

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

SIERRA CLUB, INC., and ST.
JOHNS RIVERKEEPER, INC.,

Petitioners,

and

FLORIDA DEFENDERS OF THE
ENVIRONMENT, INC.,

Intervenor,

v.

DOAH Case No.: 14-2608

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

Respondents.

KAREN AHLERS and JERI BALDWIN,

Petitioners,

and

FLORIDA DEFENDERS OF THE
ENVIRONMENT, INC.,

Intervenor,

v.

DOAH Case No.: 14-2609
14-2610

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

Respondents.

_____ /

FINAL ORDER
ENVIRONMENTAL RESOURCE PERMIT

The Division of Administrative Hearings, by its designated Administrative Law Judge,
the Honorable E. Gary Early ("ALJ"), held a formal administrative hearing in the above-styled

case on August 25-29, 2014, in Palatka, Florida. On April 29, 2015, the ALJ submitted a Recommended Order to the St. Johns River Water Management District (“District”). The Recommended Order contains findings of fact and conclusions of law regarding Environmental Resource Permit application IND-083-130588-4, and a consumptive use permit modification request to: (a) consolidate two existing consumptive use permits into a single consumptive use permit 2-083-91926-3; (b) change the type of agricultural use from supplemental irrigation for sod farming to supplemental irrigation for improved pasture and grain crops, cattle watering, and chemigation; (c) relocate withdrawal points; and (d) extend the permit term (duration) (hereafter -3 Modification). Petitioners Sierra Club, Inc. and St. Johns Riverkeeper, Inc., and Individual Petitioners Karen Ahlers and Jeri Baldwin, along with Intervenor Florida Defenders of the Environment, Inc., and District staff filed exceptions to the Recommended Order. All parties filed responses to exceptions. This matter then came before the Executive Director of the St. Johns River Water Management District, pursuant to Section 373.079(4)(a), *Florida Statutes*, for final agency action and entry of a Final Order on the Environmental Resource Permit.¹

A. STATEMENT OF THE ISSUE

The general issue before the District is whether to adopt the Recommended Order as the District’s Final Order for the Environmental Resource Permit, or to reject or modify the Recommended Order in whole or in part, in accordance with Section 120.57(1)(l), *Florida Statutes* (“F.S.”).² The specific issue is whether environmental resource permit (“ERP”)

¹ The District’s governing board has, pursuant to the legislative mandate contained in section 373.079(4)(a), F.S., delegated to the Executive Director the authority to take final agency action on permit applications under Part IV of Chapter 373, F.S. See Dist. Policy 13-01, ¶(9)(f)(Oct. 14, 2014).

² References to statutes are to Florida Statutes (2014), unless otherwise noted.

application number IND-083-130588-4 meets the conditions for issuance of a permit as set forth in Part IV, Chapter 373, F.S., Chapters 62-330, 40C-4 and 40C-44, Florida Administrative Code (“F.A.C.”), and Environmental Resource Permit Applicant’s Handbook Volume I (General and Environmental) (effective October 1, 2013) and Volume II (for use within the geographic limits of the St. Johns River Water Management District) (effective October 1, 2013). The ERP application from Sleepy Creek Lands, LLC (“Sleepy Creek”), is for the construction of a stormwater management system, including the establishment of vegetated upland buffers, construction of retention berms and swales, and the implementation of conservation practices. The ALJ recommended issuance of Environmental Resource Permit No. IND-083-130588-4 to Sleepy Creek Lands, LLC on the terms and conditions set forth in the “complete Joint Application for Individual and Conceptual Environmental Resource Permit and the Individual Environmental Resource Permit Technical Staff Report.” (RO at 136)

B. STANDARD OF REVIEW

The rules regarding an agency’s consideration of exceptions to a recommended order are well established. The agency is prescribed by Section 120.57(1)(l), F.S., in acting upon a recommended order. The ALJ, not the agency, is the fact finder. *Goss v. Dist. Sch. Bd. of St. Johns County*, 601 So. 2d 1232, 1235 (Fla. 5th DCA 1992); *Heifetz v. Dep’t of Bus. Regulation*, 475 So. 2d 1277, 1281-82 (Fla. 1st DCA 1997). A finding of fact may not be rejected or modified unless the agency first determines from a review of the entire record that (1) the finding of fact is not based upon competent substantial evidence or (2) that the proceedings on which the finding of fact was based did not comply with the essential requirements of law. *See* §120.57(1)(l), Fla. Stat. In its review, the District must be guided by the true nature of the finding, not its title. “The mere fact that what is essentially a factual determination is labeled a

conclusion of law, whether labeled by the hearing officer or the agency, does not make it so, and the obligation of the agency to honor the hearing officer's findings of fact cannot be avoided by categorizing a contrary finding as a conclusion of law." See *Kinney v. Dept. of State*, 501 So. 2d 1277 (Fla. 5th DCA 1987); *Pillsbury v. State, Dep't of Health & Rehabilitative Servs.*, 744 So. 2d 1040, 1041-42 (Fla. Dist. Ct. App. 1999); *Goin v. Comm. on Ethics*, 658 So. 2d 1131 (Fla. 1st DCA 1995); and *Barbara Herrin v. Volusia County*, 2012 WL 1303679, at 3 (Conclusions of law labeled as findings of fact, and findings labeled as conclusions, will be considered as a conclusion or finding based upon the statement itself and not the label assigned.) *Charlotte Cty v. IMC Phosphates Co.*, 18 So. 3d 1089 (Fla. 2d DCA 2009); *Wills v. Fla. Elections Comm'n*, 955 So. 2d 61 (Fla. 1st DCA 2007).

I. Competent substantial evidence

"Competent substantial evidence" is such evidence as is sufficiently relevant and material that a reasonable mind would accept such evidence as adequate to support the conclusion reached. *Perdue v. TJ Palm Associates, Ltd.*, 755 So. 2d 660 (Fla. 4th DCA 1999). The term "competent substantial evidence" relates not to the quality, character, convincing power, probative value or weight of the evidence, but refers to the existence of some quantity of evidence as to each essential element and as to the legality and admissibility of that evidence. *Scholastic Book Fairs v. Unemployment Appeals Commission*, 671 So. 2d 287, 289 (Fla. 5th DCA 1996); *Nunez v. Nunez*, 29 So. 3d 1191, 1192 (Fla. 5th DCA 2010).

If a finding is supported by any competent substantial evidence from which the finding could be reasonably inferred, the finding cannot be disturbed. *Freeze v. Dep't. of Bus. Regulation, Div. of Alcoholic Beverages & Tobacco*, 556 So. 2d 1204 (Fla. 5th DCA 1990); *Berry v. Dep't of Envtl. Regulation*, 530 So. 2d 1019 (Fla. 4th DCA 1998). See also *Save Our*

Creeks, Inc. and Environmental Confederation of Southwest Florida, Inc. v. Florida Fish and Wildlife Conservation Commission and Dep't of Environmental Protection, 2014 WL 211098 (Jan. 15, 2014). The agency may not reweigh evidence admitted in the proceeding, may not resolve conflicts in the evidence, may not judge the credibility of witnesses or otherwise interpret evidence anew. *Goss*, 601 So. 2d at 1235; *Peace River/Manasota Regional Water Supply Authority v. IMC Phosphates Co.*, 18 So. 3d 1079, 1088 (Fla. 2d DCA 2009); *Rogers v. Dep't of Health*, 920 So. 2d 27, 30 (Fla. 1st DCA 2005); *Brown v. Criminal Justice Standards & Training Comm'n*, 667 So. 2d 977 (Fla. 4th DCA 1996). The issue is not whether the record contains evidence contrary to the findings of fact in the recommended order, but whether the finding is supported by competent substantial evidence. *Florida Sugar Cane League v. State Siting Bd.*, 580 So. 2d 846, (Fla. 1st DCA 1991). Finally, the District is precluded from making additional or supplemental findings of fact. *Florida Power & Light v. State Siting Board*, 693 So. 2d 1025, 1026-27 (Fla. 1st DCA 1997); *See also North Port Fla. v. Consol. Minerals*, 645 So. 2d 485, 487 (Fla. 2d DCA 1994); *Boulton v. Morgan*, 643 So. 2d 1103 (Fla. 4th DCA 1994)(agency may not make supplemental findings of fact on an issue where the hearing officer has made no findings); *Cohn v. Dep't Professional Regulation*, 477 So. 2d 1039 (Fla. 3d DCA 1985)(agency has no authority to make supplemental findings on matters susceptible of ordinary proof; if missing findings are critical to resolve the issue, the agency should remand).

II. Essential requirements of law

A reviewing agency may also reject or modify a finding of fact if it determines from a review of the entire record, and states with particularity in the order, that the finding is based on a proceeding that did not comply with the “essential requirements of law.” *See* §120.57(1)(l),

Fla. Stat. As stated by Judge Benton, in his concurring opinion in *Florida Power & Light Co.* at 1028, citing to the 1996 amendment to the Administrative Procedure Act:

Except in the most extreme cases - those where “the proceedings did not comply with essential requirements of law”-the Administrative Procedure Act (APA) precludes an agency's changing an ALJ's finding of fact on any basis other than the lack of substantial competent evidence to support it. Among the revisions to the APA which will apply on remand, *see Life Care Ctrs. of Am. v. Sawgrass Care Ctr.*, 683 So.2d 609 (Fla. 1st DCA 1996), is language intended to foreclose altogether evidentiary rulings in a final order entered after entry of a recommended order.

Id. See also *Putnam Cnty. Envtl. Council, Inc. et al v. Dept. Envtl. Protection and Georgia-Pacific Corp.*, Case No. 01-2442, pp. 8-9 (Fla. DOAH July 3, 2002; DEP Aug. 6, 2002) (holding that, based on a review of the record, the DOAH proceeding did not constitute an *extreme case* where procedural and evidentiary rulings of the ALJ adverse to the Petitioners were so “egregious” as to violate the “essential requirements of law” within the purview of §120.57(1)(1), F.S.) (emphasis added); *Cf. State Dept. of Financial Services v. Mistretta*, 946 So. 2d 79, 80 (Fla. 1st DCA 2006) (holding that ALJ who sua sponte raised and decided the issue of default after the final hearing without giving parties an opportunity to present evidence and/or argument departed from the essential requirements of law by denying due process). Therefore, an agency may not reject or modify a finding of fact that is supported by competent substantial evidence except in the most extreme cases.

III. Subject matter jurisdiction

With respect to conclusions of law in the recommended order, the agency may reject or modify the conclusions of law over which it has substantive jurisdiction and interpretations of administrative rules over which it has substantive jurisdiction, provided the reasons for such rejection or modification are stated with particularity and the agency finds that such rejection or modification is as, or more reasonable than, the ALJ's conclusion or interpretation. See

§120.57(1)(l), Fla. Stat. In interpreting the term “substantive jurisdiction,” the courts have continued to interpret the standard of review as requiring deference to the expertise of an agency in interpreting its own rules and enabling statutes. *See, e.g., State Contracting & Eng’g Corp. v. Dep’t of Transp.*, 709 So. 2d 607, 610 (Fla. 1st DCA 1998). The “deference rule” recognizes that:

Policy considerations left to the discretion of an agency may take precedence over findings of fact by an administrative law judge. The rule provides:

Matters that are susceptible of ordinary methods of proof, such as determining the credibility of witnesses or the weight to accord evidence, are factual matters to be determined by the hearing officer. On the other hand, matters infused with overriding policy considerations are left to agency discretion. *Baptist Hosp., Inc. v. Department of Health & Rehabilitative Servs.*, 500 So.2d 620, 623 (Fla. 1st DCA 1986) (citations omitted); *McDonald v. Department of Banking & Fin.*, 346 So.2d 569 (Fla. 1st DCA 1977).

Gross v. Dept. of Health, 819 So. 2d 997, 1002 (Fla. 5th DCA 2002). Matters infused with overriding policy considerations include instances where an agency must interpret one of its own rules, or where a statute confers broad discretionary authority upon the agency which depends on whether certain criteria are found by the agency to exist. *Id.* at 1002.

The agency lacks subject matter jurisdiction to overturn an ALJ’s rulings on procedural and evidentiary issues. *Barfield v. Dep’t of Health*, 805 So. 2d 1008, 1012 (Fla. 1st DCA 2001) (the agency lacked jurisdiction to overturn an ALJ’s evidentiary ruling); *Lane v. Dep’t of Env’tl. Protection*, 29 F.A.L.R. 4063 (DEP 2007) (the agency has no substantive jurisdiction over procedural issues, such as whether an issue was properly raised, and over an ALJ’s evidentiary rulings); *Lardas v. Dep’t of Env’tl. Protection*, 28 F.A.L.R. 3844, 3846 (DEP 2005) (evidentiary rulings of the ALJ concerning the admissibility and competency of evidence are not matters within the agency’s substantive jurisdiction).

The agency's authority to modify a recommended order is not dependent on the filing of exceptions. *Westchester Gen. Hosp. v. Dept of Health and Rehabilitative Serv.*, 419 So. 2d 705 (Fla. 1st DCA 1982). However, when exceptions are filed, they become part of the record before the agency. *See* §120.57(1)(f), Fla. Stat. In the final order, the agency must expressly rule on each exception, except for any 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 the exception, or that does not include appropriate and specific citations to the record. *See* §120.57(1)(k), Fla. Stat. Thus, the agency is not required to rule on an omnibus exception in which a party states that its exception to a particular finding of fact is also an exception to any portion of the recommended order where the finding of fact is restated or repeated.

C. EXCEPTIONS AND RESPONSES

The Administrative Procedure Act provides the parties to an administrative hearing with an opportunity to file exceptions to a recommended order. *See* §§120.57(1)(b) and (k), Fla. Stat. The purpose of exceptions is to identify errors in a recommended order for the agency to consider in issuing its final order. As discussed above in Section B (Standard of Review), the agency may accept, reject, or modify the recommended order within certain limitations. When the agency considers a recommended order and exceptions, its role is like that of an appellate court in that it reviews the sufficiency of the evidence to support the ALJ's findings of fact and, in areas where the District has substantive jurisdiction, the correctness of the ALJ's conclusions of law. In an appellate court, a party appealing a decision must show the court why the decision was incorrect so that the appellate court can rule in the appellant's favor. Likewise, a party filing an exception must specifically alert the agency to any perceived defects in the ALJ's findings, and in so doing the party must cite to specific portions of the record as support for the exception. *John D. Rood and Jamie A.*

Rood v. Larry Hecht and Dep't of Env'tl. Protection, 21 F.A.L.R. 3979, 3984 (DEP 1999); *Kenneth Walker and R.E. Oswalt d/b/a Walker/Oswalt v. Dep't of Env'tl. Protection*, 19 F.A.L.R. 3083, 3086 (DEP 1997); *Worldwide Investment Group, Inc. v. Dep't of Env'tl. Protection*, 20 F.A.L.R. 3965, 3969 (DEP 1998). To the extent that a party fails to file written exceptions to a recommended order regarding specific issues, the party has waived such specific objections. *Environmental Coalition of Florida, Inc. v. Broward County*, 586 So. 2d 1212, 1213 (Fla. 1st DCA 1991).

In addition to filing exceptions, the parties have the opportunity to file responses to exceptions filed by other parties. See Fla. Admin. Code R. 28-106.217(2). The responses are meant to assist the agency in evaluating and ultimately ruling on exceptions by providing legal argument and citations to the record.

Petitioners Karen Ahlers, Jeri Baldwin, Sierra Club, Inc., and St. Johns Riverkeeper, Inc., as well as Intervenor Florida Defenders of the Environment, Inc. (collectively "Petitioners") jointly filed 11 exceptions to the ALJ's Recommended Order on May 14, 2015. The District filed six exceptions on May 14, 2015, and the Respondent Sleepy Creek elected not to file exceptions. This order makes rulings on the exceptions only to the extent they are directed at findings of fact and conclusions of law for the environmental resource permit. In addition, rulings are provided in many instances where they are not legally required by Chapter 120, *Florida Statutes*.

D. PUBLIC COMMENT

The Administrative Procedure Act in certain instances allows the general public to participate in an administrating hearing.

Section 120.57(1)(b), Florida Statutes, states, in part:

When appropriate, the general public may be given an opportunity to present oral or written communications. If the agency proposes to consider such material, then

all parties shall be given an opportunity to cross-examine or challenge or rebut the material.

The ALJ granted the Petitioners' oral motion for public comment in this proceeding. (T: 23-29 and 226-228; RO at 8) On August 28, 2014, the ALJ provided members of the general public the opportunity to present oral and written communications. The District, through its counsel, agreed to consider the public comment "at the time it takes final agency action in this proceeding." (T: 226-229 and 556-557; RO at 8) Therefore, the parties were given an opportunity to cross-examine, challenge, or rebut the material presented. *See* §120.57(1)(b), Fla. Stat. With one exception, the parties waived that opportunity. Forty-eight individuals participated, some of whom provided documents, photographs, or videos ("written communications"), to the ALJ. A two-volume transcript of the public comment period including copies of the written communications was provided to the District with the Recommended Order on April 29, 2015. The undersigned has reviewed the two-volume public comment testimony and written communications.

E. RULINGS ON EXCEPTIONS³

1. RULINGS ON PETITIONERS' EXCEPTIONS

³ Citations to page numbers in the transcript of the formal administrative hearing will be designated by the transcript page(s); (e.g. T: 234). Citations to exhibits admitted by the ALJ will be made by identifying the party that entered the exhibit followed by the exhibit number (e.g. Jt Ex. 2). Citations to the Recommended Order will be designated by "RO" page (p.) or paragraph (¶) number (e.g. RO at 13; RO at ¶ 12). Citations to the District's Applicant's Handbook: Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental) and Volume II (effective October 1, 2013) will be designated by the abbreviation "ERP AH" followed by the volume number ("Vol. I" or "Vol. II") and the section number (e.g., ERP AH Vol. I §3.4.1(b)). Citations to the District's Applicant's Handbook: Consumptive Uses of Water, Chapter 40C-2, F.A.C. (Sept. 16, 2012) will be designated by the abbreviation "CUP AH" followed by the section number (e.g., CUP AH §10.3(g)). Citations to the parties exceptions and their respective responses to filed exceptions will be referred to "Pet. Exception at", "Dist. Exception at", "Dist. Response to Pet. Exception at" and "Pet. Response to Dist. Exception at" followed by the page number.

Petitioners' Exception No. 1

Petitioners take exception to 13 conclusions of law (COLs) and 10 findings of fact (FOFs) on essentially two grounds.⁴ First, they contend that “the hearing process was not consistent with the essential requirements of law” (Pet. Exception at 26-27). Second, Petitioners argue that the ALJ erred by “failing to consolidate the sequence 4 permit application with the instant sequence 3 permit application for simultaneous cumulative consideration.” (Pet. Exception at 13) These grounds are related in that Petitioners argue that the ALJ’s denial of their motion to consolidate their petitions regarding the -3 Modification and -4 application in a single proceeding resulted in a hearing that did not comply with the essential requirements of law.

As a preliminary matter, the District notes that the “sequence 4 permit application” and “the sequence 3 permit application” relate to a separate consumptive use permit (“CUP”) application submitted by Sleepy Creek and the -3 Modification, respectively. Apparently, however, Petitioners believe the ALJ’s failure to consolidate these CUP matters affected the proceedings and their outcome regarding Sleepy Creek’s environmental resource permit application. For the reasons explained below, the exception is denied.⁵

As to the first grounds, and as explained above under the heading “Essential requirements of law,” only findings of fact may be excepted to on the grounds that the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent this exception is directed at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide

⁴ The COLs are: 355, 356, 362, 367, 369, 370, 381, 383, 384, 390, 391, 396 and 397. The FOFs are: 32, 133, 157, 251, 253, 256, 257, 267, 271 and 272.

⁵ Much of the text of Petitioners’ exception addresses the scope of review of the -3 Modification, an issue that is addressed in the ruling on Petitioners’ Exception No. 3.

a ruling on this portion of the exception.

To reject or modify a finding of fact on the grounds that the proceedings did not comply with the essential requirements of law, the District would need to determine that the ALJ's rulings in the proceedings were so "egregious" or "extreme" as to warrant rejection of findings of fact that are supported by competent substantial evidence in the record. *See Putnam Cnty. Env'tl. Council, Inc., et al v. Dept. Env'tl. Protection and Georgia-Pacific Corp.*, Case No. 01-2442, pp.8-9 (Fla. DOAH July 3, 2002; DEP Aug. 6, 2002) and *Florida Power & Light Co. v. State of Florida Siting Bd.*, 693 So. 2d 1025, 1028 (Fla. 1st DCA 1997).

Such extreme circumstances did not exist in this case where all of the findings of fact to which Petitioners take exception are supported by competent substantial evidence and where, in ruling on a motion, the ALJ exercised his discretion regarding the procedural issue of whether cases should be consolidated. *Cf. State Dept. of Financial Services v. Mistretta*, 946 So. 2d 79, 80 (Fla. 1st DCA 2006) (holding that ALJ who sua sponte raised and decided the issue of default after the final hearing without giving parties an opportunity to present evidence and/or argument departed from the essential requirements of law by denying due process).

In essence, Petitioners are requesting the District to revisit the ALJ's ruling in which he denied Petitioners' Motion to Consolidate the -4 application with the -3 Modification. The consolidation of cases filed under the Administrative Procedure Act is governed by chapter 120, *Florida Statutes*, and rules implementing this chapter, including rule 28-106.108, F.A.C., entitled "Consolidation." As explained under the heading "Subject matter jurisdiction" above, the District does not have substantive jurisdiction over the interpretation of these statutes and rules, and, generally lacks jurisdiction to overturn an ALJ's rulings on procedural issues.

The District notes that consolidation of cases is permissive and not mandatory and, thus,

it was within the ALJ's discretion as to whether or not to consolidate the cases. *See* Fla. Admin. Code R. 28-106.108 (stating that "[i]f there are separate matters which involve similar issues of law or fact, or identical parties, the matters *may* be consolidated if it appears that consolidation would promote the just, speedy, and inexpensive resolution of the proceedings, and would not unduly prejudice the rights of a party") (emphasis added). The record reflects that the ALJ considered the motion, the Respondents' responses, and the Petitions for Administrative Hearing filed by Petitioners (regarding the Sequence 4 permit application), and accepted all allegations set forth in Petitioners' motion. He held that the consolidation of Petitioners' petitions regarding the Sequence 4 permit application with the proceedings on the -3 Modification and the ERP application "is not necessary to promote the just, speedy, and inexpensive resolution of the proceedings, nor would denial of the motion unduly prejudice the rights of a party." *See* Order Denying Petitioners' and Intervenors' Emergency Motion to Consolidate and for Continuance (DOAH Aug. 14, 2014) at 1.

Petitioners' Exception No. 2

Petitioners take exception to 10 FOFs and 14 COLs on two grounds.⁶ First, they contend the -4 application and the -3 Modification "should have been consolidated and considered together." (Pet. Exception at 27) Second, Petitioners argue "the ALJ erroneously excluded evidence relating to CUP Sequence 4 application" by failing to "consider evidence relating to the data, analysis and considerations" of the - 4 application in this *de novo* proceeding. (Pet. Exception at 27) These grounds are related in that Petitioners assert the ALJ's failure to consolidate the proceedings and exclusion of evidence resulted in proceedings that did not

⁶ FOF paragraphs 32, 133, 157, 251, 253, 256, 257, 267, 271 and 272, and COL paragraphs 290, 355, 356, 362, 367, 369, 370, 381, 383, 384, 390, 391, 396-397.

comply with the essential requirements of law. The consolidation of cases and the consideration of evidence are procedural in nature, and governed by Chapter 120, *Florida Statutes*, and its implementing rules. The District does not have subject matter jurisdiction over procedural decisions.

As a preliminary matter, the District notes that the “sequence 4 permit application” and “the sequence 3 permit application” relate to a separate consumptive use permit application submitted by Sleepy Creek and the -3 Modification, respectively. Apparently, however, Petitioners believe the ALJ’s failure to consolidate these CUP matters affected the proceedings and their outcome regarding Sleepy Creek’s environmental resource permit application. For the reasons explained below, the exception is denied.

As to the first ground, the ALJ exercised his discretion regarding the procedural issue of whether the cases should be consolidated. *See* Ruling on Exception 1. Additionally, as explained above under the heading “Essential requirements of law,” only findings of fact may be excepted to on the grounds that the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent this exception is directed at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception.

With respect to the second ground, Petitioners claim “the ALJ erroneously excluded evidence relating to the CUP Sequence 4 application” by failing to “consider evidence relating to the data, analysis and considerations relating to the denial of the sequence 4 application which should at least have been considered in this *de novo* proceeding.” (Pet. Exception at 27) The decision to exclude evidence is an evidentiary matter on which the ALJ is afforded wide

discretion and the District lacks substantive jurisdiction. *Barfield v. Dep't of Health*, 805 So. 2d 1008, 1012 (Fla. 1st DCA 2001) (the agency lacked jurisdiction to overturn an ALJ's evidentiary ruling); *Lane v. Dep't of Env'tl. Protection*, 29 F.A.L.R. 4063 (DEP 2007) (the agency has no substantive jurisdiction over procedural issues, such as whether an issue was properly raised, and over an ALJ's evidentiary rulings); *Lardas v. Dep't of Env'tl. Protection*, 28 F.A.L.R. 3844, 3846 (DEP 2005) (evidentiary rulings of the ALJ concerning the admissibility and competency of evidence are not matters within the agency's substantive jurisdiction).

Petitioners' Exception No. 3

Petitioners take exception to COLs 380, 390, 391, 396 and 397 on the grounds that “the ALJ erred by accepting District Staff’s artificially truncated review of the Conditions for Issuance” and that “for the period of the extension there has never been a full review of the conditions of issuance.” (Pet. Exception at 32) The ALJ’s approach they argue “allows issuance [of a consumptive use permit] without meeting the conditions of issuance contrary to section 373.223, Florida Statutes.” (Pet. Exception at 32) They also contend “the ALJ erred in relying on ERP case law supporting an agency review limited to evaluation of the modified aspects in a permit modification application.” (Pet. Exception at 33, at ¶ 290) These arguments relate to issuance of a consumptive use permit modification under part II of Chapter 373. The exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception in this order.

Petitioners' Exception No. 4

Petitioners take exception to 20 FOFs and 18 COLS on two grounds.⁷ Petitioners contend that (1) the “hearing process was not consistent with the essential requirements of law” and (2) the ALJ erred by accepting “District staff’s position that the predevelopment condition [of the North Tract] was improved pasture.” (Pet. Exception at 37). As explained above, under the heading “Essential requirements of law,” only findings of fact may be excepted to on the grounds that the proceeding on which the findings were based did not comply with the essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent Petitioners direct the first grounds of this exception at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception. For the reasons below, the District denies the remainder of the exception.

a. **Baseline condition**

Petitioners take exception to FOFs 28, 29, 32, 33, 264 and COL 320 and contend that the District should have considered the pre-development condition to be the “primarily pine forest” that existed in December 2011 instead of the “improved pasture” land use that existed in March 2014 when Sleepy Creek submitted the ERP application. (Pet. Exception at 35) In support, Petitioners argue that Sleepy Creek and the District “discussed” the “development of an ERP application” “around December 2011.” Petitioners do not argue there was no competent substantial evidence in the record to support these findings.

FOFs 28, 29, 32, 33, and 264 state as follows:

28. Historically, the North Tract was used for timber production, with limited pasture and crop lands. At the time the 7,207-acre

⁷ The FOFs are: 28, 29, 32, 33, 249-257, 263-266, and 270-272. The COLs are: 320, 341-342, 362, 367, 369-372, 380-384, 390-391, 396-397.

North Tract was purchased by Sleepy Creek, land use consisted of 4,061 acres of planted pine, 1,998 acres of wetlands, 750 acres of improved pasture, 286 acres of crops, 78 acres of non-forested uplands, 20 acres of native forest, 10 acres of open water, and 4 acres of roads and facilities.

29. Prior to the submission of the CUP and ERP applications, much of the planted pine was harvested, and the land converted to improved pasture. Areas converted to improved pasture include those proposed for irrigation, which have been developed in the circular configuration necessary for future use with center irrigation pivots. As a result of the harvesting of planted pine, and the conversion of about 345 acres of crop land and non-forested uplands to pasture and incidental uses, total acreage in pasture on the North Tract increased from 750 acres to 3,938 acres.

32. Petitioners argue that the baseline conditions should be measured against the use of the property as planted pine plantation, and that Sleepy Creek should not be allowed to “cattle-up” before submitting its permit applications, thereby allowing the baseline to be established as a higher impact use. However, the applicable rules and statutes provide no retrospective time-period for establishing the nature of a parcel of property other than that lawfully existing when the application is made. See West Coast Reg’l Water Supply Auth. v. SW Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____) (“The baseline against which projected impacts conditions [sic] are those conditions, including previously permitted adverse impacts, which existed at the time of the filing of the renewal applications.”).⁸

33. The evidence and testimony in this case focused on the effects of the water allocation on the Floridan aquifer, Silver Springs, and the Silver River, and on the effects of the irrigation on water and nutrient transport from the properties. It was not directed at establishing a violation of chapter 373, the rules of the SJRWMD, or the CUP Applicant’s Handbook with regard to the use and

⁸ The case cited in FOF 32 and COL 320 was a Recommended Order, and no Final Order was ever issued on that Recommended Order. *West Coast Reg’l Water Supply Auth. v. SW Fla. Water Mgmt. Distr.*, 1997 WL 1052355, ¶ 301 (Fla. DOAH Case No. 95-1520, May 29, 1997). That case was apparently resolved by a Settlement Agreement filed with DOAH on April 2, 1999. (See Docket for DOAH Case No. 95-1520.) Thus, the precedential value of this case appears limited.

management of the agriculturally-exempt unirrigated pastures, nor did it do so.

264. The baseline condition for measuring changes in nutrient concentrations was determined to be that lawfully existing at the time the application was made. Had there been any suggestion of illegality or impropriety in Sleepy Creek's actions in clearing the timber and creating improved pasture, a different baseline might be warranted. However, no such illegality or impropriety was shown, and the SJRWMD rules create no procedure for "looking back" to previous land uses and conditions that were legally changed. Thus, the "exempted improved pasture condition" nutrient levels are appropriate for comparison with irrigated pasture nutrient levels.

COL 320 states as follows:

320. As set forth in paragraph 32 above, the baseline conditions are those that existed at the time of the application, including the effects of previously permitted withdrawals. West Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____)

As indicated in FOF 32, the ALJ specifically considered and rejected Petitioners' argument, which Petitioners made at hearing and in their PRO (T: 721, 1164, PRO at 9-10). Notably, Petitioners do not take exception to FOFs 30 and 31, which found the conversion of the North Tract is substantially complete, the act of converting the land use from planted pine to improved pasture was an exempt agricultural activity; and therefore, there was no impropriety in considering the actual, legal use as the baseline condition. (RO at ¶¶ 30 and 31)

When determining the predevelopment nutrient load, the District's environmental resource permitting criteria do not require the District to consider a land use condition in place at some point in time before the submittal of the application, unless a District rule specifies

otherwise⁹ or an applicant converted land in violation of District rules, neither of which the Petitioners assert. Moreover, the District can consider exempt activities proposed as part of a related ERP application. *See* Fla. Admin. Code R. 62-330.050(6) (“the Agency will consider exempt activities included in an application to conduct other activities as part of an application requiring a permit and will review and act upon the entire application at one time.”)

b. “Retention Berm,” “Volume Calculation” and “Watershed Assessment Model”

Petitioners take exception to FOF 225 relating to the “Retention Berm,” FOFs 249-257 relating to “Volume Calculations” and FOFs 263-266 and 270-272 relating to the “Watershed Assessment Model.” All of the findings of fact in these paragraphs are supported by competent substantial evidence.¹⁰ As ruled previously, the proceedings in this case were not conducted in a manner so extreme that constitutes a departure from the essential requirements of law, and Petitioners in this exception do not allege circumstances so extreme as to constitute such a departure. Accordingly, the exception is rejected with regard to these findings of fact.

Essentially, Petitioners’ exception attempts to re-argue their position that Sleepy Creek should have been required to use the land use that existed in 2011 in its calculations and analysis of the pre- and post-development nutrient loading to determine the required treatment volume. As noted above, the ALJ’s findings that the predevelopment condition was improved pasture is supported by competent substantial evidence and is consistent with District rules.

⁹ For example, the District’s “Basin Criteria” for the Lake Apopka Hydrologic Basin, require that “pre-development” phosphorus loads be based upon the land uses in place as of March 7, 2003. (A.H. Vol. II §13.7)

¹⁰ *See, e.g.*, FOF 225 (Dist. Exs. 61, 65, 69, 170, and 179; T: 1010-1016, 1023, 1056-1057, 1072, 1074-1076, 1120-1125, 1132-1133, 1137-1138, 1142-1143, 1156, and 1189). FOFs 249-257 (Dist. Exs. 170 and 179; T: 1014, 1072, 1074-1076, 1091-1093, 1121-1122, and 1137-1138). FOFs 263-266 (Dist. Ex. 69; SC Ex. 209; T: 630-632, 644-645, 654-661, 1014, 1121-1122, and 1137-1138). FOFs 270-272 (SC Ex. 209; T: 291, 633, 654-656, 658, and 660-661).

c. ERP Rule Criteria

Based on the argument described in a. above, Petitioners take exception to paragraphs that relate to various aspects of the ERP rule criteria: state water quality standards (COL 341, 342, 362, 383, and 384), secondary impact assessment (COL 367, 369, and 370), capable of performing and functioning as proposed (COL 371 and 372), cumulative impact assessment (380, 381, and 382), and the ALJ's ultimate conclusion that the conditions for issuance were met (COL 396 and 397), and statutory requirements found in section 373.413(1), F.S., regarding harm to the water resources (COL 390 and 391).

As explained above, the ALJ's findings that the predevelopment condition was improved pasture is supported by competent substantial evidence and is consistent with District rules. Petitioners do not argue there was no competent substantial evidence in the record to support any of the findings of fact in these paragraphs.

Petitioners' Exception No. 5

Petitioners take exception to FOF 116 and endnote 2 and COLs 360-362, 367, 369-372, 383-384, 390-391, 396-397 on two grounds. Petitioners contend that (1) the "hearing process was not consistent with the essential requirements of law" and (2) the ALJ erred in concluding that Sleepy Creek's implementation of best management practices (BMPs) for cow/calf operations provided Sleepy Creek a "presumption" of compliance with water quality standards.¹¹ As explained above, under the heading "Essential requirements of law," only findings of fact may be excepted to on the grounds that the proceeding on which the findings were based did not

¹¹ The District's ruling in this Final Order on Petitioners' Exception 6 and the FOFs and COLs at which the exception is directed, only addresses the environmental resource permitting criteria. To the extent these FOFs and COLs are relevant to address CUP criteria, those matters are addressed in the CUP Final Order.

comply with the essential requirements of law. *See* 120.57(1)(l), Fla. Stat. Thus, to the extent Petitioners direct the first grounds of this exception at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception.

FOF 116 and endnote 2 read as follows:

116. Sleepy Creek has entered into a Notice of Intent to Implement Water Quality BMPs with the Florida Department of Agriculture and Consumer Services which is incorporated in the NMP and which requires the implementation of Best Management Practices.^{2/} Dr. Bottcher testified that implementation and compliance with the Water Quality Best Management Practices manual creates a presumption of compliance with water quality standards. His testimony in that regard is consistent with Department of Agriculture and Consumer Services rule 5M-11.003 (“implementation, in accordance with adopted rules, of BMPs that have been verified by the Florida Department of Environmental Protection as effective in reducing target pollutants provides a presumption of compliance with state water quality standards.”).

EN2/ The Department of Agriculture and Consumer Services BMP manual is specifically for cow/calf operations. However, the testimony in this case was persuasive that nutrient loading for grass-fed beef production is substantially lower than that for cow/calf production. Thus, compliance with the BMPs for cow/calf operations will meet the presumption of compliance with water quality standards.

The District agrees that the ALJ’s conclusion that Sleepy Creek’s compliance and implementation with BMPs for cow/calf operations will meet the presumption of compliance with water quality standards and that such a presumption “is consistent with Department of Agriculture and Consumer Services rule 5M-11.003” is not supported by competent substantial evidence.

The BMPs found in rule 5M-11.003 of the Florida Administrative Code are for Florida cow/calf operations. The presumption of compliance with state water quality standards is provided only when “BMPs that have been verified by the Florida Department of Environmental

Protection as effective in reducing target pollutants . . .” are implemented. *See* Fla. Admin. Code R. 5M-1003.

The Department of Agriculture and Consumer Services has not verified BMPs for the type of grass-fed beef production proposed by Sleepy Creek; therefore, a presumption of compliance with water quality standards based on implementation of the cow/calf BMPs is not supported.

Thus, the District accepts this exception only with regard to FOF 116 and rejects FOF 116 and endnote 2 for the reasons stated above. However, to the extent the Petitioners are arguing that the “presumption” afforded in FOF 116 was the sole basis for the ALJ concluding that “the project would meet water quality standards,” and that its rejection requires the modification of the COLs referenced in the exception, Exception 5 is rejected. The Recommended Order contains other findings of fact that support the ALJ’s conclusions that the project would meet water quality standards. (FOFs 15, 27, 111-115, 133-135, 143, 149-154, 156-158, 225-259, 264, 272)

Petitioners’ Exception No. 6

Petitioners take exception to pages 8 and 9 of the Recommended Order, FOFs 53-60 and 195, and COL 376 on two grounds. Petitioners contend that (1) the “hearing process was not consistent with the essential requirements of the law” and (2) that “the ALJ failed to consider the Public Hearing evidence.” (Pet. Exception at 45). For the reasons stated below, the exception is denied.

a. Public Comment

Petitioners argue that, “the ALJ erred by failing to consider the Public Hearing testimony and evidence, instead passing it on to the Governing Board for their consideration without

providing any findings or conclusions thereupon, and without synthesizing the Public Hearing evidence with the balance of the evidentiary record.”¹² (Pet. Exception at 38) Petitioners’ argument is based on statements made at pages 8 and 9 of the Recommended Order wherein the ALJ states:

[t]he District, through counsel, confirmed its intent to consider public comment at such time as it takes final agency action in this proceeding. Therefore, the members of the public who chose to speak were placed under oath, and all parties were given an opportunity to cross-examine them, or to challenge or rebut and materials submitted. . . . A transcript of the public comment period and copies of all documents and recordings are being provided to the District along with the record of this proceeding for the District’s consideration.

(RO at 8-9)

These words are not dispositive that the ALJ “passed” along the public comment and associated materials without consideration. In FOF 62, the ALJ specifically references the public comment by finding “[m]any of the speakers at the public comment period of this proceeding spoke fondly of having frequented Silver Springs over the years, enjoying its crystal clear water through famous glass-bottomed boats.” (RO at ¶ 62) Additionally, the ALJ considered the parties’ proposed recommended orders (PROs) filed in this matter. *See* RO at 9 (“the parties filed Proposed Recommended Orders . . . which have been considered in the preparation of this Recommended Order.”) Thus, to the extent the Petitioners themselves relied on public comment in their own PROs and cited to the public comment materials, the ALJ considered those matters. *See* Ahlers PRO at ¶ 161 and Florida Defenders of the Environment PRO at ¶¶ 33 and 43.

¹² Petitioners’ argument is in reference to provisions of section 120.57(1)(b), which states, “the general public may be given an opportunity to present oral or written communications.” To the extent Petitioners refer to this opportunity as a “public hearing” and the oral and written communications as “testimony” and “evidence,” it should be noted those terms are not used in the statute.

Section 120.57(1)(b), Fla. Stat. provides:

All parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of fact, and orders, to file exceptions to the presiding officer's recommended order, and to be represented by counsel or other qualified representative. When appropriate, the general public may be given an opportunity to present oral or written communications. If the agency proposes to consider such material, then all parties shall be given opportunity to cross-examine or challenge or rebut the material.

§120.57(1)(b), Fla. Stat.

The ALJ's decision to accept or consider such public comment is a procedural and evidentiary matter governed by statutes over which the District lacks substantive jurisdiction. *Barfield v. Dep't of Health*, 805 So. 2d 1008, 1012 (Fla. 1st DCA 2001) (the agency lacked jurisdiction to overturn an ALJ's evidentiary ruling); *Lane v. Dep't of Env'tl. Protection*, 29 F.A.L.R. 4063 (DEP 2007) (the agency has no substantive jurisdiction over procedural issues, such as whether an issue was properly raised, and over an ALJ's evidentiary rulings); *Lardas v. Dep't of Env'tl. Protection*, 28 F.A.L.R. 3844, 3846 (DEP 2005) (evidentiary rulings of the ALJ concerning the admissibility and competency of evidence are not matters within the agency's substantive jurisdiction).

The standard of review does not allow the District to add facts or change the findings of fact that are supported by competent substantial evidence, consider evidence not presented at hearing, reevaluate the quantity and quality of evidence presented in the hearing, or change the ALJ's evidentiary and procedural rulings. *See* Section B.I. *supra*.

b. Karst Features

Petitioners argue that the ALJ's failure to consider the "Public Hearing evidence" caused errors to FOFs 53-60 and COL 376, relating to the District's Sensitive Karst Areas Basin design

criteria. As discussed above, there is no definitive indication the ALJ did not consider the oral or written communications provided during the public comment. Petitioners have not alleged that the findings of fact to which they have taken exception are not supported by competent substantial evidence.

Finally, the conduct of these proceedings does not fall within the category of an extreme case that violates 120.57(1)(l), F.S.

Petitioners' Exception No. 7

Petitioners take exception to FOF 116 and COLs 355-56, 362, 367-372, 380-84, 390-393, 396 and 397 on two grounds. Petitioners argue (1) “the hearing process was not consistent with the essential requirements of law” and (2) that the ALJ failed to “properly consider the cumulative water quality impact evidence.” (Pet. Exception at 47) The District rejected FOF 116 in its ruling on Petitioners' Exception No. 5. Therefore, the District need only rule on the cited COLs. The exception is rejected with respect to these COLs.

As explained under the heading “Essential requirements of law,” only findings of fact may be excepted to on the grounds the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent Petitioners direct the first grounds of this exception at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of this exception. As explained below, the District denies the remainder of the exception.

As to the second grounds, Petitioners argue “the evidence established there would be an additional load of nitrate, though small, that would be likely to reach Silver Springs and Silver River,” citing to FOFs 267, 277, 278, and 279. (Pet. Exception at 46) However, as pointed out

in the District Staff's Response to Petitioners' Exception No. 7, Petitioners mischaracterize the ALJ's findings in FOFs 276-279. In these FOFs, the ALJ found that a "small fraction of the less than 1 percent of the particle tracks originating on the North Tract, perhaps a few tenths of one percent, can reach Silver Springs" and that this water would be "subject to the protection and treatment afforded by the NMP and the ERP berms," (RO at ¶¶ 277 and 278) Additionally, the ALJ found that this protection and treatment would be effective at minimizing the transport of nutrients to groundwater (RO at ¶ 158) and would remove nutrients to at or below pre-development levels. (RO at ¶¶ 256-258). Ultimately, the ALJ concluded, reasonable assurances were provided that there will be no additional pollutant loading from the permitted activities. (RO at ¶ 258) Accordingly, there is no basis for the District to reject or modify the referenced COLs.

Petitioners' Exception No. 8

Petitioners take exception to 13 COLs on two grounds.¹³ They contend: (1) "the hearing process was not consistent with the essential requirements of law," and (2) the ALJ failed to "correctly analyze cumulative impacts regarding water quantity." (Pet. Exception at 48) As explained above under the heading "Essential requirements of law," only findings of fact may be excepted to on the grounds that the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent that the first grounds of this exception is directed at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception. As explained below, the District denies the remainder of the exception.

¹³ The COLs are: 355, 356, 367, 369, 370, 371, 380, 381, 382, 390, 391, 396 and 397.

To the extent that Petitioners contend that the ALJ erred (1) in not considering the impact of the -4 permit application by not consolidating their petitions regarding the -3 Modification and -4 application in a single proceeding; or (2) by excluding evidence regarding the -4 permit application, the exception is addressed in the ruling on Exceptions No. 1 and 2, respectively. The proceedings in this case did not create, and the Petitioners in this exception have not alleged, circumstances so extreme as to constitute a departure from the essential requirements of law.

Petitioners' second argument relates to the -3 Modification's water quantity impacts (rather than the water quantity impacts associated with construction of the surface water management system under the ERP application), and is not ruled upon in this order in accordance with section 120.57(1)(k), F.S.

Petitioners' Exception No. 9

Petitioners take exception to 15 COLs and 10 FOFs on two grounds.¹⁴ They contend: (1) "the hearing process was not consistent with the essential requirements of law," and (2) the ALJ failed to "consider the additional Sequence 4 water withdrawals as secondary of the Sequence 3 withdrawals on the North Tract." (Pet. Exceptions at 50, 52) As explained above under the heading "Essential requirements of law", only findings of fact may be excepted to on the grounds that the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent that the first grounds of this exception is directed at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception. For the reasons below, the District denies the remainder of the exception.

¹⁴ The COLs are: 338, 341, 355, 356, 362, 367, 369, 370, 381, 383, 384, 390, 391, 396 and 397.

Petitioners take exception to FOFs 32, 133, 157, 251, 253, 256, 257, 267, 271 and 272. All of the findings of fact in these paragraphs are supported by competent substantial evidence. (*See, e.g.*, T: 149-153, 200, 234, 644, 657, 670, 675, 1062, 1074; IP Ex. 65) As ruled previously, the proceedings in this matter were not conducted in a manner so extreme that constitutes a departure from the essential requirements of law, and Petitioners in this exception have not alleged circumstances so extreme they would constitute such a departure. Accordingly, the exception is rejected with regard to the findings of fact in these FOFs.

The second grounds -- that the District should have considered the sequence 4 application's predicted water resource impacts "in the determination of the secondary impacts of the sequence 3 [consumptive use permit] application" -- is directed at the -3 Modification (rather than the ERP), and not ruled upon in this order in accordance with section 120.57(1)(k), F.S. However, to the extent that the exception could be interpreted as a request to consider the -3 Permit Modification or the -4 CUP application as a secondary impact of the ERP, the exception is rejected. Section 10.2.7(a) of the secondary impacts criterion in Volume I, ERP AH states in pertinent part:

Impacts of groundwater withdrawals upon wetlands and other surface waters that result from the use of wells permitted pursuant to the District consumptive use rules shall not be considered under the rules adopted pursuant to Part IV of Chapter 373, F.S.

Thus, the District could not have considered the -3 Modification's or sequence 4 application's water resource impacts in its evaluation of the ERP application.

Petitioners' Exception No. 10

Petitioners take exception to COLs 396 and 397 on the grounds that (1) "the hearing process was not consistent with the essential requirements of law" and (2) the "Recommended Order's analysis of consistency with the public interest recognizes some of the applicable law but

misapplies it.” (Pet. Exception at 53, 55) For the reasons below, the exception is rejected.

COLs 396 and 397 state as follows:

396. Petitioners did not meet their burden of ultimate persuasion that the stormwater management system authorized by the ERP will be harmful to the water resources of the District.

397. 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 ERP will meet the applicable standards applied by the District, including sections 373.406, 373.413, and 373.414, Florida Statutes; Florida Administrative Code Rules 62-330.301, 62-330.302, 40C-41.063, and 40C-44.065; and the corresponding provisions of the ERP Applicant’s Handbook, and that the Environmental Resource Permit No. IND-083-130588-4 should therefore be issued.

As to the first grounds, and as explained above under the heading “Essential requirements of law,” only findings of fact may be excepted to on the grounds that the proceedings on which the findings were based did not comply with essential requirements of law. *See* §120.57(1)(l), Fla. Stat. Thus, to the extent this exception is directed at conclusions of law, the exception does not state a valid basis as required by section 120.57(1)(k), F.S., and the District need not provide a ruling on this portion of the exception.

With regard to the second grounds, it is clear from the exception that it is directed at the public interest test under part II of Chapter 373 which applies only to consumptive use permit applications, not environmental resource permit applications. Thus, it does not state a grounds for modifying these conclusions of law that relate to the ERP application.

Petitioners’ Exception No. 11

In this general exception, Petitioners argue the ALJ committed reversible error “by refusing to continue the hearing beyond August 25, 2014.” (Pet. Exception at 56) As a result, Petitioners contend, “the hearing process was not consistent with the essential requirements of law, thus causing virtually all findings and conclusions to contain or be based upon the error.”

(Pet. Exception at 58) Petitioners state that they were not afforded sufficient time to adequately prepare for the administrative hearing. (Pet. Exception at 56) The Petitioners' exception does not identify any portion of the Recommended Order by page number or paragraph and therefore, the District need not provide a ruling on the exception. "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 the exception, or that does not include appropriate and specific citations to the record." See § 120.57(1)(k), Fla. Stat.

Nonetheless, a review of the record indicates that all parties to the proceeding represented to the ALJ they were available for hearing the weeks of August 18 and 25, 2014, and the hearing was initially set for August 18. Following issuance of the Order setting the hearing, the Petitioners filed multiple motions for continuance. The initial joint motion, Petitioners' and Intervenor's Emergency Motion to Consolidate and for Continuance, was denied. Then, Petitioners Sierra Club, Inc. and St. Johns Riverkeeper, Inc. filed a separate motion for continuance on June 25, 2014. After reviewing the motion and responses, the ALJ agreed to continue the case until the week of August 25.

The ALJ's decision to deny Petitioners' motion for continuance is a procedural matter governed by Chapter 120, Florida Statutes, over which the District lacks substantive jurisdiction. *Malave v. Dept. of Health*, 881 So. 2d 682 (Fla. 5th DCA 2004) ("The decision to grant or deny a continuance of an administrative proceeding is a matter in the sound discretion of the administrative law judge."); *Public Employees Relation Commission v. City of Lauderhill*, Case No. 77-430 (June 29, 1977) (A motion for continuance is "entirely a ... procedural matter."); *Lane v. Dep't of Env'tl. Protection*, 29 F.A.L.R. 4063 (DEP 2007) (the agency has no substantive jurisdiction over procedural issues, such as whether an issue was properly raised, and over an

ALJ's evidentiary rulings). Therefore, the District denies this exception.

2. RULINGS ON DISTRICT'S EXCEPTIONS

District's Exception No. 1

District staff takes exception to FOFs 31, 32, 264 and COL 320 because it could be implied that "all exempt activities must be completed at the time an ERP application is submitted in order for them to be considered as part of the 'baseline condition.'" (Dist. Exception at 2)

FOFs 31, 32, and 264 state as follows:

31. The act of converting the North Tract for a property dominated by planted pine to one dominated by improved pasture, and the change in the use of the East Tract from sod farm to pasture, were agricultural activities that did not require a permit from the District. As such, there is no impropriety in considering the actual, legal use of the property in its current configuration as the existing use for which baseline conditions are to be measured.

32. Petitioners argue that the baseline conditions should be measured against the use of the property as planted pine plantation, and that Sleepy Creek should not be allowed to "cattle-up" before submitting its permit applications, thereby allowing the baseline to be established as a higher impact use. However, the applicable rules and statutes provide no retrospective time-period for establishing the nature of a parcel of property other than that lawfully existing when the application is made. See West Coast Reg'l Water Supply Auth. v. SW Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____) ("The baseline against which projected impacts conditions [sic] are those conditions, including previously permitted adverse impacts, which existed at the time of the filing of the renewal applications.").

264. The baseline condition for measuring changes in nutrient concentrations was determined to be that lawfully existing at the time the application was made. Had there been any suggestion of illegality or impropriety in Sleepy Creek's actions in clearing the timber and creating improved pasture, a different baseline might be warranted. However, no such illegality or impropriety was shown, and the SJRWMD rules create no procedure for "looking back" to previous land uses and conditions that were legally changed. Thus,

the “exempted improved pasture condition” nutrient levels are appropriate for comparison with irrigated pasture nutrient levels.

COL 320 states as follows:

320. As set forth in paragraph 32 above, the baseline conditions are those that existed at the time of the permit application, including the effects of previously permitted withdrawals. West Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____)

Collectively, the statements in FOFs 31, 32, 264 and COL 320 could be viewed to conclude that an applicant must complete all exempt activities prior to submitting an ERP application for consideration as part of the baseline condition. The appropriate time for considering the “baseline” condition is discussed in the District’s ruling on Petitioners’ exception number 4. As stated therein, the District can consider proposed exempt activities at the time of receipt of the ERP application; there is no requirement the exempt activities be completed at that time. For these reasons, District staff’s exception number 1 is accepted.

District’s Exception No. 2

District staff takes exception to FOF 116 on the grounds the record does not contain competent substantial evidence to support the findings of fact stated therein.

FOF 116 and endnote 2 read as follows:

116. Sleepy Creek has entered into a Notice of Intent to Implement Water Quality BMPs with the Florida Department of Agriculture and Consumer Services which is incorporated in the NMP and which requires the implementation of Best Management Practices.^{2/} Dr. Bottcher testified that implementation and compliance with the Water Quality Best Management Practices manual creates a presumption of compliance with water quality standards. His testimony in that regard is consistent with Department of Agriculture and Consumer Services rule 5M-11.003 (“implementation, in accordance with adopted rules, of BMPs that have been verified by the Florida Department of Environmental Protection as effective in reducing target pollutants provides a presumption of compliance with state water quality standards.”).

EN2/ The Department of Agriculture and Consumer Services BMP manual is specifically for cow/calf operations. However, the testimony in this case was persuasive that nutrient loading for grass-fed beef production is substantially lower than that for cow/calf production. Thus, compliance with the BMPs for cow/calf operations will meet the presumption of compliance with water quality standards.

FOF of 116 is discussed in the District's ruling on Petitioners' exception 5 and for the reasons stated therein, District staff's exception 2 is accepted.

District's Exception No. 3

District staff takes exception to FOF 224 on the grounds that it appears to contain a scrivener's error in the first sentence by referring to "CUP" rather than "ERP." FOF 224 states as follows:

224. The CUP has a 'no impact' requirement for water quality resulting from the irrigation from the improved pasture. Thus, nutrients leaving the irrigated pastures may not exceed those calculated to be leaving the existing pre-development use as improved pastures.

While this FOF is located under the heading "Environmental Resource Permit", the District on this basis alone cannot conclude that the reference to the CUP is a scrivener's error and that FOF 224 should be revised as proposed by District staff. A scrivener's error is generally defined as a "clerical error" meaning "[a]n error resulting from a minor mistake or inadvertence, esp. in writing or copying on the record, and not from judicial reasoning or determination. *See* BLACK'S LAW DICTIONARY 622 (9th ed. 2004)

Rule 40C-2.301(4)(k), F.A.C., allows a CUP applicant to rely on an environmental resource permit (ERP) to meet the requirement that a consumptive use "shall not cause or contribute to a violation of state water quality standards in receiving waters of the state...", provided the ERP authorizes the discharge associated with the consumptive use and applicant is

in compliance with the water quality conditions of the ERP. Fla. Admin. Code R. 40C-2.301(4)(k), F.A.C.; 10.3(k), CUP A.H. Sleepy Creek has chosen to avail itself of this provision with regard to its consumptive use on the North Tract. To obtain the ERP, it was required to implement water quality practices to meet applicable water quality criteria for permit issuance. *See* Fla. Admin. Code R. 62-330.301(1)(e), 40C-44.065, 40C-44.066. It did so in part by providing reasonable assurance that nutrients leaving the irrigated pastures would not exceed those calculated to be leaving the existing pre-development use as improved pastures. *See* RO at ¶¶ 362, 341.

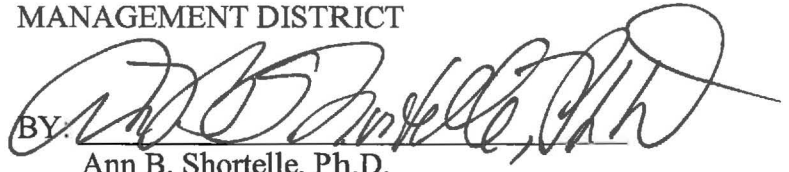
Additionally, it should be emphasized that the ERP and CUP permitting criteria actually require a proposed project (for ERP) or a proposed water use (for CUP) “not cause or contribute to a violation of state water quality standards.” *See* Fla. Admin. Code R. 62-330.301(1)(e), ERP AH Vol. I §10.2.4 and Fla. Admin. Code R. 40C-2.301(4)(k). The District interprets the ALJ’s use of quotation marks in this finding as a short-hand expression of this criterion. With these clarifications, District staff’s exception is denied.

ACCORDINGLY, IT IS HEREBY ORDERED:

The Recommended Order dated April 29, 2015, attached hereto as Exhibit “A,” is adopted in its entirety as it relates to ERP application number IND-083-130588-4 except as modified by the final action of the agency in the rulings on FOF 116 and as clarified in the rulings on Petitioners’ Exception 4 and District Exceptions 1 and 3. Sleepy Creek’s ERP number IND-083-130588-4 is hereby issued under the terms and conditions contained in the Technical Staff Report dated May 12, 2014, attached hereto as Exhibit “B.”

DONE AND ORDERED this 14th day of July 2015, in Palatka, Florida.

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

BY: 
Ann B. Shortelle, Ph.D.
Executive Director

RENDERED this 14th day of July 2015.

BY: Sandra Bertram
Sandra Bertram
District Clerk

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

SIERRA CLUB, INC., AND
ST. JOHNS RIVERKEEPER, INC.,

Petitioners,

and

FLORIDA DEFENDERS OF THE
ENVIRONMENT, INC.,

Intervenor,

vs.

Case No. 14-2608

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

Respondents.

_____/

KAREN AHLERS AND JERI BALDWIN,

Petitioners,

and

FLORIDA DEFENDERS OF THE
ENVIRONMENT, INC.,

Intervenor,

vs.

Case No. 14-2609

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

Respondents.

_____/

KAREN AHLERS AND JERI BALDWIN,

Petitioners,

and

FLORIDA DEFENDERS OF THE
ENVIRONMENT, INC.,

Intervenor,

vs.

Case No. 14-2610

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

Respondents.

_____/

RECOMMENDED ORDER

Pursuant to notice, a final hearing was held in this case on August 25-29, 2014, in Palatka, Florida, before E. Gary Early, a designated administrative law judge of the Division of Administrative Hearings.

APPEARANCES

For Petitioners Sierra Club, Inc., and St. Johns Riverkeeper, Inc.:

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For Respondent Sleepy Creek Lands, LLC:

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For Respondent St. Johns River Water Management District:

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STATEMENT OF THE ISSUE

The issue to be determined is whether Consumptive Use Permit No. 2-083-91926-3, and Environmental Resource Permit No. IND-083-130588-4 should be issued as proposed in the respective proposed agency actions issued by the St. Johns River Water Management District.

PRELIMINARY STATEMENT

On May 15, 2014, the St. Johns River Water Management District (District) issued proposed agency action, in the form of a Consumptive Use Technical Staff Report, to Sleepy Creek Lands, LLC (Sleepy Creek or Applicant) for "the use of 532.9

million gallons per year (mgd) (1.46 million gallons per day (mgd) average) of ground water from the Upper Floridan aquifer . . . for irrigation of 2,231 acres of improved pasture and other crops, and watering of cattle" (the CUP). In conjunction therewith, on May 12, 2014, the District issued proposed agency action, in the form of an Individual Environmental Resource Permit Technical Staff Report, to Sleepy Creek for "[c]onstruction of a stormwater management system, including the establishment of vegetated upland buffers, retention berms, and redistribution swales, and the implementation of other conservation practices" (the ERP).

On or about June 2, 2014, Petitioners Sierra Club, Inc., and St. Johns Riverkeeper, Inc., (the Institutional Petitioners) timely filed their Petition for Administrative Hearing challenging the proposed issuance of both the CUP and the ERP. The Petition was referred to the Division of Administrative Hearings on June 3, 2014.

On or about June 2, 2014, Petitioners Karen Ahlers and Jeri Baldwin (the Individual Petitioners) timely filed their Petition for Formal Administrative Proceedings (CUP) challenging the proposed issuance of the CUP. The Petition was referred to the Division of Administrative Hearings on June 3, 2014.

On or about June 2, 2014, the Individual Petitioners timely filed their Petition for Formal Administrative Proceedings (ERP)

challenging the proposed issuance of the ERP. The Petition was referred to the Division of Administrative Hearings on June 3, 2014.

The three cases were consolidated on June 4, 2014. The final hearing was scheduled for the week of August 18, 2014, and subsequently rescheduled for the week of August 25, 2014.

On June 30, 2014, Intervenor Florida Defenders of the Environment (FDE or Intervenor) filed its Motion for Leave to Intervene, which was granted on July 2, 2014.

For ease of reference, the Institutional Petitioners, Individual Petitioners, and Intervenor will be collectively referred to as Petitioners, unless specifically identified otherwise.

Prior to the commencement of the final hearing, the parties filed a number of motions, disposition of which may be determined by reference to the docket in this case.

The final hearing was commenced as scheduled on August 25, 2014. The permits 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.

The following exhibits were received in evidence without objection by Petitioners: Joint Applicant/District Exhibits 1 through 52, consisting of the permitting file and the Technical Staff Report for the CUP; and Joint Applicant/District Exhibits 53-71, consisting of the permitting file and the Technical Staff Report for the ERP. Upon introduction of the application and relevant material submitted to the District in support of the application, and the District's Technical Staff Report recommending approval of the permits, the Applicant and the District met the prima facie case demonstrating Applicant's entitlement to the permits.

Petitioners called as witnesses: Dr. Todd Kincaid, who was tendered and accepted as an expert in groundwater modeling, and hydrogeology with specialization in karst hydrogeology and springs; Chad Drummond, who was tendered and accepted as an expert in water resources engineering, environmental engineering, and groundwater modeling; Dr. Robert Knight, who was tendered and accepted as an expert in environmental science, wetland and aquatic hydrogeology, water quality, wetland processes, and ecosystem processes; Linda Bremer, a member and legal chair for Petitioner, Sierra Club, Inc.; Lisa Rinaman, Riverkeeper for Petitioner, St. Johns Riverkeeper, Inc.; Petitioner, Karen Ahlers, in her individual capacity and in her capacity as Executive Director of Intervenor, Florida Defenders

of the Environment; and Petitioner, Jeri Baldwin. Individual Petitioners' Exhibits 60, 65, 66, 121, 122, 139, 144, 145, and 150-152 were received in evidence. Individual Petitioners' Exhibit 140 was offered but not received in evidence.

Institutional Petitioners' Exhibits 1 and 2 were received in evidence. Intervenor's Exhibits 1 and 2 were received in evidence. Official recognition was requested and granted for Individual Petitioners' Exhibits 49, 50, 63, and 79.

The Applicant called as witnesses: Dr. Adelbert Bottcher, who was tendered and accepted as an expert in agricultural engineering, surface and groundwater modeling, watershed assessment, water quality, and soil science; Nicholas Andreyev, who was tendered and accepted as an expert in hydrogeology, and groundwater flow modeling; and Dr. William Dunn, who was tendered and accepted as an expert in ecology, with an emphasis in systems ecology, environmental science, botany, and biology. Applicant's Exhibits 201, 207, 209, 210, 214-218, 220, 222, and 225 were received in evidence.

The District called as witnesses: Travis Richardson, who was tendered and accepted as an expert in soil science; Dr. Harvey Harper, who was tendered and accepted as an expert in stormwater management and water quality; Dr. Martin Wanielista, who was tendered and accepted as an expert in stormwater management and water quality; Cameron Dewey, who was tendered

and accepted as an expert in environmental engineering; Douglas Hearn, who was tendered and accepted as an expert in geology, hydrogeology, and groundwater flow modeling; Phillip Davis, who was tendered and accepted as an expert in hydrology, hydrogeology, groundwater flow modeling, and water resource studies; and Michael Register, who was tendered and accepted as an expert in surface water management systems and agricultural engineering. District Exhibits 124, 125, 170, 179, 182, 184, 191, 202, 203, 206, 207, 209, 210, and 212 were received in evidence.

On the evening of Thursday, August 28, 2014, a public comment period authorized pursuant to section 120.57(1)(b) was conducted. The District, through counsel, confirmed its intent to consider public comment at such time as it takes final agency action in this proceeding. Therefore, the members of the public who chose to speak were placed under oath, and all parties were given an opportunity to cross-examine them, or to challenge or rebut any materials submitted. With one exception, that opportunity was waived. Forty-eight persons provided comment regarding the permits, all of whom spoke in opposition. Several persons ceded their time, but expressed general agreement with previous speakers; other persons provided written comments in lieu of testimony; and several persons had to leave the meeting before they were called to speak. A transcript of the public

comment period and copies of all documents and recordings are being provided to the District along with the record of this proceeding for the District's consideration.

The ten-volume Transcript of the final hearing was filed on September 18, 2014, and a separate two-volume Transcript of the public comment period was filed on September 23, 2014. Thirty days from the date of the filing of the Transcript having been established as the time for filing post-hearing submittals, the parties filed Proposed Recommended Orders on October 23, 2014, which have been considered in the preparation of this Recommended Order.

References to statutes are to Florida Statutes (2014) unless otherwise noted.

FINDINGS OF FACT

The Parties

1. Sierra Club, Inc., is a national organization, the mission of which is to explore, enjoy, and advocate for the environment. A substantial number of Sierra Club's 28,000 Florida members utilize the Silver River, Silver Springs, the Ocklawaha River, and the St. Johns River for water-based recreational activities, which uses include kayaking, swimming, fishing, boating, canoeing, nature photography, and bird watching.

2. St. Johns Riverkeeper, Inc., is one of 280 members of the worldwide Waterkeepers Alliance. Its mission is to protect, restore, and promote healthy waters of the St. Johns River, its tributaries, springs, and wetlands -- including Silver Springs, the Silver River, and the Ocklawaha River -- through citizen-based advocacy. A substantial number of St. Johns Riverkeeper's more than 1,000 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. Karen Ahlers is a native of Putnam County, Florida, and lives approximately 15 miles from the Applicant's property on which the permitted uses will be conducted. Ms. Ahlers currently uses the Ocklawaha River for canoeing, kayaking, and swimming, and enjoys birding and nature photography on and around the Silver River. Over the years, Ms. Ahlers has advocated for the restoration and protection of the Ocklawaha River, as an individual and as a past-president of the Putnam County Environmental Council.

4. Jeri Baldwin lives on a parcel of property in the northeast corner of Marion County, approximately one mile from the Applicant's property on which the permitted uses will be conducted. Ms. Baldwin, who was raised in the area, and whose

family and she used the resources extensively in earlier years, currently uses the Ocklawaha River for boating.

5. Florida Defenders of the Environment (FDE) is a Florida corporation, the mission of which is to conserve and protect and restore Florida's natural resources and to conduct environmental education projects. A substantial number of FDE's 186 members, of which 29 reside in Marion County, Florida, use and enjoy Silver Springs, the Silver River, and the Ocklawaha Aquatic Preserve, and their associated watersheds in their educational and outreach activities, as well as for various recreational activities including boating, fishing, wildlife observation, and other water-based recreational activities.

6. 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 East Tract and the North Tract on which the activities authorized by the permits are proposed.

7. St. Johns River Water Management District (SJRWMD or 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. The CUP is a modification and consolidation of two existing CUP permits, CUP No. 2-083-3011-7 and CUP No. 2-083-91926-2, which authorize the withdrawal of 1.46 mgd from wells located on the East Tract. Although the existing CUP permits authorize an allocation of 1.46 mgd, actual use has historically been far less, and rarely exceeded 0.3 mgd.

9. The proposed CUP modification will convert the authorized use of water from irrigation of 1,010 acres of sod grass on the East Tract, to supplemental irrigation of improved pasture for grass and other forage crops (approximately 97 percent of the proposed withdrawals) and cattle watering (approximately three percent of the proposed withdrawals) on the North Tract and the East Tract. An additional very small amount will be used in conjunction with the application of agricultural chemicals.

10. CUP No. 2-083-3011-7 is due to expire in 2021. CUP No. 2-083-91926-2 is due to expire in 2024. In addition to the consolidation of the withdrawals into a single permit, the proposed agency action would extend the term of the consolidated permit to 20 years from issuance, with the submission of a compliance report due 10 years from issuance.

11. Sleepy Creek calculated a water demand of 2.569 mgd for the production of grasses and forage crops necessary to meet the needs for grass-fed beef production, based on the expected demand in a 2-in-10 drought year. That calculation is consistent with that established in CUP Applicant's Handbook (CUP A.H.) section 12.5.1. The calculated amount exceeds the authorized average allocation of 1.46 mgd. Mr. Jenkins testified as to the District's understanding that the requested amount would be sufficient, since the proposed use was a "scaleable-type project," with adjustments to cattle numbers made as necessary to meet the availability of feed. Regardless of demand, the proposed permit establishes the enforceable withdrawal limits applicable to the property.

12. With regard to the East Tract, the proposed agency action reduces the existing 1.46 mgd allocation for that tract to a maximum allocation of 0.464 mgd, and authorizes the irrigation of 611 acres of pasture grass using existing extraction wells and six existing pivots.

13. With regard to the North Tract, the proposed agency action authorizes the irrigation of 1,620 acres of pasture and forage grain crops using 15 center pivot systems. Extraction wells to serve the North Tract pivots will be constructed on the North Tract. The proposed North Tract withdrawal wells are

further from Silver Springs than the current withdrawal locations.

14. The proposed CUP allows Sleepy Creek to apply the allocated water as it believes to be appropriate to the management of the cattle operation. Although the East Tract is limited to a maximum of 0.464 mgd, there is no limitation on the North Tract. Thus, Sleepy Creek could choose to apply all of the 1.46 mgd on the North Tract. For that reason, the analysis of impacts from the irrigation of the North Tract has generally been based on the full 1.46 mgd allocation being drawn from and applied to the North Tract.

The Environmental Resource Permit

15. As initially proposed, the CUP had no elements that would require issuance of an ERP. However, in order to control the potential for increased runoff and nutrient loading resulting from the irrigation of the pastures, Sleepy Creek proposes to construct a stormwater management system to capture runoff from the irrigated pastures, consisting of a series of vegetated upland buffers, retention berms and redistribution swales between the pastures and downgradient wetland features.

16. Because the retention berm and swale system triggered the permitting thresholds in rule 62-330.020(2)(d) ("a total project area of more than one acre") and rule 62-330.020(2)(e) ("a capability of impounding more than 40 acre-feet of water"),

Sleepy Creek was required to obtain an Environmental Resource Permit for its construction.

Regional Geologic Features

17. To the west of the North Tract is a geologic feature known as the Ocala Uplift or Ocala Platform, in which the limestone that comprises the Floridan aquifer system exists at or very near the land surface. Karst features, including subterranean conduits and voids that can manifest at the land surface as sinkholes, are common in the Ocala Uplift due in large part to the lack of consolidated or confining material overlaying the limestone. Water falling on the surface of such areas tends to infiltrate rapidly through the soil into the Floridan aquifer, occasionally through direct connections such as sinkholes. The lack of confinement in the Ocala Uplift results in few if any surface-water features such as wetlands, creeks, and streams.

18. As one moves east from the Ocala Uplift, a geologic feature known as the Cody Escarpment becomes more prominent. In the Cody Escarpment, the limestone becomes increasingly overlain by sands, shell, silt, clays, and other less permeable sediments of the Hawthorn Group.

19. The North Tract and the East Tract lie to the east of the point at which the Cody Escarpment becomes apparent. As a

result, water tends to flow overland to wetlands and other surface water features.

The Property

20. The North and East Tracts are located in northern Marion County near the community of Fort McCoy.

East Tract Topography and Historic Use

21. The East Tract is located in the Daisy Creek Basin, and includes the headwaters of a small creek that drains directly to the Ocklawaha River.

22. The historic use of the East Tract has been as a cleared 1,010-acre sod farm. The production of sod included irrigation, fertilization, and pest control. Little change in the topography, use, and appearance of the property will be apparent as a result of the permits at issue, but for the addition of grazing cattle.

23. The current CUPs that are subject to modification in this proceeding authorize groundwater withdrawals for irrigation of the East Tract at the rate of 1.46 mgd. Since the proposed agency action has the result of reducing the maximum withdrawal from wells on the East Tract to 0.464 mgd, thus proportionately reducing the proposed impacts, there was little evidence offered to counter Sleepy Creek's prima facie case that reasonable assurance was provided that the proposed East Tract groundwater withdrawal allocation will meet applicable CUP standards.

24. There are no stormwater management structures to be constructed on the East Tract. Therefore, the ERP permit discussed herein is not applicable to the East Tract.

North Tract Topography and Historic Use

25. The North Tract has a generally flat topography, with elevations ranging from 45 feet to 75 feet above sea level. The land elevation is highest at the center of the North Tract, with the land sloping towards the Ocklawaha River to the east, and to several large wet prairie systems to the west.

26. Surface water features on the North Tract include isolated, prairie, and slough-type wetlands on approximately 28 percent of the North Tract, and a network of creeks, streams, and ditches, including the headwaters of Mill Creek, a contributing tributary of the Ocklawaha River. A seasonal high groundwater elevation on the North Tract is estimated at 6 to 14 inches below ground surface.

27. The existence of defined creeks and surface water features supports a finding that the North Tract is underlain by a relatively impermeable confining layer that impedes the flow of water from the surface and the shallow surficial aquifer to the upper Floridan and lower Floridan aquifers. If there was no confining unit, water going onto the surface of the property, either in the form of rain or irrigation water, would percolate unimpeded to the lower aquifers. Areas in the Ocala Uplift to

the west of the North Tract, where the confining layer is thinner and discontinuous, contain few streams or runoff features.

28. Historically, the North Tract was used for timber production, with limited pasture and crop lands. At the time the 7,207-acre North Tract was purchased by Sleepy Creek, land use consisted of 4,061 acres of planted pine, 1,998 acres of wetlands, 750 acres of improved pasture, 286 acres of crops, 78 acres of non-forested uplands, 20 acres of native forest, 10 acres of open water, and 4 acres of roads and facilities.

29. Prior to the submission of the CUP and ERP applications, much of the planted pine was harvested, and the land converted to improved pasture. Areas converted to improved pasture include those proposed for irrigation, which have been developed in the circular configuration necessary for future use with center irrigation pivots. As a result of the harvesting of planted pine, and the conversion of about 345 acres of cropland and non-forested uplands to pasture and incidental uses, total acreage in pasture on the North Tract increased from 750 acres to 3,938 acres.

30. Other improvements were constructed on the North Tract, including the cattle processing facility. Aerial photographs suggest that the conversion of the North Tract to

improved pasture and infrastructure to support a cattle ranch is substantially complete.

31. The act of converting the North Tract from a property dominated by planted pine to one dominated by improved pasture, and the change in use of the East Tract from sod farm to pasture, were agricultural activities that did not require a permit from the District. As such, there is no impropriety in considering the actual, legal use of the property in its current configuration as the existing use for which baseline conditions are to be measured.

32. Petitioners argue that the baseline conditions should be measured against the use of the property as planted pine plantation, and that Sleepy Creek should not be allowed to "cattle-up" before submitting its permit applications, thereby allowing the baseline to be established as a higher impact use. However, the applicable rules and statutes provide no retrospective time-period for establishing the nature of a parcel of property other than that lawfully existing when the application is made. See West Coast Reg'l Water Supply Auth. v. SW Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____) ("The baseline against which projected impacts conditions [sic] are those conditions, including previously permitted adverse impacts, which existed at the time of the filing of the renewal applications.").

33. The evidence and testimony in this case focused on the effects of the water allocation on the Floridan aquifer, Silver Springs, and the Silver River, and on the effects of the irrigation on water and nutrient transport from the properties. It was not directed at establishing a violation of chapter 373, the rules of the SJRWMD, or the CUP Applicant's Handbook with regard to the use and management of the agriculturally-exempt unirrigated pastures, nor did it do so.

Soil Types

34. Soils are subject to classifications developed by the Soil Conservation Service based on their hydrologic characteristics, and are grouped into Group A, Group B, Group C, or Group D.

35. Factors applied to determine the appropriate hydrologic soil group on a site-specific basis include depth to seasonal high saturation, the permeability rate of the most restrictive layer within a certain depth, and the depth to any impermeable layers. Group A includes the most well-drained soils, and Group D includes the most poorly-drained soils. Group D soils are those with seasonal high saturation within 24 inches of the soil surface and a higher runoff potential.

36. The primary information used to determine the hydrologic soil groups on the North Tract was the depth to

seasonal-high saturation, defined as the highest expected annual elevation of saturation in the soil.

37. Depth to seasonal-high saturation was measured through a series of seven hand-dug and augered soil borings completed at various locations proposed for irrigation across the North Tract. In determining depth to seasonal-high saturation, the extracted soils were examined based on depth, color, texture, and other relevant characteristics.

38. In six of the seven locations at which soil borings were conducted, a restrictive layer was identified within 36 inches of the soil surface. At one location at the northeastern corner of the North Tract, the auger hole ended at a depth of 48 inches -- the length of the auger -- at which depth there was an observable increase in clay content but not a full restrictive layer. However, while the soil assessment was ongoing, a back-hoe was in operation approximately one hundred yards north of the boring location. Observations of that excavation revealed a heavy clay layer at a depth of approximately 5 feet.

39. In each of the locations, the depth to seasonal-high saturation was within 14 inches of the soil surface.

40. Based on the consistent observation of seasonal-high saturation at each of the sampled locations, as well as the flat topography of the property with surface water features, the

soils throughout the property, with the exception of a small area in the vicinity of Pivot 6, were determined to be in hydrologic soil Group D.

Hydrogeologic Features

41. There are generally five hydrogeologic units underlying the North Tract, those units being the surficial aquifer system, the intermediate confining unit, the upper Floridan aquifer, the middle confining unit, and the lower Floridan aquifer.

42. In areas in which a confining layer is present, water falling on the surface of the land flows over the surface of the land or across the top of the confining layer. A surficial aquifer, with a relatively high perched water table, is created by the confinement and separation of surface waters from the upper strata of the Floridan aquifer. Surface waters are also collected in or conveyed by various surface water features, including perched wetlands, creeks, and streams.

43. The preponderance of the evidence adduced at the final hearing demonstrates that the surficial aquifer exists on the property to a depth of up to 20 feet below the land surface (bls).

44. Beneath the surficial aquifer is an intermediate confining unit of dense clay interspersed with beds of sand and calcareous clays that exists to a depth of up to 100 feet bls.

The clay material observed on the North Tract is known as massive or structureless. Such clays are restrictive with very low levels of hydraulic conductivity, and are not conducive to development of preferential flow paths to the surficial or lower aquifers. The intermediate confining unit beneath the North Tract restricts the exchange of groundwater from the surficial aquifer to the upper Floridan aquifer.

45. The upper Floridan aquifer begins at a depth of approximately 100 feet bls, and extends to a depth of approximately 340 feet bls.

46. At about 340 feet bls, the upper Floridan aquifer transitions to the middle confining unit, which consists of finely grained, denser material that separates the interchange of water between the upper Floridan aquifer and the lower Floridan aquifer.

Karst Features

47. Karst features form as a result of water moving through rock that comprises the aquifer, primarily limestone, dissolving and forming conduits in the rock.

48. Karst areas present a challenging environment to simulate through modeling. Models assume the subsurface to be a relatively uniform "sand box" through which it is easier to simulate groundwater flow. However, if the subsurface contains conduits, it becomes more difficult to simulate the preferential

flows and their effect on groundwater flow paths and travel times.

49. The District has designated parts of western Alachua County and western Marion County as a Sensitive Karst Area Basin. A Sensitive Karst Area is a location in which the porous limestone of the Floridan aquifer occurs within 20 feet of the land surface, and in which there is 10 to 20 inches of annual recharge to the Floridan aquifer.

50. The designation of an area as being within the Sensitive Karst Area Basin does not demonstrate that it does, or does not, have subsurface features that are karstic in nature, or that would provide a connection between the surficial aquifer and the Floridan aquifer.

51. The western portion of the North Tract is within the Sensitive Karst Area Basin. The two intensive-use areas on the North Tract that have associated stormwater facilities -- the cattle unloading area and the processing facility -- are outside of the Sensitive Karst Area Basin.

52. The evidence was persuasive that karst features are more prominent to the west of the North Tract.

53. In order to evaluate the presence of karst features on the North Tract, Mr. Andreyev performed a "desktop-type evaluation," with a minimal field survey. The desktop review included a review of aerial photographs and an investigation of

available data, including the Florida Geological Survey database of sinkhole occurrence in the area.

54. The aerial photographs showed circular depressions suggestive of karst activity west and southwest of the North Tract, but no such depressions on the North Tract.

55. Soil borings taken on the North Tract indicated the presence of layers of clayey sand, clays, and silts at a depth of 70 to 80 feet. Well-drilling logs taken during the development of the wells used for an aquifer performance test on the North Tract showed the limestone of the Floridan aquifer starting at a depth below ground surface of 70 to 80 feet. Other boring data generated on the North Tract suggests that there is greater than 100 feet of clay and sandy clay overburden above the Floridan aquifer on and in the vicinity of the North Tract. Regardless of site-specific differences, the observed confining layer separating the surficial aquifer from the Floridan aquifer is substantial, and not indicative of a karst environment.

56. Aquifer performance tests performed on the North Tract were consistent in showing that drawdown in the surficial aquifer from the tests was minimal to non-detectable, which is strong evidence of an intact and low-permeability confining layer.

57. The presence of well-developed drainage features on the North Tract is further evidence of a unit of confinement that is restricting water from going deeper into the subsurface, and forcing it to runoff to low-lying surface water features.

58. Petitioners' witnesses did not perform any site-specific analysis of karst features on or around the Sleepy Creek property. Their understanding of the nature of the karst systems in the region was described as "hypothetical or [] conceptual." Dr. Kincaid admitted that he knew of no conduits on or adjacent to the North Tract.

59. As a result of the data collected from the North Tract, Mr. Hearn opined that the potential for karst features on the property that provide an opening to the upper Floridan aquifer "is extremely remote." Mr. Hearn's opinion is consistent with the preponderance of the evidence in this case, and is accepted.

60. In the event a surface karst feature were to manifest itself, Sleepy Creek has proposed that the surface feature be filled and plugged to reestablish the integrity of the confining layer. More to the point, the development of a surficial karst feature in an area influenced by irrigation would be sufficient grounds for the SJRWMD to reevaluate and modify the CUP to account for any changed conditions affecting the assumptions and bases for issuance of the CUP.

Silver Springs, the Silver River, and the Ocklawaha River

61. The primary, almost exclusive concern of Petitioners was the effect of the modified CUP and the nutrients from the proposed cattle ranch on Silver Springs, the Silver River, and the Ocklawaha River.

Silver Springs

62. Silver Springs has long been a well-known attraction in Florida. It is located just to the east of Ocala, Florida. Many of the speakers at the public comment period of this proceeding spoke fondly of having frequented Silver Springs over the years, enjoying its crystal clear waters through famous glass-bottomed boats.

63. For most of its recorded history, Silver Springs was the largest spring by volume in Florida. Beginning in the 1970s, it began to lose its advantage, and by the year 2000, Rainbow Springs, located in southwestern Marion County, surpassed Silver Springs as the state's largest spring.

64. Silver Springs exists at the top of the potentiometric surface of the Floridan aquifer. Being at the "top of the mountain," when water levels in the Floridan aquifer decline, groundwater flow favors the lower elevation springs. Thus, surrounding springshed boundaries expand to take more water to maintain their baseflows, at the expense of the Silver Springs

springshed, which contracts. Rainbow Springs shares an overlapping springshed with Silver Springs.

65. The analogy used by Dr. Knight was of the aquifer as a bucket with holes at different levels, and with the Silver Springs "hole" near the top of the bucket. When the water level in the bucket is high, water will flow from the top hole. As the water level drops below that hole, it will preferentially flow from the lower holes.

66. Rainbow Springs has a vent or outlet from the aquifer, that is 10 feet lower in elevation than that of Silver Springs. Coastal springs are lower still. Thus, as groundwater levels decline, the lower springs "pirate flow" from the upper springs.

67. Since the first major studies of Silver Springs were conducted in the 1950s, the ecosystem of Silver Springs has undergone changes. The water clarity, though still high as compared to other springs, has been reduced by 10 to 15 percent.

68. Since the 1950s, macrophytic plants, i.e., rooted plants with seeds and flowers, have declined in population, while epiphytic and benthic algae have increased. Those plants are sensitive to increases in nitrogen in the water. Thus, Dr. Knight's opinion that increases in nitrogen emerging from Silver Springs, calculated to have risen from just over 0.4 mg/l in the 1950s, to 1.1 mg/l in 2004, and to up to 1.5 mg/l at

present,^{1/} have caused the observed vegetative changes is accepted.

Silver River

69. Silver Springs forms the headwaters for the Silver River, a spring run 5 1/2 miles in length, at which point it becomes a primary input to the Ocklawaha River.

70. Issues of water clarity and alteration of the vegetative regime that exist at Silver Springs are also evident in the Silver River. In addition, the reduction in flow allows for more tannic water to enter the river, further reducing clarity.

71. Dr. Dunn recognized the vegetative changes in the river, and opined that the "hydraulic roughness" caused by the increase in vegetation is likely creating a spring pool backwater at Silver Springs, thereby suppressing some of the flow from the spring.

72. The Silver River has been designated as an Outstanding Florida Water. There are currently no Minimum Flows and Levels established by the District for the Silver River.

Ocklawaha River

73. The Ocklawaha River originates near Leesburg, Florida, at the Harris Chain of Lakes, and runs northward past Silver Springs.

74. The Silver River is a major contributor to the flow of the Ocklawaha River. Due to the contribution of the Silver River and other spring-fed tributaries, the Ocklawaha River can take on the appearance of a spring run during periods of low rainfall.

75. Historically, the Ocklawaha River flowed unimpeded to its confluence with the St. Johns River in the vicinity of Palatka, Florida. In the 1960s, as part of the Cross-Florida Barge Canal project, the Rodman Dam was constructed across the Ocklawaha River north of the Sleepy Creek property, creating a large reservoir known as the Rodman Pool. Dr. Knight testified convincingly that the Rodman Dam and Pool have altered the Ocklawaha River ecosystem, precipitating a decline in migratory fish populations and an increase in filamentous algae.

76. At the point at which the Ocklawaha River flows past the Sleepy Creek property, it retains its free-flowing characteristics. Mill Creek, which has its headwaters on the North Tract, is a tributary of the Ocklawaha River.

77. The Ocklawaha River, from the Eureka Dam south, has been designated as an Outstanding Florida Water. However, the Ocklawaha River at the point at which Mill Creek or other potential surface water discharges from the Sleepy Creek property might enter the river are not included in the Outstanding Florida Water designation. There are currently no

Minimum Flows and Levels established by the District for the Ocklawaha River.

The Silver Springs Springshed

78. A springshed is that area from which a spring draws water. Unlike a surface watershed boundary, which is fixed based on land features, contours, and elevations, a springshed boundary is flexible, and changes depending on a number of factors, including rainfall. As to Silver Springs, its springshed is largest during periods of more abundant rainfall when the aquifer is replenished, and smaller during drier periods when groundwater levels are down, and water moves preferentially to springs and discharge points that are lower in elevation.

79. The evidence in this case was conflicting as to whether the North Tract is in or out of the Silver Springs springshed boundary. Dr. Kincaid indicated that under some of the springshed delineations, part of the North Tract was out of the springshed, but over the total period of record, it is within the springshed. Thus, it was Dr. Kincaid's opinion that withdrawals anywhere within the region will preferentially impact Silver Springs, though he admitted that he did not have the ability to quantify his opinion.

80. Dr. Knight testified that the North Tract is within the Silver Springs "maximum extent" springshed at least part of

the time, if not all the time. He did not opine as to the period of time in which the Silver Springs springshed was at its maximum extent.

81. Dr. Bottcher testified that the North Tract is not within the Silver Springs springshed because there is a piezometric rise between North Tract and Silver Springs. Thus, in his opinion, withdrawals at the North Tract would not be withdrawing water going to Silver Springs.

82. Dr. Dunn agreed that the North Tract is on the groundwater divide for Silver Springs. In his view, the North Tract is sometimes in, and sometimes out of the springshed depending on the potentiometric surface. In his opinion, the greater probability is that the North Tract is more often outside of the Silver Springs springshed, with seasonal and year-to-year variation. Dr. Dunn's opinion provides the most credible explanation of the extent to which the North Tract sits atop that portion of the lower Floridan aquifer that feeds to Silver Springs. Thus, it is found that the groundwater divide exists to the south of the North Tract for a majority of the time, and water entering the Floridan aquifer from the North Tract will, more often than not, flow away from Silver Springs.

Silver Springs Flow Volume

83. The Silver Springs daily water discharge has been monitored and recorded since 1932. Over the longest part of the

period of record, up to the 1960s, flows at Silver Springs averaged about 800 cubic feet per second (cfs).

84. Through 1989, there was a reasonable regression between rainfall and springflow, based on average rainfalls. The long-term average rainfall in Ocala was around 50 inches per year, and long-term springflow was about 800 cfs, with deviations from average generally consistent with one another.

85. Between 1990 and 1999, the relationship between rainfall and springflow declined by about 80 cubic feet per second. Thus, with average rainfall of 50 inches per year, the average springflow was reduced to about 720 cfs.

86. From 2000 to 2009, there was an additional decline, such that the total cumulative decline for the 20-year period through 2009 was 250 cfs.

87. Dr. Dunn agreed with Dr. Knight that after 2000, there was an abrupt and persistent reduction in flow of about 165 cfs. However, Dr. Dunn did not believe the post-2000 flow reduction could be explained by rainfall directly, although average rainfall was less than normal. Likewise, groundwater withdrawals did not offer an adequate explanation.

88. Dr. Dunn described a natural 30-year cycle of wetter and drier periods known as the Atlantic Multidecadal Oscillation (AMO) that has manifested itself over the area for the period of record. From the 1940s up through 1970, the area experienced an

AMO wet cycle with generally higher than normal rainfall at the Ocala rain station.

89. For the next 30-year period, from 1970 up to 2000, the Ocala area ranged from a little bit drier to some years in which it was very, very dry. Dr. Dunn attributed the 80 cfs decline in Silver Springs flow recorded in the 1990s to that lower rainfall cycle.

90. After 2000, when the next AMO cycle would be expected to build up, as it did post-1940, it did not happen. Rather, there was a particularly dry period around 2000 that Dr. Dunn believes to have had a dramatic effect on the lack of recovery in the post-2000 flows in the Silver River. According to Mr. Jenkins, that period of deficient rainfall extended through 2010.

91. Around the year 2001, the relationship between rainfall and flow changed such that for a given amount of rainfall, there was less flow in the Silver River, with flow dropping to as low as 535 cfs after 2001. It is that reduction in flow that Dr. Knight has attributed to groundwater withdrawals.

92. It should be noted that the observed flow of Silver Springs that formed the 1995 baseline conditions for the North Central Florida groundwater model that will be discussed herein was approximately 706 cfs. At the time of the final hearing in

August 2014, flow at Silver Springs was 675 cfs. The reason offered for the apparent partial recovery was higher levels of rainfall, though the issue was not explored in depth.

93. For the ten-year period centered on the year 2000, local water use within Marion and Alachua County, closer to Silver Springs, changed little -- around one percent per year. From a regional perspective, groundwater use declined at about one percent per year for the period from 1990 to 2010.

94. The figures prepared by Dr. Knight demonstrate that the Sleepy Creek project area is in an area that has a very low density of consumptive use permits as compared to areas adjacent to Silver Springs and more clearly in the Silver Springs springshed.

95. In Dr. Dunn's opinion, there were no significant changes in groundwater use either locally or regionally that would account for the flow reduction in Silver Springs from 1990 to 2010. In that regard, the environmental report prepared by Dr. Dunn and submitted with the CUP modification application estimated that groundwater withdrawals accounted for a reduction in flow at Silver Springs of approximately 20 cfs as measured against the period of record up to the year 2000, with most of that reduction attributable to population growth in Marion County.

96. In the March 2014, environmental impacts report, Dr. Dunn described reductions in the stream flow of not only the Silver River, but of other tributaries of the lower Ocklawaha River, including the upper Ocklawaha River at Moss Bluff and Orange Creek. However, an evaluation of the Ocklawaha River water balance revealed there to be additional flow of approximately 50 cfs coming into the Ocklawaha River at other stations. Dr. Dunn suggested that changes to the vent characteristics of Silver Springs, and the backwater effects of increased vegetation in the Silver River, have resulted in a redistribution of pressure to other smaller springs that discharge to the Ocklawaha River, accounting for a portion of the diminished flow at Silver Springs.

The Proposed Cattle Operation

97. Virtually all beef cattle raised in Florida, upon reaching a weight of approximately 875 pounds, are shipped to Texas or Kansas to be fattened on grain to the final body weight of approximately 1,150 pounds, whereupon they are slaughtered and processed.

98. The United States Department of Agriculture has a certification for grass-fed beef which requires that, after an animal is weaned, it can only be fed on green forage crops, including grasses, and on corn and grains that are cut green and before they set seed. The forage crops may be grazed or put

into hay or silage and fed when grass and forage is dormant. The benefit of grass feeding is that a higher quality meat is produced, with a corresponding higher market value.

99. Sleepy Creek plans to develop the property as a grass-fed beef production ranch, with pastures and related loading/unloading and slaughter/processing facilities where calves can be fattened on grass and green grain crops to a standard slaughter weight, and then slaughtered and processed locally. By so doing, Sleepy Creek expects to save the transportation and energy costs of shipping calves to the Midwest, and to generate jobs and revenues by employing local people to manage, finish, and process the cattle.

100. As they currently exist, pastures proposed for irrigation have been cleared and seeded, and have "fairly good grass production."

101. The purpose of the irrigation is to enhance the production and quality of the grass in order to maintain the quality and reliability of feed necessary for the production of grass-fed beef.

East Tract Cattle Operation

102. The East Tract is 1,242 acres in size, substantially all of which was previously cleared, irrigated, and used for sod production. The proposed CUP permit authorizes the irrigation of 611 acres of pasture under six existing center pivots. The

remaining 631 acres will be used as improved, but unirrigated, pasture.

103. Under the proposed permit, a maximum of 1,207 cattle would be managed on the East Tract. Of that number, 707 cattle would be grazed on the irrigated paddocks, and 500 cattle would be grazed on the unirrigated improved pastures. If the decision is made to forego irrigation on the East Tract, with the water allocation being used on the North Tract or not at all, the number of cattle grazed on the six center pivot pastures would be decreased from 707 cattle to 484 cattle.

104. The historic use of the East Tract as a sod farm resulted in high phosphorus levels in the soil from fertilization, which has made its way to Daisy Creek. Sleepy Creek has proposed a cattle density substantially below that allowed by application of the formulae in the Nutrient Management Plan in order to "mine" the phosphorus levels in the soil over time.

North Tract Cattle Operation

105. The larger North Tract includes most of the "new" ranch activities, having no previous irrigation, and having been put to primarily silvicultural use with limited pasture prior to its acquisition by Sleepy Creek. The ranch's more intensive uses, i.e., the unloading corrals and the slaughter house, are located on the North Tract.

106. The North Tract is 7,207 acres in size. Of that, 1,656 acres are proposed for irrigation by means of 15 center-pivot irrigation systems.

107. In addition to the proposed irrigated pastures, the North Tract includes 2,382 acres of unirrigated improved pasture, of which approximately 10 percent is wooded.

108. Under the proposed permit, a maximum of 6,371 cattle would be managed on the North Tract. Of that number, 3,497 cattle would be grazed on the irrigated paddocks (roughly 2.2 head of cattle per acre), and 2,374 cattle would graze on the improved pastures (up to 1.1 head of cattle per acre). The higher cattle density in the irrigated pastures can be maintained due to the higher quality grass produced as a result of irrigation.

109. The remaining 500 cattle would be held temporarily in high-concentration corrals, either after offloading or while awaiting slaughter. On average, there will be fewer than 250 head of cattle staged in those high-concentration corrals at any one time.

110. In the absence of irrigation, the improved pasture on the North Tract could sustain about 4,585 cattle.

Nutrient Management Plan, Water Conservation Plan, and BMPs

111. The CUP and ERP applications find much of their support in the implementation of the Nutrient Management Plan

(NMP), the Water Conservation Plan, and Best Management Practices (BMPs). The NMP sets forth information designed to govern the day to day operations of the ranch. Those elements of the NMP that were the subject of substantive testimony and evidence at the hearing are discussed herein. Those elements not discussed herein are found to have been supported by Sleepy Creek's prima facie case, without a preponderance of competent and substantial evidence to the contrary.

112. The NMP includes a herd management plan, which describes rotational grazing and the movement of cattle from paddock to paddock, and establishes animal densities designed to maintain a balance of nutrients on the paddocks, and to prevent overgrazing.

113. The NMP establishes fertilization practices, with the application of fertilizer based on crop tissue analysis to determine need and amount. Thus, the application of nitrogen-based fertilizer is restricted to that capable of ready uptake by the grasses and forage crops, limiting the amount of excess nitrogen that might run off of the pastures or infiltrate past the root zone.

114. The NMP establishes operation and maintenance plans that incorporate maintenance and calibration of equipment, and management of high-use areas. The NMP requires that records be kept of, among other things, soil testing, nutrient application,

herd rotation, application of irrigation water, and laboratory testing.

115. The irrigation plan describes the manner and schedule for the application of water during each irrigation cycle. Irrigation schedules for grazed and cropped scenarios vary from pivot to pivot based primarily on soil type. The center pivots proposed for use employ high-efficiency drop irrigation heads, resulting in an 85 percent system efficiency factor, meaning that there is an expected evaporative loss of 15 percent of the water before it becomes available as water in the soil. That level of efficiency is greater than the system efficiency factor of 80 percent established in CUP A.H. section 12.5.2. Other features of the irrigation plan include the employment of an irrigation manager, installation of an on-site weather station, and cumulative tracking of rain and evapotranspiration with periodic verification of soil moisture conditions. The purpose of the water conservation practices is to avoid over application of water, limiting over-saturation and runoff from the irrigated pastures.

116. Sleepy Creek has entered into a Notice of Intent to Implement Water Quality BMPs with the Florida Department of Agriculture and Consumer Services which is incorporated in the NMP and which requires the implementation of Best Management Practices.^{2/} Dr. Bottcher testified that implementation and

compliance with the Water Quality Best Management Practices manual creates a presumption of compliance with water quality standards. His testimony in that regard is consistent with Department of Agriculture and Consumer Services rule 5M-11.003 ("implementation, in accordance with adopted rules, of BMPs that have been verified by the Florida Department of Environmental Protection as effective in reducing target pollutants provides a presumption of compliance with state water quality standards.").

Rotational Grazing

117. Rotational grazing is a practice by which cattle are allowed to graze a pasture for a limited period of time, after which they are "rotated" to a different pasture. The 1,656 acres proposed for irrigation on the North Tract are to be divided into 15 center-pivot pastures. Each individual pasture will have 10 fenced paddocks. The 611 acres of irrigated pasture on the East Tract are divided into 6 center-pivot pastures.

118. The outer fence for each irrigated pasture is to be a permanent "hard" fence. Separating the internal paddocks will be electric fences that can be lowered to allow cattle to move from paddock to paddock, and then raised after they have moved to the new paddock.

119. The NMP for the North Tract provides that cattle are to be brought into individual irrigated pastures as a single

herd of approximately 190 cattle and placed into one of the ten paddocks. They will be moved every one to three days to a new paddock, based upon growing conditions and the reduction in grass height resulting from grazing. In this way, the cattle are rotated within the irrigated pasture, with each paddock being used for one to three days, and then rested until each of the other paddocks have been used, whereupon it will again be used in the rotation.

120. The East Tract NMP generally provides for rotation based on the height of the pasture grasses, but is designed to provide a uniform average of cattle per acre per year. Due to the desire to "mine" phosphorus deposited during the years of operation of the East Tract as a sod farm, the density of cattle on the irrigated East Tract pastures is about 30 percent less than that proposed for the North Tract. The East Tract NMP calls for a routine pasture rest period of 15 to 30 days.

121. Unlike dairy farm pastures, where dairy cows traverse a fixed path to the milking barn several times a day, there will be minimal "travel lanes" within the pastures or between paddocks. There will be no travel lanes through wetlands.

122. If nitrogen-based fertilizer is needed, based upon tissue analysis of the grass, fertilizer is proposed for application immediately after a paddock is vacated by the herd. By so doing, the grass within each paddock will have a

sufficient period to grow and "flush up" without grazing or traffic, which results in a high-quality grass when the cattle come back around to feed.

123. Sleepy Creek proposes that rotational grazing is to be practiced on improved pastures and irrigated pastures alike. The rotational practices on the improved East Tract and North Tract pastures are generally similar to those practiced on the irrigated pastures.

124. The paddocks will have permanent watering troughs, with one trough serving two adjacent paddocks. The troughs will be raised to prevent "boggy areas" from forming around the trough. Since the area around the troughs will be of a higher use, Sleepy Creek proposes to periodically remove accumulated manure, and re-grade if necessary. Other cattle support items, including feed bunkers and shade structures are portable and can be moved as conditions demand.

Forage Crop Production

125. The primary forage crop on the irrigated pastures is to be Bermuda grass. Bermuda grass or other grass types tolerant of drier conditions will be used in unirrigated pastures. During the winter, when Bermuda grass stops growing, Sleepy Creek will overseed the North Tract pastures with ryegrass or other winter crops. Due to the limitation on

irrigation water, the East Tract NMP calls for no over-seeding for production of winter crops.

126. Crops do not grow uniformly during the course of a year. Rather, there are periods during which there are excess crops, and periods during which the crops are not growing enough to keep up with the needs of the cattle. During periods of excess, Sleepy Creek will cut those crops and store them as haylage to be fed to the cattle during lower growth periods.

127. The North Tract management plan allows Sleepy Creek to dedicate one or more irrigated pastures for the exclusive production of haylage. If that option is used, cattle numbers will be reduced in proportion to the number of pastures dedicated to haylage production. As a result of the limit on irrigation, the East Tract NMP does not recommend growing supplemental feed on dedicated irrigation pivot pastures.

Direct Wetland Impacts

128. Approximately 100 acres proposed for irrigation are wetlands or wetland buffer. Those areas are predominantly isolated wetlands, though some have surface water connections to Mill Creek, a water of the state.

129. Trees will be cut in the wetlands to allow the pivot to pass overhead. Tree cutting is an exempt agricultural activity that does not require a permit. There was no persuasive evidence that cutting trees will alter the

fundamental benefit of the wetlands or damage water resources of the District.

130. The wetlands and wetland buffer will be subject to the same watering and fertigation regimen as the irrigated pastures. The application of water to wetlands, done concurrently with the application of water to the pastures, will occur during periods in which the pasture soils are dry. The incidental application of water to the wetlands during dry periods will serve to maintain hydration of the wetlands, which is considered to be a benefit.

131. Fertilizers will be applied through the irrigation arms, a process known as fertigation. Petitioners asserted that the application of fertilizer onto the wetlands beneath the pivot arms could result in some adverse effects to the wetlands. However, Petitioners did not quantify to what extent the wetlands might be affected, or otherwise describe the potential effects.

132. Fertigation of the wetlands will promote the growth of wetland plants. Nitrogen applied through fertigation will be taken up by plants, or will be subject to denitrification -- a process discussed in greater detail herein -- in the anaerobic wetland soils. The preponderance of the evidence indicated that enhanced wetland plant growth would not rise to a level of concern.

133. Since most of the affected wetlands are isolated wetlands, there is expected to be little or no discharge of nutrients from the wetlands. Even as to those wetlands that have a surface water connection, most, if not all of the additional nitrogen applied through fertigation will be accounted for by the combined effect of plant uptake and denitrification.

134. Larger wetland areas within an irrigated pasture will be fenced at the buffer line to prevent cattle from entering. The NMP provided a blow-up of the proposed fencing related to a larger wetland on Pivot 8. Although other figures are not to the same scale, it appears that larger wetlands associated with Pivots 1, 2, 3, and 12 will be similarly fenced.

135. Cattle would be allowed to go into the smaller, isolated wetlands. Cattle going into wetlands do not necessarily damage the wetlands. Any damage that may occur is a function of density, duration, and the number of cattle. The only direct evidence of potential damage to wetlands was the statement that "[i]f you have 6,371 [cattle] go into a wetland, there may be impacts." The NMP provides that pasture use will be limited to herds of approximately 190 cattle, which will be rotated from paddock to paddock every two to three days, and which will allow for "rest" periods of approximately 20 days. There will be no travel lanes through any wetland. Thus, there

is no evidence to support a finding that the cattle at the density, duration, and number proposed will cause direct adverse effects to wetlands on the property.

High Concentration Areas

136. Cattle brought to the facility are to be unloaded from trucks and temporarily corralled for inspection. For that period, the cattle will be tightly confined.

137. Cattle that have reached their slaughter weight will be temporarily held in corrals associated with the processing plant.

138. The stormwater retention ponds used to capture and store runoff from the offloading corral and the processing plant holding corral are part of a normal and customary agricultural activity, and are not part of the applications and approvals that are at issue in this proceeding. The retention ponds associated with the high-intensity areas do not require permits because they do not exceed one acre in size or impound more than 40 acre-feet of water. Nonetheless, issues related to the retention ponds were addressed by Petitioners and Sleepy Creek, and warrant discussion here.

139. The retention ponds are designed to capture 100 percent of the runoff and entrained nutrients from the high concentration areas for a minimum of a 24-hour/25-year storm event. If rainfall occurs in excess of the designed storm, the

design is such that upon reaching capacity, only new surface water coming to the retention pond will be discharged, and not that containing high concentrations of nutrients from the initial flush of stormwater runoff.

140. Unlike the stormwater retention berms for the pastures, which are to be constructed from the first nine inches of permeable topsoil on the property, the corral retention ponds are to be excavated to a depth of six feet which, based on soil borings in the vicinity, will leave a minimum of two to four feet of clay beneath the retention ponds. In short, the excavation will penetrate into the clay layer underlying the pond sites, but will not penetrate through that layer. The excavated clay will be used to form the side slopes of the ponds, lining the permeable surficial layer and generally making the ponds impermeable.

141. Organic materials entering the retention ponds will form an additional seal. An organic seal is important in areas in which retention ponds are constructed in sandy soil conditions. Organic sealing is less important in this case, where clay forms the barrier preventing nutrients from entering the surficial aquifer. Although the organic material is subject to periodic removal, the clay layer will remain to provide the impermeable barrier necessary to prevent leakage from the ponds.

142. Dr. Bottcher testified that if, during excavation of the ponds, it was found that the remaining in-situ clay layer was too thin, Sleepy Creek would implement the standard practice of bringing additional clay to the site to ensure adequate thickness of the liner.

Nutrient Balance

143. The goal of the NMP is to create a balance of nutrients being applied to and taken up from the property. Nitrogen and phosphorus are the nutrients of primary concern, and are those for which specific management standards are proposed.

144. Nutrient inputs to the NMP consist generally of deposition of cattle manure (which includes solid manure and urine), recycling of plant material and roots from the previous growing season, and application of supplemental fertilizer.

145. Nutrient outputs to the NMP consist generally of volatilization of ammonia to the atmosphere, uptake and utilization of the nutrients by the grass and crops, weight gain of the cattle, and absorption and denitrification of the nutrients in the soil.

146. The NMP, and the various models discussed herein, average the grass and forage crop uptake and the manure deposition to match that of a 1,013 pound animal. That average weight takes into account the fact that cattle on the property

will range from calf weight of approximately 850 pounds, to slaughter weight of 1150 pounds.

147. Nutrients that are not accounted for in the balance, e.g., those that become entrained in stormwater or that pass through the plant root zone without being taken up, are subject to runoff to surface waters or discharge to groundwater.

148. Generally, phosphorus not taken up by crops remains immobile in the soil. Unless there is a potential for runoff to surface waters, the nutrient balance is limited by the amount of nitrogen that can be taken up by the crops.

149. Due to the composition of the soils on the property, the high water table, and the relatively shallow confining layer, there is a potential for surface runoff. Thus, the NMP was developed using phosphorus as the limiting nutrient, which results in nutrient application being limited by the "P-index."

150. A total of 108 pounds of phosphorus per acre/per year can be taken up and used by the irrigated pasture grasses and forage crops. Therefore, the total number of cattle that can be supported on the irrigated pastures is that which, as a herd, will deposit an average of 108 pounds of phosphorus per year over the irrigated acreage. Therefore, Sleepy Creek has proposed a herd size and density based on calculations demonstrating that the total phosphorus contained in the waste excreted by the cattle equals the amount taken up by the crops.

151. A herd producing 108 pounds per acre per year of phosphorus is calculated to produce 147 pounds of nitrogen per acre per year. The Bermuda grass and forage crops proposed for the irrigated fields require 420 pounds of nitrogen per acre per year.

152. As a result of the nitrogen deficiency, additional nitrogen-based fertilizer to make up the shortfall is required to maintain the crops. Since phosphorus needs are accounted for by animal deposition, the fertilizer will have no phosphorus.

153. The NMP requires routine soil and plant tissue tests to determine the amount of nitrogen fertilizer needed. By basing the application of nitrogen on measured rather than calculated needs, variations in inputs, including plant decomposition and atmospheric deposition, and outputs, including those affected by weather, can be accounted for, bringing the full nutrient balance into consideration.

154. The numeric values for crop uptakes, manure deposition, and other estimates upon which the NMP was developed were based upon literature, values, and research performed and published by the University of Florida and the Natural Resource Conservation Service. Dr. Bottcher testified convincingly that the use of such values is a proven and reliable method of developing a balance for the operation of similar agricultural operations.

155. A primary criticism of the NMP was its expressed intent to "reduce" or "minimize" the transport of nutrients to surface waters and groundwater, rather than to "negate" or "prevent" such transport. Petitioners argue that complete prevention of the transport of nutrients from the property is necessary to meet the standards necessary for issuance of the CUP and ERP.

156. Mr. Drummond went into some detail regarding the total mass of nutrients expected to be deposited onto the ground from the cattle, exclusive of fertilizer application. In the course of his testimony, he suggested that the majority of the nutrients deposited on the land surface "are going to make it to the surficial aquifer and then be carried either to the Floridan or laterally with the groundwater flow." However, Mr. Drummond performed no analysis on the fate of nitrogen through uptake by crops, volatilization, or soil treatment, and did not quantify the infiltration of nitrogen to groundwater. Furthermore, he was not able to provide any quantifiable estimate on any effect of nutrients on Mill Creek, the Ocklawaha River, or Silver Springs. In light of the effectiveness of the nutrient balance and other elements of the NMP, along with the retention berm system that will be discussed herein, Mr. Drummond's assessment of the nutrients that might be expected to impact water resources of the District is contrary to the greater weight of the evidence.

157. Mr. Drummond's testimony also runs counter to that of Dr. Kincaid, who performed a particle track analysis of the fate of water recharge from the North Tract. In short, Dr. Kincaid calculated that of the water that makes it as recharge from the North Tract to the surficial aquifer, less than one percent is expected to make its way to the upper Floridan aquifer, with that portion originating from the vicinity of Pivot 6. Recharge from the other 14 irrigated pastures was ultimately accounted for by evapotranspiration or emerged at the surface and found its way to Mill Creek.

158. The preponderance of the competent, substantial evidence adduced at the final hearing supports the effectiveness of the NMPs for the North Tract and East Tract at managing the application and use of nutrients on the property, and minimizing the transport of nutrients to surface water and groundwater resources of the District.

North Central Florida Model

159. All of the experts involved in this proceeding agreed that the use of groundwater models is necessary to simulate what might occur below the surface of the ground. Models represent complex systems by applying data from known conditions and impacts measured over a period of years to simulate the effects of new conditions. Models are imperfect, but are the best means

of predicting the effects of stresses on complex and unseen subsurface systems.

160. The North Central Florida (NCF) model is used to simulate impacts of water withdrawals on local and regional groundwater levels and flows.

161. The NCF model simulates the surficial aquifer, the upper Floridan aquifer, and the lower Floridan aquifer. Those aquifers are separated from one another by relatively impervious confining units.

162. The intermediate confining unit separates the surficial aquifer from the upper Floridan aquifer. The intermediate confining unit is not present in all locations simulated by the NCF model. However, the evidence is persuasive that the intermediate confining unit is continuous at the North Tract, and serves to effectively isolate the surficial aquifer from the upper Floridan aquifer.

163. The NCF model is not a perfect depiction of what exists under the land surface of the North Tract or elsewhere. It was, however, acknowledged by the testifying experts in this case, despite disagreements as to the extent of error inherent in the model, to be the best available tool for calculating the effects of withdrawals of water within the boundary of the model. The NCF model was developed and calibrated over a period

of years, is updated routinely as data becomes available, and has undergone peer review.

Aquifer Performance Tests

164. In order to gather site-specific data regarding the characteristics of the aquifer beneath the Sleepy Creek property, a series of three aquifer performance tests (APTs) was conducted on the North Tract. The first two tests were performed by Sleepy Creek, and the third by the District.

165. An APT serves to induce stress on the aquifer by pumping from a well at a high rate. By observing changes in groundwater levels in observation wells, which can be at varying distances from the extraction well, one can extrapolate the nature of the subsurface. In addition, well-completion reports for the various withdrawal and observation wells provide actual data regarding the composition of subsurface soils, clays, and features of the property.

166. The APT is particularly useful in evaluating the ability of the aquifer to produce water, and in calculating the transmissivity of the aquifer. Transmissivity is a measure of the rate at which a substance passes through a medium and, as relevant to this case, measures how groundwater flows through an aquifer.

167. The APTs demonstrated that the Floridan aquifer is capable of producing water at the rate requested.

168. The APT drawdown contour measured in the upper Floridan aquifer was greater than that predicted from a simple run of the NCF model, but the lateral extent of the drawdown was less than predicted. The most reasonable conclusion to be drawn from the combination of greater than expected drawdown in the upper Floridan aquifer with less than expected extent is that the transmissivity of the aquifer beneath the North Tract is lower than the NCF model assumptions.

169. The conclusion that the transmissivity of the aquifer at the North Tract is lower than previously estimated means that impacts from groundwater extraction would tend to be more vertical than horizontal, i.e., the drawdown would be greater, but would be more localized. As such, for areas of lower than estimated transmissivity, modeling would over-estimate off-site impacts from the extraction.

NCF Modeling Scenarios

170. The initial NCF modeling runs were based on an assumed withdrawal of 2.39 mgd, an earlier -- though withdrawn -- proposal. The evidence suggests that the simulated well placement for the 2.39 mgd model run was entirely on the North Tract. Thus, the results of the model based on that withdrawal have some limited relevance, especially given that the proposed CUP allows for all of the requested 1.46 mgd of water to be withdrawn from North Tract wells at the option of Sleepy Creek,

but will over-predict impacts from the permitted rate of withdrawal.

171. A factor that was suggested as causing a further over-prediction of drawdown in the 2.39 mgd model run was the decision, made at the request of the District, to exclude the input of data of additional recharge to the surficial aquifer, wetlands and surface waters from the irrigation, and the resulting diminution in soil storage capacity. Although there is some merit to the suggestion that omitting recharge made the model results "excessively conservative," the addition of recharge to the model would not substantially alter the predicted impacts.

172. A model run was subsequently performed based on a presumed withdrawal of 1.54 mgd, a rate that remains slightly more than, but still representative of, the requested amount of 1.46 mgd. The 1.54 mgd model run included an input for irrigation recharge. The simulated extraction points were placed on the East Tract and North Tract in the general configuration as requested in the CUP application.

173. The NCF is designed to model the impacts of a withdrawal based upon various scenarios, identified at the hearing as Scenarios A, B, C, and D.

174. Scenario A is the baseline condition for the NCF model, and represents the impacts of all legal users of water at

their estimated actual flow rates as they existed in 1995. Scenario B is all existing users, not including the applicant, at end-of-permit allocations. Scenario C is all existing users, including the applicant, at current end-of-permit allocations. Scenario D is all permittees at full allocation, except the applicant which is modeled at the requested (i.e., new or modified) end-of-permit allocation. To simulate the effects of the CUP modification, simulations were performed on scenarios A, C, and D.

175. In order to measure the specific impact of the modification of the CUP, the Scenario C impacts to the surficial, upper Floridan, and lower Floridan aquifers were compared with the Scenario D impacts to those aquifers.

176. In order to measure the cumulative impact of the CUP, the Scenario A actual-use baseline condition was compared to the Scenario D condition which predicts the impacts of all permitted users, including the applicant, pumping at full end-of-permit allocations.

177. The results of the NCF modeling indicate the following:

2.39 mgd - Specific Impact

178. The surficial aquifer drawdown from the simulated 2.39 mgd withdrawal was less than 0.05 feet on-site and off-

site, except to the west of the North Tract, at which a drawdown of 0.07 feet was predicted.

179. The upper Floridan aquifer drawdown from the 2.39 mgd withdrawal was predicted at between 0.30 and 0.12 feet on-site, and between 0.30 and 0.01 feet off-site. The higher off-site figures are immediately proximate to the property.

180. The lower Floridan aquifer drawdown from the 2.39 mgd withdrawal was predicted at less than 0.05 feet at all locations, and at or less than 0.02 feet within six miles of the North Tract.

2.39 mgd - Cumulative Impact

181. The cumulative impact to the surficial aquifer from all permitted users, including a 2.39 mgd Sleepy Creek withdrawal, was less than 0.05 feet on-site, and off-site to the north and east, except to the west of the North Tract, at which a drawdown of 0.07 feet was predicted.

182. The cumulative impact to the upper Floridan aquifer from all permitted users, including a 2.39 mgd Sleepy Creek withdrawal, ranged from 0.4 feet to 0.8 feet over all pertinent locations.

183. The cumulative impact to the lower Floridan aquifer from all permitted users, including a 2.39 mgd Sleepy Creek withdrawal, ranged from 1.0 to 1.9 feet over all pertinent locations. The conclusion drawn by Mr. Andreyev that the

predicted impacts to the lower Floridan are almost entirely from other end-of-permit user withdrawals is supported by the evidence and accepted.

1.54 mgd - Specific Impact

184. The NCF model runs based on the more representative 1.54 mgd withdrawal predicted a surficial aquifer drawdown of less than 0.01 feet (i.e., no drawdown contour shown) on the North Tract, and a 0.01 to 0.02 foot drawdown at the location of the East Tract.

185. The drawdown of the upper Floridan aquifer from the CUP modification was predicted at up to 0.07 feet on the property, and generally less than 0.05 feet off-site. There were no drawdown contours at the minimum 0.01 foot level that came within 9 miles of Silver Springs.

186. The lower Floridan aquifer drawdown from the CUP modification was predicted at less than 0.01 feet (i.e., no drawdown contour shown) at all locations.

1.54 mgd - Cumulative Impact

187. A comparison of the cumulative drawdown contours for the 2.36 mgd model and 1.54 mgd model show there to be a significant decrease in predicted drawdowns to the surficial and upper Floridan aquifers, with the decrease in the upper Floridan aquifer drawdown being relatively substantial, i.e., from 0.5 to 0.8 feet on-site predicted for the 2.36 mgd withdrawal, to 0.4

to 0.5 feet on-site for the 1.54 mgd model. Given the small predicted individual impact of the CUP on the upper Floridan aquifer, the evidence is persuasive that the cumulative impacts are the result of other end-of-permit user withdrawals. The drawdown contour for the lower Floridan aquifer predicted by the 1.54 mgd model is almost identical to that of the 2.36 mgd model, thus supporting the conclusion that predicted impacts to the lower Floridan are almost entirely from other end-of-permit user withdrawals.

Modeled Effect on Silver Springs

188. As a result of the relocation of the extraction wells from the East Tract to the North Tract, the NCF model run at the 1.54 mgd withdrawal rate predicted springflow at Silver Springs to increase by 0.15 cfs.

189. The net cumulative impact in spring flow as measured from 1995 conditions to the scenario in which all legal users, including Sleepy Creek, are pumping at full capacity at their end-of-permit rates for one year^{3/} is roughly 35.4 cfs, which is approximately 5 percent of Silver Springs' current flow.

However, as a result of the redistribution of the Sleepy Creek withdrawal, which is, in its current iteration, a legal and permitted use, the cumulative effect of the CUP modification at issue is an increase in flow of 0.15 cfs.

190. Dr. Kincaid agreed that there is more of an impact to Silver Springs when the pumping allowed by the CUP is located on the East Tract than there is on the North Tract, but that the degree of difference is very small. Dr. Knight testified that effect on the flow of Silver Springs from relocating the 1.46 mgd withdrawal from the East Tract to the North Tract would be "zero."

191. The predicted increase of 0.15 cfs is admittedly miniscule when compared to the current Silver Springs springflow of approximately 675 cfs. However, as small as the modeled increase may be -- perhaps smaller than its "level of certainty" -- it remains the best evidence that the impact of the CUP modification to the flow of Silver Springs will be insignificant at worst, and beneficial at best.

Opposition to the NCF Model

192. Petitioners submitted considerable evidence designed to call the results generated by the District's and Sleepy Creek's NCF modeling into question.

Karst Features

193. A primary criticism of the validity of the NCF model was its purported inability to account for the presence of karst features, including conduits, and their effect on the results.

194. It was Dr. Kincaid's opinion that the NCF model assigned transmissivity values that were too high, which he

attributed to the presence of karst features that are collecting flow and delivering it to springs. He asserted that, instead of assuming the presence of karst features, the model was adjusted to raise the overall capacity of the porous medium to transmit water, and thereby match the observed flows. In his opinion, the transmissivity values of the equivalent porous media were raised so much that the model can no longer be used to predict drawdowns. That alleged deficiency in the model is insufficient for two reasons.

195. First, as previously discussed in greater detail, the preponderance of the evidence in this case supports a finding that there are no karst features in the vicinity of the North Tract that would provide preferential pathways for water flow so as to skew the results of the NCF model.

196. Second, Dr. Kincaid, while acknowledging that the NCF model is the best available tool for predicting impacts from groundwater extraction on the aquifer, suggested that a hybrid porous media and conduit model would be a better means of predicting impacts, the development of which would take two years or more. There is no basis for the establishment of a de facto moratorium on CUP permitting while waiting for the development of a different and, in this case, unnecessary model.

197. For the reasons set forth herein, it is found that the NCF model is sufficient to accurately and adequately predict

the effects of the Sleepy Creek groundwater withdrawals on the aquifers underlying the property, and to provide reasonable assurance that the standards for such withdrawals have been met.

Recharge to the Aquifer

198. Petitioners argued that the modeling results showing little significant drawdown were dependent on the application of unrealistic values for recharge or return flow from irrigation.

199. In a groundwater model, as in the physical world, some portion of the water extracted from the aquifer is predicted to be returned to the aquifer as recharge. If more water is applied to the land surface than is being accounted for by evaporation, plant uptake and evapotranspiration, surface runoff, and other processes, that excess water may seep down into the aquifer as recharge. Recharge serves to replenish the aquifer and offset the effects of the groundwater withdrawal.

200. Dr. Kincaid opined that the NCF modeling performed for the CUP application assigned too much water from recharge, offsetting the model's prediction of impacts to other features.

201. It is reasonable to assume that there is some recharge associated with both agricultural and public supply uses. However, the evidence suggests that the impact of recharge on the overall NCF model results is insignificant on the predicted impacts to Silver Springs, the issue of primary concern.

202. Mr. Hearn ran a simulation using the NCF model in which all variables were held constant, except for recharge. The difference between the "with recharge" and "without recharge" simulations at Silver Springs was 0.002 cfs. That difference is not significant, and is not suggestive of adverse impacts on Silver Springs from the CUP modification.

203. Dr. Kincaid testified that "the recharge offset on the property is mostly impacting the surficial aquifer," and that "the addition of recharge in this case didn't have much of an impact on the upper Floridan aquifer system." As such, the effect of adding recharge to the model would be as to the effect of groundwater withdrawal on wetlands or surface water bodies, and not on springs.

204. As previously detailed, the drawdown of the surficial aquifer simulated for the 2.39 mgd "no recharge" scenario were less than 0.05 feet on-site and off-site, except for a predicted 0.07 foot drawdown to the west of the North Tract. The predicted drawdown of the surficial aquifer for the 1.54 mgd "with recharge" scenario was 0.02 feet or less. The preponderance of the evidence supports a finding that drawdowns of either degree are less than that at which adverse impacts to wetlands or surface waters would occur. Thus, issues related to the recharge or return flows from irrigation are insufficient to support a finding or conclusion that the NCF model failed to

provide reasonable assurance that the standards for issuance of the CUP modification were met.

External Boundaries

205. The boundaries of the NCF model are not isolated from the rest of the physical world. Rather, groundwater flows into the modeled area from multiple directions, and out of the modeled area in multiple directions.

206. Inflows to the model area are comprised of recharge, which is an assigned value, and includes water infiltrating and recharging the aquifer from surface waters; injection wells; upward and downward leakage from lower aquifers; and flow across the external horizontal boundaries.

207. Outflows from the model area include evapotranspiration; discharge to surface waters, including springs and rivers; extraction from wells; upward and downward leakage from lower aquifers; and flow against the external model boundaries.

208. Dr. Kincaid testified that flow across the external model boundary is an unknown and unverifiable quantity which increases the uncertainty in the model. He asserted that in the calibrated version of the model, there is no way to check those flows against data. His conclusion was that the inability of the NCF model to accurately account for external boundary flow made the margin of error so great as to make the model an

unreliable tool with which to assess whether the withdrawal approved by the proposed CUP modification will increase or decrease drawdown at Silver Springs.

209. The District correlates the NCF model boundaries with a much larger model developed by the United States Geological Survey, the Peninsula of Florida Model, more commonly referred to as the Mega Model, which encompasses most of the State of Florida and part of Southeast Georgia. The Mega Model provides a means to acknowledge that there are stresses outside the NCF model, and to adjust boundary conditions to account for those stresses. The NCF is one of several models that are subsets of the Mega Model, with the grids of the two models being "nested" together.

210. The 1995 base year of the NCF model is sufficiently similar to the 1993-1994 base year of the Mega Model as to allow for a comparison of simulated drawdowns calculated by each of the models. By running a Mega Model simulation of future water use, and applying the change in that use from 1993 base year conditions, the District was able to come to a representative prediction of specific boundary conditions for the 1995 NCF base year, which were then used as the baseline for simulations of subsequent conditions.

211. In its review of the CUP modification, the District conducted a model validation simulation to measure the accuracy

of the NCF model against observed conditions, with the conditions of interest being the water flow at Silver Springs. The District ran a simulation using the best information available as to water use in the year 2010, the calculated boundary conditions, irrigation, pumping, recharge, climatic conditions, and generally "everything that we think constitutes that year."

212. The discharge of water at Silver Springs in 2010 was measured at 580 cfs. The discharge simulated by the NCF model was 545 cfs. Thus, the discharge predicted by the NCF model simulation was within six percent of the observed discharge. Such a result is generally considered in the modeling community to be "a home run."

213. Petitioners' objections to the calculation of boundary conditions for the NCF model are insufficient to support a finding that the NCF model is not an appropriate and accurate tool for determining that reasonable assurance has been provided that the standards for issuance of the CUP modification were met.

Cumulative Impact Error

214. As part of the District's efforts to continually refine the NCF, and in conjunction with a draft minimum flows and levels report for Silver Springs and the Silver River, the cumulative NCF model results for the period of baseline to 2010

were compared with the simulated results from the Northern District Model (NDF), a larger model that overlapped the NCF.

215. As a result of the comparison, which yielded different results, it was discovered that the modeler had "turned off" not only the withdrawal pumps, but inputs to the aquifer from drainage wells and sinkholes as well. When those inputs were put back into the model run, and effects calculated only from withdrawals between the "pumps-off" condition and 2010 pumping conditions, the cumulative effect of the withdrawals was adjusted from a reduction in the flow at Silver Springs of 29 cfs to a reduction of between 45 and 50 cfs, an effect described as "counterintuitive." Although that result has not undergone peer review, and remains subject to further review and comparison with the Mega Model, it was accepted by the District representative, Mr. Bartol.

216. Petitioners seized upon the results of the comparison model run as evidence of the inaccuracy and unreliability of the NCF model. However, the error in the NCF model run was not the result of deficiencies in the model, but was a data input error. Despite the error in the estimate of the cumulative effect of all users at 2010 levels, the evidence in this case does not support a finding that the more recent estimates of specific impact from the CUP at issue were in error.

NCF Model Conclusion

217. As has been discussed herein, a model is generally the best means by which to calculate conditions and effects that cannot be directly observed. The NCF model is recognized as being the best tool available for determining the subsurface conditions of the model domain, having been calibrated over a period of years and subject to peer review.

218. It should be recognized that the simulations run using the NCF model represent the worst-case scenario, with all permittees simultaneously drawing at their full end-of-permit allocations. There is merit to the description of that occurrence as being "very remote." Thus, the results of the modeling represent a conservative estimate of potential drawdown and impacts.

219. While the NCF model is subject to uncertainty, as is any method of predicting the effects of conditions that cannot be seen, the model provides reasonable assurance that the conditions simulated are representative of the conditions that will occur as a result of the withdrawals authorized by the CUP modification.

Environmental Resource Permit

220. The irrigation proposed by the CUP will result in runoff from the North Tract irrigated pastures in excess of that

expected from the improved pastures, due in large measure to the diminished storage capacity of the soil.

221. Irrigation water will be applied when the soils are dry, and capable of absorbing water not subject to evaporation or plant uptake. The irrigation water will fill the storage space that would exist without irrigation.

222. With irrigation water taking up the capacity of the soil to hold water, soils beneath the irrigation pivots will be less capable of retaining additional moisture during storm events. Thus, there is an increased likelihood of runoff from the irrigated pastures over that expected with dry soils. The increase in runoff is expected to be relatively small, since there should be little or no irrigation needed during the normal summer wet season.

223. The additional runoff may have increased nutrient levels due to the increased cattle density made possible by the irrigation of the pastures.

224. The CUP has a no-impact requirement for water quality resulting from the irrigation of the improved pasture. Thus, nutrients leaving the irrigated pastures may not exceed those calculated to be leaving the existing pre-development use as improved pastures.

Retention Berms

225. The additional runoff and nutrient load is proposed to be addressed by constructing a system of retention berms, approximately 50,000^{4/} feet in length, which is intended to intercept, retain, and provide treatment for runoff from the irrigated pasture. The goal of the system is to ensure that post-development nutrient loading from the proposed irrigated pastures will not exceed the pre-development nutrient loading from the existing improved pastures.

226. An ERP permit is required for the construction of the berm system, since the area needed for the construction of the berms is greater than the one acre in size, and since the berms have the capability of impounding more than 40 acre-feet of water.

227. The berms are to be constructed by excavating the top nine inches of sandy, permeable topsoil and using that permeable soil to create the berms, which will be 1 to 2 feet in height. The water storage areas created by the excavation will have flat or horizontal bottoms, and will be very shallow with the capacity to retain approximately a foot of water. The berms will be planted with pasture grasses after construction to provide vegetative cover.

228. The retention berm system is proposed to be built in segments, with the segment designed to capture runoff from a

particular center pivot pasture to be constructed prior to the commencement of irrigation from that center pivot.

229. A continuous clay layer underlies the areas in which the berms are to be constructed. The clay layer varies from 18 to 36 inches below the ground surface, with at least one location being as much as five feet below the ground surface. As such, after nine inches of soil is scraped away to create the water retention area and construct the berm, there will remain a layer of permeable sandy material above the clay.

230. The berms are to be constructed at least 25 feet landward of any jurisdictional wetland, creating a "safe upland line." Thus, the construction, operation, and maintenance of the retention berms and redistribution swales will result in no direct impacts to jurisdictional wetlands or other surface waters. There will be no agricultural activities, e.g., tilling, planting, or mowing, within the 25-foot buffers, and the buffers will be allowed to establish with native vegetation to provide additional protection for downgradient wetlands.

231. As stormwater runoff flows from the irrigated pastures, it may, in places, create concentrated flow ways. Redistribution swales will be built in those areas to spread any remaining overland flow of water and reestablish sheet flow to the retention berm system. At any point at which water may

overtop a berm, the berm will be hardened with rip-rap to insure its integrity.

232. The berms are designed to intercept and collect overland flow from the pastures and temporarily store it behind the berms, regaining the soil storage volume lost through irrigation.

233. A portion of the runoff intercepted by the berm system will evaporate. The majority will infiltrate either through the berm, or vertically into the subsurface soils beneath it. When the surficial soils become saturated, further vertical movement will be stopped by the impermeable clay layer underlying the site. The runoff water will then move horizontally until it reemerges into downstream wetland systems. Thus, the berm system is not expected to have a measurable impact on the hydroperiod of the wetlands on the North Tract.

Phosphorus Removal

234. Phosphorus tends to get "tied up" in soil as it moves through it. Phosphorus reduction occurs easily in permeable soil systems because it is removed from the water through a chemical absorption process that is not dependent on the environment of the soil. As the soils in the retention areas and berms go through drying cycles, the absorption capacity is regenerated. Thus, the retention system will effectively account for any increase in phosphorus resulting from the

increased cattle density allowed by the irrigation such that there is expected to be no increase in phosphorus levels beyond the berm.

Nitrogen Removal

235. When manure is deposited on the ground, primarily as high pH urine, the urea is quickly converted to ammonia, which experiences a loss of 40 to 50 percent of the nitrogen to volatilization.

236. Soil conditions during dry weather conditions are generally aerobic. Remaining ammonia in the manure is converted by aerobic bacteria in the soil to nitrates and nitrites. Converted nitrates and nitrites from manure, along with nitrogen from fertilizer, is readily available for uptake as food by plants, including grasses and forage crops.

237. Nitrates and nitrites are mobile in water. Therefore, during rain events of sufficient intensity to create runoff, the nitrogen can be transported downstream towards wetlands and other receiving waters, or percolate downward through the soil until blocked by an impervious barrier.

238. During storm events, the soils above the clay confining layer and the lower parts of the pervious berms become saturated. Those saturated soils are drained of oxygen and become anaerobic.

239. When nitrates and nitrites encounter saturated conditions, they provide food for anaerobic bacteria that exist in those conditions. The bacteria convert nitrates and nitrites to elemental nitrogen, which has no adverse impact on surface waters or groundwater. That process, known as denitrification, is enhanced in the presence of organic material. The soils from which the berms are constructed have a considerable organic component.

240. In addition to the denitrification that occurs in the saturated conditions in and underlying the berms, remaining nitrogen compounds that reemerge into the downstream wetlands are likely to encounter organic wetland-type soil conditions. Organic wetland soils are anaerobic in nature, and will result in further, almost immediate denitrification of the nitrates and nitrites in the emerging water.

Calculation of Volume - BMPTRAINS Model

241. The calculation of the volume necessary to capture and store excess runoff from the irrigated pastures was performed by Dr. Wanielista using the BMPTRAINS model. BMPTRAINS is a simple, easy to use spreadsheet model. Its ease of use does not suggest that it is less than reliable. The model has been used as a method of calculating storage volumes in many conditions over a period of more than 40 years.

242. The model was used to calculate the storage volumes necessary to provide storage and treatment of runoff from fifteen "basins" that had a control or a Best Management Practice associated with them.

243. All of the basins were calculated as being underlain by soils in poorly-drained hydrologic soil Group D, except for the basin in the vicinity of Pivot 6, which is underlain by the more well-drained soil Group A. The model assumed about 5 percent of the property to have soil Group A soils, an assumption that is supported by the evidence.

244. Soil moisture conditions on the property were calculated by application of data regarding rainfall events and times, the irrigation schedule, and the amount of irrigation water projected for use over a year. The soil moisture condition was used to determine the amount of water that could be stored in the on-site soils, known as the storage coefficient.

245. Once the storage coefficient was determined, that data was used to calculate the amount of water that would be expected to run off of the North Tract, known as the curve number. The curve number is adjusted by the extent to which the storage within a soil column is filled by the application of irrigation water, making it unable to store additional rainfall. As soil storage goes down, the curve number goes up. Thus, a

curve number that approaches 100 means that more water is predicted to run off. Conversely, a lower curve number means that less water is predicted to run off.

246. The pre-development curve number for the North Tract was based on the property being an unirrigated, poor grass area.

247. A post-development curve number was assigned to the property that reflected a wet condition representative of the irrigated soils beneath the pivots. In calculating the storage volume necessary to handle runoff from the basins, the wet condition curve number was adjusted based on the fact that there is a mixture of irrigated and unirrigated general pasture within each basin to be served by a segment of the retention berm system, and by the estimated 15 percent of the time that the irrigation areas would be in a drier condition. In addition, the number was adjusted to reflect the 8 to 10 inches of additional evapotranspiration that occurs as a result of irrigation.

248. The BMPTRAINS model was based on average annual nutrient-loading conditions, with water quality data collected at a suitable point within Reach 22, the receiving waterbody. The effects of nutrients from the irrigated pastures on receiving waterbodies is, in terms of the model, best represented by average annual conditions, rather than a single highest-observed nutrient value.

249. Pre-development loading figures were based on the existing use of the property as unirrigated general pasture.

250. The pre-development phosphorus loading figure was calculated at an average event mean concentration (EMC) of 0.421 milligrams per liter (mg/l).

251. The post-condition phosphorus loading figure was calculated at an EMC of 0.621 mg/l. Therefore, in order to achieve pre-development levels of phosphorus, treatment to achieve a reduction in phosphorus of approximately 36 percent was determined to be necessary.

252. The pre-development nitrogen loading figure was calculated at an EMC of 2.6 mg/l.

253. The post-condition nitrogen loading figure was calculated at an EMC of 3.3 mg/l. Therefore, in order to achieve pre-development levels of nitrogen, treatment to achieve a reduction in nitrogen of approximately 25 percent was determined to be necessary.

254. The limiting value for the design of the retention berms is phosphorus. To achieve post-development concentrations that are equal to or less than pre-development concentrations, the treatment volume of the berm system must be sufficient to allow for the removal of 36 percent of the nutrients in water being retained and treated behind the berms, which represents the necessary percentage of phosphorus.

255. In order to achieve the 36 percent reduction required for phosphorus, the retention berm system must be capable of retaining approximately 38 acre-feet of water from the 15 basins. In order to achieve that retention volume, a berm length of approximately 50,000 linear feet was determined to be necessary, with an average depth of retention behind the berms of one foot.

256. The proposed length of the berms is sufficient to retain the requisite volume of water to achieve a reduction in phosphorus of 36 percent. Thus, the post-development/irrigation levels of phosphorus from runoff are expected to be no greater than pre-development/general pasture levels of phosphorus from runoff.

257. By basing the berm length and volume on that necessary for the treatment of phosphorus, there will be storage volume that is greater than required for a 25 percent reduction in nitrogen. Thus, the post-development/irrigation levels of nitrogen from runoff are expected to be less than pre-development/general pasture levels of nitrogen from runoff.

258. Mr. Drummond admitted that the design of the retention berms "shows there is some reduction, potentially, but it's not going to totally clean up the nutrients." Such a total clean-up is not required. Rather, it is sufficient that there is nutrient removal to pre-development levels, so that there is

no additional pollutant loading from the permitted activities. Reasonable assurance that such additional loading is not expected to occur was provided.

259. Despite Mr. Drummond's criticism of the BMPTRAINS model, he did not quantify nutrient loading on the North Tract, and was unable to determine whether post-development concentrations of nutrients would increase over pre-development levels. As such, there was insufficient evidence to counter the results of the BMPTRAINS modeling.

Watershed Assessment Model

260. In order to further assess potential water quantity and water quality impacts to surface water bodies, and to confirm stormwater retention area and volume necessary to meet pre-development conditions, Sleepy Creek utilized the Watershed Assessment Model (WAM). The WAM is a peer-reviewed model that is widely accepted by national, state, and local regulatory entities.

261. The WAM was designed to simulate water balance and nutrient impacts of varying land uses. It was used in this case to simulate and provide a quantitative measure of the anticipated impacts of irrigation on receiving water bodies, including Mill Creek, Daisy Creek, the Ocklawaha River, and Silver Springs. Inputs to the model include land conditions,

soil conditions, rain and climate conditions, and water conveyance systems found on the property.

262. In order to calculate the extent to which nutrients applied to the land surface might affect receiving waters, a time series of surface water and groundwater flow is "routed" through the modeled watershed and to the various outlets from the system, all of which have assimilation algorithms that represent the types of nutrient uptakes expected to occur as water goes through the system.

263. Simulations were performed on the North Tract in its condition prior to acquisition by Sleepy Creek, in its current "exempted improved pasture condition," and in its proposed "post-development" pivot-irrigation condition. The simulations assessed impacts of the site conditions on surface waters at the point at which they leave the property and discharge to Mill Creek, and at the point where Mill Creek merges into the Ocklawaha River.

264. The baseline condition for measuring changes in nutrient concentrations was determined to be that lawfully existing at the time the application was made. Had there been any suggestion of illegality or impropriety in Sleepy Creek's actions in clearing the timber and creating improved pasture, a different baseline might be warranted. However, no such illegality or impropriety was shown, and the SJRWMD rules create

no procedure for "looking back" to previous land uses and conditions that were legally changed. Thus, the "exempted improved pasture condition" nutrient levels are appropriate for comparison with irrigated pasture nutrient levels.

265. The WAM simulations indicated that nitrogen resulting from the irrigation of the North Tract pastures would be reduced at the outflow to Mill Creek at the Reach 22 stream segment from improved pasture levels by 1.7 percent in pounds per year, and by 0.6 percent in milligrams per liter of water. The model simulations predicted a corresponding reduction at the Mill Creek outflow to the Ocklawaha River of 1.3 percent in pounds per year, and 0.5 percent in milligrams per liter of water. These levels are small, but nonetheless support a finding that the berm system is effective in reducing nitrogen from the North Tract. Furthermore, the WAM simulations showed levels of nitrogen from the irrigated pasture after the construction of the retention berms to be reduced from that present in the pre-development condition, a conclusion consistent with that derived from the BMPTRAINS model.

266. The WAM simulations indicated that phosphorus from the irrigated North Tract pastures, measured at the outflow to Mill Creek at the Reach 22 stream segment, would be reduced from improved pasture levels by 3.7 percent in pounds per year, and by 2.6 percent in milligrams per liter of water. The model

simulations predicted a corresponding reduction at the Mill Creek outflow to the Ocklawaha River of 2.5 percent in pounds per year, and 1.6 percent in milligrams per liter of water. Those levels are, again, small, but supportive of a finding of no impact from the permitted activities. The WAM simulations showed phosphorus in the Ocklawaha River at the Eureka Station after the construction of the retention berms to be slightly greater than those simulated for the pre-development condition (0.00008 mg/l) -- the only calculated increase. That level is beyond miniscule, with impacts properly characterized as "non-measurable" and "non-detectable." In any event, total phosphorus remains well below Florida's nutrient standards.

267. The WAM simulations were conducted based on all of the 15 pivots operating simultaneously at full capacity. That amount is greater than what is allowed under the permit. Thus, according to Dr. Bottcher, the predicted loads are higher than those that would be generated by the permitted allocation, making his estimates "very conservative." Dr. Bottcher's testimony is credited.

268. During the course of the final hearing, the accuracy of the model results was questioned based on inaccuracies in rainfall inputs due to the five-mile distance of the property from the nearest rain station. Dr. Bottcher admitted that given the dynamics of summer convection storms, confidence that the

rain station rainfall measurements represent specific conditions on the North Tract is limited. However, it remains the best data available. Furthermore, Dr. Bottcher testified that even if specific data points simulated by the model differ from that recorded at the rain station, that same error carries through each of the various scenarios. Thus, for the comparative purpose of the model, the errors get "washed out."

269. Other testimony regarding purported inaccuracies in the WAM simulations and report were explained as being the result of errors in the parameters used to run alternative simulations or analyze Sleepy Creek's simulations, including use of soil types that are not representative of the North Tract, and a misunderstanding of dry weight/wet weight loading rates.

270. There was agreement among witnesses that the WAM is regarded, among individuals with expertise in modeling, as an effective tool, and was the appropriate model for use in the ERP application that is the subject of this proceeding. As a result, the undersigned accepts the WAM simulations as being representative of comparative nutrient impacts on receiving surface water bodies resulting from irrigation of the North Tract.

271. The WAM confirmed that the proposed retention berm system will be sufficient to treat additional nutrients that may

result from irrigation of the pastures, and supports a finding of reasonable assurance that water quality criteria will be met.

272. With regard to the East Tract, the WAM simulations showed that there would be reductions in nitrogen and phosphorus loading to Daisy Creek from the conversion of the property to irrigated pasture. Those simulations were also conservative because they assumed the maximum number of cattle allowed by the nutrient balance, and did not assume the 30 percent reduction in the number of cattle under the NMP so as to allow existing elevated levels of phosphorus in the soil from the sod farm to be "mined" by vegetation.

Pivot 6

273. The evidence in this case suggests that, unlike the majority of the North Tract, a small area on the western side of the North Tract drains to the west and north. Irrigation Pivot 6 is within that area.

274. Dr. Harper noted that there are some soils in hydrologic soil Group A in the vicinity of Pivot 6 that reflect soils with a deeper water table where rainfall would be expected to infiltrate into the ground.

275. Dr. Kincaid's particle track analysis suggested that recharge to the surficial aquifer ultimately discharges to Mill Creek, except for recharge at Pivot 11, which is accounted for by evapotranspiration, and recharge at Pivot 6.

276. Dr. Kincaid concluded that approximately 1 percent of the recharge to the surficial aquifer beneath the North Tract found its way into the upper Floridan aquifer. Those particle tracks originated only on the far western side of the property, and implicated only Pivot 6, which is indicative of the flow divide in the Floridan aquifer.

277. Of the 1 percent of particle tracks entering the Floridan aquifer, some ultimately discharged at the St. John's River, the Ocklawaha River, or Mill Creek. Dr. Kincaid opined, however, that most ultimately found their way to Silver Springs. Given the previous finding that the Floridan aquifer beneath the property is within the Silver Springs springshed for less than a majority of the time, it is found that a correspondingly small fraction of the less than 1 percent of the particle tracks originating on the North Tract, perhaps a few tenths of one percent, can reach Silver Springs.

278. Dr. Bottcher generally agreed that some small percentage of the water from the North Tract may make it to the upper Floridan aquifer, but that amount will be very small. Furthermore, that water reaching the upper Floridan aquifer would have been subject to the protection and treatment afforded by the NMP and the ERP berms.

279. The evidence regarding the somewhat less restrictive confinement of the aquifer around Pivot 6 is not sufficient to

rebut the prima facie case that the CUP modification, coupled with the ERP, will meet the District's permitting standards.

Public Interest

280. The primary basis upon which Sleepy Creek relies to demonstrate that the CUP is "consistent with the public interest" is that Florida's economy is highly dependent upon agricultural operations in terms of jobs and economic development, and that there is a necessity of food production.

281. Sleepy Creek could raise cattle on the property using the agriculturally-exempt improved pastures, but the economic return on the investment would be questionable without the increased quality, quantity, and reliability of grass and forage crop production resulting from the proposed irrigation.

282. Sleepy Creek will continue to engage in agricultural activities on its properties if the CUP modification is denied. Although a typical Florida beef operation could be maintained on the property, the investment was based upon having the revenue generation allowed by grass-fed beef production in order to realize a return on its capital investment and to optimize the economic return.

283. If the CUP modification is denied, the existing CUP will continue to allow the extraction of 1.46 mgd for use on the East Tract. The preponderance of the evidence suggests that such a use would have greater impacts on the water levels at

Silver Springs, and that the continued use of the East Tract as a less stringently-controlled sod farm would have a greater likelihood of higher nutrient levels, particularly phosphorus levels which are already elevated.

CONCLUSIONS OF LAW

Jurisdiction

284. 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.

Standing

285. The parties to this proceeding stipulated to the standing of the Institutional Petitioners, the Individual Petitioners, and the Intervenor as persons whose substantial interests will be affected by proposed agency action, and who made an appearance as a party. Specifically, the parties stipulated to the following:

a. A substantial number of Sierra Club's 28,000 Florida members 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.

b. A substantial number of Riverkeeper's more than 1,000 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.

c. A substantial number of FDE's 186 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.

286. The facts stipulated by the parties are sufficient to demonstrate that the substantial interests of the Institutional Petitioners, the Individual Petitioners, and the Intervenor would be affected by the proposed agency action under the standards established in Agrico Chemical Corporation v. Department of Environmental Regulation, 406 So. 2d 478 (Fla. 2d DCA 1981) and its progeny.

287. Petitioners Sierra Club and St. Johns Riverkeeper, and Intervenor FDE have alleged standing as associations acting 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).

288. As a result of the facts supporting standing, both as stipulated by the parties and as described in the testimony of the Individual Petitioners and the representatives of the Institutional Petitioners and Intervenor, there is sufficient evidence to demonstrate that, if the adverse impacts of the proposed agency action were proven, the Institutional Petitioners, the Individual Petitioners, and the Intervenor would be adversely affected by final agency action consistent with that proposed.

Nature of the Proceeding

289. 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).

Scope of the Proceeding - CUP

290. The scope of this proceeding is not in the nature of a challenge to the original CUP. As noted by Judge J. Lawrence Johnston in a comparable proceeding involving the modification of an existing permit:

The test in this case is not whether the District properly evaluated the 2004 ERP, but whether the areas proposed to be modified or affected by the modification met the applicable conditions for issuance. 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." . . . Accordingly, Petitioner's arguments that certain criteria must be revisited because they were not properly addressed in previous permits is irrelevant to this proceeding; but previously-decided criteria must be reviewed again to the extent that proposed modifications affect those criteria. (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 (DOAH May 15, 2007; SFWMD July 18, 2007). Thus, as to the CUP modification, this proceeding is limited to determining whether Sleepy Creek has provided reasonable assurance that the modifications authorized by Consumptive Use Permit No. 2-083-91926-3 meet applicable standards.

Modification of the Existing CUPs

291. This case involves, in short, the consolidation of two existing CUPs (Nos. 2-083-91926-2 and 2-083-3011-7) into a single permit, and modifies the proposed use from irrigation of

a sod farm to pasture irrigation and associated minor uses for a cattle ranch. The proposed modification does not increase the permitted allocation, but rather changes the points of withdrawal and application from the East Tract to the East Tract and North Tract. The modification further extends the duration of the permit from its existing expiration in 2021 and 2024, to a date 20 years from the issuance of the modification, with a compliance report pursuant to section 373.236(4), to be submitted 10 years from the date of permit issuance.

292. Section 373.239, entitled "Modification and renewal of permit terms," provides that:

(1) A permittee may seek modification of any terms of an unexpired permit.

(2) If the proposed modification involves water use of 100,000 gallons or more per day, the application shall be treated under the provisions of s. 373.229 in the same manner as the initial permit application. Otherwise, the governing board or the department may at its discretion approve the proposed modification without a hearing, provided the permittee establishes that:

(a) A change in conditions has resulted in the water allowed under the permit becoming inadequate for the permittee's need, or

(b) The proposed modification would result in a more efficient utilization of water than is possible under the existing permit.

(3) All permit renewal applications shall be treated under this part in the same manner as the initial permit application.

293. Rule 40C-2.331(2), which establishes standards for permits modified by application, rather than by letter, provides that:

(2) A request for modification under paragraph (1)(a) above must meet the conditions for issuance in Rule 40C-2.301, F.A.C. A request for modification by letter in accordance with paragraph (1)(b) above need only provide information and meet the conditions for issuance in Rule 40C-2.301, F.A.C., that relate to the modification request, in accordance with Section 373.239(2), F.S. A permit which has expired or which has been revoked shall not be subject to modification. A denial of a request for modification under paragraphs (1)(a) or (1)(b) above shall be processed as provided in Sections 1.4.3.3.1(b) and 1.4.3.3.2 of the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in paragraph 40C-2.101(1)(a), F.A.C.

294. CUP A.H. 11.1 provides that:

Each application for modification to an existing permit will be evaluated using the criteria listed in Section 9.0 above (see also 40C-2.301(2)). The proposed modification must be for a reasonable-beneficial use, it must not interfere with presently existing legal uses, and it must be in the public interest. Likewise, it must not result in any of the conditions which are listed as reasons for recommendation of denial (see Section 9.4 above as well as 40C-2.301(5)(a)).

295. The permit modification was made by application meeting the criteria established in section 373.229, and will be the subject of a hearing before the governing board. The

application was processed by the District using all relevant criteria established in rule 40C-2.301, and CUP A.H. chapters 9.0 and 10.0. The evidence established that the District assessed the individual and cumulative impacts of movement of the withdrawal locations from their existing permitted locations on the East Tract, to the modified locations on the East Tract and North Tract, the modification of use from a sod farm to a cattle ranch, and the effect of the extended permit term.

296. Based on the foregoing, the application, processing, and proposed agency action on the application as a modification of the existing CUPs was appropriate and consistent with the procedures established by statute and District rule.

Burden and Standard of Proof

297. 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.

298. Sleepy Creek made its prima facie case of entitlement to the CUP and the ERP by entering into evidence the complete application files and supporting documentation, and the District's Technical Staff Report for each permit. Sleepy Creek elected to make no additional presentation in initial support of its permit applications, choosing to reserve further argument for its case on rebuttal. 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 permits were met.

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

Reasonable Assurance

300. As established in the Joint Pre-Hearing Stipulation, issuance of the permits is dependent upon there being reasonable assurance that the activities authorized will meet applicable standards.

301. 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 (DOAH Apr. 30, 2012; DEP June 8, 2012).

Consumptive Use Permit - Statutory and Rule Criteria

302. Section 373.223(1) provides 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;

(b) Will not interfere with any presently existing legal use of water; and,

(c) Is consistent with the public interest.

303. 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."

304. Section 373.227(1) further provides:

that the proper conservation of water is an important means of achieving the economical and efficient utilization of water necessary, in part, to constitute a reasonable-beneficial use. The overall water conservation goal of the state is to prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources.

305. Rule 40C-2.301(4) provides, in pertinent part, that "when an application was complete before August 14, 2014, then 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 elected to have its CUP application reviewed in accordance with the standards, criteria, and conditions in effect immediately prior to August 14, 2014.

306. The version of rule 40C-2.301 in effect immediately prior to August 14, 2014, was that as amended on February 13, 2008. Thus, references in this Order to rule 40C-2.301 shall, unless otherwise specified, refer to the version of the rule as amended on February 13, 2008.

307. Rule 40C-2.301 provides, in pertinent part,^{5/} that:

(2) To obtain a consumptive use permit for a use which will commence after the effective date of implementation, the applicant must 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.
- (3) For purposes of paragraph (2)(b) above, "presently existing legal use of water" shall mean those legal uses which exist at the time of receipt of the application for the consumptive use permit.
- (4) The following criteria must be met in order for a use to be considered reasonable-beneficial:
- (a) The use must be in such quantity as is necessary for economic and efficient utilization.
 - (b) The use must be for a purpose that is both reasonable and consistent with the public interest.
 - (c) The source of the water must be capable of producing the requested amounts of water.
 - (d) The environmental or economic harm caused by the consumptive use must be reduced to an acceptable amount.
 - (e) All available water conservation measures must be implemented unless the applicant demonstrates that implementation is not economically, environmentally or technologically feasible. Satisfaction of this criterion may be demonstrated by implementation of an approved water conservation plan as required in section 12.0., Applicant's Handbook: Consumptive Uses of Water.
 - (f) When reclaimed water is readily available it must be used in place of higher quality water sources unless the applicant demonstrates that its use is either not

economically, environmentally or technologically feasible.

(g) For all uses except human food preparation and direct human consumption, the lowest acceptable quality water source, including reclaimed water or surface water (which includes stormwater), must be utilized for each consumptive use. To use a higher quality water source an applicant must demonstrate that the use of all lower quality water sources will not be economically, environmentally, or technologically feasible. If the applicant demonstrates that use of a lower quality water source would result in adverse environmental impacts that outweigh water savings, a higher quality source may be utilized.

(h) The consumptive use shall not cause significant saline water intrusion or further aggravate currently existing saline water intrusion problems.

(i) The consumptive use shall not cause or contribute to flood damage.

(j) The water quality of the source of the water shall not be seriously harmed by the consumptive use.

(k) 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 paragraphs 62-4.242(1)(a) and (b), subsections 62-4.242(2) and (3), and Rule 62-302.300, F.A.C., and any special standards for Outstanding National Waters set forth in subsections 62-4.242(2) and (3), F.A.C. A valid permit issued pursuant to Chapter 62-660 or 62-670, F.A.C., or Rule 62-4.240, F.A.C., or a permit issued pursuant to Chapter 40C-4, 40C-40, 40C-42,

or 40C-44, F.A.C., which authorizes the discharge associated with the consumptive use shall establish that this criterion has been met, provided the applicant is in compliance with the water quality conditions of that permit.

(1) The consumptive use must not cause water levels or flows to fall below the minimum limits set forth in Chapter 40C-8, F.A.C.

(5)(a) A proposed consumptive use does not meet the criteria for the issuance of a permit set forth in subsection 40C-2.301(2), F.A.C., if such proposed water use will:

* * *

2. Cause the water table or surface water level to be lowered so that stages or vegetation will be adversely and significantly affected on lands other than those owned, leased or otherwise controlled by the applicant; or

* * *

(b) Compliance with the criteria set forth in paragraph (5)(a) above does not preclude a finding by the Board that a proposed use fails to comply with the criteria set forth in subsection 40C-2.301(2), F.A.C., above.

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

309. Section 10.3 of the CUP A.H. establishes "Reasonable-Beneficial Use Criteria" and provides, in pertinent part,^{6/} that:

the Governing Board has determined that the following criteria must be met in order for

a use to be considered reasonable-beneficial:

(a) The use must be in such quantity as is necessary for economic and efficient utilization. The quantity applied for must be within acceptable standards for the designated use (see Section 12.0 for standards used in evaluation of need/allocation).

(b) The use must be for a purpose which is both reasonable and consistent with the public interest.

(c) The source of the water must be capable of producing the requested amounts of water. This capability will be based upon records available to the District at the time of evaluation. An eight of ten year capability will be considered acceptable.

(d) The environmental or economic harm caused by the consumptive use must be reduced to an acceptable amount. The methods for reducing harm include: reducing the amount of water withdrawn, modifying the method or schedule of withdrawal, or mitigating the damages caused (see also subsections 9.4.3 and 9.4.4 of this Handbook).

(e) All available water conservation measures including those in Rule 40C-2.042(1) or (2), F.A.C., as applicable must be implemented unless the applicant demonstrates that implementation is not economically, environmentally or technologically feasible. Satisfaction of this criterion may be demonstrated by implementation of an approved water conservation plan as required in section 12.0 of Applicant's Handbook: Consumptive Uses of Water. Appendix I provides an outline of water conservation measures which the applicant may undertake to meet this requirement. Individual provisions in

Appendix I are not requirements per se, and do not exclude alternative conservation measures the applicant may wish to propose to the District.

* * *

(g) The lowest acceptable quality water source, including reclaimed water or surface water (which includes stormwater), which is addressed in paragraph 40C-2.301(4)(f), must be utilized for each consumptive use. To use a higher quality water source an applicant must demonstrate that the use of all lower quality water sources will not be economically, environmentally, or technologically feasible. If the applicant demonstrates that use of a lower quality water source would result in adverse environmental impacts that outweigh water savings, a higher quality source may be utilized. This criterion shall not be used to require the use of lower quality sources for direct human consumption or human food preparation. Entities using water for these purposes and also for other purposes, such as irrigation, must evaluate the feasibility of using lower quality sources for such other purposes. However, it is possible that the unavailability of higher quality sources may necessitate the development of lower quality sources in order to meet projected demands, including the demands resulting from direct human consumption and human food preparation needs.

* * *

(j) The water quality of the source of the water should not be seriously harmed by the consumptive use.

(k) 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. A valid permit issued pursuant to chapters 62-660 or 62-670, F.A.C., or section 62-4.240, F.A.C., or a permit issued pursuant to chapters 40C-4, 40C-40, 40C-42, or 40C-44, F.A.C., shall establish that this criterion has been met, provided the applicant is in compliance with the water quality conditions of that permit.

Application of CUP Permitting Standards

310. The Joint Prehearing Stipulation was, though thorough and reflective of significant and commendable effort by all of the parties, somewhat confusing as to which provisions of law were not in dispute. Thus, in order for the record to be comprehensive, and unless listed in a footnote hereto, each pertinent provision of the District CUP permitting rules and CUP A.H. will be set forth with a conclusion as to whether that standard was met, which in some cases may be based on stipulations of the parties.

Section 373.223(1)(a) - Reasonable-beneficial use

311. The first "prong" of the three-pronged test established in section 373.223(1) provides that the use of water proposed by a consumptive use permit must be a reasonable-beneficial use, meaning that the use of water must be of a quantity necessary for economic and efficient utilization, and for a purpose and in a manner that is reasonable and consistent

with the public interest. As established by rule 40C-2.301(4) and section 10.3 of the CUP A.H., the following criteria were considered in the evaluation of whether the proposed use is a reasonable-beneficial use:

Rule 40C-2.301(4) (a) and CUP A.H. Section 10.3(a)

312. The preponderance of the evidence in this case, including the Irrigation Demand Analysis and the Water Conservation Plan, demonstrates that the proposed use of water by Sleepy Creek is necessary for the economic and efficient utilization of the Sleepy Creek grass-fed cattle ranch. Due to the fact that grass-fed beef cattle cannot be fed with grain or feed other than green forage crops, irrigation is necessary to provide the reliability and quality of forage crops to support the cattle. The evidence further demonstrates that Sleepy Creek has proposed a quantity of irrigation water that is less than the actual need if all pastures were to be irrigated to their optimal extent. The Water Conservation Plan submitted with the application demonstrates that the irrigation means of application is of a higher rate of efficiency than the District's system efficiency standard. Alternative sources of water, including surface waters, reclaimed water, and stormwater capture and reuse, were determined to be either unavailable or uneconomic.

313. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the water withdrawals proposed were not in such quantity as is necessary for the economic and efficient utilization of the Sleepy Creek grass-fed cattle ranch.

Rule 40C-2.301(4)(b) and CUP A.H. Section 10.3(b)

314. The preponderance of the evidence in this case demonstrates that the proposed use of water by Sleepy Creek is reasonable and consistent with the public interest.

315. The agricultural use proposed for the water extraction is of the type generally recognized to be of "economic significance and importance." Harloff v. City of Sarasota, 575 So. 2d 1324, 1326 (Fla. 2d DCA 1991).

316. Although Sleepy Creek could operate a typical Florida cattle ranch on the property without irrigation, such a use would entail shipping calves to the mid-west for fattening, slaughter, and processing, thus eliminating the benefits of those activities to the Florida job-market and economy. Although there was no evidence of the number of full-time and part-time jobs that would be necessary to support the grass-fed beef production and processing operation, the undersigned can reasonably infer that the number of jobs will be substantial.

317. 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 775, 779 (Fla. 5th DCA 2009).

318. The SJRWMD 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).

319. A conclusion that the public interest test is constrained by the effect of the use finds further support in Harloff, cited above, in which the Court expressed that:

it is clear that Mr. Harloff's intentions to grow produce and his methods to do so would establish a reasonable-beneficial use in the absence of a competing demand for water. In order to obtain a permit, however, Mr. Harloff was required to prove that his use would not interfere with the City's existing legal use of water and that it would be consistent with the public interest under the environmental conditions which existed in the region at the time of the application. (emphasis added).

Harloff v. City of Sarasota, 575 So. 2d at 1226-1327.

320. As set forth in paragraph 32 above, the baseline conditions are those that existed at the time of the permit application, including the effects of previously permitted withdrawals. West Coast Reg'l Water Supply Auth. v. Southwest Fla. Water Mgmt. Dist., Case No. 95-1520 et seq., ¶ 301 (Fla. DOAH May 29, 1997; SFWMD _____).

321. The question as to whether the CUP meets the public interest test is also influenced by the fact that the proposed agency action is a modification of an existing use, i.e., sod farm irrigation, that is not entirely dissimilar from the proposed use, i.e., pasture grass and forage crop irrigation. The preponderance of the evidence demonstrates that the relocation of points of extraction from the East Tract to the North Tract will have a beneficial effect on the flow of Silver Springs, and will have little or no impact to surface water or groundwater quality.

322. The preponderance of the evidence in this proceeding supports a conclusion that the water use proposed by Sleepy Creek is efficient, that Sleepy Creek demonstrated a need for the water requested and the legitimacy of the purpose for the use, and that the proposed use will not harm the water resources of the District.

323. For the reasons set forth herein, 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.

Rule 40C-2.301(4)(c) and CUP A.H. Section 10.3(c)

324. The preponderance of the evidence in this case, including the series of three APTs performed by Sleepy Creek and the District, demonstrates that the upper Floridan aquifer is capable of producing the requested amounts of water.

325. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the source of the water is not capable of producing the requested amounts of water.

Rule 40C-2.301(4)(d) and CUP A.H. Section 10.3(d)

326. Most of the evidence in this proceeding, and consequently many of the findings made herein, address the extent to which the proposed withdrawals will adversely affect water quality, water quantity, and the environmental effects of

both. The evidence led the undersigned to find that the proposed use would have, at most, de minimus to undetectable impacts to the surface waters and groundwater on and under the property or offsite, and would not have an adverse impact on Silver Springs or the Silver River.

327. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the environmental or economic harm caused by the consumptive use has not been reduced to an acceptable amount.

Rule 40C-2.301(4)(e) and CUP A.H. Section 10.3(e)

328. The CUP modification application submitted as Sleepy Creek's prima facie case, including the Water Conservation Plan, established that Sleepy Creek proposed and intends to implement conservation measures designed to advance the state conservation objectives of reducing wasteful, uneconomical, impractical, or unreasonable uses of water resources.

329. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that Sleepy Creek failed to implement all available and applicable water conservation measures.

Rule 40C-2.301(4)(f)

330. The CUP modification application submitted as Sleepy Creek's prima facie case, including the Water Conservation Plan, established that reclaimed water was generally unavailable in

the area, and that its use would be impractical. Petitioners failed to prove by a preponderance of competent and substantial evidence that reclaimed water is readily available for use in place of higher quality water sources. Furthermore, Petitioners stipulated that Sleepy Creek provided reasonable assurance that the CUP modification application meets the corresponding section of the CUP A.H., section 10.3(f).

331. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that reclaimed water is readily available for use in place of that source of water proposed by Sleepy Creek.

Rule 40C-2.301(4)(g) and CUP A.H. Section 10.3(g)

332. The CUP modification application submitted as Sleepy Creek's prima facie case, including the Alternate Water Source Analysis and the Water Conservation Plan, establishes that groundwater is the lowest quality water source that is economically, environmentally, and technologically feasible. Furthermore, the use of water from the Ocklawaha River is impractical for the reasons set forth in paragraph E.(22) of the Joint Prehearing Stipulation.

333. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that Sleepy Creek was not proposing to use the lowest

acceptable quality water source, including reclaimed water or surface water, or stormwater.

Rule 40C-2.301(4)(h)

334. As established in paragraphs E.(26) and F.(6) of the Joint Prehearing Stipulation, the consumptive use will not significantly induce saline water encroachment.

Rule 40C-2.301(4)(i)

335. There was no evidence introduced at the final hearing to suggest that there would be any increase in flooding as a result of the proposed activities. In addition, Petitioners stipulated that Sleepy Creek provided reasonable assurance that the CUP modification application meets the section of the CUP A.H., section 10.3(i), that corresponds to rule 40C-2.301(4)(i).

336. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the consumptive use will cause or contribute to flood damage.

Rule 40C-2.301(4)(j) and CUP A.H. Section 10.3(j)

337. Much of the evidence in this proceeding, and consequently many of the findings made herein, addressed the extent to which nutrients from the property would reasonably be expected to make their way to the Floridan aquifer, the source of the proposed consumptive use.

338. The effects of nutrient management and treatment resulting from the NMP, construction of the retention berms, and process of denitrification, combined with the restrictive layers preventing water applied to the surface from finding its way to the Floridan aquifer, strongly suggests that few -- if any -- nutrients will be introduced to the Floridan aquifer as a result of the proposed activities on the property.

339. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the water quality of the source of the water would be seriously harmed by the consumptive use.

Rule 40C-2.301(4)(k) and CUP A.H. Section 10.3(k)

340. Much of the evidence in this proceeding, and consequently many of the findings made herein, addressed the extent to which contaminants, primarily nutrients, would reasonably be expected to impact wetlands, surface waters, or groundwater on, under, and around the property.

341. The effects of nutrient management and treatment resulting from the NMP, treatment afforded by the retention berms, and the process of denitrification, combined with the restrictive layers preventing water applied to the surface from finding its way to the Floridan aquifer, strongly suggests that few -- if any -- nutrients will be introduced to wetlands, surface waters, or groundwater as a result of the proposed

activities on the property. In that regard, the evidence supports a finding that post-development levels of nutrients will be less than pre-development levels of nutrients.

342. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the consumptive use will 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 paragraphs 62-4.242(1)(a) and (b), subsections 62-4.242(2) and (3), and rule 62-302.300, F.A.C., and any special standards for Outstanding National Waters set forth in subsections 62-4.242(2) and (3), F.A.C.

Rule 40C-2.301(4)(1)

343. As established in paragraphs E.(28), E.(29), F.(14), and F.(15) of the Joint Prehearing Stipulation, the consumptive use will not cause water levels or flows to fall below the minimum limits set forth in chapter 40C-8, F.A.C.

Ultimate Conclusion of Reasonable-Beneficial Use

344. 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.

Section 373.223(1) (b) - Interference With Presently Existing Legal Use of Water

345. The second "prong" of the three-pronged test established in section 373.223(1) provides that the use of water proposed by a consumptive use permit may not interfere with any presently existing legal use of water. As established in paragraph F.(12) of the Joint Prehearing Stipulation, the water use proposed by the Sleepy Creek CUP modification will have no significant and adverse effect on existing legal users.

Section 373.223(1) (c) - Consistent with the Public Interest

346. The third "prong" of the three-pronged test established in section 373.223(1) provides that the use of water proposed by a consumptive use permit must be consistent with the public interest. For the reasons set forth in paragraphs 314 through 323 above, and for the reasons set forth herein, the undersigned concludes that the water use proposed by the Sleepy Creek CUP modification is consistent with the public interest.

Rule 40C-2.301(5) (a)2. - Lowering of the Water Table

347. Petitioners have asserted that the CUP modification would violate rule 40C-2.301(5) (a)2., which provides that a proposed consumptive use does not meet the criteria for the issuance of a permit if such proposed water use will cause the water table or surface water level to be lowered so that stages

or vegetation will be adversely and significantly affected on off-site properties.

348. The evidence introduced at the final hearing demonstrates that there will be insignificant impacts to the hydrologic regime of wetlands either on or off of the Sleepy Creek property, or to the levels of the surficial aquifer such that any surface water feature would experience a change in stage elevation. There was insufficient evidence to support a finding that vegetation will be adversely and significantly affected on off-site properties.

349. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the Sleepy Creek proposed use will cause the water table or surface water level to be lowered so as to result in adverse or significant affects to off-site properties.

Environmental Resource Permit - Statutory and Rule Criteria

350. Section 373.413(1) provides in pertinent part that:

the governing board [of the water management district] and the [Department of Environmental Protection] may require such permits and impose such reasonable conditions as are necessary to assure that the construction or alteration of any stormwater management system, dam, impoundment, reservoir, appurtenant work, or works will comply with the provisions of this part and applicable rules promulgated thereto and will not be harmful to the water resources of the district.

351. Section 373.4131, which establishes the creation and implementation of statewide ERP rules, provides in pertinent part that:

(1) The department shall initiate rulemaking to adopt, in coordination with the water management districts, statewide environmental resource permitting rules governing the construction, alteration, operation, maintenance, repair, abandonment, and removal of any stormwater management system, dam, impoundment, reservoir, appurtenant work, works, or any combination thereof, under this part.

* * *

(2)(a) Upon adoption of the rules, the water management districts shall implement the rules without the need for further rulemaking pursuant to s. 120.54. The rules adopted by the department pursuant to this section shall also be considered the rules of the water management districts. The districts and local governments shall have substantive jurisdiction to implement and interpret rules adopted by the department under this part, consistent with any guidance from the department, in any license or final order pursuant to s. 120.60 or s. 120.57(1)(1).

352. Rule 62-330.301 provides in pertinent part^{7/} that:

(1) To obtain an individual or conceptual approval permit, an applicant must provide reasonable assurance that the construction, alteration, operation, maintenance, removal, or abandonment of the projects regulated under this chapter:

(a) Will not cause adverse water quantity impacts to receiving waters and adjacent lands;

(b) Will not cause adverse flooding to on-site or off-site property;

(c) Will not cause adverse impacts to existing surface water storage and conveyance capabilities;

(d) Will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters;

(e) Will not adversely affect the quality of receiving waters such that the state water quality standards set forth in Chapters 62-4, 62-302, 62-520, and 62-550, F.A.C., including the antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), F.A.C., subsections 62-4.242(2) and (3), F.A.C., and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in subsections 62-4.242(2) and (3), F.A.C., will be violated;

(f) Will not cause adverse secondary impacts to the water resources. . . .;

* * *

(i) Will be capable, based on generally accepted engineering and scientific principles, of performing and functioning as proposed;

* * *

(k) Will comply with any applicable special basin or geographic area criteria established as follows:

* * *

3. Within the St. Johns River Water Management District:

a. Chapter 40C-41, F.A.C., "Surface Water Management Basin Criteria," [October 1, 2013], incorporated by reference herein (<https://www.flrules.org/Gateway/reference.asp?No=Ref-02551>).

b. Sections 13.0 through 13.8.3 (Part VI, Basin Criteria), of Volume II.

353. Rule 62-330.302(b)^{8/} provides that:

(1) In addition to the conditions in Rule 62-330.301, F.A.C., to obtain an individual or conceptual approval permit under this chapter, an applicant must provide reasonable assurance that the construction, alteration, operation, maintenance, repair, removal, and abandonment of a project:

* * *

(b) Will not cause unacceptable cumulative impacts upon wetlands and other surface waters as set forth in sections 10.2.8 through 10.2.8.2 of Volume I.

Application of the ERP Permitting Standards

354. As with the criteria for the CUP, each pertinent provision of the District ERP permitting rules and the Environmental Resource Permit Applicant's Handbook (ERP A.H.) will be set forth with a conclusion as to whether that standard was met, which in some cases may be based on stipulations of the parties.

Rule 62-330.301(1)(a)

355. As set forth in the conclusions of law regarding rule 40C-2.301(4)(d) and CUP A.H. section 10.3(d), the preponderance of the evidence introduced at the hearing demonstrates that the

proposed activities to be authorized by the ERP would have, at most, de minimus to undetectable impacts to the hydrologic regime of on-site and off-site wetlands, would not materially affect surface water or groundwater levels on and under the property or offsite, and would not have an adverse impact on Silver Springs or the Silver River. In addition, as set forth in the conclusions of law regarding rule 40C-2.301(5)(a)2., the evidence supports a conclusion that the activities proposed by Sleepy Creek meet the criteria for the issuance of a permit since the proposed water use will not cause the water table or surface water levels to be lowered so that stages or vegetation will be adversely and significantly affected on off-site properties.

356. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the proposed activities to be authorized by the ERP will cause adverse water quantity impacts to receiving waters and adjacent lands.

Rule 62-330.301(1)(b)

357. There was no competent, substantial, or persuasive evidence adduced at the hearing that the construction and operation of the retention berms would cause adverse flooding to on-site or off-site property.

358. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities authorized by the ERP will cause adverse flooding to on-site or off-site property.

Rule 62-330.301(1)(c)

359. For the reasons set forth with regard to rules 62-330.301(a) and (b), and as supported by the record of this proceeding, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities authorized by the ERP will cause adverse impacts to existing surface water storage and conveyance capabilities.

Rule 62-330.301(1)(d)

360. The preponderance of the competent, substantial, and persuasive evidence adduced at the hearing demonstrates that the proposed retention berms would have no significant impacts to the hydrologic or vegetative regime of wetlands either on or off of the Sleepy Creek property, to the water quality or quantity of any surface water, or to the quality or quantity of groundwater emerging at springs that would reasonably be expected to affect the biota inhabiting those ecosystems.

361. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities authorized by the ERP will adversely impact the value of functions provided to fish and

wildlife and listed species by wetlands and other surface waters.

Rule 62-330.301(1)(e)

362. As set forth in the conclusions of law regarding rule 40C-2.301(4)(k) and CUP A.H. section 10.3(k), and as supported by the record of this proceeding, and as otherwise set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities authorized by the ERP will adversely affect the quality of receiving waters such that state water quality standards will be violated.

Rule 62-330.301(1)(f)

363. Petitioners have alleged that potential secondary impacts of the Sleepy Creek permitted activities will result in adverse secondary impacts to the water resources. "Secondary impacts are impacts caused not by the construction of the project itself but by 'other relevant activities very closely linked or causally related to the construction of the project.'" Deep Lagoon Boat Club, Ltd. v. Sheridan, 784 So. 2d 1140, 1143 (Fla. 2nd DCA 2001) (citing Florida Power Corp., Inc. v. Dep't of Env'tl. Reg., 605 So. 2d 149, 152 (Fla. 1st DCA 1992) and Conservancy, Inc. v. A. Vernon Allen Builder, Inc., 580 So. 2d 772, 777 (Fla. 1st DCA 1991)).

364. ERP A.H. section 10.2.7 establishes four criteria for consideration in the assessment of whether secondary impacts resulting from the ERP permitted activities will be reasonably expected to occur.

365. ERP A.H. section 10.2.7(a) provides, in pertinent part, that:

[a]n applicant shall provide reasonable assurance that the secondary impacts from construction, alteration, and intended or reasonably expected uses of a proposed activity will not cause or contribute to violations of water quality standards or adverse impacts to the functions of wetlands or other surface waters.

366. Despite the foregoing, section 10.2.7(a) also provides, in pertinent part, that:

Impacts of groundwater withdrawals upon wetlands and other surface waters that result from the use of wells permitted pursuant to the District consumptive use rules shall not be considered under the rules adopted pursuant to Part IV of Chapter 373, F.S.

Secondary impacts to the habitat functions of wetlands associated with adjacent upland activities will not be considered adverse if buffers, with a minimum width of 15 ft. and an average width of 25 ft., are provided abutting those wetlands that will remain under the permitted design.

367. The preponderance of the competent, substantial, and persuasive evidence in this case demonstrates that the ERP permitted retention berms will not adversely affect surface

water quality or the functions of wetlands or other surface waters, and will more likely result in an improvement in water quality from pre-development levels. The lack of water quality impacts, along with the limitation on the consideration of CUP allowed withdrawals, and the creation of the 25-foot buffers, results in the conclusion that secondary impacts under ERP A.H. 10.2.7(a) are not a basis for denial of the ERP permit.

368. ERP A.H. section 10.2.7(b) provides that an applicant must provide reasonable assurance that the permitted activity "will not adversely impact the ecological value of uplands for bald eagles, and aquatic or wetland dependent listed animal species," or "have the potential to cause impacts to significant historical and archaeological resources." ERP A.H. section 10.2.7(c) provides that the District is to consider activities related to any proposed dredging or filling "that have the potential to cause impacts to significant historical and archaeological resources." In addition to the fact that there is no dredging or filling associated with the ERP, there was no competent, substantial, or persuasive evidence adduced at the hearing as to the criteria in ERP A.H. section 10.2.7(b) or (c), and those secondary impacts are not a basis for denial of the ERP permit.

369. Finally, ERP A.H. section 10.2.7(d) allows for consideration of "[a]dditional phases or expansion of the

proposed activity" on water quality and wetland and other surface water functions. Although there has been another permit application filed for an additional CUP permit associated with the Sleepy Creek cattle ranch, the District has indicated its intent to deny that permit. The ERP A.H. cannot be reasonably construed to require the denial of current permits that meet all permitting standards when some future but disallowed activity may not. Thus, given that the ERP permit at issue is expected to improve water quality from pre-development levels, with no measurable effect of water quantity, the undersigned concludes that ERP A.H. 10.2.7(d) is not a basis for denial of the ERP permit.

370. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities authorized by the ERP will cause adverse secondary impacts to the water resources.

Rule 62-330.301(1)(i)

371. The evidence in this case was overwhelming that the retention berms authorized by the proposed ERP will be capable of effectively capturing additional runoff caused by the irrigation of the pastures, treating that runoff to pre-development levels or better, and allowing the treated runoff to migrate through permeable soils to the receiving wetlands and surface waters.

372. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the retention berm system as proposed by Sleepy Creek will not be capable, based on generally accepted engineering and scientific principles, of performing and functioning as proposed.

Rules 62-330.301(1)(k) and 40C-41.063(7) - Karst Basin Standards

373. Rule 40C-41.063(7) provides in pertinent part that:

(7) Within the Sensitive Karst Areas Basin, stormwater management systems shall be designed to assure adequate treatment (pursuant to Sections 13.6 through 13.6.3, "Environmental Resource Permit Applicant's Handbook, Volume II: For Use Within the Geographic Limits of the St. Johns River Water Management District" as incorporated by reference in subsection 40C-41.043(5), F.A.C.) of the stormwater before it enters the Floridan Aquifer, and to preclude the formation of solution pipe sinkholes in the stormwater system. Many different stormwater management system designs will achieve these goals, therefore the District does not require any specific system design. However, to assure protection of the Floridan Aquifer, the District does require certain design features. The individual site characteristics may affect what design features will be required. However, for all projects in sensitive karst areas, the following minimum design features are required:

(a) A minimum of three feet of unconsolidated soil material between the surface of the limestone bedrock and the bottom and sides of the stormwater basin.

Excavation and backfill of suitable material may be made to meet this criteria;

(b) Stormwater basin depth should be as shallow as possible with a horizontal bottom (no deep spots);

(c) Maximum stormwater basin depth of 10-feet; and

(d) Fully vegetated basin side slopes and bottoms. The District recommends that Saint Augustine or Bermuda grass be used for this purpose.

374. The design criteria established in rule 40C-41.063(7) are carried over in ERP A.H. section 13.6.3.

375. Most of the retention berms, and the ponds serving the high-intensity areas, are not within the Sensitive Karst Basin Area. Thus, the Sensitive Karst Basin Area rules and design criteria do not apply to those systems. Nonetheless, all of the retention berms, whether located in or out of the Sensitive Karst Area Basin, far exceed the minimum design standards established in rule 40C-41.063(7) and ERP A.H. section 13.6.3.

376. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the retention berm system as proposed by Sleepy Creek will not meet the District's Sensitive Karst Areas Basin permitting standards.

Section 373.414(8)(a) and Rule 62-330.302(1)(b) -
Cumulative Impact

377. Section 373.414(8)(a) provides, in pertinent part,
that:

The governing board or the department, in deciding whether to grant or deny a permit for an activity regulated under this part shall consider the cumulative impacts upon surface water and wetlands.

378. Rule 62-330.302 provides, in pertinent part, that:

(1) In addition to the conditions in Rule 62-330.301, F.A.C., to obtain an individual or conceptual approval permit under this chapter, an applicant must provide reasonable assurance that the construction, alteration, operation, maintenance, repair, removal, and abandonment of a project:

* * *

(b) Will not cause unacceptable cumulative impacts upon wetlands and other surface waters as set forth in sections 10.2.8 through 10.2.8.2 of Volume I.

379. ERP A.H. section 10.2.8 provides, in pertinent part,
that:

an applicant must provide reasonable assurance that a regulated activity will not cause unacceptable cumulative impacts upon wetlands and other surface waters within the same drainage basin as the regulated activity for which a permit is sought. The impact on wetlands and other surface waters shall be reviewed by evaluating the impacts to water quality as set forth in section 10.1.1(c), above, and by evaluating the impacts to functions identified in section 10.2.2, above.

As set forth in ERP A.H. section 10.2.8.1:

This analysis asks the question whether the proposed system, considered in conjunction with past, present, and future activities would be the proverbial "straw that breaks the camel's back" regarding the above referenced water quality or wetland and other surface water functions in the basin.

380. In order for there to be a cumulative impact of an ERP, there must first be an individual, non-mitigated impact. See section 373.414(8)(b) ("If an applicant proposes mitigation . . . and if the mitigation offsets these adverse impacts, the governing board . . . shall consider the regulated activity to meet the cumulative impact requirements of paragraph (a)."). See also Retreat House, LLC v. Pamela C. Damico and Dep't of Env'tl. Prot., Case No. 10-10767, ¶ 44 (Fla. DOAH Oct. 14, 2011; DEP Jan. 12, 2012) ("In this case, DEP did not perform a cumulative impacts analysis because it was assumed that the proposed ERP would have no adverse impacts.").

381. The evidence was persuasive that the retention berms authorized by the ERP will result in a net improvement in water quality from that reasonably expected from pre-development conditions, and will have no discernable effect on the hydroperiod of the wetlands and surface waters they are designed to protect. Thus, there is no adverse specific or cumulative impact arising from the retention berms permitted by the ERP.

382. For the reasons set forth herein, and as supported by the record of this proceeding, Petitioners failed to prove by a preponderance of competent and substantial evidence that the retention berms as proposed by Sleepy Creek will have unacceptable cumulative impacts upon wetlands and other surface waters.

Rule 40C-44.065(1) - Agricultural Surface Water Management

383. Rule 40C-44.065(1) provides in pertinent part that "[d]ischarges from the agricultural surface water management system shall not cause or contribute to a violation of water quality standards in waters of the state." The preponderance of the evidence in this case demonstrated that the agricultural surface water management system, as part of the overall NMP, will result in an improvement in water quality from levels existing or allowed as agriculturally exempt activities, or those baseline conditions that do not otherwise require permits.

384. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities proposed by Sleepy Creek will violate rule 40C-44.065(1).

Section 373.406(2), Fla. Stat. - High Intensity Corrals

385. Section 373.406(2) provides in pertinent part that:

(2) Notwithstanding s. 403.927, nothing herein, or in any rule, regulation, or order adopted pursuant hereto, shall be construed

to affect the right of any person engaged in the occupation of agriculture, silviculture, floriculture, or horticulture to alter the topography of any tract of land, including, but not limited to, activities that may impede or divert the flow of surface waters or adversely impact wetlands, for purposes consistent with the normal and customary practice of such occupation in the area. However, such alteration or activity may not be for the sole or predominant purpose of impeding or diverting the flow of surface waters or adversely impacting wetlands.

386. Petitioners have identified the issue of whether the "unloading corral areas" are exempt from permitting pursuant to section 373.406(2), as being in dispute.

387. The creation of stormwater systems to serve the corral areas and capture and retain animal waste is clearly consistent with normal and customary agricultural activities. The evidence was convincing that the predominant purpose for the retention ponds was to prevent stormwater from being directly discharged to surface water bodies on the North Tract, and thereby minimize nutrient release to those water bodies, and not to impede or divert the flow of surface waters. The evidence was equally convincing that the stormwater retention areas do not exceed the permitting thresholds established in ERP A.H. Vol. II, section 1.2.3.

388. Since the primary purpose of the retention ponds is to allow for water quality treatment of stormwater from the corrals and appurtenant features, any incidental purpose of

impeding or diverting the flow of surface waters does not preclude the application of the exemption. Duda & Sons, Inc. v. St. Johns River Water Mgmt. Dist., 17 So. 3d 378 (Fla. 5th DCA 2009); Zagame v. Dep't of Agric. & Consumer Servs., Case No. 12-1356 (DOAH Feb. 1, 2013; DACS May 29, 2013).

389. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the stormwater systems serving the corral areas activities proposed by Sleepy Creek do not come within the ambit of section 373.406(2).

Section 373.413(1), Fla. Stat.

390. Section 373.413(1) authorizes the District to require permits that "will not be harmful to the water resources of the district." As set forth in detail herein, and as supported by the record of this proceeding, Sleepy Creek has provided reasonable assurance that the activities proposed in its CUP modification application and its ERP application will not harm the water resources of the District.

391. For the reasons set forth herein, Petitioners failed to prove by a preponderance of competent and substantial evidence that the activities proposed by Sleepy Creek will be harmful to the water resources of the District.

Section 403.927, Fla. Stat.

392. Section 403.927 provides, in pertinent part, that:

(1) The Legislature recognizes the great value of farming and forestry to this state and that continued agricultural activity is compatible with wetlands protection. In order to avoid unnecessary expense and delay from duplicative programs, it is the intent of the Legislature to provide for the construction and operation of agricultural water management systems under authority granted to water management districts and to control, by the department or by delegation of authority to water management districts, the ultimate discharge from agricultural water management systems.

(2) Agricultural activities and agricultural water management systems are authorized by this section and are not subject to the provisions of s. 403.087 or ss. 403.91-403.929 [T]he department shall not enforce water quality standards within an agricultural water management system. The department may require a stormwater permit or appropriate discharge permit at the ultimate point of discharge from an agricultural water management system or a group of connected agricultural water management systems. Impacts of agricultural activities and agricultural water management systems on groundwater quality shall be regulated by water management districts. (emphasis added).

393. There is, and has been, no suggestion that the District did not regulate and consider impacts of the retention berms, and in fact all of the activities proposed by the CUP and the ERP, on groundwater quality. Thus, Petitioners failed to prove by a preponderance of competent and substantial evidence

that any provision of section 403.927 warrants denial of the permits at issue.

Conclusion

394. Petitioners did not meet their burden of ultimate persuasion that the withdrawal of water authorized by the CUP is not a reasonable-beneficial use, that the withdrawal will interfere with any presently existing legal use of water, or that the withdrawal is inconsistent with the public interest.

395. 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 Applicant's Handbook, and that the modification to Consumptive Use Permit No. 2-083-91926-3, including the consolidation of CUP Nos. 2-083-3011-7 and 2-083-91926-2, should therefore be issued.

396. Petitioners did not meet their burden of ultimate persuasion that the stormwater management system authorized by the ERP will be harmful to the water resources of the District.

397. 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 ERP will meet the applicable standards applied by the District, including sections 373.406, 373.413, and 373.414, Florida Statutes; Florida Administrative Code Rules 62-330.301, 62-330.302, 40C-41.063, and 40C-44.065; and the corresponding provisions of the ERP Applicant's Handbook, and that the Environmental Resource Permit No. IND-083-130588-4 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:

a) approving the issuance of Consumptive Use Permit No. 2-083-91926-3 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; and

b) approving the issuance of Environmental Resource Permit No. IND-083-130588-4 to Sleepy Creek Lands, LLC on the terms and conditions set forth in the complete Joint Application for Individual and Conceptual Environmental Resource Permit and the Individual Environmental Resource Permit Technical Staff Report.

DONE AND ENTERED this 29th day of April, 2015, 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 29th day of April, 2015.

ENDNOTES

^{1/} The data collected by Dr. Knight showed nitrogen levels to vary from over time, sometimes sharply, but with a consistent upward trend.

^{2/} The Department of Agriculture and Consumer Services BMP manual is specifically for cow/calf operations. However, the testimony in this case was persuasive that nutrient loading for grass-fed beef production is substantially lower than that for cow/calf production. Thus, compliance with the BMPs for cow/calf operations will meet the presumption of compliance with water quality standards.

^{3/} The likelihood of all permitted users pumping at full end-of-permit rates for a period of a year is "statistically . . . probably impossible." Nonetheless, in evaluating the long-term worst case scenario, that is the evaluation criteria.

^{4/} The initial TSR for the ERP indicated that the retention berm system was to be "over 39,000 feet in length." However, the 39,000 feet figure was the result of a conversion error. The actual length was approximately 50,000 feet, a figure reflected by the volume calculations in the BMPTRAINS model. Petitioners were given an opportunity for surrebuttal to explore the effect,

if any, on the length of the retention berms of 50,000 feet, but declined.

^{5/} The parties stipulated that Sleepy Creek provided reasonable assurance that the CUP application meets the criteria in rules 40C-2.301(5)(a)(1) and (5)(a)(3)-(6). Rules 40C-2.301(1), (6) and (7) are unnecessary or inapplicable.

^{6/} The parties stipulated that Sleepy Creek provided reasonable assurance that the CUP application meets the criteria in sections 10.3(f), (h), and (i).

^{7/} The parties stipulated that Sleepy Creek provided reasonable assurance that the ERP application meets the criteria in rules 62-330.301(g), (h), and (j).

^{8/} The parties stipulated that Sleepy Creek provided reasonable assurance that the ERP application meets the criteria in rules 62-330.302(a), (c), and (d).

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(eServed)

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.

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT TECHNICAL STAFF REPORT
12-May-2014
APPLICATION #: IND-083-130588-4

Applicant: Sleepy Creek Lands LLC
Mike Rogers
15045 NW 141st Ct
Williston, FL 32696-7446
(352) 528-1287

Owner: Sleepy Creek Lands LLC
Mike Rogers
15045 NW 141st Ct
Williston, FL 32696-7446
(352) 528-1287

Agent: Dean Mead Minton & Zwemer
Michael D Minton
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1903 S 25th St
Fort Pierce, FL 34947-4740
(772) 464-7700

Consultant: Soil & Water Engineering Technology Inc
Del Bottcher
3448 NW 12th Ave
Gainesville, FL 32605-4811
(352) 378-7372

Royal Consulting Services Inc
Brian L Roy
211 W Warren Ave
Longwood, FL 32750-4108
(407) /83-1309

Project Name: Sleepy Creek Lands LLC - North Tract Phase 1
Acres Owned: 7207.0
Project Acreage: 12.56
County: Marion
STR:

Section(s):	Township(s):	Range(s):
14,15,20,21,22,23,27,28,29,32,33,34,35	12S	23E
2,3,4,5,9,10,11	13S	23E

Receiving Water Body:

Name	Class
Mill Creek	III Fresh

Authority: 62-330.020 (2)(e), 62-330.020 (2)(d)
Wetland Forested Mixed(6300), Cypress(6210), Bay Swamps(6110),
Existing Land Use: Tree Crops(2200), Upland Forests(4000), Water (5000), Vegetated
Non - Forested Wetlands(6400), Row Crops(2140), Freshwater
Marshes(6410), Improved Pastures(2110), Streams and

	Waterways(5100)
Mitigation Drainage Basin:	Northern Ocklawaha River
Special Regulatory Basin:	Karst Area in Marion
Final O&M Entity:	Sleepy Creek Lands LLC
ERP Conservation Easements/Restrictions	No
:	
Interested Parties:	No
Objectors:	No

Authorization Statement:

Construction of a stormwater management system, including the establishment of vegetated upland buffers, retention berms, and redistribution swales, and the implementation of other conservation practices, for Sleepy Creek LLC - North Tract, a 7,207-acre permit area. The project shall be constructed and operated in accordance with the Nutrient Management Plan, received by the District on March 28, 2014, and the construction plans received on April 24, 2014, and the stormwater management system construction sequencing document received on May 9, 2014, and must be located entirely landward of the safe upland lines as depicted in the attached Exhibit 1.

Recommendation: Approval

Reviewers: Cammie Dewey; Mark Crosby; Timothy Wetzel; Marc Van Heden

Staff Comments

Project Applicant and Sufficient Real Property Interest:

The permit applicant is the record title holder over the property on which the proposed activities will be conducted.

Project Location and Brief Description:

The project site is located in Marion County west of Hwy 315, north of Hwy 316 and northwest of Ft. McCoy. This application proposes construction of vegetated upland buffers, retention berms, and redistribution swales, and the implementation of other conservation practices described in the Nutrient Management Plan to serve non-irrigated improved pastures and 15 irrigated rotationally-grazed pastures.

Permitting History:

Historically, the project area has primarily been used for timber production, with some limited pasture lands and other agricultural crop lands.

On July 17, 2012 a Silviculture Noticed General permit (400-083-130588-2) was issued by the District pursuant to subsections 40C-400.500(4)(a),(d),and (i), F.A.C., for the construction and modification of a permanent silviculture access road.

On July 24, 2013, a Standard General Stormwater Environmental Resource Permit (ERP) (42-083-130588-3) was issued by the District to pave the aforementioned road and provide a stormwater management system.

On December 20, 2011, the Florida Department of Environmental Protection (Department) authorized an Environmental Resource Permit (ERP 42-0308870-001-ES) to construct a stormwater management system and a beef harvesting facility with out-buildings, sidewalks, drive aisles and parking areas. On July 24, 2012, a modification to this permit was received by the Department and a letter that authorized the requested changes to the permitted buildings and reshaping of the wet detention ponds was issued October 31, 2012.

There are also two pending CUP applications that are relevant to the project site.

On December 2, 2011, the District received CUP application 2-083-129419-1. As amended to date, the application requests to withdraw groundwater to serve eight center pivot irrigation systems and seven cattle watering/mixing wells on the North Tract. On April 18, 2014, the applicant requested that the District's review of its application be abated until further notice and waived any applicable Chapter 120, Florida Statutes, time constraints until July 9, 2014.

On April 18, 2014, the District received CUP application 2-083-91926-3. As amended, the applicant requests to consolidate and modify its existing permits for two sod farms (2-083-3011-7 and 2-083-91926-2) and shift some or all of its existing allocation of 1.46 mgd to the North Tract. The allocation at the North Tract is proposed to serve up to fifteen center pivot irrigation systems as well as cattle watering/mixing wells. The applicant requests the ability to retain no more than .5 mgd of its existing allocation at the sod farms (the East Tract).

Site Description:

Historically, the project site has been primarily managed for intensive silvicultural operations. Because of the high water tables, extensive bedding and furrowing for planted pine is evident throughout the site. Smaller areas of improved pasture for cattle grazing and hay production also occur within the project area and large areas of former pine plantation have recently been harvested and converted to improved pasture.

The existing land use consists of primarily pine plantation (56%), wetlands (28%), and improved pasture (10%). This site has a generally flat topography with elevations ranging from 45' NAVD to 75' NAVD. The ranch has numerous isolated, prairie and slough type wetlands that cover about 28% of the ranch. The largest wetland system serves as the headwater for Mill Creek. The predominant soil is mapped as Lynne Sand (43%) with other soils including Samsula-Martel complex (9.4%) Electra Sand (8.5%) and Pomona Sand (8.4%) and other less prominent soils. The soils can generally be described as sandy near the surface with a clay hard pan layer from 20 to 40 inches below ground surface. A seasonal high groundwater elevation is estimated at 6"-14" below land surface.

Stormwater runoff drains from the site into a network of streams, ditches and natural depressions. Generally, the site drains from northwest to southeast and ultimately to Mill Creek. Mill Creek continues offsite east of Hwy 315.

Permit required:

An Individual ERP is being sought to construct vegetated upland buffers, retention berms, and redistribution swales between the irrigated pastures and wetlands. This construction is part of the implementation of conservation practices, including nutrient and pesticide management practices, on the North Tract ranch where the applicant plans to have irrigated rotationally-grazed pastures, as well as non-irrigated pastures and some remaining timber operations. These water quality practices are proposed to reduce the nutrient loads reaching the wetlands.

This ERP is required pursuant Chapter 62-330.020, F.A.C. which states in relevant part:

62-330.020(2) F.A.C. Regulated Activities “...a permit is required prior to the construction, alteration, operation, maintenance, removal, or abandonment of any new project that, by itself or in combination with an activity conducted after [October 1, 2013], cumulatively results in any of the following:

62-330.020(2)(d) F.A.C. A total project area of more than one acre

62-330.020(2)(e) F.A.C. A capability of impounding more than 40 acre-feet of water

Exempt Activities:

Certain agricultural activities proposed by the applicant are exempt from permitting requirements as afforded under Section 373.406(2) *Florida Statutes* (F.S.). In order for the exemption to apply the following criteria must be met.

1. The applicant must be engaged in the occupation of agriculture
2. The activity must not have the sole or predominant purpose of impeding or diverting the flow of surface waters or adversely impacting wetlands
3. The proposed alterations to the topography of the land must be consistent with the normal and customary practice of such occupation in the area

The exempt activities include, but are not limited to, construction of agricultural access roads, center irrigation pivots, fencing, and converting existing pinelands into pasture. These activities are for the agricultural use of the land; and, therefore, the applicant is engaged in the occupation of agriculture. They do not have the sole or predominant purpose of impeding or diverting the flow of surface waters or adversely impacting wetlands. Additionally, the topographic alterations are consistent with normal and customary practices of converting land into pasture for cattle foraging.

Conditions for Issuance of Individual Permits.

Rule 62-330.301(1) F.A.C. states that an applicant must provide reasonable assurance that the construction, alteration, operation, maintenance, removal, or abandonment of the projects regulated under this chapter:

62-330.301(1)(a) - Will not cause adverse water quantity impacts to receiving waters and adjacent lands;

Within the permit area, the applicant proposes clearing, incidental grading, and planting of forage crops for cattle. The permit area drains into adjacent wetlands and generally

east to the Ocklawaha River in the pre-development condition. Runoff volumes are not anticipated to increase as a result of the activities proposed in this application. Under the developed condition, runoff from the fields will continue to sheet flow to adjacent wetlands. Drainage patterns will be maintained and surface waters will not be obstructed or diverted. Further, the watershed boundaries and discharge points will not be modified. Therefore, no adverse water quantity impacts to receiving waters and adjacent lands will occur.

62-330.301(1)(b) Will not cause adverse flooding to on-site or off-site property;

Drainage patterns will be maintained as described in the preceding paragraph. No changes in flood stages will occur as a result of the project.

62-330.301(1)(c) Will not cause adverse impacts to existing surface water storage and conveyance capabilities;

Surface water storage and conveyance is provided by existing wetlands and streams. Drainage patterns will be maintained as previously described. Therefore, no adverse impacts to existing surface water storage and conveyance systems will occur.

62-330.301(1)(d) Will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters;

In evaluating this criterion, District staff considered Section 10.2.2, A.H. Vol. I, which states that an applicant must provide reasonable assurances that a regulated activity will not impact the values of wetland and other surface water functions so as to cause adverse impacts to: (a) the abundance and diversity of fish, wildlife, listed species and the bald eagle (*Haliaeetus leucocephalus*); and (b) the habitat of fish, wildlife, and listed species.

The project area is located within a larger parcel of land which includes normal and customary agricultural activities that are exempt from permitting requirements under Section 373.406(2), F.S. In order to provide additional water treatment over and above the applicable agricultural best management practices, the applicant has proposed construction of a shallow swale and berm system located between the larger on-site wetland systems, including Mill Creek and its associated tributaries, and the higher intensity grazing areas associated with the irrigated pivot locations. In order to provide assurance that the construction of the shallow swale and berm system occurs landward of these wetland systems, a safe upland line was established and field verified.

No adverse impacts to wetlands or other surface waters are proposed within the project limits. During site visits, District staff observed listed species including the American alligator, Florida sandhill crane, little blue heron and white ibis. The construction and operation of the proposed berms is not anticipated to cause adverse impacts to these listed species. In addition, a search for active or inactive bald eagle nests revealed that the closest nest is located greater than one mile away from the project, and the proposed activities are not expected to adversely affect bald eagles. The applicant has provided reasonable assurance that the project will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters.

62-330.301(1)(e) Will not adversely affect the quality of receiving waters such that the state water quality standards set forth in Chapters 62-4, 62-302, 62-520, and 62-550, F.A.C., including the antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), F.A.C., subsections 62-4.242(2) and (3), F.A.C., and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in subsections 62-4.242(2) and (3), F.A.C., will be violated;

Under 40C-44.071(4), F.A.C., 16.3.2 Vol II A.H., and 1.2.3 (c) Vol II A.H., agricultural operations such as this project must comply with the performance standards and water quality standards contained in Chapter 40C-44, F.A.C., in order to meet the District's water quality criteria for permit issuance.

Chapter 40C-44 provides presumptive design criteria for water quality practices that can be implemented to provide reasonable assurance that a proposed system will comply with the performance standards set forth in Chapter 40C-44. Here, the applicant proposes water quality practices under 40C-44.066(2) and 40C-44.066(4).

In accordance with 40C-44.066(2) F.A.C, the applicant proposes to: *"Implement and maintain a Conservation Plan, which includes a Nutrient Management Plan and Pesticide Management Plan."*

The Nutrient Management Plan, received by the District on March 28, 2014, contains multiple components, including:

- 1) Manure and wastewater handling and storage
- 2) Land treatment
- 3) Nutrient management and record keeping
- 4) Pesticide management

Manure and wastewater handling are referenced in the plan in association with heavy animal traffic areas. These include areas where heavy trafficking of the livestock is expected to occur, such as around water troughs, under the shade of trees, and in lanes and corrals. Heavy animal traffic in these areas can compact the soil, resulting in a loss of vegetation and in a concentration of nutrients from the manure and the lack of plant uptake. Soil compaction can also increase the runoff from the areas after rainfall events due to decreased infiltration capability. The management plan proposes to address these issues by managing the areas to avoid manure accumulation and soil compaction. This will include moving the water troughs around in the fields, rotating the animals for uniform grazing and loafing, locating supplemental feeding areas away from wetlands and watercourses, and construction of retention areas adjacent to the corrals to store the concentrated runoff from the temporarily confined livestock. The accumulated manure and sediment in these retention areas will periodically be removed and land applied into the pasture areas at agronomic rates as a fertilizer, or exported offsite for other entities to use for the same purpose.

The land treatment practices component of the management plan consists of conservation practices and best management practices (BMPs) that are to be implemented as part of the agricultural operations. These practices are fully described in the Florida Department of Agriculture and Consumer Services (FDACS) BMP manual for Florida Cow/Calf Operations, and in the Natural Resource Conservation Service (NRCS)

Conservation Practice Standards and Technical Guides for silviculture and grazing, which are referenced in the Nutrient Management Plan. The practices consist of a wide range of strategies for minimizing the transport of nutrients offsite including leaving vegetated buffers around wetlands and edges of fields, minimizing erosion by ensuring vegetative cover after land is disturbed, rotating animals for uniform grazing, proper timing and application rates of fertilizer, and irrigation management to ensure proper soil moisture, which promotes desired crop growth rates, and decreases impacts to groundwater resources.

Nutrient management practices involve the proper timing and placement of fertilizer, both commercial and manure, at amounts that allow for optimum forage crop growth while minimizing adverse impacts to the environment. This is accomplished in part by testing the soils for existing phosphorus levels, and by plant tissue testing to detect nitrogen, phosphorus, and potassium levels. Soil and tissue testing will adjust the fertilizer application rates based on IFAS recommendation, however supplemental fertilizer cannot exceed the maximum amounts described in the NMP. This information, used in conjunction with published nutrient uptake values for different types of forage crops, helps the grower properly determine the amount of fertilizer to apply. The management practices also involve record keeping on amounts of fertilizer applied, dates applied, rainfall, and crop yields so that the fertilization can be adjusted to ensure that the management practices continue to function as proposed in plan.

The Pesticide Management Plan provides recommendations for proper handling, mixing, and storage of pesticides, and locating such areas away from wetlands and other watercourses. It provides information on how to identify and control specific agricultural crop pests, and also on types and amounts of pesticides to use. The plan also discusses proper disposal methods and provides additional sources of information online and in literary references.

The applicant also proposes an alternative water quality practice, as described in 40C-44.066(4) F.A.C.:

“ Applicants who propose to satisfy the performance standards in Rule 40C-44.065, F.A.C., by employing a treatment methodology or device other than those described in subsections 40C-44.066(1) through 40C-44.066(3), F.A.C., may seek approval for an equivalent alternative through the District’s individual permit process. The applicant must provide reasonable assurance, through plans, test results or other information, that the alternative will provide an adequate level of treatment to meet the performance standards above.”

The applicant has proposed a retention swale and berm along the downstream edges of multiple rotational pivot fields as an additional structural water quality practice. The water quality treatment provided in these systems is equivalent to the design criterion for Retention Systems as set forth under the Applicant’s Handbook Volume II, *Permit Information Manual*, Section 5. The phosphorus removal efficiencies for this type of system can be found under Section 13 of the same handbook, and in scientific literature.

In addition to the components detailed above, the applicant has simulated the water quality discharges from the watershed that encompasses the Sleepy Creek Lands LLC. The GIS Watershed Assessment Model (WAM) tool is a modeling tool that provides detailed analysis of nutrient loading, transport, uptake, and discharge. In order to

determine the effect of development, a base model is created to simulate the system prior to development. This base model is calibrated with the available streamflow and water quality data. After calibration, modified simulations are created based on the proposed scenarios of development. The developed scenarios are compared to the base scenario to determine the water quality impacts. This model also demonstrates that the proposed project will not cause or contribute to an increase of nutrients discharged offsite.

62-330.301(1)(f) Will not cause adverse secondary impacts to the water resources. In addition to the criteria in this subsection and in subsection 62-330.301(2), F.A.C., in accordance with Section 373.4132, F.S., an applicant proposing the construction, alteration, operation, maintenance, abandonment, or removal of a dry storage facility for 10 or more vessels that is functionally associated with a boat launching area must also provide reasonable assurance that the facility, taking into consideration any secondary impacts, will meet the provisions of paragraph 62-330.302(1)(a), F.A.C., including the potential adverse impacts to manatees;

The applicant has provided reasonable assurance that the proposed activities will not cause adverse secondary impacts to water resources through agricultural best management practices and a proposed conservation plan.

In evaluating this criterion, District considered Section 10.2.7, A.H. Vol. I. This section contains a four part criterion which addresses additional impacts that may be caused by a proposed activity: (a) impacts to wetland functions that may result from the intended use of a project; (b) impacts to the upland nesting or denning habitat of listed species that are aquatic or wetland dependent; (c) impacts to significant historical and archaeological resources that are closely linked and causally related to any proposed dredging or filling of wetlands or other surface waters; and (d) wetland impacts that may be caused by future phases of the project or activities that are closely linked and causally related to the proposed activity.

The proposed activities were assessed for the potential to result in unacceptable secondary impacts, as defined in Section 10.2.7, A.H. Vol. I. No adverse impacts to wetlands or other surface waters are proposed. The applicant has demonstrated through the proposed implementation of agricultural best management practices and an associated conservation plan, that the proposed project will have no unacceptable adverse secondary impacts to wetlands and water quality, as defined by Section 10.2.7(a), A.H. Vol. I.

As discussed above, the conservation plan includes nutrient management practices to manage and minimize potential fertilizer and manure runoff into wetlands and other surface waters, as well as a pesticide management plan which emphasizes proper handling and application procedures so as to minimize potential impacts to water resources.

Also included in the conservation plan are best management guidelines from published manuals for Florida cow/calf operations, grazing, silviculture and NRCS conservation standards that further minimize potential secondary impacts to wetlands and other surface waters. The best management practices emphasize fencing, vegetated upland buffers around water resources and frequent rotation of animals in order to promote

uniform, limited grazing. These practices will limit potential erosion, soil compaction and disturbance to wetlands and other surface waters from grazing and loafing cattle. In combination, all of the above practices provide reasonable assurance that no adverse secondary impacts to water resources will occur from the proposed activities.

The project area currently supports active cattle grazing and intensive silvicultural operations. A bald eagle nest search was accomplished and showed that no documented nests occur within one mile of the project site. The construction and operation of the proposed berms is not anticipated to adversely impact the ecological value of uplands for bald eagles, and aquatic or wetland dependent listed animal species for enabling nesting or denning by these species, as defined by Section 10.2.7(b), A.H. Vol. I.

No dredging or filling of wetlands or other surface waters is proposed by the applicant. Therefore, there are no activities related to any proposed dredging or filling that have the potential to cause impacts to significant historical and archaeological resources, and require consideration under Section 10.2.7(c), A.H. Vol. I.

No wetland or other surface water impacts that may be caused by future phases or closely related on-site or off-site activities are proposed. The applicant has provided reasonable assurance that the proposed activities will not cause unacceptable future adverse impacts, as defined by Section 10.2.7(d), A.H. Vol. I.

62-330.301(1)(g) Will not adversely impact the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S.

Surface waters are not proposed to be diverted or obstructed as part of this application. Drainage patterns will be maintained as previously described. The activities proposed in this application are not anticipated to impact the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S.

62-330.301(1)(h) Will not cause adverse impacts to a Work of the District established pursuant to Section 373.086, F.S.;

No works of the District are within this permit area.

62-330.301(1)(i) Will be capable, based on generally accepted engineering and scientific principles, of performing and functioning as proposed;

The project has been designed by registered professional engineers. All supporting materials provided by the professionals demonstrate that the project will be capable of performing and functioning as proposed based on accepted engineering and scientific principles.

62-330.301(1)(j) Will be conducted by a person with the financial, legal and administrative capability of ensuring that the activity will be undertaken in accordance with the terms and conditions of the permit, if issued; and

The permit applicant is the record title holder over the property on which the proposed activities will be conducted. The applicant has the financial capability of ensuring that the activity will be undertaken in accordance with the terms and conditions of the permit. The

applicant will operate and maintain the proposed system in accordance with the requirements of section 12.3.2. ERP, A.H., Volume I.

62-330.301(1)(k) Will comply with any applicable special basin or geographic area criteria.

The southwest portion of the proposed project lies within the Sensitive Karst Area Basin (SKAB) in Marion County. The goal of the SKAB design criteria, under 13.6 of the ERP Applicants Handbook Vol II, is to provide adequate treatment of stormwater before it enters the Floridan aquifer and to prevent the formation of solution pipe sinkholes. Excavation onsite is limited to the shallow retention swale system located downstream of the pivot areas, therefore maximizing the depth of unconsolidated soil material between any limerock surface and the swale bottom. The retention swale system is designed to be shallow, no more than one foot deep, and extends over 39,000 feet in length, thereby maximizing the footprint for stormwater infiltration and minimizing the hydraulic head. The retention swale and berm system will be properly stabilized with vegetation. The applicant has demonstrated that the design of the retention swale and berm will provide for adequate treatment of stormwater and will minimize the potential for formation of solution pipe sinkholes.

62-330.302(1)(b) Will not cause unacceptable cumulative impacts upon wetlands and other surface waters as set forth in section 10.2.8 through 10.2.8.2 of Volume I.

Section 10.2.8, A.H. Vol I, requires applicants to provide reasonable assurances that a regulated activity will not cause unacceptable cumulative impacts upon wetlands and other surface waters within the same drainage basin as the regulated activity for which a permit is sought. This analysis considers past, present, and likely future similar impacts and assumes that reasonably expected future applications with like impacts will be sought, thus necessitating equitable distribution of acceptable impacts among future applications. Mitigation, that offsets a projects adverse impacts within the same basin as the project for which a permit is sought is presumed to not cause unacceptable cumulative impacts.

No adverse impacts to wetlands or other surface waters are proposed for this project and, therefore, the project will not cause unacceptable cumulative impacts

Conclusion:

The applicant has provided reasonable assurance that the proposed project meets the conditions for issuance of permits specified in rules 62-330.301 and 62-330.302, F.A.C.

Conditions

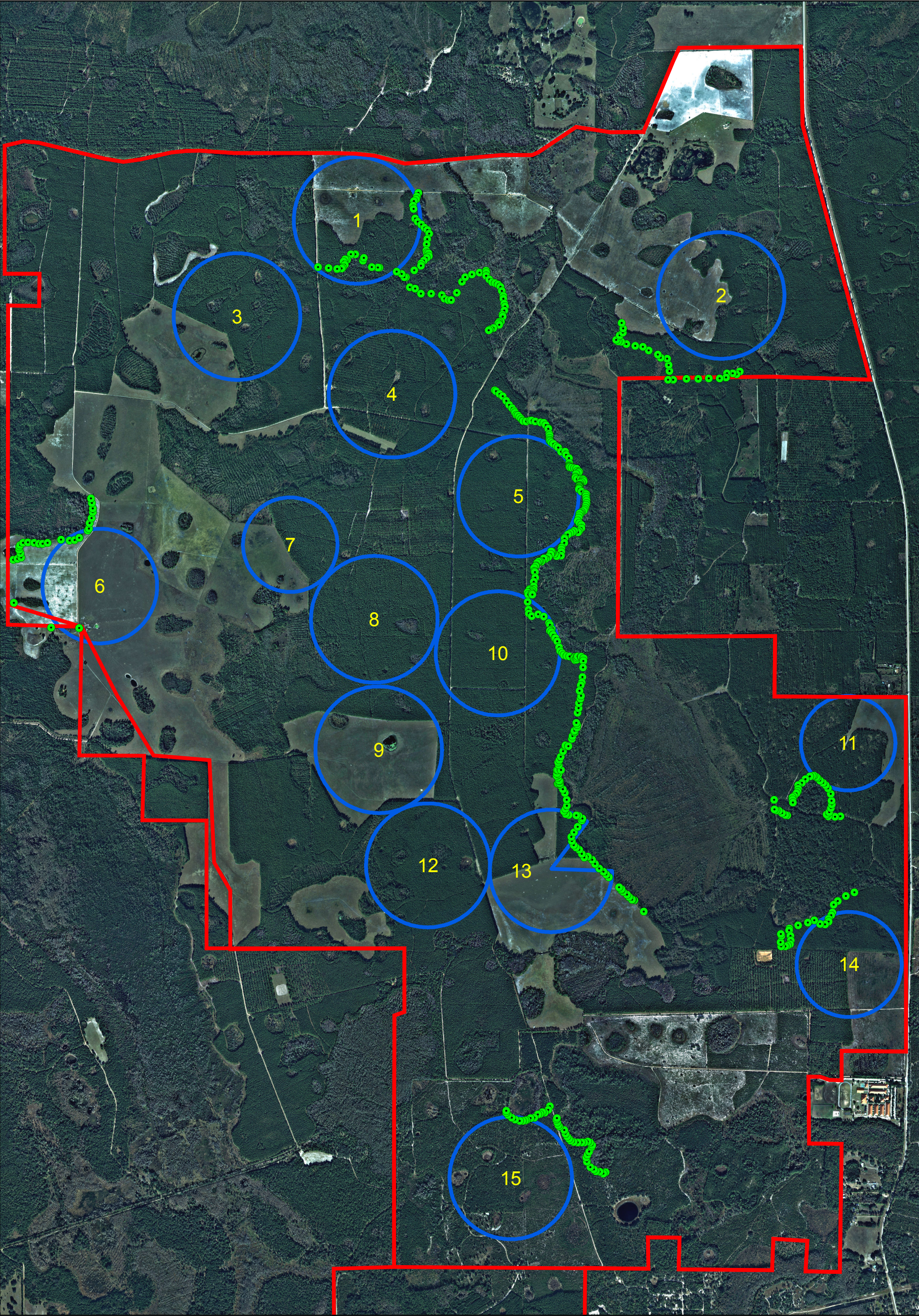
1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the District staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5, F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the District a fully executed Form 62-330.350(1), "Construction Commencement Notice,"[10-1-13], incorporated by reference herein (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02505>), indicating the expected start and completion dates. A copy of this form may be obtained from the District, as described in subsection 62-330.010(5), F.A.C. If available, an District website that fulfills this notification requirement may be used in lieu of the form.
5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 1. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex — "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 2. For all other activities — "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 3. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:
 1. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 2. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
8. The permittee shall notify the District in writing of changes required by any other regulatory District that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
9. This permit does not:
 1. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 2. Convey to the permittee or create in the permittee any interest in real property;
 3. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 4. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
11. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the District in writing:
1. Immediately if any previously submitted information is discovered to be inaccurate; and
 2. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
13. Upon reasonable notice to the permittee, District staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the District will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.
19. This permit for construction will expire five years from the date of issuance.
20. All wetland areas or water bodies that are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity, and dewatering.
21. Prior to construction, the permittee must clearly designate the limits of construction on-site. The permittee must advise the contractor that any work outside the limits of construction, including clearing, may be a violation of this permit.
22. This proposed stormwater management system shall be constructed and operated in accordance with the Nutrient Management Plan received by the District on March 28, 2014, the construction plans received on April 24, 2014, and the stormwater management system construction sequencing document received on May 9, 2014, and must be located entirely landward of the safe upland lines as depicted in the attached Exhibit 1.
23. The permittee shall construct grass spreader swales in accordance with the approved Nutrient Management Plan and construction plans, or similar District-approved BMPs, at points of concentrated flow as necessary to establish sheet flow conditions prior to stormwater runoff entering wetlands or other surface waters.
24. The operation and maintenance entity shall inspect the stormwater or surface water management system once within two years after the completion of construction and every two years thereafter to determine if the system is functioning as designed and permitted. The operation and maintenance entity must maintain a record of each required inspection, including the date of the inspection, the name and contact information of the inspector, and whether the system was functioning as designed and permitted, and make such record available for inspection upon request by the District during normal business hours. If at any time the system is not functioning as designed and permitted, then within 30 days the entity shall submit a report electronically or in writing to the District using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," describing the remedial actions taken to resolve the failure or deviation.



Legend

Waypoint

CUP Boundaries (Pending)

Pivot:9.24

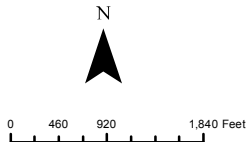
Marion County 2011, 1 ft. True Color
RGB

Red: Band_1

Green: Band_2

Blue: Band_3

Exhibit 1. Safe Upland Line - GPS Waypoints



NOTICE OF RIGHTS

1. Pursuant to section 120.569, Florida Statutes, the purpose of this notice is to inform each party's attorney of record that judicial review of the Final Order in this case is available under Section 120.68, Florida Statutes.

2. Pursuant to Section 120.68, Florida Statutes, a party who is adversely affected by the Final Order may seek review in the appellate district where the District maintains its headquarters or where a party resides or as otherwise provided by law by filing a notice of appeal or petition for review in accordance with the Florida Rules of Appellate Procedure within 30 days of the rendering of the Final Order. The District's headquarters are in Palatka, Florida, and in this case, the Final Order was rendered on July 14, 2015.

3. Failure to observe the relevant time frames for filing a petition for judicial review will result in waiver of that right to review.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on July 14, 2015, a copy of this NOTICE OF RIGHTS has been sent by United States Certified Mail to Marcy I. LaHart, 4804 S.W. 45th Street, Gainesville, FL 32609, Attorney for Sierra Club, Inc. and St. Johns Riverkeeper, Inc., John R. Thomas, 233 Third Street North, Suite 101, St. Petersburg, FL 33701, Attorney for Karen Ahlers & Jeri Baldwin, John Wharton and Melanie Griffin, 215 S. Monroe Street, Suite 815, Tallahassee, FL 32301, Attorneys for Sleepy Creek Lands, LLC, and Christopher T. Byrd, 3505 Lake Lynda Drive, Suite 200, Orlando, FL 32817, Attorney for Florida Defenders of the Environment, Inc.; and hand delivered to Mary Ellen Winkler, Thomas I. Mayton, Kris Davis, and Rachel Gray, 4049 Reid Street, Palatka, FL 32177, Attorneys for SJRWMD.



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