's findings, Petitioners must provide a valid legal basis for doing so. They have not; thus no ruling on the exceptions to paragraphs 41-45, 50, and 79-88 of the Recommended Order is required.<sup>34</sup>

Notwithstanding that there is no requirement to do so, a complete review of the record shows that the ALJ's findings of fact as to the Northern District Model version 5 contained in paragraphs 20 and 21,<sup>35</sup> and paragraphs 41-45, 50, and 79-88<sup>36</sup> are supported by competent substantial evidence. Further, the evidence Petitioners cite as unrebutted or undisputed is, in fact, disputed, and it is within the ALJ's province to weigh the evidence.<sup>37</sup> Accordingly, exception 2 is rejected.

### Exception 3

Petitioners' exception 3 takes issue with the ALJ's conclusions of law contained in paragraphs 88-89, 114-17, 124-26, and 137 of the Recommended Order.<sup>38</sup> The substance of Petitioners' argument appears to be related more to paragraphs 89-90 than 88-89, however. Paragraph 88 contains findings of fact and paragraphs 89 and 90 contain mixed findings of fact and conclusions of law. To the extent the findings of fact are challenged, they are supported by competent substantial record evidence, as discussed in exception 1, above. To the extent the

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<sup>33</sup> See *Walker*, 946 So. 2d at 605.

<sup>34</sup> *Id.*, § 120.57(1)(k), Fla. Stat.

<sup>35</sup> *R.O.* ¶ 20: T. 279-80, 343, 344; *Jt. Ex.* 84, p. 7. *R.O.* ¶ 21: T. 280-81, 313-15, 343-44, *Jt. Ex.* 84, p. 7.

<sup>36</sup> *R.O.* ¶ 41: T. 171-72. *R.O.* ¶ 42: T. 172-73. *R.O.* ¶ 43: T. 184-85. *R.O.* ¶ 44: T. 349-51. *R.O.* ¶ 45: T. 351-54.

*R.O.* ¶ 50: T. 286. *R.O.* ¶ 79: T. 224, 226-28. *R.O.* ¶ 80: *Jt. Ex.* 84b, pp. 82-83. *R.O.* ¶ 81: *Jt. Ex.* 84c. *R.O.* ¶ 82: *Jt. Ex.* 84c, pp. 1-2, 5. *R.O.* ¶ 83: *Jt. Ex.* 84c, p. 8; *Jt. Ex.* 84c6. *R.O.* ¶ 84: *Jt. Ex.* 84, p. 18. *R.O.* ¶ 85: *Jt. Ex.* 84, p. 17; *Jt. Ex.* 84a. *R.O.* ¶ 86: *Jt. Ex.* 84a. *R.O.* ¶ 87: *Jt. Ex.* 84a. *R.O.* ¶ 88: *Jt. Ex.* 84, p. 17; *Jt. Ex.* 84a; *Jt. Ex.* 84i.

<sup>37</sup> T. 351-54.

<sup>38</sup> P. Except. ¶3, p. 10.

paragraphs contain legal conclusions about the ALJ's application of the public interest test, each is discussed below.<sup>39</sup>

The requirements for rulings on exceptions to conclusions of law are provided by statute:

The agency in its final order may reject or modify the conclusions of law over which it has substantive jurisdiction and interpretation of administrative rules over which it has substantive jurisdiction. When rejecting or modifying such conclusion of law or interpretation of administrative rule, the agency must state with particularity its reasons for rejecting or modifying such conclusion of law or interpretation of administrative rule and must make a finding that its substituted conclusion of law or interpretation of administrative rule is as or more reasonable than that which was rejected or modified.<sup>40</sup>

Paragraphs 89 and 90 contain findings that support the ALJ's application of the public interest test to the record evidence. The bulk of the other cited paragraphs are quotes from statutes, rules, or other cases. Paragraph 114 quotes section 373.223. Paragraph 115 quotes a case characterizing subsection 373.223(1) as the "three-prong test." Paragraph 116 quotes the Final Order from a different administrative proceeding. Paragraph 117 quotes a case that uses the same application of the public interest test as the ALJ. Paragraph 124 quotes Section 2.3 of the CUP Applicant's Handbook. Paragraph 125 quotes section 3.10 of the CUP Applicant's Handbook. Paragraph 126 states the reasonable-beneficial use criteria in rule 40C-2.301. Paragraph 137 quotes the same case as paragraph 117.

Petitioners do not argue that the law contained in any of the challenged conclusions of law in paragraphs 114-17, 124-26, or 137 is incorrect. Further, paragraphs 88-90, 114-17, 124-26, and 137 do not contain the ALJ's independent interpretation of the public interest test. Thus, the exceptions to these paragraphs do not contain a valid legal basis for rejecting a conclusion of

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<sup>39</sup> See *Pillsbury v. State, Dept. of Health and Rehabilitative Serv.*, 744 So. 2d 1040, 1041-42 (Fla. 2d DCA 1999) (review must be guided by the true nature of the finding, rather than its label).

<sup>40</sup> § 120.57(1)(I), Fla. Stat.

law and no ruling is required.<sup>41</sup> Notwithstanding that there is no requirement to do so, the following discussion of the public interest test is provided.

Because interpretation of the public interest test as applied to consumptive use permitting is within the District's area of expertise, the Governing Board has substantive jurisdiction and may reject or modify legal conclusions interpreting the public interest test and its application.<sup>42</sup> To modify an ALJ's conclusion of law or administrative rule interpretation, the substituted interpretation must be as or more reasonable than that which is rejected or modified.<sup>43</sup>

Petitioners argue the public interest test contained in section 373.223(1)(c), which has been interpreted in District rules and the CUP Applicant's Handbook; consistently applied in previous District cases; accepted by the Fifth District Court of Appeal; and applied by the ALJ in this case, is wrong.<sup>44</sup> Of specific note, Petitioners suggest that the ALJ and the District (in section 3.10 of the CUP Applicants Handbook) have incorrectly interpreted and applied the public interest test because the scope is not limited to the proposed water use's relation to water resources.<sup>45</sup> However, the ALJ actually discussed this very point in paragraph 118 of the Recommended Order:

The District has likewise determined that the scope of the public interest test extends no further than the effect of the proposed use on the water resources of the District, and in that regard has established by final order that:

The CUP program of Part II of Chapter 373 was enacted to accomplish the water resource conservation and protection policy goals of Chapter 373. The permitting requirement is intended to regulate water uses to prevent harm to the water resources and ensure the use is consistent with the overall water resource objectives of the District. Reading Chapter 373 as a

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<sup>41</sup> § 120.57(1)(I), Fla. Stat.

<sup>42</sup> *Id.*, *State Contracting and Eng'g Corp.*, 709 So. 2d at 607.

<sup>43</sup> § 120.57(1)(I), Fla. Stat.

<sup>44</sup> P. Except. ¶ 3, pp. 10-12

<sup>45</sup> P. Except. ¶ 3, p. 11-12.

whole, the term “consistent with the public interest,” as implemented by Section 9.3, A.H., is cabined by the purpose of Chapter 373 to address water resource-related issues.

*City of Groveland v. Niagara Bottling Co. and St. Johns River Water Mgmt. Dist.*, Case No. 08-4201 (Fla. DOAH Aug. 7, 2009; SJRWMD Sept. 28, 2009).

The public interest test, as applied by the ALJ in this case, has been applied in the same manner in several other cases in which the test was at issue.<sup>46</sup> Additionally, the Governing Board is required to follow statutory interpretations contained in case law,<sup>47</sup> and the Fifth District Court of Appeal has accepted application of the public interest test in the same manner the ALJ applied it in the Recommended Order.<sup>48</sup>

Petitioners offer an alternative interpretation of the public interest test citing various public interest considerations discussed in case law in unrelated contexts (for example, racial discrimination, voting conflict of interest, marriage contracts).<sup>49</sup> They include two cases involving water management districts.<sup>50</sup> However, the interest in one case was not public interest as it relates to consumptive use permitting; rather it was the requisite substantial interest of a petitioner to challenge a water supply plan.<sup>51</sup> The second involved a rule challenge, and the court

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<sup>46</sup> *E.g. St. Johns Riverkeeper, Inc. v. St. Johns River Water Mgmt. Dist.*, Case No. 14-2608 (Fla. DOAH Apr. 29, 2015; SJRWMD July 14, 2015), *aff'd* 200 So. 3d 1284 (Fla. 5th DCA 2016) (applied public interest test), *City of Groveland v. St. Johns River Water Mgmt. Dist. & Niagara Bottling Co., LLC*, Case No. 08-4201 (Fla. DOAH Aug. 7, 2009; SJRWMD Sept. 25, 2009) (acknowledges distinct public interest considerations in reasonable-beneficial use and public interest prongs and applied third-prong public interest test, specifically rejecting petitioner’s argument that public interest test should include considerations beyond those related to water resources), *Marion County v. Greene*, Case No. 06-2464 (Fla. DOAH Jan. 9, 2007; SJRWMD Mar. 23, 2007), *aff'd* 5 So. 3d 775, 779 (Fla. 5th DCA 2009) (rejected petitioner’s argument to broaden public interest test beyond consideration of water resources), *Miami Corp., Inc. & Clark v. City of Titusville & St. Johns River Water Mgmt. Dist.*, Case No. 05-0344 (Fla. DOAH July 31, 2007; SJRWMD Sept. 14, 2007) (applied public interest test and rejected petitioner’s argument that it should include considerations outside of those related to water resources).

<sup>47</sup> *Costareli v. Fla. Unemployment Appeals Comm’n*, 916 So. 2d 778, 782 (Fla. 2005) (administrative agencies must follow interpretations of statutes as interpreted by state courts).

<sup>48</sup> *See Marion County*, 5 So. 3d at 779.

<sup>49</sup> P. Except. ¶ 3, pp. 12-13.

<sup>50</sup> P. Except. ¶ 3, pp. 13-14.

<sup>51</sup> *See Washington County v. Northwest Fla. Water Mgmt. Dist.*, 85 So. 3d 1127, 1131-32 (Fla. 1st DCA 2012).

considered conservation to be a legitimate consideration in applying the public interest test but did not conclude as narrowly as the Petitioners have, that conservation of the resource is the *only* public interest.<sup>52</sup>

Subject to judicial review, the consumptive use permitting statutes, sections 373.203 through 373.249, are the exclusive authority for issuing consumptive use permits, and those statutes prevail if there is any conflict with other laws.<sup>53</sup> Section 373.223 provides the requirements to receive a consumptive use permit, as follows:

- (1) To obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of the water:
  - (a) Is a reasonable-beneficial use as defined in s. 373.019;
  - (b) Will not interfere with any presently existing legal use of water; and
  - (c) Is consistent with the public interest.

Rule 40C-2.301 of the Florida Administrative Code, a District rule, interprets the requirements in section 373.233 and provides more detailed explanation of the three requirements.<sup>54</sup> The CUP Applicant's Handbook provides an even greater level of interpretation, explanation, and detail about how a permit applicant demonstrates reasonable assurance that the rule 40C-2.301 requirements are met.<sup>55</sup> As it relates to the "consistent with the public interest" criterion, Section 3.10 of the CUP Applicant's Handbook provides:

For purposes of this section, "public interest" means those rights and claims on behalf of people in general. In determining the public interest in consumptive use permitting decisions, the District will consider whether an existing or proposed use is beneficial or detrimental to the overall collective well-being of the people or to the water resource in the area, the District and the State.

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<sup>52</sup> See *Southwest Fla. Water Mgmt. Dist. v. Charlotte County*, 774 So. 2d 903, 914-15 (Fla. 2d DCA 2001).

<sup>53</sup> § 373.217, Fla. Stat.

<sup>54</sup> See also § 373.171, Fla. Stat. (water management districts may adopt rules to implement Chapter 373).

<sup>55</sup> See *id.*, Rule 40C-2.101(1), Fla. Admin. Code.

Further, in *Marion County v. Greene*, the Fifth District Court of Appeal accepted the same interpretation of the public interest test as the ALJ applied it in this case and specifically noted that “[t]he inquiry focuses on the impact of the use on water resources.”<sup>56</sup>

Petitioners’ conclusion about the public interest test is inconsistent with the rules interpreting section 373.223. None of Petitioners’ cases or arguments support or provide a legal basis for the Governing Board to ignore existing District rules or judicial precedent interpreting the public interest test in consumptive use permitting and instead apply their alternative interpretation. The ALJ applied the public interest test in a manner consistent with applicable rules and judicial precedent in the Recommended Order, and Petitioners’ suggested alternative interpretation is not “as or more reasonable” to support rejecting or modifying the ALJ’s legal conclusions regarding the public interest test.<sup>57</sup> Accordingly, exception 3 is rejected.

For the foregoing reasons, **IT IS ORDERED:**

1. The Recommended Order entered November 17, 2017, attached as Exhibit A, is **ADOPTED** in its entirety.
2. CUP application 2-083-91926-4 is approved and the permit is **ISSUED** on the terms and conditions set forth in the complete Permit Application for Consumptive Uses of Water and the Consumptive Use Technical Staff Report dated December 28, 2016,


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<sup>56</sup> 5 So. 3d at 779.

<sup>57</sup> § 120.57(1)(l), Fla. Stat.

as supplemented, attached as Exhibit B, upon the adoption of rule 40C-8.031(10) and  
40CER17-02, Supplemental Regulatory Measures for Silver Springs.

**DONE AND ORDERED** on January 9<sup>th</sup>, 2018, in Palatka, Florida.

ST. JOHNS RIVER WATER  
MANAGEMENT DISTRICT  
BY:   
John A. Miklos Freel N. Roberts, Jr.  
Governing Board Chair  
Vice

**RENDERED** on January 9<sup>th</sup>, 2018.

BY: Sandra Bertram  
Sandra Bertram, District Clerk

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*Management District*

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

ST. JOHNS RIVERKEEPER, FLORIDA  
DEFENDERS OF THE ENVIRONMENT,  
SILVER SPRINGS ALLIANCE, AND  
ALICE GARDINER,

Petitioners,

vs.

Case No. 17-0119

SLEEPY CREEK LANDS, LLC, AND  
ST. JOHNS RIVER WATER  
MANAGEMENT DISTRICT,

Respondents.

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RECOMMENDED ORDER

Pursuant to notice, a final hearing was held in this case on April 10 through 11, 2017, in Palatka, Florida, before E. Gary Early, a designated administrative law judge of the Division of Administrative Hearings.

APPEARANCES

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St. Johns River Water Management District  
4049 Reid Street  
Palatka, Florida 32177

#### STATEMENT OF THE ISSUE

The issue to be determined is whether Consumptive Use Permit (CUP) No. 2-083-91926-4 should be authorized as proposed in the December 12, 2016, Consumptive Use Technical Staff Report (TSR) issued by the St. Johns River Water Management District.

#### PRELIMINARY STATEMENT

On December 12, 2016, the St. Johns River Water Management District (District) issued proposed agency action, in the form of a Consumptive Use Technical Staff Report, for issuance of CUP No. 2-083-91926-4 to Sleepy Creek Lands, LLC (Sleepy Creek or Applicant). The TSR authorized an increase of 1.22 million gallons per day (mgd) of groundwater from the Upper Floridan Aquifer (UFA) over the existing withdrawal allocation of

1.46 mgd for a total allocation of 2.68 mgd for the years 2017 through 2023, followed by a reduction to the current 1.46 mgd allocation for the years 2024 through 2034. The purpose of the CUP is for irrigation of 2,231 acres of improved pasture and other crops, watering of cattle, and commercial/industrial use related to the Sleepy Creek cattle processing facility.

The TSR was published on December 15, 2016. On or about January 9, 2017, after having received an extension of time from the original January 4, 2017, date for filing a challenge to the proposed permit, Petitioners St. Johns Riverkeeper, Florida Defenders of the Environment, Silver Springs Alliance, and Alice Gardiner (Petitioners) timely filed their Petition for Formal Administrative Proceedings challenging the proposed issuance of the CUP modification. The Petition was referred to the Division of Administrative Hearings on January 9, 2017, and the final hearing was scheduled for April 10 through 13, 2017.

On April 5, 2017, the parties filed their Joint Pre-hearing Stipulation (JPS), which included eight stipulated facts, and an identification of issues of law on which there was agreement. Each of the stipulated facts is adopted and incorporated herein. The JPS also identified the disputed issues of fact and law remaining for disposition. Those issues identified in the JPS are those upon which this case proceeds, with other issues being

waived. Palm Beach Polo Holdings, Inc. v. Broward Marine, Inc., 174 So. 3d 1037 (Fla. 4th DCA 2015).

On April 7, 2017, the District filed a Motion for Official Recognition of Florida Administrative Code Chapters 40C-1, 40C-2, 40C-8, 40C-21, and 62-40, and the Applicant's Handbook: Consumptive Uses of Water Chapter 40C-2, F.A.C. (November 3, 2015) (CUP A.H.). That motion was granted at the commencement of the final hearing.

The final hearing was convened as scheduled on April 10, 2017. The permit under review having been issued under the authority of chapter 373, Florida Statutes, the hearing proceeded subject to the modified burden of proof established in section 120.569(2)(p), Florida Statutes. The burden of proof provisions of section 120.569(2)(p) are discussed in the Conclusions of Law herein.

Sleepy Creek and the District offered Joint Applicant/District Exhibits 1 through 84i8, consisting of the permitting file and the TSR without objection by Petitioners, and they were received in evidence. Joint Applicant/District Exhibits 84h through 84i8 are applicable to the issue of the effect of the District's newly-adopted emergency rules as discussed below.

In support of the prima facie case of its entitlement to the CUP, Sleepy Creek offered the testimony of Adelbert

Bottcher, Ph.D., who was tendered and accepted as an expert in agricultural engineering, surface water modeling, watershed assessment, water quality, and soil science; and William Dunn, Ph.D., who was tendered and accepted as an expert in ecology, with an emphasis in systems ecology, environmental science, botany, and biology. In addition, Sleepy Creek Exhibits 86; 90(a) through (c), (e), (f), (h), (k) through (m), (t), (v), and (w); 99; and 105 were received in evidence. The District offered the testimony of Robert Burleson, P.E., who was tendered and accepted as an expert in hydrology, water resources engineering, and modeling of surface water systems; and Anthony Janicki, Ph.D., who was tendered and accepted as an expert in water quality modeling and assessments, limnology, and freshwater and surface water biological assessments in support of the prima facie case of Sleepy Creek's entitlement to the CUP. In addition, District Exhibits 121 and 122 were received in evidence.

Upon introduction of the application and relevant material submitted to the District in support of the application, the District's TSR recommending approval of the CUP, the testimonial evidence of the witnesses, and the additional exhibits, the Applicant and the District met the prima facie case demonstrating the Applicant's entitlement to the CUP.

Petitioners called as witnesses, both in their initial case in opposition to the CUP and in surrebuttal: Todd Kincaid, Ph.D., who was tendered and accepted as an expert in groundwater modeling, geologic modeling, hydrology, and geology; and Robert Knight, Ph.D., who was tendered and accepted as an expert in environmental science related to aquatic wetlands and terrestrial environments. Petitioners' Exhibits 2 through 5, 12, 13, 63, 64, 80, 94, 100 through 102, 118, and 124 through 126 were received in evidence.

Sleepy Creek offered no additional evidence in rebuttal. In its case in rebuttal, the District called as witnesses: Douglas J. Hearn, P.G., who was tendered and accepted as an expert in geology, hydrogeology, and groundwater flow modeling; Peter F. Andersen, P.E., who was tendered and accepted as an expert in groundwater modeling; Varut "Dua" Guvanasen, Ph.D., P.E., who was tendered and accepted as an expert in groundwater flow modeling; Dennis R. Helsel, Ph.D., who was tendered and accepted as an expert in environmental statistics; Jian Jun Di, who was tendered and accepted as an expert in environmental statistics, groundwater and hydrologic data analysis, and time series data analysis; and Richard H. Burklew, Jr., P.G., who was tendered and accepted as an expert in hydrogeology. Dr. Janicki

was also recalled to the stand in rebuttal. District Exhibits 87 through 89, 100, 104, 106, 114, 118, and 123 through 127 were received in evidence.

During the proceedings on April 11, 2017, it was announced that the District's Governing Board approved Emergency Rule 40CER17-01, Minimum Flows for Silver Springs (the Emergency MFL Rule), and 40CER17-02, Supplemental Regulatory Measures for Silver Springs. The final hearing was recessed on April 11, 2017, and scheduled to be reconvened on May 11, 2017, for the purpose of addressing the effect of the newly adopted emergency rules on the decision to issue or deny the CUP.

On April 13, 2017, the District filed a Second Motion for Official Recognition requesting that the undersigned take official recognition of the emergency rules, which was granted.

On April 28, 2017, Petitioners in this case challenged the Emergency MFL Rule as an invalid exercise of delegated legislative authority. They did not challenge 40CER17-02. The challenge to the Emergency MFL Rule was assigned DOAH Case No. 17-2543ER. Due to the accelerated statutory timeframe for resolving challenges to emergency rules, the May 11, 2017, date set aside for the completion of this proceeding was instead devoted to the final hearing in DOAH Case No. 17-2543ER.

On June 9, 2017, the parties in this proceeding filed a Stipulated Request to Cancel Continuance of the Final Hearing

indicating that further evidence was unnecessary for the determination of the issues in this proceeding. Based thereon, the record was closed, and the time for filing proposed recommended orders was, at the request of the parties, established as 30 days from the date of filing of the transcript, or by August 16, 2017, whichever was later.

On August 10, 2017, the District filed a Third Motion for Official Recognition of rule 40C-8.031(10) (the MFL Rule), which became effective on June 27, 2017, and which is identical to the Emergency MFL Rule. The Motion was granted. The Supplemental Regulatory Measures for Silver Springs continue to be governed by 40CER17-02 due the necessity of legislative ratification of the permanent rule.

The two-volume Transcript of the final hearing was filed on July 19, 2017. On August 14, 2017, Sleepy Creek filed an Agreed Upon Request for Extension of Time to File Proposed Recommended Orders, requesting an extension until August 25, 2017. The request was granted. The parties filed Proposed Recommended Orders on August 25, 2017, which have been considered in the preparation of this Recommended Order.

Sleepy Creek's application for licensure is governed by the law in effect at the time the final licensure decision is made. See Lavernia v. Dep't of Prof'l Reg., 616 So. 2d 53, 54 (Fla.

1st DCA 1993). Therefore, all references to the Florida Statutes shall be to the 2017 Florida Statutes, unless otherwise indicated.

## FINDINGS OF FACT

### The Parties

1. St. Johns Riverkeeper is a Florida non-profit member corporation whose mission is to conserve and restore the ecological integrity of the St. Johns River and its tributary system. It conducts educational outreach and research concerning the St. Johns River and its tributary system. A substantial number of St. Johns River Keeper's approximately 1,000 members<sup>1/</sup> utilize the Silver River, Silver Springs, Ocklawaha River, and St. Johns River for water-based recreational activities, such as kayaking, swimming, fishing, boating, canoeing, nature photography, and bird-watching.

2. Florida Defenders of the Environment is a Florida non-profit member corporation whose mission is to conserve and protect the natural resources in Florida generally, and the waters tributary and distributary to the Ocklawaha River. It conducts educational outreach and research concerning those waters. A substantial number of Florida Defenders of the Environment's approximately 200 members use and enjoy the

St. Johns River, the Silver River, Silver Springs, and the Ocklawaha River for boating, fishing, wildlife observation, and other water-based recreational activities.

3. The Silver Springs Alliance is a Florida non-profit member corporation whose mission is to protect, preserve, and restore the ecological integrity of Silver Springs, as well as other Florida springs. It conducts educational outreach and research concerning the River and its tributary system. A substantial number of Florida Springs Alliance's approximately 75 members use and enjoy Silver Springs, the Silver River, the Ocklawaha Aquatic Preserve, and their associated watersheds in their educational and outreach activities, as well as for various recreational activities including boating, swimming, fishing, birding, photography, art, nature and wildlife observation, and nature-based recreation.

4. Alice Gardiner is a resident of Marion County, who lives less than 10 miles from Silver Springs and is a board member of Silver Springs Alliance. For at least the past 25 years and up until the present, she has regularly and frequently used and enjoyed Silver Springs and related distributary waters, including Silver River, the Ocklawaha River, and the St. Johns River for boating, fishing, wildlife observation, and other water-based recreational activities.

5. Sleepy Creek Lands, LLC (Sleepy Creek or Applicant), is an entity registered with the Florida Department of State to do business in the state of Florida. Sleepy Creek owns approximately 21,000 acres of land in Marion County, Florida, which includes the North Tract which is the receiving property for the water to be withdrawn pursuant to the proposed CUP.

6. The Sleepy Creek North and East Tracts cattle farm project is located in northern Marion County northwest of the community of Fort McCoy. The project consists of two separate non-contiguous parcels (the northern portion of the Sleepy Creek property and the Ft. McCoy/Jones Turf-Grass Farms). The North Tract project area that is the subject of this application consists of a total of approximately 8,218 acres. The improved pasture to be irrigated by the proposed 1.22 mgd withdrawal consists of 2,231 acres served by a center-pivot irrigation system within the North Tract.

7. The District is a water-management district created by section 373.069(1). It has the responsibility to conserve, protect, manage, and control the water resources within its geographic boundaries. See § 373.069(2)(a), Fla. Stat.

The Consumptive Use Permit

8. On December 14, 2016, the District issued a notice of intent to issue Individual Consumptive Use Permit (CUP) 2-083-91926-4.

9. The permit application requests a modification of an existing agricultural use permit with a request for an increase in groundwater allocation of 1.22 mgd -- from 1.46 mgd to 2.68 mgd -- in groundwater allocation to: 1) fully meet the agricultural demand previously demonstrated in permit number 2-083-91926-3, and 2) supply the cattle processing facility. For years 2024 through 2034, the permitted allocation will be reduced to the currently permitted allocation of 1.46 mgd. No change in duration is proposed.

#### Silver Springs and the Silver River

10. Silver Springs is located approximately six miles northeast of Ocala, at the western edge of the Ocklawaha River valley. Silver Springs forms the headwaters for the Silver River, a spring run approximately five miles in length, at which point it becomes a primary input to the Ocklawaha River.

11. Silver Springs consists of at least 30 different springs, with 69 vents in the bed or in coves at the edges of the upper 3,900 feet of the Silver River, collectively called the Silver Springs Group. The largest of the spring vents is Mammoth Springs (also called the Silver Main Spring), which has multiple vents in the main pool that discharge nearly half of the total flow of Silver River.

12. Silver Springs and the Silver River are Outstanding Florida Waters. In addition, Silver Springs was designated in 2016 as an Outstanding Florida Spring.

13. Silver River State Park, established in 1987, encompasses approximately 4,230 acres and is designated for public recreation and conservation. Silver Springs has been a major tourist destination in Florida for well over 100 years, and has been widely known for its glass bottom boat rides from which the numerous springs and the associated aquatic life may be viewed. Although tourist attendance has declined in recent years, the park typically receives a million or more visitors annually, generating an annual estimated economic impact of approximately \$65 million.

14. Silver Springs flow is derived from the Floridan aquifer system, and is supplied through a network of fractures and solution channels in the limestones and dolomites of the Floridan aquifer. Groundwater flow to Silver Springs emanates from two areas of high potentiometric levels, one located in the north in the lakes region of Alachua, Bradford, Clay, and Putnam counties and the other in the south centered around Polk County. Groundwater flows from these areas toward Silver Springs.

15. Since the first major studies of Silver Springs were conducted in the 1950s, the ecosystem of Silver Springs has undergone changes. Of relevance to this proceeding is the

increase in the abundance of tapegrass, a rooted aquatic grass with blades about three to five feet long and a half inch wide, particularly in the lower reaches of the Silver River, along with filamentous algae and, recently, hydrilla near the confluence of the Silver River with the Ocklawaha River.<sup>2/</sup> The increase in vegetation has likely created a damming effect, suppressing some of the flow from the Silver Springs Group, and allowing increased water levels from the lesser spring flows.

16. Over a period of decades, the average flow in Silver River has declined by roughly 32 percent, though the figure could be as high as 40 percent.<sup>3/</sup> The District has attributed the decrease to flow suppression from the proliferation of vegetation in the Silver River; a substantial rainfall deficit from the 1970s to 2000, without a corresponding rainfall surplus since; and groundwater withdrawals. The District estimated the decrease in flow attributable to groundwater pumping as 3.5 percent of the total decline.

17. Dr. Knight argued passionately that the rate of flow and the velocity of the water in the river is controlling the growth of the plants, and not the other way around.<sup>4/</sup> However, he admitted that he had not studied the relationship between springflows and the growth of vegetation as independent scientific research.

18. Dr. Knight was equally confident that groundwater pumping played a more significant part in the overall reduction in spring flows than estimated by the District, and that "the effect of this permit and this additional withdrawal from the Floridan aquifer will have an additional impact on a system that's already well past the point of significant harm." However, he could not quantify either the reduction in flow at Silver Springs attributable to Sleepy Creek's allocation, or any environmental impacts from that allocation, suggesting that such quantification is within the province of the District and its modelling tools.

#### Northern District Groundwater Model

19. The disputed issues in this case center almost entirely on the District's Northern District Model version 5 groundwater model (NDMv5). As stated by Petitioners in their Proposed Recommended Order, "[a] new model known as [NDMv5] was developed in 2016, which indicated that additional water withdrawals causing a flow reduction of 17 cfs in the Silver River would not cause significant harm to water resources or the ecology. The instant permit challenge concerns the validity of [NDMv5]." Petitioners further stated that "[b]ecause this 17 cfs of freeboard was based on [NDMv5], and because the Petitioners' case seeks to show that [NDMv5] contains a major error that dramatically overstates the amount of recharge into

the Silver Springs springshed, the central issue . . . in this case is whether [NDMv5] provides reasonable assurances that the proposed CUP at issue will in accordance with the Minimum Flow established for Silver River."

20. Impacts from the proposed Sleepy Creek withdrawal on local and regional groundwater levels and flows and the impact from groundwater pumping on Silver Springs flows were developed using NDMv5. NDMv5 is the most current version of a continuously updated model originally developed by the District. NDMv5 was developed collaboratively between the District and the Southwest Florida Water Management District (SWFWMD). The SWFWMD used previous versions of the Northern District Model to set MFLs for six spring systems and the Withlacoochee River.

21. NDMv5 is not a "new model" as described by Petitioners, but is part of an ongoing process to evaluate and incorporate data as it becomes available, a process designed to allow as accurate a depiction of natural processes occurring beneath the ground as possible. NDMv5 is an update to Northern District Model version 4 and incorporates updated hydraulic and hydrogeologic information, including the USGS flow record for Silver Springs, data from a comprehensive Aquifer Performance Test performed on the Sleepy Creek property, and data with respect to the UFA and discharge from submerged springs in the Ocklawaha River obtained during the 2015 drawdown of the Rodman

Reservoir. NDMv5 has been subject to peer review designed to identify and, if possible, account for perceived flaws and inconsistencies.<sup>5/</sup> The NDMv5 model is the most up-to-date tool available for determining the subsurface conditions of the model domain.

#### Aquifer Performance Tests

22. An aquifer consists of different layers of differing hydrogeologic qualities. Layers of rock of varying porosity capable of holding and transmitting water are interspersed with layers of less permeable materials that act to separate and confine the water-bearing features of the aquifer.

23. Site-specific data regarding the characteristics of the aquifer beneath the Sleepy Creek property, which data were incorporated into NDMv5, was obtained through a series of aquifer performance tests (APT). Short term APTs were performed in March and October 2012, in conjunction with the CUP application for the earlier phase of the permit at issue.

24. A more comprehensive APT was conducted in 2014 for the purpose of refining the North Central Florida groundwater flow model and other models in development by the District. The 2014 APT was comprehensive in scope, and yielded detailed information regarding the characteristics of the aquifer in the vicinity of the Sleepy Creek property. The APT extended over 12 days, at a constant pumping rate of 2,400 gallons per minute. The APT

included 19 wells subject to monitoring, which included the test well itself. The majority of the 18 monitoring-only wells were in the UFA, and varied in distance from 50 feet to 41,245 feet from the test well.

25. The intent of 12-day APT was to gain a better understanding of the hydraulic characteristics of the confining and semi-confining units above and below the UFA, as well as the spatial distribution of the UFA transmissivity.

26. Transmissivity is calculated as the product of hydraulic conductivity and thickness of the aquifer, and defines the rate at which water flows through the aquifer. Thus, accurate data as to the transmissivity values at a particular location within a study area results in a more accurate simulation of the effects of pumping on the aquifer.

27. The transmissivity values derived from the 12-day APT were orders of magnitude less than what was built into the District's existing models, both the North-Central Florida Model and the Northern District Groundwater Flow Model (NDM). This lower transmissivity value in the vicinity of Sleepy Creek's property means that the consumptive use proposed by Sleepy Creek will have less impact on the flow of Silver Springs.

28. The preponderance of the evidence established that NDMv5 is the best means available for not only establishing the

relationship between pumping and flows, but also for estimating future impacts due to projected pumping in the future.

#### Alleged Flaws in NDMv5

29. Petitioners identified three flaws in NDMv5 that they argue substantially compromise the validity of the model, and the calculation of available "freeboard" calculated by the model and incorporated into Minimum Flows Determination that forms the basis for the MFL Rule, the Emergency Supplemental Regulatory Measures for Silver Springs, and the Prevention Strategy for the Implementation of Silver Springs Minimum Flows and Levels.

#### Western Boundary - Gulf of Mexico/Aquifer Interface

30. As explained by Petitioners in their Proposed Recommended Order, NDMv5 "contains a major error in the model domain on the West Coast, west of the Springs region, between Homosassa Springs and Weeki Wachee Springs . . . this error takes place in a part of the model domain distant from the Silver Springs springshed and as such, does not affect modeling outcomes concerning Silver Springs. However, it is such an extremely large error that it impeaches the process by which [NDMv5] was developed and calibrated."

31. The western boundary is, according to Dr. Kincaid, classified in the model's water budget as flux or flow through the constant head boundaries, and represents inflows and outflows through the model domain. Constant head boundaries are

the simulation of the boundary between the fresh water Floridan Aquifer and the salt water Gulf of Mexico. That flux is limited to the model polygons between Homosassa Springs and Weeki Wachee Springs, an area approximately 40 miles from Silver Springs.

32. The volume passing back and forth across the NDMv5 western coastal boundary is simulated as being in the range of  $2.4 \times 10^{13}$  cubic feet per day, which is acknowledged by all involved as not being representative of the actual volume of water flowing across the boundary. However, the model is simulating water moving down in one layer and then forcing water up into the other layer. Dr. Kincaid recognized that "the process is plausible," but that the value was "silly."

33. The District explained that the dramatically high figure was used in an effort to account for the difference in density between saltwater, which is pushing inland, and the freshwater which is flowing out from the inland and pressing against the saltwater. The model underlying NDMv5 assumes a single density fluid.

34. Mr. Anderson provided a very detailed explanation of the calculations, based on the difference in saltwater and freshwater density that led to the very large and seemingly incongruous  $2.4 \times 10^{13}$  cubic feet per day figure. He established that the balance causes the saltwater interface to be where it is, and creates problems as to how to characterize the process.

As stated by Mr. Anderson, "[t]here's flow from the subsurface beneath the ocean. It's converging and mixing and moving up and discharging into the Gulf. The basis for it is real, but it is, as I've indicated, an approximation to a real situation that occurs and the approximation is made because of some of the limitations of this single-density model." Mr. Anderson established that the number, though not the amount actually moving back and forth, is representative of the physical process occurring at the boundary, but admitted that NDMv5 would not be the tool to quantify that boundary amount. However, he concluded by persuasively opining that the NDMv5 coastal boundary conceptualization would not affect predictions of drawdown and springflow related to the proposed Sleepy Creek CUP.

35. As indicated previously, the parties are in agreement that the western boundary modeling issue does not affect modeling outcomes concerning Silver Springs or its springshed. The preponderance of the evidence demonstrates that the boundary parameters were not a mistake that suggests a lack of care or precision that compromises the accuracy and effectiveness of NDMv5. To the contrary, it was a calculated measure to approximate the effects of fluids of differing densities. Although it resulted in a figure that does not reflect the physical reality of conditions in the model's coastal polygon,

it is not an error in the model, but is a "caution light" to anyone who might be evaluating conditions at the coastal boundary. The modeled effects were not made without forethought, and do not affect the overall validity of NDMv5.

#### Northern Boundary - Silver Springs Springshed

36. A springshed is the area that captures recharge and contributes flow to a spring. When one is trying to simulate groundwater flow to springs or impact to springflow from actions taking place in the aquifer, one of the first steps is to simulate the springshed.

37. A springshed is similar in nature to the watershed of a river. A watershed boundary is defined by fixed, two-dimensional topographic contours that channel flow to a surface water feature such as a stream.

38. A springshed boundary is the point at which groundwater elevation contours create equipotentials, which are divides based on groundwater elevation from which groundwater would be expected to flow perpendicularly in either direction to a point of discharge -- in this case a spring. Unlike the watershed of a river, a springshed is three-dimensional, with water moving not only directionally along a single plane, but vertically between different layers of the subsurface hydrogeologic formations. Groundwater flows are not constrained by surficial topography, and water level contours can be

different in different layers. Of the multiple layers that form the subsurface hydrology of a springshed, the surficial aquifer, or water table, most closely mimics the surface topography, though on a more subdued basis.

39. Groundwater levels change seasonally and with time, and are affected by factors including rainfall and groundwater extraction. Therefore, springshed boundaries may expand, contract, or change accordingly.

40. Springshed boundaries can be identified by various methods including, for purposes relevant to this proceeding, groundwater modeling.

41. The springshed boundary at the north end of the Silver Springs springshed is generally the divide between groundwater flow that goes towards Silver Springs to the south and flow that goes towards the City of Gainesville, and the City of Gainesville municipal wellfield, to the north. The boundary line should be the point at which there is no flow into or out of the model domain.

42. Dr. Kincaid testified that his review of NDMv5 showed there was flow across the boundary and into the Silver Springs springshed. The data set shows water flowing to Gainesville, but NDMv5 shows water from the same area flowing to Silver Springs, suggesting a disagreement between the data. Therefore, he opined that the model has not simulated the springshed

because there is unaccounted flow into the simulated springshed, which he characterized as a "fatal flaw." In his opinion, the additional water available to Silver Springs upon which the freeboard was calculated, water determined to be available for consumption, is the result of the boundary error, and that the 17 cubic feet per second (cfs) of available freeboard is not actually available.

43. On cross-examination, Dr. Kincaid clarified that the query into NDMv5 was a "holistic" query. It was not intended to specify that groundwater was entering the model domain through model layers representing the UFA. Rather, the inquiry was simply how much flow is coming across the polygon depicting the springshed boundary, but did not specify the layer. He testified specifically that "I do not know which layer of the model it came from."

44. Dr. Guvanasen testified that the "extra" water discussed by Dr. Kincaid came from the northwest boundary of the model domain in the surficial aquifer. That area has a topographically sloping elevation that slopes into the model area. Because the surficial aquifer is generally a subdued reflection of topographical elevation, the surficial aquifer is expected to slope towards the model area. Thus, the modeled

conceptualization of the area showed water flowing into the model area through the surficial aquifer, while depicting the UFA as a no-flow type.

45. To further address Dr. Kincaid's concern regarding the northern boundary, Dr. Guvanasen performed a water budget analysis, which showed a total influx of water from all layers into the model domain of 850 cfs, but influx into the UFA layers of 750 cfs, which is consistent with the model UFA input parameters. He testified that the 850 cfs figure is based on recharge calculated from the top of the surficial aquifer, while the 750 cfs figure is based on infiltration at the top of Layer 3, which is the top of the UFA. Thus, the "extra" 100 cfs does not contribute to the UFA groundwater, but is subject to lateral flow in the surficial aquifer and, ultimately, discharge through a surface water feature such as a stream.

46. Based on the foregoing, the northern boundary of NDMv5 is not inaccurate, but reflects the distinction between the surficial aquifer and the UFA.

#### Transmissivity - Marion County

47. Dr. Kincaid expressed his concern that NDMv5 transmissivity values in Marion County deviated from APT values reported by the U.S. Geological Survey in its 2012 map of transmissivity of the Floridan aquifer.

48. For eight of the nine counties depicted in NDMv5, the model transmissivity values were very close to the USGS values. However, in Marion County, the USGS values derived from 5 of the 19 APT test wells deviated substantially from the NDMv5 transmissivity values. Dr. Kincaid's concern was "not necessarily just the deviation in the values, but it's also the pattern. So when we see this type of deviation, it indicates that there's something about this area that required the model to deviate or the modelers to deviate from the data in order to achieve what was termed or deemed a desirable or an acceptable result. . . . -- it's not necessarily with the deviation from the values, but it's in the selective deviation from the values."

49. In assessing the basis for the "selective deviation," Mr. Hearn reviewed the APTs associated with the five deviating wells in Marion County that largely formed the basis for Dr. Kincaid's opinion. He offered convincing testimony that the APTs from which the values were derived were unreliable due to a number of factors, including the short duration of the APTs, which were shorter than the recommendations in the CUP A.H., the failure of the test wells to fully penetrate the aquifer, the nature of the APTs, and the lack of information regarding observation wells. Mr. Hearn indicated that the USGS database

for one of the outlying tests failed to provide any information as to the duration or type of the APT.

50. The exclusion of the deviating wells from the model values was not arbitrary, but was done to ensure scientific reliability. In Mr. Hearn's opinion, the exclusion of the USGS transmissivity data derived from the five outlying tests from the NDMv5 transmissivity values for Marion County did not compromise the model. His testimony in that regard was persuasive.

#### NDMv5 Conclusion

51. The preponderance of the evidence adduced at the hearing demonstrates that the "flaws" identified in the NDMv5 model constitute a conscious effort to model complex processes occurring at the coastal saltwater/freshwater interface, an accurate depiction of influx into the UFA at the northern boundary, and an effort to ensure the accuracy of the NDMv5 transmissivity values. The alleged flaws do not compromise the validity of the model or the calculation of available "freeboard" calculated by the model, and as such NDMv5 remains the best available tool for establishing the relationship between pumping and flows, and for estimating future impacts due to projected pumping in the future.

## Hydrologic Effects

52. To evaluate whether the proposed CUP would cause harmful hydrologic alterations to wetlands, other surface waters, or water resources of the area, the District evaluated the following characteristics that would be sensitive to hydrologic change: (1) fish and wildlife habitat and the passage of fish and manatees, (2) transfer of detrital material, (3) algal scour, (4) filtration and absorption of nutrients and other pollutants, and (5) sediment movement. The goal was to evaluate how flow reductions in the Silver River would affect those characteristics.

53. Environmental, hydrological, and topographical data<sup>6/</sup> was used to establish the flow or stage, and the frequency, necessary to support or sustain each of the characteristics.

54. Five stage/flow conditions were evaluated: the baseline or observed condition; a no-pumping condition in which pumping impacts were added back into the baseline record; and flow reductions of 5 percent, 10 percent, and 15 percent as measured against the no-pumping condition.

55. The frequency of those critical events under the no-pumping scenario was determined and used to evaluate how the frequency changed through each flow reduction scenario.

## Habitat Values

### Passage of Fish

56. The water elevation necessary to support the passage of fish was set at 0.8 feet over 25 percent of the channel width, which was determined to meet the criteria for bass, gar, and larger fish that inhabit the Silver River. A frequency analysis performed for each of the flow reduction scenarios demonstrated that stage elevations did not fall below the 0.8 foot level at any section under any flow reduction scenario.<sup>7/</sup>

### Water Velocity

57. Although there was no evidence that particular water velocities were necessary for any observed species to complete their life cycles, water velocity can affect aeration, nutrient delivery, and waste removal. The modeling performed demonstrated there is little difference in water velocity between the no-pumping flow scenario and flow reductions of 5 percent, 10 percent, and 15 percent. Thus, channel velocities required to protect fish and wildlife habitat are protected under any pumping regime.

### Floodplain Inundation

58. Floodplain inundation is important for feeding, reproduction, and refuge of fish species, and for wading bird feeding. Essential to maintaining the floodplain habitat are the organic soils that support wetland vegetation, and which

require periodic inundation to prevent their oxidation.

59. Spawning and support of juvenile fish populations generally require 30 continuous days of seasonal floodplain inundation. Flow and stage time series for each of the four transects, and critical stage elevations were analyzed. Although hydration of the floodplain occurred on fewer days under the 5-percent, 10-percent, and 15-percent flow reduction scenarios, Dr. Janicki opined that a 5-percent reduction remained protective of the ability of fish to seasonally access the floodplain for the requisite duration. His opinion was supported by competent, substantial evidence, and was not disputed.

60. Similarly, critical stage data was evaluated to assess floodplain hydration for maintaining organic soils. Rather than looking at periods during which organic soils are inundated, thus allowing for seasonal fish access, an assessment was made of dewatering events during which the flow is not adequate to inundate the organic soils in the floodplain, thus allowing soils to oxidize. In order to maintain organic soils, inundation to an elevation of 0.3 feet below the soil surface for at least 180 days per year is required, which do not have to be continuous days. That critical stage was established across

a range from 39.77 feet NGVD at Transect T9, closest to Silver Springs, to 37.77 feet NGVD at Transect T3, closest to the Ocklawaha River.

61. Under each of the flow reduction scenarios, there was an increase in the number of dewatering events. With the question being whether the decrease was such as to lead to lack of protection, Dr. Janicki was again of the opinion that although there is an increase in dewatering events from a 5-percent flow reduction, the critical number of events was not increased to the point where those soils would be put at risk. His opinion was, again, supported by competent, substantial evidence, and not disputed.

#### Manatee Passage

62. Silver Springs provides a warm-water refuge for manatees during winter months when river temperatures can fall below 60 degrees Fahrenheit. Water temperatures in the Silver River remain at 69 degrees virtually year-round. Manatee passage requires a water depth of five feet throughout the channel to the boil, which is the destination for manatees. A frequency analysis performed for each of the flow reduction scenarios demonstrated that stage elevations did not fall below the minimum level at any section under any flow reduction scenario.

### Transfer of Detrital Material

63. Detritus is organic material derived from dead plant material, largely particulates and dissolved organic carbon, which is fed upon by microbes and aquatic insects at the bottom of the food web. Those organisms become food for fish and wildlife up the food chain.

64. Detrital material largely accumulates in the floodplain. Transfer of detrital material in the floodplain and to the channel is necessary to sustain the food web.

65. In-channel velocities were found to be generally consistent and adequate to transfer detrital material under any of the flow reduction scenarios.

66. A frequency analysis was performed to determine the frequency at which water levels would inundate the Silver River floodplain and allow accumulated detritus to be transferred out of the floodplain and become available for consumption. The analysis was performed to evaluate how often the floodplain would be inundated for 7-day durations and for 30-day durations under each of the five stage/flow conditions.

67. The frequency analysis indicates that all areas of the floodplain experience periodic inundation which allows detrital transfer to the channel to occur under the three flow reduction scenarios for both 7-day and 30-day durations.

68. On an average, based on the number of occurrences over 100 years, those inundation events occur once every 1.3 to 3.5 years under the no-pumping scenario, depending on the location along the river reach. Under a 5-percent flow reduction, that frequency of occurrence decreases to 1.5 to 5 years. Mr. Burleson testified that the decreased frequency at the 5-percent reduction would not cause a significant risk of inadequate contact with the floodplain for detrital material, but that the decreased frequency associated with a 10-percent reduction of 2.2 to 6.7 years would negatively affect detrital transfer. His opinion was supported by competent, substantial evidence, and was not disputed.

#### Algal Scour

69. Studies performed in rivers and spring systems in Florida suggest that flow velocity of below 0.82 feet per second (ft/sec) allows for colonization of river bottoms by submerged aquatic vegetation, including algae. Conversely, flow velocity of 1.1 ft/sec restricts algal abundance to a minimal level. There was a consensus of opinion that minimization of algae in the main channel of the Silver River was desirable.

70. The average channel flow velocity in the Silver River exceeds the algal flushing threshold of 1.1 ft/sec only within the immediate vicinity of the boil, and at the confluence of the Silver River and the Ocklawaha River. Velocities were generally

uniform at each measuring station, and at spring discharge rates ranging from 1008.8 cfs to 429 cfs, for the no-pumping condition, baseline, and 5-percent, 10-percent, and 15-percent flow reductions, with the difference between the scenarios at any given station of a few hundredths of a cfs. As a result, a preponderance of the evidence establishes that the algal scour capacity of the Silver River will not change significantly under any flow reduction scenario.

#### Filtration and Absorption of Nutrients and Other Pollutants

71. Filtration and absorption of nutrients and other pollutants are natural system processes. Filtration consists of the physical, chemical, and biological processes that, in spring systems, are largely a function of soil porosity. Absorption is a chemical process by which nutrients and pollutants are adsorbed to sediments, or taken up by microorganisms or vegetation.

72. The rates at which nutrients and pollutants are filtered and/or absorbed are a function of the time during which water is in contact with soils, sediments, or vegetation. Given that in-channel velocities do not materially change over any of the five stage/flow conditions, the filtration and absorption capacity of the Silver River channel, including denitrification, would not be affected.

73. Filtration and absorption of nutrients and pollutants also occur in the floodplains adjoining the Silver River, and can be affected by a reduction in the frequency and duration of inundation events.

74. The results of the frequency analysis as described above were reviewed to evaluate the periodic inundation for 14-day and 30-day durations to determine whether inundation events are expected to allow filtration and absorption to occur in the floodplains. The average overflow occurrence interval under the no-pumping condition, calculated as the number of events over a 100-year period, was 1.4 years to 3.5 years depending on the location along the river reach. That occurrence interval decreased to 1.6 years to 5 years under the 5-percent flow reduction scenario. The occurrence interval decreased to 2.4 to 6.7 years under the 10-percent flow reduction scenario, and to 3.1 to 12 years under the 15-percent flow reduction scenario.

75. Mr. Burleson concluded that the occurrence interval at the 5-percent reduction from the no-pumping condition would not create a significant risk to the filtration and absorption capacity of the Silver River floodplain, a conclusion not extended to the higher flow reduction scenarios. His opinion was supported by competent, substantial evidence, and was not disputed.

### Sediment Movement

76. Flow reduction in the Silver River should not cause a substantial change in the nature of sediment transport regime, e.g., net change in erosion or sedimentation. The focus of the analysis is limited to in-channel velocity since flow velocity in floodplains is generally not sufficient for the transport of inorganic sediments. If the frequency of critical flow velocity events is not substantially changed under the flow reduction scenarios, sediment transport will not be affected.

77. As described previously, there are very small differences in velocities across the flow reduction scenarios. Flow events of a magnitude and duration critical for maintaining current sediment transport occurs, on average, every two years under both the no-pumping scenario and the 5-percent reduction scenario. As such, a 5-percent reduction from the no-pumping condition would not create a significant risk to the sediment transport regime of the Silver River.

### Conclusion

78. Based on the foregoing, a 5-percent flow reduction would not put the hydrologic characteristics of Silver Springs and the Silver River at risk.

79. Petitioners offered evidence in support of their assertion that the proposed CUP will have an adverse impact on the ecological health of Silver Springs. Much of the evidence

was observational, was based on an opinion that "there should be no increase in groundwater pumping in the basin and in the surrounding area," and included no evidence to quantify the environmental impacts of Sleepy Creek's specific withdrawals on Silver Springs.

80. Under the legislatively required burden of proof discussed in the Conclusions of Law herein, the evidence presented by Petitioners as to the hydrologic effects of the proposed CUP was not sufficient to outweigh that presented by Respondents.

#### Modeling Scenarios

81. To assess impacts from the proposed withdrawals, NDMv5 simulations were performed by first removing the existing permitted Sleepy Creek withdrawal of 1.46 mgd from the current existing allocations to create a baseline condition, and then adding the full allocation of 2.68 mgd back in to measure the effect of the full Sleepy Creek permitted withdrawal. The simulated impacts were then used to determine the proposed CUP's individual impacts; the cumulative impacts of all proposed uses; and the year in which the cumulative impact of all allowable uses would exceed the 5-percent flow reduction at which adverse effects, as described above, would be predicted.<sup>8/</sup>

#### Individual Impacts

82. Using the applicant's total requested allocation of 2.68 mgd, the model predicted a reduction in flow of 0.76 cfs at Silver Springs from the proposed withdrawal.

#### Cumulative Impacts

83. To conduct an analysis of the cumulative impact of all permitted users, NDMv5 was used to simulate flow at Silver Springs in a predevelopment no-pumping condition, which established the baseline. The no-pumping condition was then compared to a simulation that assessed the impact of all currently permitted allocations assuming all users pumping at full capacity by 2035, and all permits expiring in the interim being renewed at existing allocations. The modeled results indicate a 2.5 percent flow reduction attributable to groundwater pumping in 2014, and a 7.4-percent reduction in 2035. Linearly interpreting those results led to a conclusion that an exceedance of the 5-percent flow reduction threshold at which adverse effects could begin was predicted in 2024.

#### Exceedance

84. Based on the foregoing, the withdrawals authorized by the proposed CUP will not result in adverse effects to Silver Springs and the Silver River, or to water resources, through 2023. Thus, the proposed condition of the CUP allowing withdrawals of 2.68 mgd average through 2023, with a return to

the previously permitted 1.46 mgd for the duration of the CUP is appropriate and supported by the evidence.

Compliance with MFL and Supplemental Regulatory Measures for Silver Springs

85. Although the Minimum Flows and Levels had not been adopted at the time the District issued proposed agency action on the Sleepy Creek CUP amendment, the total proposed allocation of 2.68 mgd was assessed for compliance with the Draft Silver Springs Emergency MFL Rule and Supplemental Regulatory Measures for Silver Springs. The evidence adduced at the hearing also measured impacts against the pending Emergency MFL Rule.

86. The MFL Rule, the Supplemental Regulatory Measures for Silver Springs, and the supporting technical publications in support thereof establish that, using the most constraining minimum flow parameter, there is water availability, or freeboard, of 17 cfs based on 2010 levels.

87. As set forth in the Hydrological Effects section above, it was determined that a 5-percent flow reduction would not result in adverse hydrologic impacts to Silver Springs and the Silver River. Evidence was adduced at the hearing to establish that effects of a 5-percent flow reduction from 2010 levels would result in available freeboard of 12 cfs, less than the available 17 cfs freeboard established by the MFL Rule.

88. Petitioners, though asserting that additional groundwater withdrawals would have adverse effects on Silver Springs and the Silver River in general, presented no persuasive evidence that the proposed CUP would violate any specific parameter of the MFL Rule as adopted. Likewise, Petitioners presented no evidence regarding Sleepy Creek's compliance with the Supplemental Regulatory Measures for Silver Springs.

#### Public Interest

89. The preponderance of the evidence in this proceeding, demonstrates that the proposed use of water by Sleepy Creek does not interfere with and is not adverse to the rights and claims to the use of groundwater on behalf of people in general. The CUP serves a beneficial use of advancing the agricultural use of Sleepy Creek's lands, and has no proven detrimental impacts that would be adverse to the overall collective well-being of the people or to the water resource in the area, the District, and the state.

90. The preponderance of the evidence in this proceeding further demonstrates that the proposed use of water by Sleepy Creek is efficient, that Sleepy Creek established a need for the water requested, that its use is for a legitimate and lawful purpose, and is not wasteful. Furthermore, the water proposed for use is available for a beneficial purpose, and the proposed use of the source meets all of the District's criteria.

## CONCLUSIONS OF LAW

### Jurisdiction

91. The Division of Administrative Hearings has jurisdiction over the parties to and the subject matter of this proceeding. §§ 120.569 and 120.57, Fla. Stat.

92. Pursuant to chapter 373, part II and chapter 40C-2, the District has regulatory jurisdiction over the CUP permit application.

### Standing

93. The facts stipulated by the parties are sufficient to demonstrate that the substantial interests of the Petitioners would be affected by the proposed agency action.

94. Standing under chapter 120 is guided by the two-pronged test established in the seminal case of Agrico Chemical Corporation v. Department of Environmental Regulation, 406 So. 2d 478 (Fla. 2d DCA 1981). In that case, the court held that:

We believe that before one can be considered to have a substantial interest in the outcome of the proceeding, he must show 1) that he will suffer an injury in fact which is of sufficient immediacy to entitle him to a section 120.57 hearing and 2) that his substantial injury is of a type or nature which the proceeding is designed to protect. The first aspect of the test deals with the degree of injury. The second deals with the nature of the injury.

Id. at 482.

95. Agrico was not intended as a barrier to the participation in proceedings under chapter 120 by persons who are affected by the potential and foreseeable results of agency action. Rather, "[t]he intent of Agrico was to preclude parties from intervening in a proceeding where those parties' substantial interests are totally unrelated to the issues that are to be resolved in the administrative proceedings." Mid-Chattahoochee River Users v. Fla. Dep't of Envtl. Prot., 948 So. 2d 794, 797 (Fla. 1st DCA 2006) (citing Gregory v. Indian River Cnty., 610 So. 2d 547, 554 (Fla. 1st DCA 1992)).

96. The standing requirement established by Agrico has been refined, and now stands for the proposition that standing to initiate an administrative proceeding is not dependent on proving that the proposed agency action would violate applicable law. Instead, standing requires proof that the petitioner has a substantial interest and that the interest reasonably could be affected by the proposed agency action. Whether the effect would constitute a violation of applicable law is a separate question.

Standing is "a forward-looking concept" and "cannot 'disappear' based on the ultimate outcome of the proceeding." . . . When standing is challenged during an administrative hearing, the petitioner must offer proof of the elements of standing, and it is sufficient that the petitioner demonstrate by such proof that his

substantial interests "could reasonably be affected by . . . [the] proposed activities."

Palm Beach Cnty. Env'tl. Coal. v. Fla. Dep't of Env'tl. Prot., 14 So. 3d 1076, 1078 (Fla. 4th DCA 2009) (citing Peace River/Manasota Reg'l Water Supply Auth. v. IMC Phosphates Co., 18 So. 3d 1079, 1083 (Fla. 2d DCA 2009), and Hamilton Cnty. Bd. of Cnty. Comm'rs v. State, Dep't of Env'tl. Reg., 587 So. 2d 1378 (Fla. 1st DCA 1991)); see also St. Johns Riverkeeper, Inc. v. St. Johns River Water Mgmt. Dist., 54 So. 3d 1051, 1055 (Fla. 5th DCA 2011) ("Ultimately, the ALJ's conclusion adopted by the Governing Board that there was no proof of harm or that the harm would be offset went to the merits of the challenge, not to standing.").

97. The question for determination as to the first prong of the Agrico test is whether Petitioners have alleged injuries in fact of sufficient immediacy from the effects of the CUP on Silver Springs to entitle them to a section 120.57 hearing. Given the adverse effects of the proposed withdrawals on the flows and levels of Silver Springs, effects that, if proven, would cause damage to the ecological values and functions of Silver Springs, and of Petitioners' use and enjoyment of Silver Springs, the stipulated facts constitute an adequate demonstration of an "injury in fact which is of sufficient immediacy to entitle [Petitioners] to a section 120.57 hearing."

98. Petitioners meet the second prong of the Agrico test, that is, this proceeding is designed to protect them from potential adverse impacts on water flows and levels in Silver Springs and the Silver River caused by the CUP, impacts that are the subject of chapter 373 and the rules adopted thereunder.

99. Petitioners, St. Johns Riverkeeper, Florida Defenders of the Environment, and the Silver Springs Alliance are associations appearing on behalf of the interests of their members. The facts stipulated by the parties are sufficient to demonstrate their associational standing under Florida Home Builders Association v. Department of Labor and Employment Security, 412 So. 2d 351 (Fla. 1982), and its progeny, including St. Johns Riverkeeper, Inc. v. St. Johns River Water Management District, 54 So. 3d 1051 (Fla. 5th DCA 2011).

100. As a result of the stipulated facts supporting standing, there is sufficient evidence to demonstrate that, if the adverse impacts of the proposed agency action were proven, Petitioners would be adversely affected by the CUP.

#### Nature of the Proceeding

101. This is a de novo proceeding, intended to formulate final agency action and not to review action taken earlier and preliminarily. Young v. Dep't of Cmty. Aff., 625 So. 2d 831, 833 (Fla. 1993); Hamilton Cnty. Bd. of Cnty. Comm'rs v. Dep't of

Envtl. Reg., 587 So. 2d 1378, 1387 (Fla. 1st DCA 1991); McDonald v. Dep't of Banking & Fin., 346 So. 2d 569, 584 (Fla. 1st DCA 1977).

102. The proposed CUP modification must comply with chapter 373, Part II and chapter 40C-2. See § 373.239, Fla. Stat.; Fla. Admin. Code R. 40C-2.331(2); CUP A.H. § 11.1.

103. On August 14, 2014, the District's CUP rules and corresponding CUP A.H. were revised as part of a statewide consistency rulemaking process. Rule 40C-2.301(4) provides that when an application was complete before August 14, 2014, the applicant may elect review in accordance with the standards, criteria, and conditions that were in effect immediately prior to August 14, 2014. Sleepy Creek has elected to have its CUP application reviewed in accordance with the standards, criteria, and conditions that are currently in effect.

104. In keeping with Sleepy Creek's election, the law in effect at the time the District takes final agency action on the application is applicable. Lavernia v. Dep't of Prof'l Reg., 616 So. 2d 53 (Fla. 1st DCA 1993); see also Ag. for Heath Care Admin. v. Mt. Sinai Med. Ctr., 690 So. 2d 689, 692-693 (Fla. 1st DCA 1997) ("In Lavernia it was recognized that this state follows the general rule that change in a licensure statute which occurs during the pendency of an application is operative as to that application. We logically extend that reasoning and reach the

same result with regard to a change in relevant agency rules after the application is complete but before a final decision is made.""). Thus, references in this Recommended Order to rule 40C-2.301 shall refer to the rule that became effective August 14, 2014, and references to the A.H. shall refer to the A.H. which became effective November 3, 2015. Furthermore, the newly adopted MFL rules for Silver Springs, rule 40C-8.031(10), and the "Supplemental Regulatory Measures for Silver Springs" in rule 40CER17-02 are applicable to the CUP application.

#### Scope of the Proceeding

105. The scope of this proceeding is limited to the 1.22 mgd CUP modification. As noted by Judge J. Lawrence Johnston in a comparable proceeding involving the modification of an existing permit:

When a permittee seeks to modify an existing permit, the District's review includes only that portion of the existing permit that is proposed to be modified or is affected by the modification . . . . The "reasonable assurance" requirement applies to the activities for which permitting is presently sought and, except to the extent affected by the proposed modification, does not burden the applicant with "providing 'reasonable assurances' anew with respect to the original permit." (internal citations omitted).

Conservancy of S.W. Fla. v. G.L. Homes of Naples Assoc. II, Ltd. and So. Fla. Water Mgmt. Dist., Case No. 06-4922 (Fla. DOAH May 15, 2007; SFWMD July 18, 2007).

Burden and Standard of Proof

106. Section 120.569(2) (p) provides that:

For any proceeding arising under chapter 373, chapter 378, or chapter 403, if a nonapplicant petitions as a third party to challenge an agency's issuance of a license, permit, or conceptual approval, the order of presentation in the proceeding is for the permit applicant to present a prima facie case demonstrating entitlement to the license, permit, or conceptual approval, followed by the agency. This demonstration may be made by entering into evidence the application and relevant material submitted to the agency in support of the application, and the agency's staff report or notice of intent to approve the permit, license, or conceptual approval. Subsequent to the presentation of the applicant's prima facie case and any direct evidence submitted by the agency, the petitioner initiating the action challenging the issuance of the permit, license, or conceptual approval has the burden of ultimate persuasion and has the burden of going forward to prove the case in opposition to the license, permit, or conceptual approval through the presentation of competent and substantial evidence.

107. Sleepy Creek made its prima facie case of entitlement to the CUP, jointly with the District, by entering into evidence the complete CUP application files and supporting documentation, and the TSR. Sleepy Creek also offered the testimony of Dr. Bottcher and Dr. Dunn in support of the CUP application. The District offered the testimony of Mr. Burleson and Dr. Janicki as part of the prima facie case. Having made its

prima facie case, the burden of ultimate persuasion is on Petitioners to prove their case in opposition to the permit by a preponderance of the competent and substantial evidence, and thereby prove that Sleepy Creek failed to provide reasonable assurance that the standards for issuance of the CUP were met.

108. The standard of proof is preponderance of the evidence. § 120.57(1), Fla. Stat.

#### Reasonable Assurance

109. Issuance of the CUP is dependent upon there being reasonable assurance that the proposed withdrawals will meet applicable standards.

110. Reasonable assurance means "a substantial likelihood that the project will be successfully implemented."

See Metropolitan Dade Co. v. Coscan Fla., Inc., 609 So. 2d 644, 648 (Fla. 3d DCA 1992). Reasonable assurance does not require absolute guarantees that the applicable conditions for issuance of a permit have been satisfied. Furthermore, speculation or subjective beliefs are not sufficient to carry the burden of presenting contrary evidence or proving a lack of reasonable assurance necessary to demonstrate that a permit should not be issued. FINR II, Inc. v. CF Industries, Inc., Case No. 11-6495 (Fla. DOAH Apr. 30, 2012; DEP June 8, 2012).

### Issues for Disposition

111. As set forth in the Joint Pre-hearing Stipulation, the following have been identified as being at issue in this proceeding:

#### A concise statement of those issues of fact which remain to be litigated

1. Whether Sleepy Creek has provided reasonable assurance that its proposed use of water is a reasonable-beneficial use.
2. Whether Sleepy Creek has provided reasonable assurance that the proposed use is consistent with the public interest.

#### A concise statement of those issues of law which remain for determination by the Administrative Law Judge

1. The parties agree that the following consumptive use permitting criteria are at issue in this proceeding:
  - a. Whether the applicant has provided reasonable assurance that the use is for a purpose and occurs in a manner that is both reasonable and consistent with the public interest as provided for in Florida Administrative Code Rule 40C-2.301(2)(b) and section 2.3(b), A.H.
  - b. Whether the applicant has provided reasonable assurance that the use will not cause harm to existing offsite land uses resulting from hydrologic alterations as provided in rule 40C-2.301(2)(f) and section 2.3(f), A.H.
  - c. Whether the applicant has provided reasonable assurance that the use will not cause harmful hydrologic alterations to

natural systems, including wetlands or other surface waters as provided for in rule 40C-2.301(2)(g)4 and section 2.3(g)4, A.H.

d. Whether the applicant has provided reasonable assurance that the use will not otherwise cause harmful hydrologic alterations to the water resources of the area as provided for in rule 40C-2.301(2)(g)5 and section 2.3(g)5, A.H.

e. Whether the applicant has provided reasonable assurance that the use is in accordance with any minimum flow or level and implementation strategy established pursuant to sections 373.042 and 373.0421, Florida Statutes, as provided for in rule 40C-2.301(2)(i) and section 2.3(i), A.H.

f. Whether the applicant has reasonable assurance that the use will not use water reserved pursuant to subsection 373.223(4), Florida Statutes, as provided for in rule 40C-2.301(2)(j) and section 2.3(j), A.H.

2. Petitioners contend that the following criterion is at issue in this proceeding:

a. Whether the applicant has provide reasonable assurance that the use will not cause harmful water quality impacts to the water source resulting from pollutants in discharges resulting from withdrawal or diversion as provided for in rule 40C-2.301(2)(g)1 and section 2.3(g)1, A.H. This subparagraph does not foreclose consideration of pollution concentration due to spring flow reduction.

3. Respondents contend that the following criterion is at issue in this proceeding:

a. Whether the applicant has provided reasonable assurance that the use will not cause harmful water quality impacts to the

water source resulting from the withdrawal or diversion as provided for in rule 40C-2.301(g)1 and section 2.3(g)1, A.H.

112. The evidence submitted by Petitioners was almost exclusively directed to the deficiencies and unreliability of the NDMv5.

113. Petitioners introduced no evidence to support a finding, nor did they argue in their Proposed Recommended Order, that Sleepy Creek failed to "provide[] reasonable assurance that the use will not cause harm to existing offsite land uses resulting from hydrologic alterations as provided in rule 40C-2.301(2)(f) and section 2.3(f), A.H."; that Sleepy Creek failed to provide "reasonable assurance that the use will not use water reserved pursuant to subsection 373.223(4), Florida Statutes, as provided for in rule 40C-2.301(2)(j) and section 2.3(j), A.H."; or that Sleepy Creek failed to provide "reasonable assurance that the use will not cause harmful water quality impacts to the water source resulting from pollutants in discharges resulting from withdrawal or diversion as provided for in rule 40C-2.301(2)(g)1 and section 2.3(g)1, A.H." Thus, as to those issues, the prima facie case supporting issuance of the CUP was un rebutted.

## Statutory and Rule Criteria

114. Section 373.223(1) provides, in pertinent part, that:

(1) To obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water:

(a) Is a reasonable-beneficial use as defined in s. 373.019;

\* \* \*

(c) Is consistent with the public interest.

115. "These three requirements are commonly referred to as the 'three-prong test.'" Marion Cnty. v. Greene, 5 So. 3d 775, 777 (Fla. 5th DCA 2009), citing S.W. Fla. Water Mgmt. Dist. v. Charlotte Cnty., 774 So. 2d 903 (Fla. 2d DCA 2001).<sup>9/</sup>

116. Despite the use of the same term in section 373.223(1)(a) and (c), i.e., "consistent with the public interest," the District has determined that:

the term "consistent with the public interest in the definition of reasonable-beneficial use contained in the first prong of section 373.223(1)(a), F.S." does not have the same meaning as the term "consistent with the public interest in the third prong of section 373.223(1)(c), F.S." City of Groveland v. Niagara Bottling Co. and St. Johns River Water Management District, Case No. 08-4201 (Fla. DOAH Aug. 7, 2009; SJRWMD Sept. 28, 2009) at 37-39.

Sierra Club, Inc. et al. v. Sleepy Creek Lands, LLC and St. Johns River Water Mgmt. Dist., Case Nos. 14-2608, 14-2609, and 14-2610, FO at 40 (Fla. DOAH Apr. 29, 2015; SJRWMD July 14, 2015).

117. In determining the factors that go into a determination of public interest, the Fifth District Court of Appeal has accepted a construction of the term which limits consideration to issues of "whether the use of water is efficient, whether there is a need for the water requested, and whether the use is for a legitimate purpose; and the inquiry focuses on the impact of the use on water resources and existing legal users." Marion Cnty. v. Greene, 5 So. 3d at 779.

118. The District has likewise determined that the scope of the public interest test extends no further than the effect of the proposed use on the water resources of the District, and in that regard has established by final order that:

The CUP program of Part II of Chapter 373 was enacted to accomplish the water resource conservation and protection policy goals of Chapter 373. The permitting requirement is intended to regulate water uses to prevent harm to the water resources and ensure the use is consistent with the overall water resource objectives of the District. Reading Chapter 373 as a whole, the term "consistent with the public interest," as implemented by Section 9.3, A.H., is cabined by the purpose of Chapter 373 to address water resource-related issues.

City of Groveland v. Niagara Bottling Co. and St. Johns River  
Water Mgmt. Dist., Case No. 08-4201 (Fla. DOAH Aug. 7, 2009;  
SJRWMD Sept. 28, 2009).

First Prong - Section 373.223(1)(a)  
- Reasonable-Beneficial Use

119. The first "prong" of the three-pronged test established in section 373.223(1)(a) provides that the use of water proposed by a consumptive use permit must be a reasonable-beneficial use. Section 373.019(16) defines "reasonable-beneficial use" as "the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest."

120. Agricultural use of water is of the type generally recognized to "establish a reasonable-beneficial use in the absence of a competing demand for water." Harloff v. City of Sarasota, 575 So. 2d 1324, 1326 (Fla. 2d DCA 1991).

121. Rule 40C-2.301 provides, in pertinent part, that:

(1) To obtain a consumptive use permit, renewal, or modification, an applicant must provide reasonable assurance that the proposed consumptive use of water, on an individual and cumulative basis:

(a) Is a reasonable-beneficial use;

\* \* \*

(2) In order to provide reasonable assurances that the consumptive use is

reasonable-beneficial, an applicant shall demonstrate that the consumptive use:

\* \* \*

(b) Is for a purpose and occurs in a manner that is both reasonable and consistent with the public interest;

\* \* \*

(g) Will not cause harm to the water resources of the area in any of the following ways:

\* \* \*

4. Will not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters; and

5. Will not otherwise cause harmful hydrologic alterations to the water resources of the area;

\* \* \*

(i) Is in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.

122. The statutes and rules under which the District operates have been supplemented and explained through the development of the CUP A.H.

123. CUP A.H. section 1.1(n) defines "Reasonable-Beneficial Use" as [t]he use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest."

124. CUP A.H. section 2.3 establishes "Reasonable-Beneficial Use Criteria" and provides, in pertinent part, that:

The following criteria must be met, on an individual and cumulative basis, for a consumptive use to be considered reasonable-beneficial:

\* \* \*

(b) The use must be for a purpose and occur in a manner that is both reasonable and consistent with the public interest as defined in Section 3.10.

\* \* \*

(g) The use must not cause harm to the water resources of the area in any of the following ways:

\* \* \*

4. The use must not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters (on site or off-site). A proposed use will be denied as not reasonable-beneficial if the use would alter the existing hydrology and cause an unmitigated adverse impact to natural systems, including wetlands or other surface waters. Methods for avoiding harm include: reducing the amount of water withdrawn, modifying the method or schedule of withdrawal, mitigating the damages caused, or not increasing the potential for flooding. An applicant must avoid or mitigate impacts to wetlands or other surface waters wherever they are located.

5. The use must not otherwise cause harmful hydrologic alterations to the water resources of the area.

\* \* \*

(i) The use must be in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.

125. CUP A.H. section 3.10 defines "public interest" as that term is used in the context of the reasonable-beneficial use criteria, as:

those rights and claims on behalf of people in general. In determining the public interest in consumptive use permitting decisions, the District will consider whether an existing or proposed use is beneficial or detrimental to the overall collective well-being of the people or to the water resource in the area, the District and the State.

Rule 40C-2.301(2)(b) and CUP A.H. § 2.3(b)  
- Public Interest

126. In order to qualify for a CUP, the reasonable-beneficial use of the waters proposed for consumptive use must be for a purpose and occur in a manner that is both reasonable and consistent with the public interest.

127. For the reasons set forth in the Findings of Fact herein, and applying the body of law set forth herein regarding reasonable use of water, and the "first prong" public interest test, the proposed CUP meets the criteria established by rule 40C-2.301(2)(b) and CUP A.H. section 2.3(b).

Rules 40C-2.301(2)(g)4. and 5. and CUP A.H. §§ 2.3(g)4 and 5  
- Hydrologic Alterations

128. In order to qualify for a CUP, the use must not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters, or to water resources of the area.

129. For the reasons set forth in the Findings of Fact herein regarding hydrologic effects, the proposed CUP meets the criteria established by rule 40C-2.301(2)(g)4. and 5. and CUP A.H. sections 2.3(g)4 and 5.

Rule 40C-2.301(2)(i) and CUP A.H. § 2.3(i)  
- Minimum Flows and Levels

130. As set forth herein, Petitioners' argument that the MFL rule has not been met is based exclusively on the errors alleged in NDMv5. See St. Johns Riverkeeper, Florida Defenders of the Environment, Silver Springs Alliance, and Alice Gardner's [Proposed] Recommended Order at ¶¶ 98-104. As set forth in the Findings of Fact herein, NDMv5 was designed to be, and is, the most up-to-date and accurate means of evaluating and estimating the effects of withdrawals from the UFA in model domain. Petitioners concerns with the model were addressed through a preponderance of competent and substantial evidence. Thus, Petitioners failed to prove that the proposed CUP is not in accordance with the MFL and implementation strategy.

Ultimate Conclusion of Reasonable-Beneficial Use

131. A preponderance of the evidence demonstrated that the proposed use of water will have no material or significant adverse impact to the source of the water, to environmental resources, or to the flows and levels of Silver Springs or the Silver River.

132. A preponderance of the evidence demonstrated that the proposed use of water will be for a productive, beneficial economic activity.

133. A weighing of the evidence introduced at the final hearing leads the undersigned to conclude that the water use proposed by the Sleepy Creek CUP modification is a reasonable-beneficial use of water as defined by statute, and established by the District's rules and CUP A.H.

Third Prong - Section 373.223(1)(c) -  
Public Interest

134. The third "prong" of the three-pronged test established in section 373.223(1)(c) provides that the use of water proposed by a consumptive use permit must be consistent with the public interest.

135. Rule 40C-2.301 provides, in pertinent part, that:

(1) To obtain a consumptive use permit, renewal, or modification, an applicant must provide reasonable assurance that the proposed consumptive use of water, on an individual and cumulative basis:

\* \* \*

(c) Is consistent with the public interest.

136. The District has established that:

In applying the public interest tests under rule 40C-2.301(4)(b), F.A.C., and section 373.223(1)(c), F.S., the District's review is limited to water resource related considerations . . . .

The District is a creature of statute and its powers are those expressed in statutory language, or necessarily implied from expressed language, and its powers are not conferred by the absence of language. . . . The CUP program of Part II of Chapter 373 was enacted to accomplish the water resource conservation and protection policy goals of Chapter 373. The permitting requirement is intended to regulate water uses to prevent harm to the water resources and ensure the use is consistent with the overall water resource objectives of the District. Reading Chapter 373 as a whole, the term "consistent with the public interest" as implemented by the District's rules is cabined by the purpose of Chapter 373 to address water resource related issues. See City of Sunrise v. South Florida Water Management District, 615 So. 2d 746, 747 (Fla. 4th DCA 1993) (holding that "[c]ompetitive economic considerations do not fall within the zone of protection that water management district is authorized to consider under chapter 373, Florida Statutes") and Marion County v. Greene and St. Johns River Water Management District, Case No. 6-2464 (Fla. DOAH Jan. 8, 2007, SJRWMD March 23, 2007) (determining "[n]owhere in the District's rule criteria is the amount of economic return a permittee receives from a water use made a test or factor in determining whether an applicant should be granted a permit or not.")

Sierra Club, Inc. et al. v. Sleepy Creek Lands, LLC, and  
St. Johns River Water Mgmt. Dist., Case Nos. 14-2608, et seq.,  
FO at 40-41.

137. In applying the "third prong" public interest test, the Fifth District Court of Appeal has held that:

In examining whether an application is consistent with the public interest, the District considers whether the use of water is efficient, whether there is a need for the water requested, and whether the use is for a legitimate purpose. The inquiry focuses on the impact of the use on water resources and existing legal users.

Marion Cnty v. Green, 5 So. 3d at 779.

138. The Court in Marion County v. Green determined that "the ALJ committed no reversible error." Id. at 776. Thus, a review of Judge J. Lawrence Johnston's Recommended Order, and its treatment of the public interest test is warranted.

139. Pertinent provisions of the Recommended Order are:

39. In examining whether an application is consistent with the public interest, the District considers whether a particular use of water is going to be beneficial or detrimental to the people of the area and to water resources within the state. In this inquiry, the District considers whether the use of water is efficient, whether there is a need for the water requested, and whether the use is for a legitimate purpose; and the inquiry focuses on the impact of the use on water resources and existing legal users.

\* \* \*

44. The District does not consider the level of financial gain or benefit an applicant will derive from a permitted use of water for purposes of determining whether the proposed use is consistent with the public interest. Most, if not all permitted users of water derive some level of economic benefit from the water they use, and the District's rule criteria do not provide standards for evaluating such gain or that otherwise limit the amount of such gain.

\* \* \*

81. In order to provide reasonable assurance that the proposed use of water is consistent with the public interest, Greene and Hastings presented testimony that the water will be used for a productive, beneficial economic activity and that there will no adverse impacts to the source of the water, to environmental resources, or to any adjoining landowners. These are the considerations generally encompassed and addressed by the District's permitting criteria. With regard to these criteria, there was no evidence offered showing any detrimental impacts resulting from the proposed use of water.

\* \* \*

86. If a source of water is available for use, and a beneficial use can be made of water from the source, and if a proposed use of the source meets all of the District's criteria for such use, the District has no basis on which to deny that applicant's request for a permit to use water from the source.

Marion Cnty. v. C. Ray Greene, III; Angus S. Hastings; and  
St. Johns River Water Mgmt. Dist., Case No. 06-2464 (Fla. DOAH  
Jan. 9, 2007; SJRWMD Mar. 23, 2007).

140. The preponderance of the evidence in this proceeding, as applied to the third prong "public interest" criteria, supports a conclusion that the proposed use of water by Sleepy Creek is efficient, that Sleepy Creek established a need for the water requested, and that its use is for a legitimate purpose. Furthermore, the water proposed for use is available for a beneficial use, and the proposed use of the source meets all of the District's criteria.

141. For the reasons set forth herein, the undersigned concludes that Petitioners failed to prove by a preponderance of competent and substantial evidence that the proposed use of water is not consistent with the public interest.

#### Conclusion

142. Petitioners did not meet their burden of ultimate persuasion that the withdrawal of water authorized by the CUP is not a reasonable-beneficial use, or that the withdrawal is inconsistent with the public interest.

143. Applying the standards of reasonable assurance to the Findings of Fact in this case, it is concluded that reasonable assurances have been provided by Sleepy Creek that the activities to be authorized by the CUP modification will meet the applicable standards applied by the District, including those in section 373.223, Florida Statutes; Florida

Administrative Code Rule 40C-2.301; and the corresponding provisions of the CUP A.H., and that CUP No. 2-083-91926-4 should therefore be issued.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law set forth herein it is RECOMMENDED that the St. Johns River Water Management District enter a final order approving the issuance of Consumptive Use Permit No. 2-083-91926-4 to Sleepy Creek Lands, LLC, on the terms and conditions set forth in the complete Permit Application for Consumptive Uses of Water and the Consumptive Use Technical Staff Report, as supplemented upon the adoption of rule 40C-8.031(10) and 40CER17-02, Supplemental Regulatory Measures for Silver Springs.

DONE AND ENTERED this 17th day of November, 2017, in Tallahassee, Leon County, Florida.



---

E. GARY EARLY  
Administrative Law Judge  
Division of Administrative Hearings  
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Filed with the Clerk of the  
Division of Administrative Hearings  
this 17th day of November, 2017.

#### ENDNOTES

<sup>1/</sup> The number of members was omitted from the Joint Pre-hearing Stipulation. However, the Final Order in DOAH Case No. 17-2543ER, which involved identical parties, and was tried on May 11, 2017, found St. Johns Riverkeeper to have approximately 1,000 members, which figure is found to be representative of its membership at the time of the April 10 and 11, 2017, hearing in this case.

<sup>2/</sup> The evidence suggests that native tapegrass is actually less abundant in the spring and the upper reaches of the Silver River, with the increased density in the lower reaches of the Silver River.

<sup>3/</sup> The reduction in flow is not limited to Silver Springs, but, as recognized by Dr. Knight, "is ubiquitous across our springs. . . . In general, all of the springs are seeing reductions in flow."

<sup>4/</sup> Dr. Knight has had the opportunity to observe Silver Springs from his visits as a young child in 1953, to his work on an ecological study of Silver Springs in 1979 to 1980, to his current involvement with the Springs Initiative.

<sup>5/</sup> Petitioners were dismissive of the extent to which the evaluation of the model by Mr. Anderson and Mr. Stewart should have been considered to be independent "peer review" since Mr. Anderson "regularly does business with the District and was actually under contract with the District on another project at the time he served as a 'peer reviewer.'" There was nothing in the record to suggest that either of the reviewers were predisposed to a result, or exercised less than their best independent scientific judgment in their review of NDMv5.

<sup>6/</sup> Much of the data was collected in the evaluation related to the establishment of the Silver Springs MFLs.

<sup>7/</sup> A decrease in fish biomass since 1957 was acknowledged, and was attributed in large measure to the construction of the dam and lock that created the Rodman Reservoir. Those structures impeded the movement of migratory fish, notably mullet, which had the highest biomass of any fish observed in the Silver River prior to the creation of the Rodman Reservoir, and which were observed in "modest amounts" after the construction of the dam. Dr. Knight also testified that "[s]triped bass come in from the ocean, eels come in from the ocean, mullet come in from the ocean and move back and forth." The obstruction created by the

dam and lock of the Rodman Reservoir would appear to affect populations of striped bass and eels to the same degree that they have affected mullet.

8/ The analysis was also intended to determine whether maximum proposed daily withdrawals would cause interference with any existing legal users which, pursuant to the Joint Pre-hearing Stipulation, is not at issue in this proceeding.

9/ As to the second "prong," the parties stipulated that "[w]hether the applicant has provided reasonable assurance that the use will interfere with any presently existing legal use of water" is not at issue in this proceeding.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

CONSUMPTIVE USE TECHNICAL STAFF REPORT  
28-Dec-2016  
APPLICATION #: 91926-4

**Owner:** Sleepy Creek Lands LLC  
15045 NW 141st Ct  
Williston, FL 32696-7446

**Applicant:** Sleepy Creek Lands LLC  
15045 NW 141st Ct  
Williston, FL 32696-7446

**Agent:** John L Wharton  
Dean Mead & Dunbar  
Ste 815  
215 S Monroe St  
Tallahassee, FL 32301-1858  
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**Compliance Contact:** Mike Rogers  
20 Hidden Forest Dr  
Cedar Valley, ON L0G1E-0 CANADA

**Project Name:** Sleepy Creek North and East Tracts (formerly called Adena Springs Ranch)  
**County:** Marion

**Objectors:** Yes

**Authorization Statement:**

The District authorizes, as limited by the attached permit conditions, the use of a total of 978.2 million gallons per year (mgy) (2.68 million gallons per day (mgd) average) of groundwater from the Upper Floridan aquifer for irrigation of 2,231 acres of improved pasture and other crops, watering of cattle and commercial/industrial uses for years 2017 through 2023. For years 2024 through 2034, the permitted allocation reduces to 532.9 mgy (1.46 mgd).

**Recommendation:** Approval

**Reviewers:** Richard Burklew; James Hollingshead; Timothy Wetzel; Clay Coarsey

**Abstract:**

This is a modification of an existing agricultural use permit with a request for an increase from 1.46 mgd to 2.68 mgd in groundwater allocation to (1) fully meet the agricultural demand previously demonstrated in the Sequence 3 Permit and (2) supply an additional commercial/industrial use. No change in duration is proposed. Staff is recommending approval of an increase in allocation of 1.22 mgd for a total allocation of 2.68 mgd for the years 2017 through 2023 and then a reduction to the current allocation of 1.46 mgd for the years 2024 through 2034.

## **PROJECT DESCRIPTION:**

### **Project Location**

The Sleepy Creek Lands North and East Tracts cattle farm project is located in northern Marion County northwest and southeast of the community of Fort McCoy. The project consists of two separate non-contiguous parcels (the northern portion of the Sleepy Creek Lands LLC property and the Ft McCoy/Jones Turf-Grass Farms). The project area that is the subject of this application consists of a total of approximately 8,218 acres.

### **Project Summary**

The project consists of converting approximately 7,208 acres of pine plantation, improved pasture and wetlands (North Tract), and 1,010 acres of existing sod farms (East Tract) into a cattle grazing and finishing operation for the production of grass-fed beef. The project is designed to maximize cattle forage intake on the North Tract through intensive rotational grazing practices and minimize the need to use supplemental feed. On the East Tract, the applicant proposes to utilize more standard grazing and pasture management techniques. To produce the forage necessary for grazing operations, the applicant is proposing to irrigate 2,231 acres of pasture grasses and grain crops. Each irrigated area will be watered with an efficient center pivot irrigation system.

The project is designed around the cattle finishing process. Based on the ranch plan, arriving cattle with an average weight of 875-lbs will be temporarily held at receiving corrals. They will then be grazed and rotated over time through the irrigated pastures and grain crops, eventually reaching the beef harvesting facility corral. The pasture rotation process will maximize cattle weight gain so that by the time the cattle reach the harvesting facility their anticipated finished weight will be 1,150-lbs. Due to the variable crop production throughout the year, excess forage production during the high growth periods will be mechanically harvested as haylage. This haylage will provide supplemental feed for the cattle during transitional periods when pasture or crop growth is insufficient to keep up with animal needs.

In addition to pasture and grass/crop irrigation, the applicant is also requesting to withdraw and use water for cattle watering and industrial/commercial use associated with a cattle and food processing facility (North Tract Facility). The percentage breakdown of use by type (irrigation, cattle watering and commercial/industrial) is 92% irrigation, 3% cattle watering and 5% commercial/industrial. The site also consists of non-irrigated pasture areas and other non-irrigated, miscellaneous land uses (e.g., timber).

### **Permitting History:**

In December 2011, the District received a consumptive use permit (CUP) application for Sleepy Creek Lands (formerly known as Adena Springs Ranch) for a new groundwater withdrawal of 13 million gallons of water per day (mgd). Since the initial application, Sleepy Creek significantly amended its water withdrawal request in both amount and geographic scope, and "phased" its request over two permit sequences (2-083-91926-3 and 2-083-91926-4). These permit sequences are discussed below.

### **Sequence 3 Permit**

In April 2014, Sleepy Creek requested authorization to consolidate and modify its existing permits for two sod farms (2-083-3011-7 and 2-083-91926-2) and to shift some or all of its existing allocation of 1.46 mgd to the North Tract of the Sleepy Creek property. This request was assigned permit number 2-083-91926-3 and became known as the Sequence 3 Permit. On May 14, 2014, District staff completed its review of the CUP consolidation request and recommended that the District's Governing Board approve that application. The District received two petitions challenging the Sequence 3 Permit.

After an administrative hearing, an administrative law judge (ALJ) issued a recommended order that the District issue the Sequence 3 Permit in accordance with the terms and conditions set forth in the technical staff report. The District's Governing Board entered a final order approving the CUP on July 14, 2015. The final order was appealed to the Fifth District Court of Appeal, which subsequently entered an order on October 4, 2016, affirming the District's final order.

### **Sequence 4 Permit**

On June 19, 2014, Sleepy Creek amended its 2011 application for new groundwater from 13 mgd for use on the North and South Tracts to 1.12 mgd for use on the North Tract only. This request was assigned permit number 2-083-91926-4 and became known as the Sequence 4 Permit. On July 15, 2014, the District issued notice of its intent to deny the Sequence 4 Permit. Over the course of the last two years, Sleepy Creek has requested multiple extensions of time to file a petition for administrative hearing regarding the Sequence 4 Permit. These requests for extension were granted. On October 3, 2016, Sleepy Creek submitted a letter to the District requesting: 1) the permit application be re-evaluated using the District's updated modeling tool for the area; 2) an additional 0.14 mgd of groundwater for use at its cattle harvesting facility known as the North Tract Facility; and, 3) the Sequence 4 Permit be re-evaluated under the District's current rules. The District's current rules can be found in the Applicant's Handbook: Consumptive Uses of Water (effective November 3, 2015).

### **Sequence 5 Permit**

On October 4, 2016, the permittee requested a letter modification to relocate proposed wells NT-5, NT-4, NT-8 (Station IDs 411774, 411773, 411777 respectively), remove well NT-10 (Station 411770), rename Well NT-5 (Station ID 411774) to NT-5/10 and correct

the location of existing well NT-40 (Station ID 411809) with no change in source, withdrawal capacity, or casing diameter. Staff reviewed the letter modification request and issued a modification to the Sequence 3 Permit on November 1, 2016, to address the requested well relocation and well renaming issues. This is known as the Sequence 5 permit.

## **PROPOSED WATER SUPPLY SYSTEM AND WATER USE:**

### **Water Supply System Description**

The applicant is proposing to construct thirteen 12-inch wells and five 5-inch wells. There are four 12-inch diameter wells, seven 5-inch wells, one 6-inch diameter well, four 4-inch diameter wells already on the properties. The 12-inch diameter wells will withdraw water from the Upper Floridan aquifer (UFA) to supply 21 center pivots which will be used for irrigation and chemigation of improved pasture areas. Two five-inch wells will be used for the commercial/industrial facility (North Tract Facility). The remainder of the six, five and four-inch wells will be used for cattle watering. The typical 12-inch diameter well will be constructed to a total depth of approximately 200 feet, with steel casing to a depth of approximately 100 feet. Each well will be equipped with a 75-hp submersible pump and will be capable of producing 1,000 gpm.

On the North Tract, the applicant proposes to use fifteen long radius pivot irrigation arms that are capable of rotating 360° in 24-hrs. On the East Tract, the applicant proposes to use the existing six pivots on the sod farms. Water will be supplied to each pivot by a UFA well.

### **Water Use Description**

The request is to modify the Sequence 5 Permit to authorize the withdrawal of an additional 1.12 mgd of groundwater for irrigation and an additional 0.14 mgd of groundwater for industrial uses at the North Tract Facility on the Sleepy Creek North Tract. The total project would include the irrigation of 2,231 acres of pasture grasses and grain crops using 21 center pivot irrigation systems and to water up to 7,578 head of cattle. The project area is divided between two tracts, the North Tract and East Tract.

On the North Tract, the applicant proposes to irrigate 1,620 acres using 15 center pivot systems. In any year, 20% of the irrigated area will be double-cropped with pasture grass and grains crops. The remaining 80% of the irrigated area will be used to grow pasture grasses only.

On the East Tract, the applicant proposes to irrigate 611 acres using 6 center pivot systems. The irrigation demand for 611 acres of pasture grass on the East Tract for a 2-in-10 drought year for the East Tract would be 169 mgy (0.464 mgd).

## **HYDROGEOLOGIC INVESTIGATION:**

## Hydrogeologic Setting

The project site is located in North Central Florida and lies on the eastern edge of what is known as the Ocala Platform. The Ocala Platform is an area where the limestone that comprises the Floridan Aquifer System (FAS) exists at or very near land surface. Typically, the limestone in the Ocala Platform area has little to no unconsolidated material covering it. The occurrence of karst features (caves, sinkholes, karst prairies) are very common in this area. The North Tract lies to the east of the Ocala Platform in an area where there is substantial cover by clays and other sediments of the Hawthorn Group. As a result, there is a surficial aquifer system on-site and the effect of withdrawals from the Upper Floridan aquifer are buffered. Although the property is bordered on the west by karst prairies, site investigations have shown that there are no karst prairies within the project area. Based on a review of available information, District staff has determined there are generally five hydrogeologic units of relevance within the site. These hydrogeologic units include the surficial aquifer system (SAS), the intermediate confining unit (ICU), the UFA, the middle confining unit I (MCUI), and the Lower Floridan aquifer (LFA).

The SAS is unconfined, and its upper boundary is defined by the water table. The SAS in the vicinity of the site is predominantly quartz sand layered between clayey sands. Based upon the test boring data collected near the site of Pivot Well 9, the sediments that form the SAS extend to a depth of approximately 55-60 ft below land surface (bls).

The top of the underlying ICU is defined by the presence of stiff, gray-green, phosphate bearing clays that make up the top of the Hawthorn Group. The lower portion of the ICU consists of sandy clay grading to hard, light tan colored, dolomitic limestone. The hard limestone layer generally occurs at a depth of 100 feet, and defines the bottom of the ICU and the top of the UFA.

The UFA consists of alternating layers of soft and hard light cream to brown limestone. The base of the UFA (and the top of the MCUI) was identified at 340 ft bls based on 1) a change from softer materials to much harder ones, 2) a high electrical resistivity log response in geophysical testing performed on a 950-foot deep test hole, and 3) correlation to other wells where the MCUI has been mapped by the District.

Based on the results of the deep test hole, the brown limestones and dolostones that comprise the MCUI have been estimated to extend from a depth of 340 ft to 750 ft bls. Preliminary evaluations based on temperature and fluid conductivity logs, as well as correlation with other logs, indicate that the base of the MCUI and the top of the LFA is 750 ft bls.

The section of the LFA encountered during drilling of the on-site test hole consists of alternating beds of limestone and dolostones. The test hole penetrated the upper 200 feet of the LFA (depth of 950 ft bls). Review of currently available information for the region indicates that the LFA extends to a depth of approximately 1,800 ft bls in the vicinity of the site.

## Aquifer Testing

In order to evaluate impacts of the requested withdrawals, the applicant conducted two UFA aquifer performance tests (APTs) and coordinated with the District in the planning and implementation of a third UFA APT. The first two tests were comparable in scope and duration, while the third test was expanded in both scope and duration. In all cases, aquifer test plans were reviewed by District staff prior to implementation.

The first APT was conducted on the North Tract on a well that will serve proposed Pivot 9. The APT on Well 9 (formerly Well 21) began on March 26, 2012. Withdrawal rates of 2,338 gpm were maintained for 2.3 days before the test was terminated. Drawdown at UFA observation wells located within 100 feet of the test production well varied from 3.0 to 3.5 feet at the end of the test. Manual readings taken from wells located approximately 4,700 feet from the pumping well indicated UFA drawdown of approximately 1.5 feet. Standard analytical techniques were used to estimate the UFA transmissivity from drawdown data collected from the wells located within approximately 100 feet of the production well. A mean value of 112,138 ft<sup>2</sup>/day was estimated for the UFA transmissivity, along with a leakance of 3.12E-9 day<sup>-1</sup> interpreted from the type-curve matching evaluation.

The second APT was performed on Well 33 (formerly Well 83) near the southwest corner of the larger tract of property owned by the applicant (approximately 5,000 feet east of Indian Lake Prairie). The APT began on October 17, 2012. Withdrawal rates of 1,423 gpm were maintained for 2.0 days before the test was terminated. Drawdown at UFA observation wells located within 100 feet of the test production varied from 9 to 12 feet at the end of the test. Standard analytical techniques were used to estimate the UFA transmissivity from drawdown data for wells located within approximately 100 feet of the production well. A mean value of 12,200 ft<sup>2</sup>/day was estimated for the UFA transmissivity. Leakance estimated from the type-curve matching was estimated at 1.0E-2 day<sup>-1</sup>.

The estimated parameters from the first two APTs significantly deviated from those utilized in the calibration of the North Central Florida Active Water-Table Regional Groundwater Flow Model (NCF model). UFA transmissivities within the NCF model at these APT locations yielded 625,000 ft<sup>2</sup>/day for Well 9 (compared to a mean test value of 112,138 ft<sup>2</sup>/day), and 2,000,000 ft<sup>2</sup>/day for Well 33 (compared to a mean test value of 12,200 ft<sup>2</sup>/day).

District staff reviewed all of the available data for the region, including the information derived from the two APTs and determined that additional site-specific information was needed in order to provide reasonable assurances regarding the on-site aquifer characteristics. With that objective in mind, a third APT was conducted. Well 9 was again used as the production well. The APT also included an array of 19 wells monitoring: the SAS (total of four wells); the ICU (total of four wells); the UFA (total of ten wells); and the uppermost portion of the MCUI (one well). The majority of the

shallower wells (SAS and ICU) were constructed within 150 feet of the production well. Several of the UFA wells were within 100 feet of the pumping well, with the remainder spaced at distances varying from 800 to 13,000 feet. Background wells were established at the second APT site (Well 33), approximately five miles to the south/southwest. Results from the analysis using the drawdown data collected from 18 on-site observation wells and several offsite wells in the SJRWMD observation well network indicated that: (1) transmissivity within the APT-influenced area varied from 62,000 to 102,500 square feet per day (ft<sup>2</sup>/day), (2) storativity varied from 3.7x10<sup>-4</sup> to 5.5x10<sup>-3</sup>; and (3) leakance varied from 6.9x10<sup>-5</sup> to 7.2x10<sup>-4</sup> 1/day.

### **Groundwater Flow Modeling**

The current version of the Northern District Groundwater Flow Model Version 5.0 (NDMv5) was used to estimate impacts on local and regional groundwater levels and flows. NDMv5 became available to SJRWMD water use regulation staff for use in permitting in July 2016. This model was developed collaboratively between the Southwest Florida Water Management District (SWFWMD) and the St. John River Water Management District (SJRWMD). NDMv5 updated the existing NDMv4 to include new hydraulic and hydrogeologic information that became available after the completion of NDMv4. NDMv5 was calibrated to 1995 steady-state conditions, as well as a 10-year transient time period (1996 to 2006). In addition, a verification simulation was performed using 2010 climatic and pumping conditions. NDMv5 is a 3D model that simulates 7 distinct layers that represent the underlying aquifer systems and associated confining units. The NDMv5 active model grid covers over 8,000 square miles and within that area simulates discharge from 115 springs. NDMv5 also actively simulates numerous rivers and lakes within the model domain.

Many project specific simulations were run by District staff using NDMv5. The simulations included assessment of individual (project specific) impacts. Individual impacts were assessed by comparing results from the current permitted allocation model run both with the applicant and without the applicant's proposed withdrawals included. In addition, cumulative impacts were assessed by comparing the current permitted allocation model runs to an estimated predevelopment condition. It should be noted that in the permitted allocation run all use classes, except agriculture, were included at their full permitted quantities. Pursuant to District rules, the District issues agricultural irrigation permits based on a 2 in 10 year drought quantity. The requirement to issue agricultural permits based on a 2 in 10 year drought quantity must be addressed when using groundwater flow models to assess potential long term impacts from permitted withdrawals. To account for the fact that a drought allocation is not needed every year, the permitted allocations for agricultural uses were adjusted from the 2 in 10 year drought quantity to an estimated 5 in 10 year long-term average condition. In addition, return flows for agricultural and recreational/landscape irrigation withdrawals were applied to layer 1 of the model at 35% and 20%, respectively, of the withdrawal quantity. The applicant is proposing to use high efficiency center pivot irrigation systems with irrigation system efficiencies of 85%. Given that fact, 15% of the withdrawal quantity was assigned to layer 1 as return flow for the applicant's irrigation

withdrawals. The results of the individual and cumulative impact assessments are discussed in more detail below.

#### **PERMIT APPLICATION REVIEW:**

Section 373.223, F.S., and Section 40C-2.301, Florida Administrative Code (F.A.C.), require an applicant to establish that the proposed use of water:

- (a) is a reasonable-beneficial use;
- (b) will not interfere with any presently existing legal use of water; and,
- (c) is consistent with the public interest.

In addition, the above requirements are detailed further in the Applicant's Handbook: Consumptive Uses of Water, November 3, 2015 ("A.H."). District staff has reviewed the consumptive use permit application pursuant to the above-described requirements and has determined that the application meets the conditions for issuance of this permit. A summary of District staff's review is provided below.

#### **REASONABLE BENEFICIAL USE CRITERIA [Section 2.3, A.H.]:**

##### **Section 2.3(a) - The use must be in such quantity as is necessary for economic and efficient use.**

Staff evaluated whether the proposed water is in such quantity as is necessary for economic and efficient utilization by considering the amount of water needed for the proposed crops, livestock and the food processing facility. Requested irrigation quantities were determined using the District's supported program, GWRAPPS (GIS-based Water Resources & Agricultural Permitting & Planning System), specifically tailored for this location and proposed crops. GWRAPPS is a program based on the AFSIRS (Agricultural Field Scale Irrigation Requirements Simulation) model, which was developed by the Biological and Agricultural Engineering Department, University of Florida.

The applicant submitted an extensive analysis based on the District's GWRAPPS model to estimate the amount of water needed for its proposed pasture and crop irrigation. For each irrigated area, the acreage of each soil type was determined. Based on the acreage and moisture retention properties of the soils identified, a soil type was selected to represent the soil type for each center pivot system (CPS) in the GWRAPPS. To improve the accuracy of estimating the irrigation requirements for this project, the applicant updated the default rainfall data typically used by the GWRAPPS program. The updated rainfall data is more representative of the actual rainfall intensities and frequencies expected at the site.

All irrigation will be performed by center pivots systems. CPSs are the most efficient irrigation systems capable of irrigating large areas with varying crop types. An irrigation efficiency of 85% was assumed for the proposed fifteen and existing six center pivot

systems. To insure the irrigation systems are properly managed, the applicant has submitted a Water Conservation Plan (see next section for details). The irrigation requirement for each CPS for the 2-in-10 drought year is summarized in the table below:

Irrigation Demand for the 2-in-10 drought year summary (Table1):

Pivot ID	Soil Type	CPS Area (acres)	GIR*, in	GIR, mgd	GIR, mgy
<b>PHASE 1A NORTH TRACT</b>					
1	Lynne Sand	125.7	16.05	0.150	54.76
2	Lynne Sand	125.7	16.05	0.150	54.76
3	Lynne Sand	125.7	16.05	0.150	54.76
4	Lynne Sand	125.7	16.05	0.150	54.76
5	Eaton Loamy Sand	96.5	16.69	0.120	43.75
6	Electra Sand	103.0	19.11	0.146	53.43
7	Lynne Sand	70.0	16.05	0.084	30.49
8	Lynne Sand	125.7	16.05	0.150	54.76
9	Lynne Sand	125.7	16.05	0.150	54.76
10	Lynne Sand	102.3	16.05	0.122	44.60
11	Lynne Sand	70.0	16.05	0.084	30.49
12	Lynne Sand	120.5	16.05	0.144	52.50
13	Lynne Sand	100.3	16.05	0.120	43.73
14	Lynne Sand	86.5	16.05	0.103	37.68
15	Electra Sand	117.5	19.11	0.167	60.96
	<i>Subtotal</i>	<i>1620.4</i>		<i>1.990</i>	<i>726.17</i>
<b>EAST TRACT</b>					
E-1	Eaton loamy sand	93.1	10.46	0.072	26.45
E-2	Lynne Sand	117.3	10.01	0.087	31.89
W-1	Eaton loamy sand	20.5	10.46	0.016	5.82
W-2	Eaton loamy sand	157.1	10.46	0.122	44.63
W-3	Lynne Sand	130.7	10.01	0.097	35.54
W-4	Lynne Sand	92.3	10.01	0.069	25.10
	<i>Subtotal</i>	<i>611.0</i>		<i>0.464</i>	<i>169.44</i>
	<b><i>Project Total</i></b>	<b><i>2231.4</i></b>		<b><i>2.454</i></b>	<b><i>895.61</i></b>

\*GIR- Gross Irrigation Requirement

For the irrigated areas, the applicant has requested 0.5 mgd (0.001 mgd) of groundwater for chemical mixing for the application of herbicides and pesticides. This

request is for a total of 212 gallons per acre per year, based on four applications per year.

The applicant has requested 33.2 mgy (0.090 mgd) of groundwater to water up to 7,578 head of cattle. The requested volume is based on an average of 12 gallons per day per cow, as recommended in the District's CUP Applicant's Handbook.

Based on the submitted GWRAPPS model runs and the proposed irrigation method, staff has concluded that the irrigation demand is an economic and efficient use of the resource. Also, based on typical farming practices and the requested allocation for livestock watering, staff have concluded the requested chemical mixing and livestock watering demand is an economic and efficient use of the resource. In the litigation of the Sequence 3 Permit (DOAH Case Nos. 14-2608, 14-2609 and 14-2610), the ALJ concluded that Sleepy Creek Lands, LLC, provided reasonable assurance that these agricultural uses were in an amount necessary for economic and efficient utilization. In its final order issuing the Sequence 3 permit, the District's Governing Board upheld the ALJ's determination..

In this modification, the applicant has requested 51.1 mgy (0.14 mgd) of groundwater for industrial use at the North Tract Facility. The North Tract Facility is a cattle harvesting facility located within the North Tract property. The cattle harvesting facility also includes a commissary for final food product production and a proposed pet food facility for the production of animal feed. Upon completion, the project is projected to have 158 employees. The applicant has provided extensive information concerning different types of water using processes and the estimated water consumption for each process. This facility operates under the oversight of the United States Department of Agriculture (USDA) Food Safety and Inspection Services (FSIS). Therefore, many of the water use requirements are based on USDA/FSIS requirements for these types of facilities.

Based on industry standards and water use information submitted for the boiler feed, equipment cooling, product content, product washing, refrigeration, sanitation, domestic and landscaping water needs, staff have concluded the requested allocation for the Beef Harvesting, Commissary and Pet Food Facility (i.e. the North Tract Facility) is an economic and efficient use of the resource.

The total water demand for irrigation, chemical mixing, livestock watering and industrial uses is summarized in the table below (Table 2).

<b>Total Water Demand</b>		
<b>Water Demand Type/Site</b>	<b>Average Demand</b>	
<b>Irrigation Water Demand</b>	<b>mgd</b>	<b>mgd</b>
North Tract (1620.4 acres)	1.990	726.2
East Tract (611 acres)	0.464	169.4

Subtotal	(2231.4 acres)	2.454	895.6
<b>Chemical Mixing Water Demand</b>			
North Tract	(1620.4 acres)	0.001	0.3
East Tract	(611 acres)	0.0004	0.2
Subtotal	(2231.4 acres)	0.001	0.5
<b>Livestock Water Demand</b>			
North Tract	(6371 cows)	0.076	27.9
East Tract	(1207 cows)	0.014	5.3
Subtotal	(7578 cows)	0.090	33.2
<b>Facility Water Demand</b>			
Industrial		0.14	51.1
<b>Total Water Demand per Tract</b>			
North Tract – Industrial		0.14	51.1
North Tract - Agricultural		2.067	754.4
East Tract - Agricultural		0.478	174.9
<b>Grand Total</b>		<b>2.68</b>	<b>978.2</b>

### Water Conservation

For industrial and agricultural uses respectively, sections 2.2.3.2 and 2.2.5.5, A.H. provide that applicants must submit a water conservation plan for their operations at the time of permit application. The applicant submitted a water conservation plan for agricultural uses as part of the Sequence 3 Permit. The plan includes the commitment by the applicant to implement numerous water conservation measures. The measures include proposed installation of a very high efficiency automatically operated computerized irrigation system, periodic water audits, rainfall shutoff sensors, use of an on-site weather station, use of a professional water conservation consultant, daily maintenance inspections and other measures. In the litigation of the Sequence 3 Permit (DOAH Case Nos. 14-2608, 14-2609 and 14-2610), the ALJ concluded that Sleepy Creek Lands, LLC, provided reasonable assurance that it had implemented all conservation measures economically, technically and environmentally feasible for the agricultural uses. In its final order issuing the Sequence 3 Permit, the District's Governing Board upheld the ALJ's determination.

As part of the submittal to modify the application to include the industrial uses on site, the applicant submitted a supplemental water conservation plan for industrial uses at the North Tract facility. The plan includes timeframes for the applicant to conduct a water audit, an element concerning future programmatic improvements and employee awareness and consumer education programs. The North Tract Facility has been developed using state of the art equipment and water use processes for meat processing. The amount of water used in these processes is largely dictated by USDA guidelines and sanitary requirements.

Based on review of the plans, staff conclude that the proposed water conservation activities meet the District's water conservation plan requirements.

**Section 2.3(c) - The water source must be suitable for the consumptive use.**

The UFA is a suitable source for the proposed agricultural and industrial uses; however, lower quality sources were evaluated as required by rule and are discussed in Section 2.3(e) below.

**Section 2.3(d) - The source of the water must be capable of producing the requested amounts of water.**

The applicant is proposing to withdraw up to 2.68 mgd annual average and up to 9.57 mgd as a maximum day withdrawal from the UFA. The groundwater model was utilized along with information obtained from the on-site APTs to evaluate whether the UFA is capable of supplying the requested quantities of water. Based on the groundwater modeling simulations and the APTs, the Floridan aquifer at this property is capable of producing large quantities of groundwater from wells installed into the UFA. Therefore, District staff conclude that the UFA at this site is fully capable of producing the requested quantities of groundwater.

**Section 2.3(e) - Except when the use is for human food preparation or direct human consumption, the lowest acceptable quality water source must be utilized that is suitable for the purpose and is technically, economically, and environmentally feasible.**

Section 2.3(e) provides that reclaimed water must be used in place of higher quality groundwater when readily available unless the applicant demonstrates its use is economically, environmentally, or technologically infeasible. The applicant performed a detailed analysis on whether the use of reclaimed water is feasible. The nearest source of reclaimed water is the City of Ocala, which is approximately 14 miles away. In order to utilize this source of reclaimed water, the applicant and/or utility provider would have to construct significant transmission lines to convey the reclaimed water to the site. The use of the reclaimed water would require the applicant to construct a large transmission system, storage ponds and surface water pumping stations on-site. Finally, the City of Ocala is currently developing a large-scale reclaimed water recharge project of its own; therefore, reclaimed water is less available now than it was in 2014 when this issue was first evaluated for this project. Due to the fact that reclaimed water availability has decreased and is still variable over the course of the year, the applicant would still need to construct wells in order to have groundwater to ensure an adequate water supply.

The applicant analyzed the costs associated with reclaimed water utilization and demonstrated that the costs rendered the use of reclaimed water economically infeasible. In addition, staff conclude that reclaimed water is not readily available due to

the significant distance of the sources from the site and because the City of Ocala is developing a recharge project of its own which would utilize its reclaimed water.

The applicant also performed a detailed analysis on whether the use of other lower quality water sources is feasible. In addition to the use of reclaimed water (discussed above), the applicant evaluated whether surface water or captured storm water could be utilized to meet the water needs of this project. Specifically, the applicant evaluated whether the use of surface water from the Ocklawaha River and from on-site captured storm water was available and feasible.

As with reclaimed water, in order to utilize surface water sources, the applicant and/or utility providers would have to construct significant transmission lines plus pumping stations to withdraw and convey the surface water to the site. In addition, use of the lower quality water sources would require the applicant to construct the following on-site: a large transmission system, storage ponds and surface water pumping stations. Finally, since the surface water would be an unreliable source and may not be able to supply the water needs during dry periods, the applicant would still need to construct wells in order to use groundwater as a reliable supplemental source.

The applicant analyzed the costs associated with all the above and demonstrated that the costs rendered the use of lower quality water sources economically infeasible. Specifically, the applicant looked at the costs associated with the various uses of lower quality source options and then analyzed how the costs would impact their earnings with respect to the marketplace for a similar product. The analyses show that implementing any of the lower quality source options would add significant costs, risks and uncertainty to the project and would create a price differential for the product resulting in an unfair economic burden that will likely make them uncompetitive with similar grass-fed operators. In addition, the applicant states that the additional costs would significantly reduce the grass-fed beef product premium sought by the applicant which is the basis for desiring to raise grass-fed beef over conventional beef (47% reduction). Based on the analyses submitted, staff conclude that the use of lower quality sources of water is not economically feasible to implement at this time.

#### **Section 2.3(f) - The use must not cause harm to existing off-site land uses resulting from hydrologic alterations.**

Staff evaluated whether the proposed use will cause harm to existing off-site land uses resulting from hydrologic alterations. As part of this evaluation, staff evaluated whether the proposed use will cause or contribute to off-site flooding. The proposed use of water is primarily for irrigation of pasture and crops on a supplemental basis when rainfall is insufficient to meet plant needs. As such, the applicant will only be irrigating during dry periods. Also, irrigation will occur in a very efficient manner and is designed to provide the amount of water needed by pasture and crops. The applicant will not be over-irrigating or irrigating during wet periods. As such, any water that is used for irrigation will remain on site.

**(g) The use must not cause harm to the water resources of the area in any of the following ways:**

**1. The use must not cause harmful water quality impacts to the water source resulting from the withdrawal or diversion.**

The applicant evaluated whether the proposed withdrawals would seriously harm the water quality of the source. Specifically, the applicant evaluated the potential for groundwater contamination due to the movement or migration of contaminated groundwater within the Floridan aquifer into the source water of the regional aquifer system. The applicant conducted a record search (Phase 1 Environmental Survey - Type) to identify any existing contaminated sites within a 2-mile distance around the perimeter of the property boundaries. The applicant performed a review of identified and reported properties included in the following databases:

NPL  
CERCLIS  
NFRAP  
RCRA COR ACT  
RCRA TSD  
RCRA GEN  
State & Federal Brownfields  
ERNS  
State Spills 90  
SWL  
LUST  
UST & AST  
Federal IC/EC  
Dry Cleaners

The results of the record search revealed that there are no known contaminated sites within 2 miles around the perimeter of the project site. Based on this analysis, staff conclude that the proposed groundwater withdrawal will have no potential impact on the movement or migration of contaminated groundwater in the region.

**2. The use must not cause harmful water quality impacts from dewatering discharge to receiving waters.**

No dewatering discharges are proposed with this use.

**3. The use must not cause harmful saline water intrusion or harmful upconing.**

Staff evaluated whether the proposed use of groundwater from the UFA would cause or contribute to significant saline water intrusion. Because the project is located in North Central Florida on the eastern edge of the Ocala Uplift and is a significant distance from

the coast, the fresh water portion of the Floridan aquifer is very thick and there are no known sources of saline water nearby.

Fresh water (water with chloride concentrations less than 250 mg/L) underlies the project site to depths of 1,700 feet below NGVD. Review of available groundwater quality information indicates that chloride concentrations in the area have been reasonably stable for many years. No problems concerning the salinity of water in the Floridan aquifer in this area are currently known to exist. Groundwater modeling indicates that the potentiometric surface decline will be very small, and staff conclude that the proposed consumptive use will not cause or contribute to significant saline water intrusion.

**4. The use must not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters (on site or off-site).**

and

**5. The use must not otherwise cause harmful hydrologic alterations to the water resources of the area.**

#### **Wetlands**

Staff evaluated whether the proposed withdrawals would cause harm to the water resources of the area including harm to wetlands and other surface waters. District staff utilized the NDMv5 model to evaluate the potential drawdown within the surficial aquifer within the project vicinity. Using the applicant's full requested allocation of 2.68 million gallons per day (mgd), for pumps on/off, the model predicted an individual drawdown of less than 0.4 foot. Using all other water users plus the applicant's full requested allocation of 2.68 mgd, the model predicted a cumulative drawdown of less than 0.6 foot in the surficial aquifer.

Staff inspected wetlands and other surface waters located within the area of predicted drawdown. In addition to field evaluations, staff reviewed aerial photography, soils, topography, vegetation and groundwater flow model results to determine if harm to these areas from groundwater withdrawals has occurred. Based on the hydrologic indicators observed at these locations, water levels appeared to be within the normal range of fluctuation.

Based on the results of the groundwater flow modeling simulations, field observations, and data review, District Staff does not anticipate adverse impacts to wetlands. However, the applicant will implement a wetland and other surface water monitoring plan to enable the District to verify that the applicant's water use is not causing adverse impacts or harmful hydrologic alterations to the water resources of the area. This monitoring plan includes the establishment of two wetland monitoring sites and one Upper Floridan aquifer monitoring site in those areas where the model predicts an

increased risk for impacts from groundwater withdrawals. Groundwater level monitoring must be initiated by June 30, 2017, at the new monitoring locations.

## **Springs**

There are 115 springs identified as existing in the NDMv5 model area. Based on the modeling simulations conducted for this permit application, District staff does not anticipate harmful hydrologic impacts to these springs. Silver Springs is discussed below.

Staff performed additional evaluations on four small springs that occur in close proximity to the project site (Orange, Camp Seminole, Wells Landing and Tobacco Patch Landing). All of these springs have significantly altered spring pools or runs due to human construction and activity.

**Orange Spring:** This third-magnitude spring was historically touted for its therapeutic properties and was a tourist destination at one time. The spring is enclosed by a kidney shaped pool that allows the spring to stage up and then discharge over a constructed limestone wall and into the spring run. Currently, a water bottling facility (Premium Waters Inc., CUP no. 20-083-3138-3) is situated adjacent to the spring and withdraws water from the spring for small batch boutique bottling operation.

**Camp Seminole Spring:** This fourth-magnitude spring is enclosed by a heart shaped pool and wall. Historically developed as a honeymoon resort in the 1970's, it is currently used as a Girl Scout swimming area. A manual weir system allows water levels to be manipulated in order to fill or drain the swimming area as needed.

**Wells Landing Spring:** This third magnitude spring belongs to a group of springs called Cannon Springs Group. The springs were inundated by Rodman Reservoir after the construction of the Eureka Dam on the Ocklawaha River.

**Tobacco Patch Landing Spring:** This third magnitude spring is also inundated by Rodman Reservoir and is normally submerged under 4 to 5 feet of water.

Using the groundwater flow model, potential cumulative spring discharge changes were assessed from a predevelopment condition. The cumulative impacts modeling scenario predict the following reductions in flow: Wells Landing Spring 0.27 cfs; Tobacco Patch Landing Spring 0.11 cfs; Orange Spring 0.05 cfs; and Camp Seminole 0.05 cfs. The applicant's individual contribution to the overall cumulative reduction to spring flow at these springs was also assessed. Those results predict the following reductions in flow based on only the applicant's proposed withdrawals: Wells Landing Spring 0.12 cfs; Tobacco Patch Landing Spring 0.05 cfs; Orange Spring <0.01 cfs; and Camp Seminole <0.01 cfs. Based on this evaluation, staff conclude that reasonable assurance has been provided that there will not be harmful hydrologic impacts to these springs.

## Silver Springs

At this time, there are no established Minimum Flows and Levels (MFLs) for Silver Springs or the Silver River. However, multi-year investigations by District staff are on-going to develop MFLs for Silver Springs and the Silver River. These minimum flows and levels would be the limits at which further withdrawals would be significantly harmful to the water resources or the ecology of the area.

In order to assess potential impacts to Silver Springs and the Silver River, staff utilized a technical memorandum entitled "Evaluation of the Effects of a Series of Hypothetical Flow Reductions in the Silver River on Hydroenvironmental Characteristics" which incorporated environmental, hydrological and topographical data from the on-going MFLs investigations on Silver Springs and the Silver River. Potential flow reductions from groundwater pumping of 5%, 10%, and 15% (from a no-pumping condition) on local hydroenvironmental characteristics of the Silver River were evaluated to determine the potential for harm to this system. For all of the environmental characteristics evaluated, a 5% reduction in flow was considered protective. For some environmental characteristics, flow reductions of 10% or greater were not considered protective. This increased risk of harm could potentially have an adverse impact on ecological structure and important ecological functions associated with floodplains. Examples of potential adverse impacts to these important ecological functions include:

- Decreased floodplain inundation resulting in oxidation and subsidence of floodplain organic soils, which support healthy wetland ecosystems;
- Reduction in aquatic and wetland habitat (refugia, reproductive and forage) leading to a decrease in secondary production (fish, reptiles, amphibians, wading birds, etc.);
- Reduction in transport of inorganic sediment and organic matter (which is the base of microbial foodweb and secondary production), due to reduced frequency of physical contact of water with riparian or floodplain vegetation, soils and detritus;
- Reduction in filtration and the absorption of nutrients.

In order to provide reasonable assurances that the proposed withdrawals would not cause harmful hydrologic impacts to Silver Springs and the Silver River, District staff used the low end of the increased risk range (5%) in its analysis. To predict when the reduction in flow at Silver Springs and the Silver River would exceed 5%, District staff linearly interpolated results from two groundwater model runs. A model run was completed using the 2014 actual water use data and a model run was done with current permitted allocations. In the current permitted allocations model run it was assumed that the year 2035 represented the time when pumping at the full permitted quantities would occur. This is consistent with the fact that most of the permits are issued for a duration of 20 years. For the year 2014 (using actual water use data), a 2.5% reduction in flow due to groundwater pumping is predicted. For the current permitted allocation run estimated to be year 2035, a 7.4% reduction in flow is predicted to occur. Linearly

interpolating between these two years results in a predicted exceedance of the 5% reduction in flow in the year 2024.

Therefore, District staff conclude that the applicant has provided reasonable assurance that the proposed increase in the use of water will not contribute to or exacerbate cumulative harm to the ecological structure and functions of Silver Springs and the Silver River through 2023. Based on a consideration of the Special Duration Factors in Section 1.5.3, A.H., District staff is recommending approval of the increased allocation (2.68 mgd) for the years 2017 through 2023 and then a reduction to the current allocation of 1.46 mgd for the years 2024 through 2034. In the event that projects are later proposed for implementation to avoid the potential for adverse impacts, the applicant may request a permit modification to re-evaluate the recommended duration of the increased allocation.

**Section 2.3(h) - The consumptive use shall not cause or contribute to a violation of state water quality standards in receiving waters of the state, as set forth in chapters 62-3, 62-4, 62-302, 62-520, and 62-550, F.A.C., including any anti-degradation provisions of sections 62-4.242(1)(a) and (b), 62-4.242(2) and (3), and 62-302.300, F.A.C., and any special standards for Outstanding National Resource Waters set forth in sections 62-4.242(2) and (3), F.A.C. The criterion is considered to have been met for any use of water that is required to obtain a permit or certification under Chapter 403, Florida Statutes, or a permit under Part IV of Chapter 373, Florida Statutes. For those applications relying on the issuance of a permit under Part IV of Chapter 373 to meet this criterion, a special permit condition will be attached that prohibits the consumptive use until such other permit is issued and the system is constructed.**

While the applicant's agricultural activities on the North Tract (converting forested uplands to improved pasture) are statutorily exempt from the need to obtain an environmental resource permit (ERP), the applicant applied for and the District issued an ERP (No. IND-083-130588-4). The activities approved by the ERP provide additional water quality treatment through the establishment of vegetated upland buffers, retention berms, redistribution swales, and the implementation of other conservation practices in the North Tract. The applicant also indicated that it will implement applicable Department of Agriculture and Consumer Services (DACS) best management practices (BMPs) on the East Tract to prevent water quality impacts there. The implementation of the proposed BMPs provides reasonable assurance that there will not be a water quality impact from the East Tract. In the litigation of the Sequence 3 Permit (DOAH Case Nos. 14-2608, 14-2609 and 14-2610), the ALJ concluded that Sleepy Creek Lands, LLC, provided reasonable assurance that the consumptive use will not cause or contribute to a violation of state water quality standards in receiving waters of the state. In its final order issuing the Sequence 3 Permit, the District's Governing Board upheld the ALJ's determination.

The North Tract Facility has a valid Industrial Wastewater Facility Permit (42-FLA770221) that was issued by the Florida Department of Environmental Protection.

This permit authorizes the operation of the industrial wastewater treatment and disposal system that serves the beef processing, commissary and pet food facilities. This permit provides reasonable assurance that potential water quality impacts related to the industrial facility have been addressed.

**Section 2.3(i) - The use must be in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.**

**Minimum Levels**

Staff evaluated whether issuance of the permit will cause the water level in groundwater or surface water bodies to be lowered below a minimum level established by rule. Eighty-seven surface water bodies (72 lakes, 5 springs, 3 wetlands, and portions of 2 rivers and 1 creek), with minimum levels specified in subsection 40C-8.031(4), F.A.C., are present within the NDMv5 model domain. In order to evaluate the potential for causing the lake levels to be altered below the established minimums, District staff used groundwater modeling results to assess the potential effects of the proposed withdrawals on the potentiometric surface of the UFA beneath lakes with established minimum levels within the model domain. Those results indicate that the proposed withdrawal will not cause a significant reduction in UFA potentiometric levels below these lakes. Staff conclude that reasonable assurances have been provided that the proposed withdrawals will not cause a water level to fall below its established minimum level.

**Minimum Flows**

Staff evaluated whether issuance of the permit will cause the rate of flow of springs and surface watercourses to be lowered below an established minimum flow. In order to evaluate the potential for spring flow alterations, District staff used groundwater modeling results to assess the potential effects of the proposed groundwater withdrawals on the established minimum flows. Model results predict no reduction in spring flows. Staff conclude that reasonable assurances have been provided that the proposed use of water will not adversely affect minimum flows for springs located within the NDMv5 model domain.

**Section 2.3(j) - The use must not use water reserved pursuant to Subsection 373.223(4), F.S.**

The Governing Board has reserved from use a certain portion of the surface water flow through Prairie Creek and Camps Canal south of Newnans Lake in Alachua County, Florida (Rule 40C-2.302, F.A.C., August 18, 1994). District staff used groundwater modeling results to assess the potential effects of the proposed withdrawals on SAS and UFA water levels in the area of Prairie Creek and Camps Canal. Model results predict no significant reduction in SAS and UFA water levels in the area of interest. Staff conclude that reasonable assurances have been provided that the proposed use of

water will not impact surface water flow through Prairie Creek and Camps Canal which has been reserved from use by rule pursuant to rule 40C-2.302, F.A.C.

**INTERFERENCE WITH Presently EXISTING LEGAL USES [Sections 1.3.7.2 and 3.6, a.h.]**

As part of its evaluation to address potential interference with existing legal uses, District staff researched whether there are any existing wells near the project. Because there were so few wells near the project, District staff evaluated this criterion by performing an evaluation using a hypothetical well located at the property boundary. The evaluation included the following conservative assumptions:

1. A small domestic well located within 100 feet of the project boundary (areas of highest potential drawdown), installed either in the shallow aquifer or the Upper Floridan aquifer.
2. A centrifugal pump is used to pump the water from the shallow aquifer well with lift capacity of 25 feet.
3. A small submersible pump is used to pump water from the Upper Floridan aquifer well.
4. The minimum total hydraulic head for the submersible pump (including head loss in pipes and pressure at the house) is 60 psi or 135 feet.
5. A maximum withdrawal at 9.57 mgd was considered in the evaluation.

The various analyses performed indicate that the drawdown in the SAS and in the UFA at the edge of the property will not interfere with the hypothetical use described above. As such, staff concludes that the proposed groundwater withdrawals will have no adverse impacts on legal water uses.

**PUBLIC INTEREST [Sections 1.3.7.3 and 2.3(b), A.H.]:**

Staff evaluated whether the requested consumptive use of water is consistent with the public interest. Staff conclude that the requested increase in allocation of 1.26 mgd of groundwater is consistent with the public interest through 2023 because the proposed use of water is for a cattle farm/operation designed to raise grass-fed beef and is a registered business within the state of Florida. In addition, the use will not adversely affect water resources, qualifies as a reasonable-beneficial use based on the factors listed in 40C-2.301(2), (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), F.A.C..

*On separate page*

# ATTACHMENT A

## Well Information

**Site Name:** Sleepy Creek Lands North and East Tracts

Wells Detail								
District ID	Station Name	Casing Diameter (inches)	Casing Depth (feet)	Total Depth (feet)	Capacity (GPM)	Source Name	Status	Use Type
10819	ET-1	6	171	320	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
10820	ET-2	12	175	425	1000	FAS - Upper Floridan Aquifer	Active	unknown
35878	A	12	354	415	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
39777	ET-3	4	Unknown	390	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
39874	ET-4	4	144	210	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
39875	ET-5	4	144	210	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
39876	ET-6	4	155	270	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
39877	ET-7	12	Unknown	270	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
411770	NT-1	12	Unknown	Unknown	1000	FAS -	Proposed	unknown

						Upper Floridan Aquifer		
411771	NT-2	12	Unknown	425	Unknown	FAS - Upper Floridan Aquifer	Proposed	unknown
411772	NT-3	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411773	NT-4	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411774	NT-5/10	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411775	NT-6	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411776	NT-7	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411777	NT-8	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411778	NT-9	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Active	unknown
411779	NT-10	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Removed	unknown
411780	NT-11	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411781	NT-12	12	Unknown	Unknown	1000	FAS -	Proposed	unknown

						Upper Floridan Aquifer		
411782	NT-13	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411783	NT-14	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411784	NT-15	12	Unknown	Unknown	1000	FAS - Upper Floridan Aquifer	Proposed	unknown
411804	NT-35	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Active	unknown
411805	NT-36	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Proposed	unknown
411806	NT-37	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Active	unknown
411807	NT-38	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Proposed	unknown
411808	NT-39	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Proposed	unknown
411809	NT-40	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Active	unknown
411810	NT-41	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Active	unknown
411811	NT-42	5	Unknown	Unknown	100	FAS -	Active	unknown

						Upper Floridan Aquifer		
411812	NT-43	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Proposed	unknown
411813	NT-44	5	Unknown	Unknown	100	FAS - Upper Floridan Aquifer	Active	unknown
460649	Beef Plant 1	5	121	225	Unknown	FAS - Upper Floridan Aquifer	Active	unknown
460650	Beef Plant 2	5	Unknown	Unknown	Unknown	FAS - Upper Floridan Aquifer	Active	unknown

Monitoring Wells Detail						
District ID	Station Name	Casing Diameter (inches)	Casing Depth (feet)	Total Depth (feet)	Source Name	Status
461070	MW-1			15	Surficial Aquifer	Proposed
461071	MW-2			15	Surficial Aquifer	Proposed
461072	MW-3	4	100	340	FAS - Upper Floridan Aquifer	Proposed

### Conditions

1. All submittals made to demonstrate compliance with this permit must include CUP number 91926-4 labeled on the submittal. Submittals should be made on-line at [www.sjrwmd.com/permitting](http://www.sjrwmd.com/permitting) whenever possible.
2. With advance notice to the permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit

conditions and permitted plans and specifications. The permittee shall either accompany District staff onto the property or make provision for access onto the property.

3. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Chapter 373, F.S. In the event of a declared water shortage, the permittee must adhere to the water shortage restrictions, as specified by the District. The permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order.
4. Prior to the construction, modification or abandonment of a well, the permittee must obtain a water well permit from the St. Johns River Water Management District or the appropriate local government pursuant to Chapter 40C-3, F.A.C. Construction, modification, or abandonment of a well will require modification of the consumptive use permit when such construction, modification, or abandonment is other than that specified and described on the consumptive use permit application form.
5. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational.
6. The permittee's consumptive use of water as authorized by this permit shall not interfere with legal uses of water existing at the time of permit application. If interference occurs, the District shall revoke the permit, in whole or in part, to curtail or abate the interference, unless the interference associated with the permittee's consumptive use of water is mitigated by the permittee pursuant to a District-approved plan.
7. The permittee's consumptive use of water as authorized by this permit shall not have significant adverse hydrologic impacts to off-site land uses existing at the time of permit application. If significant adverse hydrologic impacts occur, the District shall revoke the permit, in whole or in part, to curtail or abate the adverse impacts, unless the impacts associated with the permittee's consumptive use of water are mitigated by the permittee pursuant to a District-approved plan.
8. The permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and/or related facilities from which the permitted consumptive use is made. Where permittee's control of the land subject to the permit was demonstrated through a lease, the permittee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system/project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40C-1.612, F.A.C. Alternatively, the permittee may surrender the consumptive use permit to the District, thereby relinquishing the right to conduct any activities under the permit.

9. A District-issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Rule 40C-2.401, F.A.C. The permittee shall notify the District in the event that a replacement tag is needed.
10. The permittee's consumptive use of water as authorized by this permit shall not adversely impact wetlands, lakes, rivers, or springs. If adverse impacts occur, the District shall revoke the permit, in whole or in part, to curtail or abate the adverse impacts, unless the impacts associated with the permittee's consumptive use of water are mitigated by the permittee pursuant to a District-approved plan.
11. The permittee's consumptive use of water as authorized by this permit shall not reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to Section 373.042 and 373.0421, F.S. If the permittee's use of water causes or contributes to such a reduction, then the District shall revoke the permit, in whole or in part, unless the permittee implements all provisions applicable to the permittee's use in a District-approved recovery or prevention strategy.
12. The permittee's consumptive use of water as authorized by the permit shall not cause or contribute to significant saline water intrusion. If significant saline water intrusion occurs, the District shall revoke the permit, in whole or in part, to curtail or abate the saline water intrusion, unless the saline water intrusion associated with the permittee's consumptive use of water is mitigated by the permittee pursuant to a District-approved plan.
13. The permittee's consumptive use of water as authorized by the permit shall not cause or contribute to flood damage. If the permittee's consumptive use causes or contributes to flood damage, the District shall revoke the permit, in whole or in part, to curtail or abate the flood damage, unless the flood damage associated with the permittee's consumptive use of water is mitigated by the permittee pursuant to a District-approved plan.
14. All consumptive uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to Section 373.136 or 373.243, F.S., unless a permit modification has been obtained to address the noncompliance. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.
15. This permit does not convey to the permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

16. A permittee may seek modification of any term of an unexpired permit. The permittee is advised that Section 373.239, F.S., and Rule 40C-2.331, F.A.C., are applicable to permit modifications.
17. This permit will expire on June 10, 2034.
18. Maximum annual groundwater withdrawals on both the North and East Tracts for all uses combined must not exceed:
- o 668.0 million gallons (1.83 million gallons per day average) in 2017,
  - o 978.2 million gallons (2.68 million gallons per day average) in years 2018 through 2023 and
  - o 532.9 million gallons (1.46 million gallons per day average) in years 2024 through 2034.
  - o The application rates (inches of supplemental irrigation/pivot) as provided in Table 1 of the Technical Staff Report are needed to meet crop demands for a 2 in 10 year drought event, lesser quantities shall be utilized in years with more rainfall.
19. Except as provided for in 2 in 10 year drought allocation condition, the groundwater withdrawals, on an annual average basis (5 in 10), from the Floridan aquifer for pasture irrigation and cattle watering shall not exceed:
- o 694.6 million gallons (1.90 million gallons per day average) in the years 2018 through 2023
  - o 362.8 million gallons (0.99 million gallons per day average) in the years 2024 through 2034.
20. Maximum annual groundwater withdrawals for the beef processing facility must not exceed:
- o 25.6 million gallons (0.07 million gallons per day average) in 2017, and
  - o 51.1 million gallons (0.14 million gallons per day average) in years 2018 through 2034.
21. Maximum annual groundwater withdrawals on just the East Tract must not exceed 174.9 million gallons (0.478 million gallons per day average).
22. If any process wastewater is disposed of via an irrigation pivot, the groundwater allocation for irrigation shall be reduced by an equivalent amount.
23. Prior to use, wells NT-1, NT-2, NT-3, NT-4, NT-5/10, NT-6, NT-7, NT-8, NT-9, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A, Beef Plant 1, Beef Plant 2 (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878, 460649, 460650), must be equipped with totalizing flow meters. All

flowmeters must measure within +/- 5% of actual flow, be verifiable and be installed according to the manufacturer's specifications.

24. The permittee shall document proper installation of flow meters by submitting a copy of the manufacturer's specifications and photographs of the installed flow meters, or by a site visit by District staff, within 30 days of meter installation.
25. Total withdrawals from Wells NT-1, NT-2, NT-3, NT-4, NT-5/10, NT-6, NT-7, NT-8, NT-9, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A, Beef Plant 1, Beef Plant 2 (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878, 460649, 460650), must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using Form No. EN-50. The reporting dates each year will be as follows for the duration of the permit:
- | Reporting Period | Report Due Date |
|------------------|-----------------|
| January-June     | July 31         |
| July - December  | January 31      |
26. The permittee must maintain all meters. In case of failure or breakdown of any meter or other flow measuring device, the District must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.
27. The permittee must have all flow meters on wells NT-1, NT-2, NT-3, NT-4, NT-5/10, NT-6, NT-7, NT-8, NT-9, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A, Beef Plant 1, Beef Plant 2 (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878, 460649, 460650) checked for accuracy at least once every 10 years within 30 days of the anniversary date of permit issuance (7/14/2015), and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. District Form No. EN-51 must be submitted to the District within 10 days of the inspection/calibration.
28. The permittee must implement the Water Conservation Plans submitted to the District on April 23, 2014 and October 3, 2016 in accordance with the schedules contained therein.

29. The lowest quality water source, such as reclaimed water or surface/storm water, must be used as irrigation water when deemed feasible pursuant to District rules and applicable state law.
30. The permittee's consumptive use shall not adversely impact wetlands, lakes, and spring flows or contribute to a violation of minimum flows and levels adopted in Chapter 40C-8, F.A.C., except as authorized by a SJRWMD-approved minimum flow or level (MFL) recovery strategy. If unanticipated adverse impacts occur, the SJRWMD shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts are mitigated by the permittee pursuant to a District-approved plan.
31. Prior to withdrawing water to irrigate a pivot area that is used for cattle grazing on the North Tract, the permittee shall construct the stormwater management system (System) authorized by permit IND-083-130588-4 in accordance with the construction sequencing document contained therein. After construction of all or part of the System, the permittee shall operate and maintain the constructed System in accordance with permit IND-083-130588-4.
32. The permittee must implement the Nutrient Management Plan for the East Tract dated April 30, 2014, and received by the District on May 2, 2014, in accordance with the schedule contained therein.
33. The permittee must conduct monitoring of wetlands and/or surface waters for each of the proposed areas listed below, including monitoring surficial, intermediate and/or Floridan aquifer groundwater levels associated with each wetland and/or surface water monitoring site. Groundwater level monitoring must be initiated at all monitoring locations by June 30, 2017.
- New Monitoring Sites
- a) Monitoring Location 1 (29°26'08" N, 82°01'31" W)
  - b) Monitoring Location 2 (29°25'54" N, 82°01'29" W)
34. Groundwater level data associated with the wetland and/or surface water monitoring must be collected for each of the sites listed in the following table and submitted electronically every six months to the District. To meet this reporting requirement, the permittee may utilize the Water Level Data-Wetland Monitoring Template for the wetland monitoring site(s), and the Water Level Data-Groundwater Template, for the Floridan and/or intermediate aquifer monitoring site(s). These templates are available through the District's e-Permitting website. Alternative submittal formats must be approved by the District. Data collected January through June must be submitted on or before July 31<sup>st</sup> of each year. Data collected July through December must be submitted on or before January 31<sup>st</sup> of each year. Groundwater level monitoring must be initiated at all monitoring locations by June 30, 2017.

Data collection must include water levels (weekly without data loggers, daily with data loggers) from wetland surficial, intermediate and Floridan aquifer monitoring wells. Data must be reported as elevation relative to North American Vertical Datum (NAVD) of 1988.

**35. Wetland Monitoring Sites**

Station ID	Station (wetland/surface water) Name	Source	Location
461070	MW-1	Surficial Aquifer	(29°26'08" N, 82°01'28" W)
461071	MW-2	Surficial Aquifer	(29°25'56" N, 82°01'27" W)

**Groundwater Monitoring Sites**

Station ID	Station (wetland/surface water) Name	Source	Location
461072	MW-3	Upper Floridan Aquifer	(29°26'02" N, 82°01'28" W)

**36. Surficial aquifer monitoring wells for wetland monitoring site station ID numbers/station named**

Station ID 461070/MW-1 (29°26'08" N, 82°01'28" W),

Station ID 461071/MW-2 (29°25'56" N, 82°01'27" W),

must be located in uplands near the upland/wetland interface. The surficial aquifer monitoring well design and specific locations must be approved in writing by the District prior to well construction. Surficial aquifer monitoring well depths must be at least 15 feet below the seasonal high water elevation unless prohibited by subsurface geologic conditions. The monitoring wells must be installed by or under the supervision of a licensed water well contractor.

**37. Within 60 days of completion of each monitoring well installation, a Well Completion Report as well as a survey certified by a professional surveyor registered in the state of Florida shall be submitted for each monitoring well that includes:**

a) Horizontal position in latitude/longitude (degree minute second (DMS) coordinates) (YY°YY'YY.YYYY" N, XX°XX'XX.XXXX" W) relative to North American Datum (NAD) of 1983;

b) Top of casing (TOC) vertical elevation to an accuracy of +/- 0.01 foot relative to the North American Vertical Datum (NAVD) of 1988;

- c) Land surface elevation to an accuracy of +/- 0.01 foot relative to the North American Vertical Datum (NAVD) of 1988;
  - d) Top of screen depth (feet below land surface);
  - e) Bottom of screen depth (feet below land surface);
  - f) Depth to groundwater (feet below land surface);
  - g) Total depth of well (feet below land surface);
  - h) Mapped well location; and,
  - i) Lithologic description of subsurface soil profiles and underlying sediments.
38. By August 31, 2017, the permittee must submit to the District a detailed baseline monitoring report of the wetland hydrology and overall conditions, for Monitoring Location 1 (29°26'08" N, 82°01'31" W) and Monitoring Location 2 (29°25'54" N, 82°01'29" W), for the period from date of permit issuance to June 30, 2017. The baseline wetland monitoring report shall be submitted to the District. To meet this reporting requirement, the permittee may utilize the CUP Wetland Monitoring Template available through the District's e-Permitting website. If the CUP Wetland Monitoring Template is not available, the baseline report shall be submitted utilizing a District-approved electronic format.
39. The permittee must coordinate with District staff in order to establish and verify the following information:
- a) A survey, certified by a professional surveyor registered in the state of Florida, of location and elevation of limits of wetlands and/or surface waters as verified by District staff, pursuant to 62-340, Florida Administrative Code (F.A.C.) at multiple points (typically a minimum 3 points) around perimeter of the wetlands to be monitored.
  - b) Complete description of vegetation (including cover percentage for canopy, subcanopy, and groundcover species), hydrologic indicators and hydric soil indicators of each delineated point.
  - c) Complete soil profile description at each surface water/wetland delineated point (Reference: "Field Indicators of Hydric Soils in the United States"; USDA, NRCS).
  - d) Identification and delineation of the landward extent of where a hydric soil indicator occurs at the soil surface, if it is not at the wetland boundary point. A complete soil profile description shall be provided. Certified survey of location and elevation shall be submitted.
  - e) Identification and delineation landward extent of where a muck soil indicator (if present) occurs at the soil surface, if it is not at the wetland boundary point. A complete soil profile description shall be provided. Certified survey of location and elevation shall be submitted.
  - f) Identification of ordinary high water elevation (typically minimum of 3 data points) at each wetland boundary point. Certified survey of location and elevation for each data point shall be provided.
  - g) Photo documentation of items a. through f. above, including photographs of the surrounding area at each cardinal direction (e.g. north, east, south and west).

h) If the permittee elects to collect site-specific rainfall data, weekly rainfall data collected for monitoring period.

40. A hydrological and vegetative wetland/surface water monitoring report must be submitted to the District every five years subsequent to the baseline monitoring event. The five-year reports shall be submitted no later than August 31<sup>st</sup> of the submittal year and include the information, as described in the baseline monitoring report. The five-year reports shall be submitted to the District. To meet this reporting requirement, the permittee may utilize the CUP Wetland Monitoring Template through the District's e-Permitting website. If the CUP Wetland Monitoring Template is not available, the five-year reports must be submitted utilizing a District-approved format.
41. The five-year hydrological and vegetative wetland monitoring reports must include graphs summarizing the water level data, collected rainfall data (when collected by the permittee) and wellfield pumpage data. The elevation of the surveyed upland/wetland, hydric soil at surface and/or muck soil at surface boundary locations must be indicated on the graphs. In addition, the report must include a brief analysis and discussion of trends and wetland health as well as any observed changes occurring at the location of the boundary data points that are identified in the baseline monitoring report. A double mass analysis and/or a time series analysis of rainfall, well levels, and elevations of data collection points must be included for each well and monitoring location.
42. By September 30, 2022, the permittee must meet with District staff to confirm the approach and specifics of the wetland monitoring plan for the next five-year period. By February 28, 2023, the permittee must provide any proposed changes to the wetland/surface water monitoring plan to the District for review and written approval.
43. Any re-evaluation of the wetland/surface water monitoring plan shall be completed using the most recently collected wetland, surface water and groundwater data for comparative purposes. A District-approved model to re-evaluate impacts of predicted drawdown within the surficial aquifer in the area of the wellfield to substantiate the need for any modifications of the monitoring plan may be required as part of any re-evaluation of the wetland/surface water monitoring plan.
44. If the permittee is unable to obtain or maintain legal access to any of the monitoring sites referenced above, the permittee must notify the District in writing within 15 days of concluding that access to any specific site is not possible. Within 45 days of this notification, the permittee must submit an alternative site to modify the monitoring network. Within six months of District approval of the monitoring network modification, the permittee must implement the approved change(s).

45. The permittee shall submit to the District a compliance report pursuant to subsection 373.236(4), Florida Statutes. Specifically, the compliance report shall be submitted by June 10, 2024. The report shall contain sufficient information to demonstrate that the permittee's use of water will continue to meet the conditions for issuance set forth in the District's rules that existed at the time the permit was issued for 20 years by the District. At a minimum, the compliance report must:

(a) Meet the submittal requirements of section 4.2 of the Applicant's Handbook: Consumptive Uses of Water, November 3, 2015;

(b) Verify that the permittee is using all available lowest quality sources of water to supply the needs of the project; and

(c) Demonstrate that the allocation is needed for efficient water use.

46. The permittee shall participate in developing and implementing any minimum flow or level (MFL) prevention/recovery strategy approved for the Silver Springs and the Silver River. The permittee's participation in developing and implementing an approved MFL prevention/recovery strategy shall be limited to offsetting or mitigating the impact of the permittee's groundwater allocation and shall not extend to offsetting or mitigating the impact of other water users. Such a prevention/recovery strategy may include without limitation any of the following actions or combinations of them:

a) Identifying and developing additional water supplies and other actions, consistent with the authority granted under chapter 373;

b) Promulgation of a rule or orders setting forth phasing or a time table, which will allow for the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures concurrent with, to the extent practical, and to offset, reductions in permitted withdrawals, consistent with the provisions of chapter 373;

c) Actions taken by the District or water users to meet the MFLs established in rule chapter 40C- 8;

d) Elimination or reduction of permitted water uses; or

e) An impact avoidance/mitigation plan approved by the District, which offsets or mitigates the impact of the permittee's groundwater allocation on Silver Springs and the Silver River.

The District shall revoke the permit in whole or in part, if the permittee fails to implement its portion of any approved prevention/recovery strategy for these waterbodies in accordance with the schedule included in the strategy, as required by this condition.

## **Addendum to Technical Staff Report**

**Section 2.3(i) - The use must be in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.**

### **Silver Springs MFL Emergency Rule Assessment**

The total proposed allocation of 2.68 MGD was assessed for compliance with the Draft Silver Springs Emergency MFL Rule and Prevention Strategy. The results of the technical memorandum titled Evaluation of the Effects of a Series of Hypothetical Flow Reductions in the Silver River on the Hydroenvironmental Characteristics ("Technical Memorandum") was used to determine a threshold of an allowable flow reduction. To provide reasonable assurances that the proposed withdrawal would not cause harmful hydrologic impacts to Silver Springs and the Silver River, District staff used the low end of the increased risk range of 5%. The available freeboard in 2010 using the 5% reduction from the Technical Memorandum is 12 cfs. This is less than the available freeboard associated with the Draft MFL Emergency rule, which is 17 cfs in 2010. The baseline year of 2010 was selected to correlate with the most current regional groundwater model output. It should be noted that pumping during more recent years has been less than the amount pumped in 2010.

Moreover, the requested additional quantity of 1.22 MGD is proposed to expire on December 31, 2023. Because this permit will not be in existence as of the effective date of the rule, the permittee will be treated like a new permit under the District's Supplemental Rules for Silver Springs. At renewal, the permittee must eliminate or offset its potential impacts to Silver Springs associated with the 1.22 MGD. If approved, Rule 3.3.3.6.3, A.H., will provide: "In addition to meeting the conditions for issuance, applications that request the use of groundwater from the Upper Floridan aquifer for a duration beyond 2024 shall provide reasonable assurance of elimination or offset of potential impacts to the Silver Springs MFLs for the requested allocation." The other supplemental rule applicable to this permittee is draft Rule 3.3.3.9. This rule provides as follows:

The reasonable need for an agricultural, recreational, or landscape irrigation use is based on the amount of water needed to supply the supplemental irrigation requirements of the type of crop, turf or landscape grown. In determining reasonable need, the District will determine the supplemental irrigation requirements for both drought and average annual conditions. Drought allocation will be considered the amount of supplemental irrigation required during a two in ten-year rainfall condition. Average annual allocation will be considered the amount of supplemental irrigation required during a 5 in 10 rainfall condition. This quantity does not include crop protection.

The permit has been conditioned with both a drought allocation and average annual allocation. Therefore, it has been determined that the proposed allocation would not cause a violation of the Proposed Draft Emergency MFL rule for Silver Springs and is consistent with the Draft Prevention Strategy.