SJR 2015-28

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, DOAH Case No.: 14-2609

v. 14-2610

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

Respondents.
_____/

FINAL ORDER
CONSUMPTIVE USE 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 Governing Board of the St. Johns River Water Management District for final agency action and entry of a Final Order for the Consumptive Use Permit.

A. STATEMENT OF THE ISSUE

The general issue before the District is whether to adopt the Recommended Order as the District's Final Order, 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.").[1] The specific issue is whether the consumptive use permit ("CUP") modification request 2-083-91926-3 (-3 Modification) meets the conditions for issuance as set forth in Section 373.223, F.S., Chapter 40C-2, *Florida Administrative Code* ("F.A.C."), and the Applicant's Handbook: Consumptive Uses of Water, Chapter 40C-2, F.A.C. (September 16, 2012). The -3 Modification from Sleepy Creek Lands,

[1] References to statutes are to Florida Statutes (2014), unless otherwise noted.

LLC ("Sleepy Creek"), is for continued authorization to use 1.46 million gallons per day (mgd) of groundwater with a change in agricultural use type to irrigation of 2,231 acres of improved pasture and other crops, and watering cattle for 20 years. The ALJ recommended "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." (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 (Fla. 1st DCA 1997), 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 Envtl. 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 Envtl. 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 Envtl. 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 Envtl. Protection*, 19 F.A.L.R. 3083, 3086 (DEP 1997); *Worldwide Investment Group, Inc. v. Dep't of Envtl. 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 District 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 -3 Modification. In addition, rulings are provided in many instances even 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 administrative 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, 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, 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.

E. RULINGS ON EXCEPTIONS[2]

1. RULINGS ON PETITIONERS' EXCEPTIONS

Petitioners' Exception No. 1

Petitioners take exception to 23 COLs and 25 FOFs on essentially two grounds.[3] 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

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[2] Citations to page numbers in the transcript of the formal administrative hearing will be designated by 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 Prehearing Stipulation will be designated by "Stip." followed by paragraph number (Stip. at ¶ __). 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: 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 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 parties' exceptions and their respective responses to filed exceptions will be referred to as "Pet. Exception at", "Dist. Exception at", "Dist. Response to Pet. Exception at" and "Pet. Response to Dist. Exception at" followed by the page number.

[3] The COLs are: 290, 291, 295, 296, 298, 312-315, 321, 323, 326, 327, 338, 339, 341, 342, 344, 346, 348, 349, 394 and 395. The FOFs are: 8-10, 23, 170, 171, 172, 174-189, 191 and 212.

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. For the reasons explained below, the exception is denied.[4]

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.

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. 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), 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, with one exception, 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 two 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

[4] 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.

opportunity to present evidence and/or argument departed from the essential requirements of law by denying due process).[5]

In essence, Petitioners are requesting the District 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 generally does not have substantive jurisdiction over the interpretation of these statutes and rules, and 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 -4 application), and accepted all allegations set forth in Petitioners' motion. The ALJ held that the consolidation of Petitioners' petitions regarding the Sequence 4 permit application with the -3 Modification "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

[5] *See, e.g.,* Stip: 6-7; Jt. Ex. 23, 24, 44, 47, 48, 51, and 52; Figure 7A, 8A, and 9A; T: 238, 480, 481, 497, 498, 657, 786 -789, 802, 803, 1232, 1234, 1323 and 1324.

Motion to Consolidate and for Continuance (DOAH Aug. 14, 2014 at 1).

Petitioners' Exception No. 2

Petitioners take exception to 24 FOFs and 22 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 the *de novo* administrative 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 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 the ALJ's procedural decisions. 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.[7] *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

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[6] FOF paragraphs 8-10, 23, 170-172, 174-189, 191, and 212, and COL paragraphs 291, 295, 296, 298, 312-315, 321, 323, 326, 327, 338, 339, 341, 342, 344, 346, 348, 349, and 394-395.

[7] Petitioners request that Exception 1 be incorporated into Exception 2 (Pet. Exception at 27 to RO). The District is not obliged to rule on this portion of the exception. *See* Section B.III. *supra.*

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 - 4 application which should at least have been considered in this *de novo* proceeding." (Pet. Exception at 27) The decision to consider evidence is an evidentiary matter on which the ALJ is afforded wide discretion and the District lacks 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 Envtl. 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 Envtl. 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

a. Modification of the Existing CUPs

Petitioners take exception to COLs 290, 291, 295, 296, 326, 344, 394 and 395,[8] 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) In essence, Petitioners argue that the ALJ (by accepting District staff's analysis) improperly evaluated the -3 Modficiation request by limiting his review to the modified aspects of the permits that had been transferred to Sleepy

[8] COLs 344, 394 and 395 contain the ALJ's ultimate conclusions that the -3 Modification meets all applicable District requirements and that Petitioners did not meet their burden of ultimate persuasion.

Creek.[9] The ALJ's approach they argue "allows issuance [of a permit] without meeting the conditions of issuance contrary to section 373.223, Florida Statutes." (Pet. Exception at 32) They also contend, "the ALJ erred upon 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)

District staff's review of the -3 Modification was consistent with the statutes and District rules governing modifications of a consumptive use permit. Thus, the District rejects this exception except as clarified in this ruling and in the ruling on Petitioners' Exception 10.

COLs 291, 295, 290, 296 and 326 state as follows:

> 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.[10]
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> 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.
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> 290. The scope of this proceeding is not in the nature of a challenge to the original

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[9] Before these proceedings commenced, Sleepy Creek was, and continues to be the holder of consumptive use permits 2-083-91926-2 and 2-083-3011-7 that authorize a combined groundwater withdrawal of 1.46 mgd. (RO at ¶ 8; Jt. Ex. 46 and 52)

[10] To the extent this COL contains findings of fact, they are supported by competent substantial evidence. *See, e.g.,* Jt. Ex. 1-52, 44; Stip. ¶ 6, 8 ,9; T: 1232-1234; and RO FOF 159-191.

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.

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.

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.

The modification of consumptive use permits is governed by section 373.239, F.S., and District Rule 40C-2.331, Florida Administrative Code, and section 11.1 of the CUP Applicant's

Handbook. Section 373.239 entitled "Modification and renewal of permit terms" is a procedural statute[11], and provides:

> (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.

Rule 40C-2.331, which implements section 373.239, allows a permittee to request a modification of its consumptive use permit by letter that describes the proposed modification. However, certain requests for modification must be requested by filing an application on the appropriate District form and may not be made by letter. These type of requests include:

- Requests to increase the duration of the consumptive use authorization (40C-2.331(1)(c)1.), and
- Requests to change the location(s) of withdrawal point(s), unless the change: (a) Is for the relocation of withdrawal point(s) to a source of reclaimed water or water from a man-made surface water management system, or is for the relocation of a proposed well or replacement of an existing well meeting certain requirements. (40C-2.331(1)(c)7.)

As required by rule 40C-2.331(2), Sleepy Creek submitted its request for the -3 Permit Modification by application on District form 40C-2-1082-1. (Jt. Ex. 2).

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[11] *See Southwest Fla. Water Mgmt. Dist. v. Charlotte County*, 774 So. 2d 903, 912-913 (Fla. 2d DCA 2001) (noting that "the use of the term 'in the same manner' as used in section 373.239(3) has an understood meaning in Florida as being in the same procedural manner." (*citations omitted*))

Section 11.1 of the CUP Applicant's Handbook entitled "Modification to an Existing Permit" states:

> 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 recommendations of denial (see section 9.4 above as well as 40C-2.301(5)(a)).

There is no dispute that Sleepy Creek submitted the request in the proper form. Petitioners' disagreement is with both the determination that Sleepy Creek's request constitutes a request for modification and the way in which the ALJ applied the conditions for issuance to Sleepy Creek's request. Specifically, they argue in this exception:

> First, the ALJ accepted Staff's contention the Sequence 3 application was to modify an existing use... Further, any use during the proposed CUP's extended duration is a new use that has never been evaluated.
>
> The District's approach to Sleepy Creek's Sequence 3 application considered two aspects of the CUP application, the relocation of the withdrawals and the extension of the duration to 2034 [T:1321] However, for the period of extension there has never been a full review of the Conditions for Issuance. This allows issuance without meeting the Conditions for Issuance, contrary to Section 373.223, Florida Statutes.

(Pet. Exception at 31 and 32).

i. Relocation of Withdrawals

Petitioners' reference to the transcript, "[T: 1321]", is to testimony explaining how District staff evaluated the permitting criterion of whether Sleepy Creek had reduced potential environmental harm to Silver Springs from its modified water use to an acceptable amount in its request for the -3 Permit Modification.

> Rule 40C-2.301(4) states in pertinent part:
>
> ...
>
> (4) The following criteria must be met in order for a use to be considered reasonable-beneficial:

...

(d) The environmental harm ... caused by the consumptive use must be reduced to an acceptable amount.

To determine whether this criterion had been met with regard to harm to Silver Springs, District staff considered the effect of the existing permitted water uses (authorized through 2021 and 2024) on Silver Springs and then compared how the proposed relocation of water withdrawal points (wells) would impact Silver Springs. (T: 1320-1321) The ALJ found "[a]s 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." (RO at ¶ 188) *See also* RO at ¶ 283 (finding that "the preponderance of the evidence suggests that the existing permitted use would have greater impacts on the water levels at Silver Springs.") These findings are supported by competent substantial evidence in the record (Jt. Ex. 23, 24 and 44; T: 658) and the ALJ concluded, based in part on this finding, that the environmental harm of Sleepy Creek's modified consumptive use to Silver Springs had been reduced to an acceptable amount.

Petitioners appear to argue that, in applying this permitting criterion as it relates to Silver Springs and the -3 Modification, District staff should have ignored the net effect of relocation of Sleepy Creek's existing consumptive use authorization on Silver Springs, and focused only on the absolute effect of withdrawing water from the wells to be relocated to the North Tract on the spring. If the ALJ had done so, Petitioners appear to suggest, he would or should have recommended denial of the -3 Modification given the reduced flow of Silver Springs and other concerns about the spring's condition.

Under the facts as found by the ALJ, his conclusion that this permitting criterion as it relates to Silver Springs and the -3 Modification has been met was reasonable. Rule 40C-2.331,

which has not been challenged in this proceeding, clearly contemplates that a consumptive use permit may be modified by relocating withdrawal points, and the rule does not specify that, to be considered a modification, such relocation must be on property within the original permit's project area. Further, in considering whether the environmental harm to Silver Springs of Sleepy Creek's modified consumptive use associated with the proposed relocation of wells has been reduced to an acceptable amount, it was reasonable for the ALJ to consider the effect of such relocation to the North Tract as compared to the effect of the existing permitted use on the East Tract. *See Friends of the Everglades, Inc. v. State Dep't of Envtl. Reg.,* 496 So. 2d 181, 183 (Fla. 1st DCA 1986) (holding DER's interpretation of rule with regard to dredge and fill permit modification was permissible where DER's review of permitting criteria focused on activity for which modification was sought, and modification sought would result in improvement of water quality.)

Under Petitioners' view of this rule criterion, the District would be obliged to deny the permit modification when the relocation, based on the credited evidence, is anticipated to have a positive effect on Silver Springs, and where denial would result in continued authorization of a consumptive use that has a greater impact on Silver Springs than the modified use that they would have the District deny. The District will not interpret its rules in a manner that leads to an outlandish result. *See, e.g., Larimore v. State*, 2 So. 3d 101 (Fla. 2008*), as revised on denial of rehearing* (2009) (affirming "[a] court is compelled to interpret a statute so as to avoid a construction that would result in unreasonable, harsh, or absurd consequences." (*citation omitted*)).

Additionally, under Petitioners' view, with regard to persons or entities (who hold a valid consumptive use permit), the burden of addressing the existing harm to a water resource from

currently authorized consumptive uses would arbitrarily fall on those permittees that first seek a permit modification after the District determines that such harm has occurred -- without any regard to their proportionate impact on the resource.[12] While the Model Water Code and its commentary, cited by Petitioners, are used by the District and courts as a primary source of legislative intent for the Florida Water Resources Act, Chapter 373 and the State's water resource implementation rule[13] now include specific provisions, addressing the recovery of such water resources, that were not included in the code.[14] These more recent provisions contemplate phasing and timetables for prevention or recovery, with development of additional water supplies and implementation of conservation and efficiency measures occurring "concurrent with, to the extent practical, and to offset reductions in permitted withdrawals." *See* §373.0421(2)(b), Fla.

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[12] In FOF 72, the ALJ found "[t]here are currently no minimum flows and levels established by the District for the Silver River." (RO at ¶ 72) Thus, this discussion is only a general comment on the approach that Petitioners advocate.

[13]The water resource implementation rule, adopted by the Department of Environmental Protection (DEP), sets forth for the water management districts "goals, objectives, and guidance for the development and review of programs, rules, and plans relating to water resources, based on statutory policies and directives" and is used by DEP to determine whether proposed district rules are consistent with Chapter 373. *See* §373.016(25), Fla. Stat. The legislature must ratify amendments to the rule before they can become effective. *See* §373.036, Fla. Stat. However, it does not contain permitting criteria except as they are incorporated by reference in the District's consumptive use permitting rules. *See* Fla. Admin. Code R. 62-40.110(4).

[14] The Model Water Code does contain a section entitled "Declaration of Water Shortage" under which a governing board, by regulation, would "formulate a plan for implementation during periods of water shortage" and "may declare that a water shortage exists within all or part of the district when ... conditions are such as to require temporary reduction in total water use within the area *to protect water resources from serious harm.*" (emphasis added) *See* F. Maloney, et al, A Model Water Code, §2.09 – Declaration of Water Shortage (1972). A very similar version of these provisions was adopted by the Florida Legislature in sections 373.246 and 373.175, F.S., as part of the 1972 Water Resources Act, and these statutes continue to be water management tools available to the District. However, even these tools generally do not contemplate the approach that Petitioners appear to be advocating.

Stat. (2014); Fla. Admin. Code R. 62-40.473(6). Equally significant, the water resource implementation rule requires that:

> (5) After the effective date of this rule, recovery and prevention strategies shall be developed as follows:
> (a) At the time the minimum flow or level is initially adopted, if the water body is below or is projected to fall within 20 years below, the initial minimum flow or level, the District shall simultaneously approve the recovery or prevention strategy required by Section 373.0421(2), F.S.[15]

These statutory and rule provisions do not support Petitioners' approach which would require the District to categorically eliminate on a "first-come, first-served basis" existing authorized consumptive uses where the permittee seeks modification of an unexpired permit, and the proposed modification – based on the best information then available -- addresses the permittee's proportional impact on a water resource that has been significantly harmed by currently authorized consumptive uses. If additional measures are necessary to recover the water resource, the current statutory scheme contemplates that these would be included in the relevant recovery strategy. Nevertheless, if unanticipated significant adverse impacts to water resources (e.g. spring flows) from a permittee's modified use occur, the District by permit condition has the ability to revoke the permit in whole or in part to curtail or abate such adverse impacts. *See* Fla. Admin. Code R. 40C-2.381(entitled "Limiting conditions")

ii. Duration

Petitioners contend that the District's approval of a 20-year duration for the -3 Modification would be contrary to chapter 373.223, F.S. (Pet. Exception at 32) As explained above in the ruling on this exception, the analysis of how the relocation of withdrawal points would impact Silver Springs was a reasonable application of rule 40C-2.301(4)(d), F.A.C. The

[15] This rule provision became effective on May 6, 2013.

ALJ concluded that the evidence was sufficient to provide reasonable assurance for a duration of 20 years because Sleepy Creek will -- through relocation of withdrawal points -- address its modified consumptive use's proportional impact on Silver Springs. Specifically, COL 295 states in pertinent part:

> *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.* (emphasis added)

Based on the evidence, the ALJ's recommendation is for the District to issue the -3 Permit Modification "on the terms and conditions set forth in the Consumptive Use Technical Staff Report [TSR]" (Jt. Ex. 44) The conditions in the TSR include:

> 2. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage is declared by the District Governing Board, the permittee must adhere to the water shortage restrictions as specified by the District, even though the specified water shortage restrictions may be inconsistent with the terms and conditions of this permit.
>
> 9. This permit will expire on June 10, 2034.
>
> 19. The permittee's consumptive use shall not adversely impact wetlands, lakes, and spring flows or contribute to a violation of minimum flows and levels adopted in Chapter 40C-8, F.A.C., except as authorized by SJRWMD-approved minimum flow or level (MFL) recovery strategy. If unanticipated significant adverse impacts occur, the SJRWMD shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts are mitigated by the permittee pursuant to a District-approved plan.
>
> 23. The permittee shall submit to the District a compliance report pursuant to subsection 373.236(4), Florida Statutes, ten years from the date of issuance of this permit. Specifically, the compliance report shall be submitted by June 10, 2024. This report shall contain sufficient information to demonstrate that the permittee's use of water will continue, for the remaining duration of the permit, to meet the conditions for issuance set forth in the District's rules that existed at the time the

permit was issued for 20 years by the District. At a minimum, the compliance report must:

(a) Meet the submittal requirements of section 4.2 of the Applicant's Handbook: Consumptive Uses of Water, September 16, 2012;

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

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

Based on the ALJ's findings and conclusions and in light of these conditions, the District concludes that reasonable assurance has been provided that the -3 Permit Modification should be granted for the duration recommended by the ALJ.

b. Public Interest

On the bases identified in a. above, Petitioners also take exception to COLs 314, 315, and 346 that relate to the public interest test under the reasonable-beneficial prong and the public interest prong of the 3-part test for a consumptive use permit. Petitioners do not explain how the ALJ's alleged truncated review affected these COLs, and thus do not state a valid basis for the exception under 120.57(1)(k), F.S. Accordingly, the District need not rule on this exception with regard to these conclusions.

COLs 314, 315, and 346 state as follows:

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).

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.

As concluded above, the ALJ's and District staff's evaluation of the modification was not truncated and was consistent with the statute and District rules governing modifications.

Lowering of the Water Table

Petitioners also take exception to COLs 347 – 349 that relate to the permitting criterion that a consumptive use permit must be denied if a consumptive use of water will "cause the water table or surface water to be lowered so that stages or vegetation will be adversely and significantly affected on land other than those owned, leased or otherwise controlled by the applicant." *See* Fla. Admin. Code R. 40C-2.301(5)(a)2.

COLs 347 – 349 state as follows:

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 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.

Petitioners do not explain how District staff's alleged truncated review affected these COLs and thus do not state a valid basis for the exception under 120.57(1)(k), F.S. Nevertheless, the record reflects that the evaluation of impacts to wetlands and other surface waters included

consideration of groundwater flow modeling, site visits, aerial photography and the results of an aquifer performance test conducted on the North Tract to determine that the impacts of withdrawing 1.46 mgd as proposed in the modification would not violate the basis for denial in rule 40C-2.301(5)(a)2., F.A.C. (Jt. Ex. 44:14, T: 1299-1300).

d. FOFs

Petitioners take exception to FOFs 32, 33, and 170-191 on the grounds that "the hearing process was not consistent with the essential requirements of law." (Pet. Exception at 34) Because the instant proceeding does not fall into the category of an extreme case that violates section 120.57(1)(l),F.S., this exception is rejected. Moreover, Petitioners have not alleged that findings of fact in these paragraphs are not supported by competent substantial evidence which they are. (T: 786-789, 802, 803, 982-983, 1121, 1122, 1123, 1137, 1138; Jt. Exs. 23, 24, 44: Figure 4A, 5A and 6A) To the extent these paragraphs contain conclusions of law, Petitioners have not explained how the errors they allege in this exception affected these conclusions.

Petitioners' Exception No. 4

Petitioners take exception to FOF 283 and COLs 290-291, 296, 323, 338-339, 344, and 346 on two grounds. 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). For the reasons below, the exception is rejected.

a. Findings of fact

FOF 283 states as follows:

> 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.

The record contains competent substantial evidence to support the above finding of fact. (T: 607, 608, 658; Jt. Ex. 23, 24 and 44) In this exception, Petitioners have not demonstrated that the extreme circumstances contemplated by the statute for rejecting or modifying a finding of fact that is supported by competent substantial evidence has been met.

b. Conclusions of law

As to the first grounds, and as explained above, under the heading "Essential requirements of the 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. With regard to the second grounds, it is clear from the exception that Petitioners direct this exception at the determination of the predevelopment condition as it relates to environmental resource permitting requirements, which apply only to the ERP application, not the consumptive use application. Moreover, Petitioners have not explained how the errors they allege in this exception affected these COLs.

Petitioners' Exception No. 5

Petitioners take exception to 3 FOFs and 13 COLS on two grounds.[16] Petitioners contend that (1) the "hearing process was not consistent with the essential requirements of law" and (2) the ALJ erred by concluding Sleepy Creek's implementation of best management practices

[16] The FOFs are: 111, 116, and 131. The COLs are: 322-323, 326-327, 338-339, 341-342, 344, 346, 348, and 394-395.

(BMPs) for cow/calf operations provided Sleepy Creek a "presumption" of compliance with water quality standards. (Pet. Exception at 37-38).

a. FOF 116

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-11.003; *see also* § 403.067(7)(c)(3), Fla. Stat.

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 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," exception 5 is rejected. The Recommended Order contains other findings of fact that support the ALJ's conclusion that the modified consumptive use will not cause or contribute to a water quality violation.[17] (RO at ¶¶ 15, 27, 44, 59, 111-115, 133-135, 143, 149-154, 156-158, 225-259, 264, 272, 277-279.)

b. Remaining FOFs

Petitioners take exception to the findings in FOFs 111 and 131, which are supported by competent substantial evidence. (Jt. Exs. 28, 40, 44, 69; SC Ex. 201; T: 607-609, 1142-1144) 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. Therefore, the exception is rejected with regard to these findings of fact.

c. Conclusions of law

[17] The issuance of the ERP establishes that rule 40C-2.301(1)(k), F.A.C., and section 10.3(k), CUP A.H., have been met for the water use on the North Tract.

Petitioners take exception to COLs 322, 323, 326, 327, 338, 339, 341, 342, 344, 346, 348 and 394-395. 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.

With regard to the second grounds, Petitioners do not explain how FOF 116 affected conclusions and findings in these COLs.

Petitioners' Exception No. 6

Petitioners take exception to pages 8 and 9 of the Recommended Order and FOFs 53-60 and 195 on two grounds.[18] 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,[19] instead passing it on to the Governing Board for their consideration without providing any findings or conclusions thereupon, and without synthesizing the Public Hearing

[18] In their exception number 6, Petitioners take exception to findings of facts and conclusions of law related to the ERP and CUP applications. Specifically, Petitioners' exceptions to FOFs 53-60, 195 and COL 376 relate all or in part to the ERP application and are addressed in the ERP Final Order.

[19] Petitioners' argument is in reference to provisions of section 120.57(1)(b), F.S., 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.

evidence with the balance of the evidentiary record." (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 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 through 43.

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 Envtl. 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 Envtl. 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 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 195, relating to karst features on the project site. As discussed above, there is no definitive indication the ALJ did not consider the oral or written communications provided during the public comment and any error in procedure or evidentiary rulings is outside the District's substantive jurisdiction. 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 section 120.57(1)(l), F.S.

Petitioners' Exception No. 7

Petitioners take exception to FOF 116 and COLs 321-323, 326, 338-339, 341-342, 344, 346, 394, and 395 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 cumulative water quality impact evidence." (Pet. Exception at 47) The District rejected FOF 116 in its ruling on Petitioners' Exception No. 5. As discussed 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 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.

With regard to the second grounds, Petitioners have not explained how the errors they allege in this exception affected COLs directed at the modified consumptive use permit. It is, however, clear from the exception that Petitioners' argument is directed at "cumulative water quality evidence" as it relates to the North Tract. (Pet. Exception at 47).[20] Their argument is addressed in the District's final order on the environmental resource permit, issuance of which establishes that the criterion in CUP A.H. 10.3(k) is met with regard to consumptive use on the North Tract.

[20] Petitioners rely on FOF 276-279 to support their argument.

Petitioners' Exception No. 8

Petitioners take exception to 13 COLs and 13 FOFs on two grounds. 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."[21] (Pet. Exception at 48 and 50) 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.

Petitioners' exception to FOFs 181-183, 187-189, 191, 204, 214-216, 295 and 296 is mostly an effort to re-argue the evidence. All of the findings of fact in these paragraphs relate to modeling results and are supported by competent substantial evidence.[22] To the extent that Petitioners contend that: (1) the ALJ erred 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, their 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.

[21] The COLs are: 312, 313, 321, 322, 326, 344, 346, 348, 349, 390, 391, 394 and 395.

[22] *See, e.g.,* Jt. Ex. 23, 24, 37, 38, 44; Pet. Ex. 151; T: 497, 498, 788, 918, 1232, 1224, 1323, and 1324.

Part of Petitioners' argument that the ALJ failed to "correctly analyze cumulative impacts regarding water quantity" focuses on the amount of actual water use on the East Tract, which has historically been lower than the amount of permitted use. This part of their argument ignores that Sleepy Creek -- before the commencement of this proceeding -- was the holder of the permits authorizing a combined withdrawal of 1.46 mgd and, as such, without further action from the District, could use the full allocation of these permits albeit for a different use (sod production) at a different location. (RO at 8; Dist. Ex. 48, 52) To the extent that Petitioners' exception questions the scope of the review used to evaluate the -3 Modification, it is addressed by the District's ruling on Exception No. 3.

Petitioners' Exception No. 9

Petitioners take exception to 23 COLs and 27 FOFs on two grounds. [23] 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. Exception at 52 and 53) 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.

[23] The COLs are: 290, 291, 295, 296, 298, 312, 313, 314, 315, 321, 323, 326, 327, 338, 339, 342, 344, 346, 348, 349, 391, 394 and 395.

Petitioners take exception to FOFs 8-10, 23, 170-172, 174-189, 191, 212, 257, and 267. All of the findings of fact in these paragraphs are supported by competent substantial evidence. (Stip: 6-7; Jt. Ex. 23; 24; 44; 47; 48; 51; and 52; Figure 7A, 8A, and 9A; T. 238, 480, 481, 497, 498, 657, 786, 789, 802, 803, 1075, 1076, 1232, 1233, 1234, 1323, and 1324; Dist. Ex. 170). 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 these FOFs.

To support their argument on 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" -- Petitioners cite to ERP A.H. Vol. I § 10.2.7(d). This section of the ERP applicant's handbook relates to secondary impacts to wetlands and other surface waters when considering a proposed project under the District's *environmental resource permitting* rules. As pointed out by District staff, this criterion is an ERP criterion and is not a CUP criterion in chapter 40C-2, F.A.C., the CUP Applicant's Handbook or Part II of Chapter 373.

Notably, Section 10.2.7(a), another part of the secondary impacts criterion 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.

(AH Vol. I §10.2.7(a))

Thus, the District could also not have considered the sequence 4 application's predicted water resource impacts in its evaluation of the ERP application, approval of which allows the applicant

to receive a presumption of compliance with District rule 40C-2.301(4)(k), F.A.C., with regard to the withdrawals on the North Tract portion of the -3 Modification.

Petitioners' Exception No. 10

Petitioners take exception to FOFs 280-283 and COLs 314, 316, 320-323, 346 and 394-397 on the grounds that "the hearing process was not consistent with the essential requirements of law." (Pet. Exception at 55) In addition, Petitioners assert that the "Recommended Order's analysis of consistency with the public interest recognizes some of the applicable law but misapplies it." (Pet. Exception at 53) To the extent that Petitioners request the District to reject or modify conclusions of law on the basis that the hearing process was not consistent with the essential requirements of law, they have not stated a valid basis as required by section 120.57(1)(k), F.S. The District denies the exception except as clarified in this ruling.

a. Findings of Fact

FOFs 280-283 state as follows:

> 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.

The record contains competent substantial evidence to support the above findings and conclusions. (T: 587, 588, 589, 590, 607, 608, 626, 628; Jt. Ex. 23, 24 and 44) In this exception, Petitioners have not demonstrated that the extreme circumstances contemplated by the statute for rejecting or modifying a finding of fact that is supported by competent substantial evidence has been met. Therefore, this exception is rejected with regard to these findings of fact.

b. Public Interest under First (Reasonable-Beneficial) and Third (Public Interest) Prongs of 373.223(1), F.S.

COLs 314, 316 and 320-323 are under the heading "Rule 40C-2.301(4)(b) and CUP A.H. Section 10.3(b)" and state as follows:

> 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.
>
> 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.
>
> 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 _____).[24]

[24] 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.

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.

COL 346, under the heading "Section 373.223(1)(c) – Consistent with the Public Interest," states:

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.

i. Conflation of Public Interest Tests

COLs 314, 316 and 320-323 relate to the criteria in Rule 40C-2.301(4)(b), F.A.C., and CUP A.H. section 10.3(b). These rules provide in pertinent part as follows:

40C-2.301(4)(b) – The following criteria must be met in order for a use to be considered reasonable-beneficial: . . .

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

10.3 Reasonable-Beneficial Use Criteria

> ...[T]he Governing Board has determined that the following criteria must be met in order for a use to be considered reasonable-beneficial: . . . (b) The use must be for a purpose which both reasonable and consistent with the public interest.

The term "reasonable-beneficial use" is defined 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." *See* § 373.019(16), Fla. Stat. As the District has ruled previously, the term "consistent with the public interest in the definition of reasonable-beneficial use contained in the first prong of section 373.223(1)(a), F.S." does not have the same meaning as the term "consistent with the public interest in the third prong of section 373.223(1)(c), F.S." *City of Groveland v. Niagara Bottling Co. and St. Johns River Water Management District*, Case No. 08-4201 (Fla. DOAH Aug. 7, 2009; SJRWMD Sept. 28, 2009) at 37-39. To the extent COL 346 may be read to suggest that the two tests are synonymous, the District reaffirms they are not. The factors considered under the two tests may overlap. *Id.* at 38.

ii. Consideration of non-water resource related Matters

In applying the public interest tests under rule 40C-2.301(4)(b), F.A.C., and section 373.223(1)(c), F.S., the District's review is limited to water resource related considerations. *Id.* at 25. Thus, the District considers the findings in paragraphs 281, 282 and 316 only to the extent that they establish whether Sleepy Creek's consumptive use of water is for a legitimate purpose.

The District is a creature of statute and its powers are those expressed in statutory language, or necessarily implied from expressed language, and its powers are not conferred by the absence of language. *Id.* The CUP program of Part II of Chapter 373 was enacted to accomplish the water resource conservation and protection policy goals of Chapter 373. The

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

c. Remaining COLs

COLs 394 and 395 conclude that Petitioners did not meet their burden of ultimate persuasion with regard to the CUP and that Sleepy Creek has provided reasonable assurance to obtain a CUP from the District. These COLs are not affected by the District's ruling with regard to the scope of the public interest test and the exception with regard to these COLs is therefore denied.

Because they address the issuance of an ERP to Sleepy Creek, Petitioners' Exceptions to COLs 396 and 397 are addressed in a separate final order issuing the ERP.

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. 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(l)(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 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, the 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 grant or 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 Envtl. 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[25]

District's Exception No. 4

District staff takes exception to FOF 11 on the basis that the FOF contains a scrivener's error. Based on a review of the record, there appears to be no competent substantial evidence for finding that 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. The District's exception is granted. In light of the statutes limiting the District's ability to make additional findings of fact, the FOF is modified to read:

> 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 year drought year.

District's Exception No. 5

District staff takes exception to COL 293 "to the extent that this conclusion references rule 40C-2.331(2), F.A.C., as it was revised on August 14, 2014." (District Exception at 7) As set forth in the parties' Stipulation and in COL 305 "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." (Stip. ¶ F.3)

As noted elsewhere in this order, 40C-2.331(2) includes standards for permit modifications. Since Sleepy Creek elected to use the "standards criteria and conditions" in effect

[25] District staff's exceptions 1, 2, and 3 are directed at Environmental Resource Permit Application IND-083-130588-4 and, therefore, are not ruled upon in this order.

before August 14, 2014, the February 2, 2012 version of the rule is applicable. The only differences between the 2012 and 2014 version of this rule are in the references to subsection numbers of the Applicant's Handbook, which do not change the outcome of this case.

The exception is granted and paragraph 293 is corrected to read as follows:

> 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.

District's Exception No. 6

District staff takes exception to COLs 337, 338 and 339 to the extent that they "focus on the introduction of nutrients to the Floridan aquifer as a result of proposed activities on the property." (Dist. Exception at 8). These COLs appear under the heading "Rule 40C-2.301(4)(j) and CUP A.H. Section 10.3 (j)." Essentially, District staff assert that the ALJ has misinterpreted this criterion by considering how the use of water might cause water quality impacts in receiving waters, including the aquifer. As explained below, the District concurs and District staff's exception is granted.

COLs 337, 338 and 339 state as follows:

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) provides in pertinent part:

(4) The following criteria must be met in order for a use to be considered reasonable-beneficial:

...

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

(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.[26]

Under 40C-2.301(4)(j), F.A.C., and CUP A.H. §10.3(j), the District considers whether harmful water quality impacts to the source will occur *from the act of withdrawing or diverting water. See, e.g., Sierra Club v. Hines Interests Limited Partnership and St. Johns River Water*

[26] This language is also contained in sections 10.3 of the CUP Applicant's Handbook.

Management District (Order on Remand (Case No. 99-1905, Fla. DOAH December 30, 1999; SJRWMD June 15, 2000) (determining that since proposed groundwater withdrawals would not cause saltwater intrusion, the water quality of the source would not be seriously harmed in accordance with 40C-2.301(4)(j), F.A.C., and that proposed withdrawals would not cause a violation of state water quality standards in accordance with 40C-2.301(4)(k) in light of stormwater management system's treatment efficiency and potential for groundwater impacts); See *also Nassau v. Beckham. Utilities Comm'n of New Smyrna Beach, Volusia Cnty. Water Supply Auth. & St. Johns River Water Mgmt. Dist.*, Case No. 92-0246, p. 38 (Fla. DOAH May 13, 1992; SJRWMD June 9, 1992)(considering the potential withdrawal effects from groundwater pumping on the aquifer, including deterioration of water quality, and noting withdrawal rates had been reduced enough to prevent a degradation of water quality).[27] If rules 40C-2.301(1)(j) and 10.3(k) were interpreted as set forth in COLs 336 through 339, the District would, as District staff point out, "in essence have duplicative criteria in rules 10.3(j) and (k)." (Dist. Exception at 8)

Granting this exception does not mean that the criterion in 40C-2.301(4)(j), F.A.C., and 10.3(j) has not been met. In FOF 277, the ALJ found:

> 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.

[27] Petitioners indicate that the CUP Applicant's Handbook "did not exist in 1992." (Pet. Response to Dist. Exception at 4-5). In fact, the applicable handbook was the handbook dated October 4, 1989. The language pertaining to these two criteria was clarified in the Applicant's Handbook that became effective January 7, 1999, and is consistent with the District's interpretation in *Nassau. See* Fla. Admin R. 40C-2.101.

Moreover, the record reflects that District staff considered the potential for groundwater contamination due to the movement or migration of contaminated groundwater within the Floridan aquifer into the source water of the regional aquifer system and that the parties stipulated that an environmental survey conducted by the applicant concluded that there are no known contaminated sites within 2 miles around the perimeter of the project site. (Jt. Ex. 44; Stip. p. 9 ¶ 23). Accordingly, the District concurs with the ALJ's ultimate conclusion that the criteria in rule 40C-2.301, including 40C-2.301(1)(j), have been met.

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 CUP Permit Modification Request 2-083-91926-3 except as modified by the final action of the agency in the rulings on FOFs 11 and 116, and COL 293, and as clarified in the rulings on Petitioners' Exceptions 3 and 10, and District staff's Exception 6. Sleepy Creek's CUP number 2-083-91926-3 is hereby issued under the terms and conditions contained in the Technical Staff Report dated August 17, 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

Exhibit "A"

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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Rachel Dougan Gray, Esquire
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St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177

STATEMENT OF THE ISSUE

The issue to be determined is whether Consumptive Use Permit 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 (mgy) (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 discontiguous, 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 volatization 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, volatization, 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 volatization.

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.
>
> (*l*) 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)(*l*)

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)(l).

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 Envtl. 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 Envtl. 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.

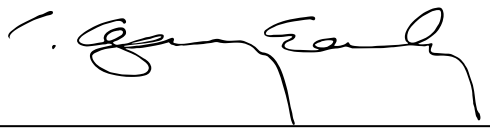
RECOMMENDATION

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.



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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 unneccesary 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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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

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

CONSUMPTIVE USE TECHNICAL STAFF REPORT
175 August May 2014
APPLICATION #: 91926-3

Owner: Sleepy Creek Lands LLC
Ste 200
700 S Federal Hwy
Boca Raton, FL 33432-6128

Applicant: Same as Owner

Agent: Andreyev Engineering, Inc.
Nicolas Andreyev
4055 Saint Johns Pkwy
Sanford, FL 32771-6375
(407) 330-7763

Compliance Contact: Mike Rogers
20 Hidden Forest Dr
Cedar Valley, ON L0G1E

Project Name: Sleepy Creek North and East Tracts
County: Marion

Located in CFCA: No
Objectors: Yes

Authorization Statement:

The District authorizes, as limited by the attached permit conditions, the use of 532.9 million gallons per year (mgy) (1.46 million gallons per day (mgd) average) of ground water from the Upper Floridan aquifer via 33 wells (fourteen proposed and four existing 12-inch diameter wells, five proposed and five existing 5-inch wells, one existing 6-inch diameter well, three existing 4-inch diameter wells and one existing 2-inch diameter well) for irrigation of 2,231 acres of improved pasture and other crops, and watering of cattle.

Recommendation: Approval
Reviewers: Victor McDaniel; Dwight Jenkins; Timothy Wetzel; Scott Laidlaw

Recommended Permit Duration and Compliance Reporting:

The applicant has requested, and staff is recommending issuance of, a 20-year duration permit. Staff is recommending that the applicant be required to submit a compliance report pursuant to subsection 373.236(4), Florida Statutes (F.S.), 10 years from the date of permit issuance. The permittee is required to comply with, and submit all information and data required by, the conditions set forth in this permit.

Use Status:

This is a consolidation of two permits (2-083-91926-2 and 2-083-3011-7) into a single permit under number 91926. In addition, the applicant proposes to modify the consolidated permit to authorize withdrawals on the Sleepy Creek Lands LLC North Tract, which is further from Silver Springs than the current withdrawal location. The applicant is not requesting any increase in allocation above what is currently authorized in the two permits and the net effect of this modification is to slightly decrease the effect of the allocated withdrawal on the flow of Silver Springs.

PROJECT DESCRIPTION:

Project Location:

The Sleepy Creek Lands North and East Tracts cattle farm project is located in northern Marion County northwest and southeast of the community of Fort McCoy. The project consists of two separate non-contiguous parcels (the northern portion of the Sleepy Creek Lands LLC property and the Ft McCoy/Jones Turf-Grass Farms). The project area that is the subject of this application consists of a total of approximately 8,200 acres.

Hydrogeologic Setting:

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

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

The top of the underlying ICU is defined by the presence of stiff, gray-green, phosphate bearing clays that make up the top of the Hawthorn Group. The lower portion of the ICU

consists of sandy clay grading to hard, light tan colored, dolomitic limestone. The hard limestone layer generally occurs at a depth of 100 feet, and defines the bottom of the ICU and the top of the UFA.

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

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

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

Background:

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

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

In addition to pasture and grass/crop irrigation, the applicant is also requesting to withdraw and use water for cattle watering. The percentage breakdown of use by type (irrigation and cattle watering) is 97% irrigation and 3% cattle watering. The site also consists of non-irrigated pasture areas and other non-irrigated, miscellaneous land uses (e.g., timber).

Water Supply System Description:

The applicant is proposing to construct fourteen 12-inch wells and five 5-inch wells. There are four 12-inch diameter wells, five 5-inch wells, one 6-inch diameter well, three 4-inch diameter wells and one 2-inch well already on the properties. The 12-inch diameter wells will withdraw water from the Upper Floridan aquifer to supply 21 center pivots which will be used for irrigation and chemigation of improved pasture areas. The six, five, four and two-inch wells will be used for cattle watering. The typical 12-inch diameter well will be constructed to a total depth of approximately 200 feet, with steel casing to a depth of approximately 100 feet. Each well will be equipped with a 75-hp submersible pump and will be capable of producing 1,500 to 2,500 gpm.

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

Description of Proposed Water Use:

This application seeks to modify two permits to irrigate 2,231 acres of pasture grasses and grain crops using 21 center pivot irrigation systems and to water 7,578~~9,500~~ head of cattle. The project area is divided between two tracts, the North Tract and East Tract.

On the North Tract, the applicant proposes to irrigate 1,620 acres using 15 center pivot systems. In any year, 20% of the irrigated area will be double-cropped with pasture grass and grains crops. The remaining 80% of the irrigated area will be used to grow pasture grasses only. The proposed use is 100% agriculture.

The East Tract consists of two adjacent parcels, which currently are permitted by CUPs #2-083-91926-2 and 2-083-3011-7, which have a combined allocation of 532.9 mgy (1.46 mgd) to irrigate 1,010 acres of sod (total). The applicant proposes to reduce the authorized irrigated area on the East Tract from 1,010 acres of sod to 611 acres of pasture grasses. The reduction in irrigated area and the change to pasture grass reduces the irrigation allocation for the 2-in-10 drought year for the East Tract to 169 mgy (0.464 mgd).

Aquifer Testing:

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

The first APT was conducted on the North Tract on a well that will serve proposed Pivot 9. The APT on Well 9 (formerly Well 21) began on March 26, 2012. Withdrawal rates of 2,338 gpm were maintained for 2.3 days before the test was terminated. Drawdown at UFA observation wells located within 100 feet of the test production well varied from three to 3.5 feet at the end of the test. Manual readings taken from wells located approximately 4,700 feet from the pumping well indicated UFA drawdown of approximately 1.5 feet. Standard analytical techniques were used to estimate the UFA

transmissivity from drawdown data collected from the wells located within approximately 100 feet of the production well. A mean value of 112,138 ft^2/day was estimated for the UFA transmissivity, along with a leakance of 3.12E-9 day^{-1} interpreted from the type-curve matching evaluation.

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

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

District staff reviewed all of the available data for the region, including the information derived from the two APTs and determined that additional site-specific information was needed in order to provide reasonable assurances regarding the on-site aquifer characteristics. With that objective in mind, a third APT was conducted. Well 9 was again used as the production well. The APT also included an array of 19 wells monitoring: the SAS (total of four wells); the ICU (total of four wells); the UFA (total of ten wells); and the uppermost portion of the MCUI (one well). The majority of the shallower wells (SAS and ICU) were constructed within 150 feet of the production well. Several of the UFA wells were within 100 feet of the pumping well, with the remainder spaced at distances varying from 800 to 13,000 feet. Background wells were established at the second APT site (Well 33), approximately five miles to the south/southwest.

Preliminary evaluation of the data collected during the third APT indicate that the UFA transmissivity values within a significant portion of the project site should generally be lowered when this area is represented in the NCF model. This means that the NCF model runs conducted as part of this application review are conservative (e.g., over-estimate harm) with regard to potential impacts to Silver Springs.

Ground Water Flow Modeling:

The current version of the District's NCF model was used to estimate impacts on local and regional ground water levels and flows. Many project specific simulations were run by both the applicant's consultants as well as District staff using the NCF model. The simulations included assessment of individual (project specific) and cumulative impacts

by applying the District's ground water use estimates for 1995 and End of Permit (EOP) allocations.

A number of simulations were run that addressed potential water use scenarios for and between the North and East Tracts. This was done to identify and evaluate potential worst case scenarios. All scenarios produced results that demonstrated that the proposed application will reduce potential harm at Silver Springs.

PERMIT APPLICATION REVIEW:

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

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

In addition, the above requirements are detailed further in the District's Applicant's Handbook: Consumptive Uses of Water, September 16, 2012 ("A.H.") District staff has reviewed the consumptive use permit application pursuant to the above-described requirements and has determined that the application meets the conditions for issuance of this permit. A summary of District staff's review is provided below.

REASONABLE BENEFICIAL USE CRITERIA [Section 10.3]

Economic and Efficient Utilization [10.3(a)]:

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

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

All irrigation will be performed by center pivots systems. Center pivot systems are the most efficient irrigation systems capable of irrigating large areas with varying crop types. An irrigation efficiency of 85% was assumed for the proposed fifteen and existing six center pivot systems. To insure the irrigation systems are properly managed, the applicant has submitted a Water Conservation Plan (see next section for details). The

irrigation requirement for each CPS for the 2-in-10 drought year is summarized in the table below:

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

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

For the irrigated areas, the applicant has requested 0.5 mgy (0.001 mgd) of ground water for chemical mixing for the application of herbicides and pesticides. This request is for a total of 212 gallons per acre per year, based on four applications per year.

The applicant has requested 33.241~~.6~~ mgy (0.090114 mgd) of ground water to water 75789~~,500~~ head of cattle. The requested volume is based on an average of 12 gallons per day per cow, as recommended in the District's CUP Applicant's Handbook.

The total water demand for irrigation, chemical mixing and livestock water is summarized in the table below:

Total Water Demand		
Water Demand Type/Site	**Average Demand**	
Irrigation Water Demand	**mgd**	**mgy**
North Tract (1620.4 acres)	1.990	726.2
East Tract (611 acres)	0.464	169.4
Subtotal (2231.4 acres)	2.454	895.6
Chemical Mixing Water Demand		
North Tract (1620.4 acres)	0.001	0.3
East Tract (611 acres)	0.0004	0.2
Subtotal (2231.4 acres)	0.001	0.5
Livestock Water Demand		
North Tract (63716~~6333~~ cows)	0.076	27.9~~7~~
East Tract (12073~~3267~~ cows)	0.0143~~8~~	5.313.~~9~~
Subtotal (75789~~9500~~ cows)	0.0901~~14~~	33.241.~~6~~
Total Water Demand per Tract		
North Tract	2.067~~6~~	754.4~~2~~
East Tract	0.478~~503~~	174.9~~183.5~~
Grand Total	**2.545~~2.569~~**	**929.3~~937.7~~**

The applicant has submitted calculations indicating a water demand that exceeds the combined existing allocations for permit numbers 91926-2 and 3011-7, which have a combined allocation of 532.9 mgy (1.46 mgd). The demonstrated demand is based on all areas under center pivot being irrigated. However, the applicant has stated that it is not seeking under this permit to irrigate all the areas to maximum demand, but wants to have the flexibility to irrigate in all 21 center pivot areas as appropriate to the management of the project site. The applicant has stated that it will only irrigate as needed and will stay within the requested allocation of 1.46 mgd.

Based on the submitted GWRAPPS model runs and the proposed irrigation method, staff has concluded that the irrigation demand is an economic and efficient use of the resource. Also, based on typical farming practices and the requested allocation for livestock watering, staff have concluded the requested chemical mixing and livestock watering demand is an economic and efficient use of the resource.

Reasonable and Consistent with the Public Interest [10.3(b)]:

Staff evaluated whether the requested consumptive use of water is consistent with the public interest. Staff concludes that the continued use of water is consistent with the

public interest because the proposed use is for the production of beef cattle and is a registered business within the state of Florida. The project provides an economic benefit to the applicant and citizens of the state. In addition, the use will not adversely affect water resources, qualifies as a reasonable-beneficial use based on the factors listed in 40C-2.301(4),(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), F.A.C., and none of the reasons for denial relating to saline water intrusion, off-site damages, water use reservations, minimum flows and levels, and water table/surface water levels are present with the proposed use.

Capable of Producing Requested Amount [10.3(c)]:

The applicant is proposing to withdraw 1.46 mgd annual average and up to 11.5 mgd as a maximum day withdrawal from the UFA. Staff and the applicant utilized the NCF model and information obtained from the on-site APTs to evaluate whether the UFA is capable of supplying the requested quantities of water. Based on the NCF model and the APTs, the Floridan aquifer at this property is capable of producing large quantities of ground water from wells installed into the UFA. The APT test conducted in the northern half of the site was pumped at a maximum rate of 2,500 gallons per minute, which translates to 3.6 mgd. The daily withdrawal rates proposed from the larger irrigation wells under this CUP range from 0.08 to 0.17 mgd. The maximum day withdrawal rates were estimated to range from 0.3 to 0.8 mgd. The long term drawdown modeling results presented in this report indicate that the aquifer will experience only minor declines in potentiometric pressure due to the proposed ground water withdrawals, no greater than 0.07 feet for the applicant's proposed impacts and no greater than 0.5 feet for cumulative impacts. Therefore, District staff concludes that the UFA at this site is fully capable of producing the requested quantities of ground water.

Environmental Harm [10.3(d)]:

District staff evaluated whether the proposed modification to the existing use would cause environmental harm and, if so, whether the harm has been reduced to an acceptable amount. The applicant and staff evaluated the potential impact associated with three withdrawal scenarios. The first scenario (Scenario 1) was performed using 1.46 mgd of ground water from the UFA on just the North Tract. The second scenario (Scenario 2) was performed using 0.96 mgd from the UFA on the North Tract along with 0.50 mgd on the East Tract. The third scenario (Scenario 3) was to evaluate the potential impacts associated with use of 2.39 mgd of withdrawal on the North Tract. The use of previous modeling that considered a withdrawal 2.39 mgd is very conservative since it is 63% greater than the 1.46 mgd withdrawals being proposed in this permit application.

Wetland and Other Surface Waters:

In evaluating whether wetlands and other surface waters would be harmed, staff utilized scenarios 2 and 3. For Scenario 2, the ground water flow model simulations predict that the proposed pumping regime will lower the surficial aquifer by no greater than 0.02 feet. For Scenario 3, the ground water flow model simulations predict that the proposed pumping regime will lower the surficial aquifer by no greater than 0.06 feet. Staff utilized the results of this ground water flow modeling, site visits and aerial photography of the site and vicinity to evaluate the current condition of wetlands and other surface waters. Based on the small predicted drawdown in the surficial aquifer, staff has determined that

reasonable assurance has been provided that environmental harm to wetlands and other surface waters in the area of the proposed withdrawal has been reduced to an acceptable amount.

Springs:

In evaluating whether springs (other than Silver Springs) would be harmed, staff considered scenarios 1 and 2. There are 46 springs identified as existing in the NCF model area and the modeling indicates that the proposed withdrawals will have no impact on most of these springs. However, staff performed additional evaluations on four small springs that occur in close proximity to the project site (Orange, Camp Seminole, Wells Landing and Tobacco Patch Landing). All of these springs have significantly altered spring pools or runs due to human construction and activity.

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

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

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

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

Potential spring discharge changes were assessed based on the results of ground water flow modeling. For Scenario 1, the modeling predicts that Wells Landing Spring will experience up to a 0.01 cfs reduction in flow and Tobacco Patch Landing Spring will experience up to a 0.02 cfs reduction in flow. Staff concludes that this very small reduction in flow has been reduced to an acceptable amount. For Scenario 2, the model predicts that there will be no reduction in spring flow for any of the springs within the model domain. Staff concludes that reasonable assurance has been provided that environmental harm to springs in the area of the proposed withdrawal has been reduced to an acceptable amount.

Silver Springs:

There are no established Minimum Flows and Levels (MFLs) on Silver Springs or the Silver River at this time. However, multi-year investigations by District staff are on-going to develop levels and a flow regime for the spring system. These minimum levels and flow regime would be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. As a result of the applicant's proposal to shift a portion of its water withdrawals from the East Tract to the North Tract, modeling

results indicate that there should be an increase in flow at Silver Springs of approximately 0.27 cfs under Scenario 1 and an increase of 0.15 cfs under Scenario 2. Therefore, District staff concludes that the proposed modification to the existing use will not cause environmental harm to Silver Springs and the Silver River, and in fact, rather than causing harm, there will be an increase in flow at Silver Springs.

Economic Harm [10.3(d)]:

Section 10.3(d) provides that economic harm must be reduced to an acceptable amount. In applying this criterion, District staff evaluated the potential for economic harm that will result due to adverse water resource impacts. The District does not consider economic harm beyond that caused by water resource impacts. Ground water flow modeling and other assessments indicate that the proposed use of water will have only a very small impact on ground water levels and water resources. Based on the anticipated very small impact, staff does not believe that the proposed use of water will have any economic impact on adjacent property owners, local businesses or other persons. In addition, this project will create a small number of jobs and, therefore, will have a positive economic benefit in the area. As such, staff concludes that the proposed use of water will not result in any economic harm and, therefore, that economic harm has been reduced to an acceptable amount.

Water Conservation [10.3(e) and 12.5.7.1]:

Section 10.3(e) provides that a permittee must implement all available water conservation measures unless the applicant demonstrates that implementation is not economically, environmentally or technologically feasible. It also states that this criterion can be satisfied by the implementation of an approved water conservation plan as required in section 12.0 of the A.H.

The applicant submitted a water conservation plan as required by District rule. The plan includes the commitment by the applicant to implement numerous water conservation measures. The measures include proposed installation of a very high efficiency automatically operated computerized irrigation system, periodic water audits, rainfall shutoff sensors, use of an on-site weather station, use of a professional water conservation consultant, daily maintenance inspections and other measures. Based on review of the plan, staff concludes that the proposed water conservation plan meets District water conservation requirements.

Use of Reclaimed Water [10.3(f)]:

Section 10.3(f) provides that reclaimed water must be used in place of higher quality ground water when readily available unless the applicant demonstrates its use is economically, environmentally, or technologically infeasible.

The applicant performed detailed analysis on whether the use of reclaimed water is feasible. The nearest source of reclaimed water is the city of Ocala, which is approximately 14 miles away. In order to utilize this source of reclaimed water, the applicant and/or utility provider would have to construct significant transmission lines to convey the reclaimed water to the site. In addition, use of the reclaimed water would require the applicant to construct a large transmission system, storage ponds and surface water pumping stations on-site. Finally, since reclaimed water availability can

vary during the course of the year, the applicant would still need to construct wells in order to have ground water as a backup source.

The applicant analyzed the costs associated with all the above and demonstrated that the costs rendered the use of reclaimed water economically infeasible. In addition, staff concludes that reclaimed water is not readily available due to the significant distance of the sources from the site.

Lowest Quality Water Source [10.3(g)]:

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

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

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

Saline Water Intrusion [10.3(h), 9.4.2]:

Staff evaluated whether the proposed use of ground water from the UFA would cause or contribute to significant saline water intrusion. Because the project is located in North Central Florida on the eastern edge of the Ocala Uplift and is a significant distance from the coast, the fresh water portion of the Floridan aquifer is very thick and there are no known sources of saline water nearby.

Fresh water (water with chloride concentrations less than 250 mg/L) underlies the project site to depths of 1,700 feet below NGVD. Review of available ground water quality information indicates that chloride concentrations in the area have been

reasonably stable for many years. No problems concerning the salinity of water in the Floridan aquifer in this area are currently known to exist. Ground water modeling indicates that the potentiometric surface decline will be very small, and staff concludes that the proposed consumptive use will not cause or contribute to significant saline water intrusion.

Flood Damage [10.3(i)]:

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

Quality of Source [10.3(j)]:

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

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

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

Water Quality Standards [10.3(k)]:

Section 10.3(k) states that 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.

While the applicant's agricultural activities on the North Tract (converting forested uplands to improved pasture) are statutorily exempt from the need to obtain an environmental resource permit (ERP), the applicant has obtained an ERP (No. IND-083-130588-4) . The activities approved by the ERP provide additional water quality treatment through the establishment of vegetated upland buffers, retention berms, redistribution swales, and the implementation of other conservation practices in the North Tract. The applicant has also indicated that it will implement the applicable Department of Agriculture and Consumer Services (DACS) best management practices (BMPs) on the East Tract to prevent water quality impacts there. The implementation of the proposed BMPs provides reasonable assurance that there will not be a water quality impact from the East Tract.

REASONS FOR DENIAL [Section 9.4.1]

Saline Water Intrusion [9.4.2]: See above discussion on saline water intrusion.

Off-site Damages [9.4.3]: Section 9.4.3, A.H., provides that a permit will be denied if the permit would allow withdrawals that would cause an unmitigated adverse impact on adjacent land use that existed at the time of permit application. Adverse impacts on adjacent land use include significant reduction in water levels in an adjacent surface water body, significant potential for land collapse or subsidence caused by a reduction in water levels and damage to crops, wetlands or other types of vegetation.

As discussed above, ground water flow modeling and other assessments indicate that the proposed use of water will have only a very small impact on ground water levels and water resources. Based on the anticipated very small impact due to the proposed withdrawals, staff do not believe that the proposed use of water will have an adverse impact on adjacent property or cause significant reduction in water levels in an adjacent surface water body, create a significant potential for land collapse or subsidence caused by a reduction in water levels or damage crops, wetlands or other types of vegetation. As such, staff concludes that the proposed use of water will not cause off-site damages.

Water Reserved from Use [9.4.5]:

The issuance of a permit will be denied if the proposed use will require the use of water which pursuant to subsection 373.223(4), F.S., and rule 40C-2.302, F.A.C., the Board has reserved from use by rule (9.4.5, A.H.).

Staff evaluated whether issuance of the permit will require the use of water, which has been reserved from use by rule. Section 9.4.5, A.H., provides that the Governing Board by regulation may reserve from use by permit applicants, water in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety. The Governing Board has reserved from use a certain portion of the surface water flow through Prairie Creek and Camps Canal south of Newnans Lake in Alachua County, Florida (section 40C-2.302, F.A.C., August 18, 1994). District staff used ground water modeling results to assess the potential effects of the proposed withdrawals on SAS and UFA water levels in the area of Prairie Creek and Camps Canal. Model results predict no significant reduction in SAS and UFA water levels in the area of interest. Staff concludes that reasonable assurances have been provided that the proposed use of water will not impact surface water flow through Prairie Creek and Camps Canal which has been reserved from use by rule pursuant to rule 40C-2.302, F.A.C., provided the permittee complies with the conditions required by this permit.

Minimum Flows [9.4.6]:

The issuance of a permit will be denied if the proposed use will cause the rate of flow of a surface watercourse to be lowered below a minimum flow which has been established pursuant to subsection 373.042(1), F.S., or Chapter 40C-8, F.A.C. (9.4.6, A.H.). Staff evaluated whether issuance of the permit will cause the rate of flow of springs and surface watercourses to be lowered below an established minimum flow. Sections 9.4.1(e) and 9.4.6, A.H., provide that issuance of a permit will be denied if the permit would allow withdrawals of water to cause the rate of flow of a surface watercourse to be lowered below a minimum flow which has been established pursuant to subsection 373.042(1), F.S., or Chapter 40C-8, F.A.C. A minimum rate of flow has been established for Blue Spring (Volusia County); Messant, Seminole and Palm springs (Lake County); and Rock Springs (Orange County), which are all springs within the NCF model domain. In order to evaluate the potential for spring flow alterations, District staff used ground water modeling results to assess the potential effects of the proposed ground water withdrawals on the established minimum flows. Model results predict no reduction in spring flows. Staff conclude that reasonable assurances have been provided that the proposed use of water will not adversely affect minimum flows for springs located within the NCF model domain, provided the permittee complies with the conditions required by this permit.

Minimum Levels [9.4.7]:

The issuance of a permit will be denied if the proposed use will cause the level of a water table aquifer, the potentiometric surface level of an aquifer, or the water level of a surface water to be lowered below a minimum level which has been established pursuant to subsection 373.042(2), F.S., or Chapter 40C-8, F.A.C. (9.4.7, A.H.). Staff evaluated whether issuance of the permit will cause the water level in ground water or surface water bodies to be lowered below a minimum level established by rule. Sections 9.4.1(f) and 9.4.7, A.H., provide that issuance of a permit will be denied if the permit would allow withdrawals of water to cause the level of a water table aquifer, the potentiometric surface level of an aquifer, or the water level of a surface water to be lowered below a minimum level which has been established pursuant to subsection 373.042(2), F.S., or Chapter 40C-8, F.A.C. Eighty-two surface water bodies with minimum levels specified in subsection 40C-8.031(4), F.A.C., are present within the NCF

model domain. In order to evaluate the potential for causing the lake levels to be altered below the established minimums, District staff used ground water modeling results to assess the potential effects of the proposed withdrawals on the potentiometric surface of the UFA beneath lakes with established minimum levels within the model domain. Those results indicate that the proposed withdrawal will not cause a significant reduction in UFA potentiometric levels below these lakes. Staff conclude that reasonable assurances have been provided that the proposed withdrawals will not cause a water level to fall below its established minimum level, provided the permittee complies with the conditions required by this permit.

INTERFERENCE WITH EXISTING LEGAL USE OF WATER [Section 9.2]:

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

1. A small domestic well located within 100 feet of the project boundary (areas of highest potential drawdown), installed either in the shallow aquifer or the Upper Floridan aquifer.

2. A centrifugal pump is used to pump the water from the shallow aquifer well with lift capacity of 25 feet.

3. A small submersible pump is used to pump water from the Upper Floridan aquifer well.

4. The minimum total hydraulic head for the submersible pump (including head loss in pipes and pressure at the house) is 60 psi or 135 feet.

5. A maximum 1 day withdrawal at 10.88 mgd and maximum 30-day withdrawal at 6.34 mgd were considered in the evaluation. This was modeled using a transient stress period at the end of a 30-year stress period (steady state condition).

The various analyses performed indicate that there will not be any drawdown in the SAS and a very small drawdown in the UFA at the edge of the property. As such, staff concludes that the proposed ground water withdrawals will have no adverse impacts on legal water uses.

PUBLIC INTEREST [Section 9.3]:

Staff evaluated whether the requested consumptive use of water is consistent with the public interest. Staff concludes that the continued use of water at the project is consistent with the public interest because the proposed use of water is for a cattle farm/operation designed to raise grass-fed beef and is a registered business within the state of Florida. The project provides an economic benefit to the applicant and citizens of the State. In addition, the use will not adversely affect water resources, qualifies as a reasonable-beneficial use based on the factors listed in 40C-2.301(4), (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), F.A.C., and none of the reasons for denial relating to saline water intrusion, off-site damages, water use reservations, minimum flows and levels, and water table/surface water levels are present with the proposed use.

SUMMARY OF EVALUATION AND OVERALL CONCLUSION OF PERMITTABILITY:

Based on the above, staff concludes that the applicant has demonstrated that the proposed use of water is a reasonable-beneficial use of water, will not cause interference with existing legal uses of water, is consistent with the public interest and none of the reasons for denial apply pursuant to District permitting rules. Therefore, staff concludes that the proposed use of water meets the Districts criteria for issuance of a CUP.

PERMIT DURATION: Staff is recommending issuance of a 20-year permit.

Conditions

1. District authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this permit.

2. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage is declared by the District Governing Board, the permittee must adhere to the water shortage restrictions as specified by the District, even though the specified water shortage restrictions may be inconsistent with the terms and conditions of this permit.

3. Prior to the construction, modification, or abandonment of a well, the permittee must obtain a Water Well Construction Permit from the St. Johns River Water Management District, or the appropriate local government pursuant to Chapter 40C-3, Florida Administrative Code. Construction, modification, or abandonment of a well will require modification of the consumptive use permit when such construction, modification, or abandonment is other than that specified and described on the consumptive use permit application form.

4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational.

5. The permittee's consumptive use of water as authorized by this permit shall not interfere with legal uses of water existing at the time of permit application. If interference occurs, the District shall revoke the permit, in whole or in part, to curtail or abate the interference, unless the interference associated with the permittee's consumptive use of water is mitigated by the permittee pursuant to a District-approved plan.

6. The District must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a well or facility from which the permitted consumptive use is

made or with in 30 days of any transfer of ownership or control of the real property at which the permitted consumptive use is located. All transfers of ownership or transfers of permits are subject to the provisions of section 40C-1.612.

7. A District issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.

8. All submittals made to demonstrate compliance with this permit must include the CUP number 91926-3 plainly labeled on the submittal.

9. This permit will expire on June 10, 2034.

10. Maximum annual ground water withdrawals on both the North and East Tracts combined must not exceed 532.9 million gallons (1.46 million gallons per day average).

11. Maximum annual ground water withdrawals on just the East Tract must not exceed 182.50 million gallons (0.50 million gallons per day average).

12. Prior to use, wells NT-1, NT-2, NT-3,NT-4, NT-5, NT-6, NT-7, NT-8, NT-9, NT-10, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878), must be equipped with totalizing flow meters. All flowmeters must measure within +/- 5% of actual flow, be verifiable and be installed according to the manufacturer's specifications.

13. The permittee shall document proper installation of flow meters by submitting a copy of the manufacturer's specifications and photographs of the installed flow meters, or by a site visit by District staff, within 30 days of meter installation.

14. Total withdrawals from Wells NT-1, NT-2, NT-3,NT-4, NT-5, NT-6, NT-7, NT-8, NT-9, NT-10, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878), must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using Form No. EN-50. The reporting dates each year will be as follows for the duration of the permit:

Reporting Period	Report Due Date
January-June	July 31
July - December	January 31

15. The permittee must maintain all meters. In case of failure or breakdown of any meter or other flow measuring device, the District must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

16. The permittee must have all flow meters on wells NT-1, NT-2, NT-3,NT-4, NT-5, NT-6, NT-7, NT-8, NT-9, NT-10, NT-11, NT-12, NT-13, NT-14, NT-15, NT-35, NT-36, NT-37, NT-38, NT-39, NT-40, NT-41, NT-42, NT-43, NT-44, ET-1, ET-2, ET-3, ET-4, ET-5, ET-6, ET-7, A (Station ID numbers 411770, 411771, 411772, 411773, 411774, 411775, 411776, 411777, 411778, 411779, 411780, 411781, 411782, 411783, 411784, 411804, 411805, 411806, 411807, 411808, 41180, 411810, 411811, 411812, 411813, 10819, 10820, 39777, 39874, 39875, 39876, 39877, 35878) checked for accuracy at least once every 10 years within 30 days of the anniversary date of permit issuance, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. District Form No. EN-51 must be submitted to the District within 10 days of the inspection/calibration.

17. The permittee must implement the Water Conservation Plan submitted to the District on April 23, 2014, in accordance with the schedule contained therein.

18. The lowest quality water source, such as reclaimed water or surface/storm water, must be used as irrigation water when deemed feasible pursuant to District rules and applicable state law.

19. The permittee's consumptive use shall not adversely impact wetlands, lakes, and spring flows or contribute to a violation of minimum flows and levels adopted in Chapter 40C-8, F.A.C., except as authorized by a SJRWMD-approved minimum flow or level (MFL) recovery strategy. If unanticipated significant adverse impacts occur, the SJRWMD shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts are mitigated by the permittee pursuant to a District-approved plan.

20. The permittee's consumptive use of water as authorized by this permit shall not have significant adverse hydrologic impacts to off-site land uses existing at the time of permit application. If significant adverse hydrologic impacts occur, the District shall revoke the permit, in whole or in part, to curtail or abate the adverse impacts, unless the impacts associated with the permittee's consumptive use of water are mitigated by the permittee pursuant to a District-approved plan.

21. Prior to withdrawing water to irrigate a pivot area that is used for cattle grazing on the North Tract, the permittee shall construct the stormwater management system (System) authorized by permit IND-083-130588-4 in accordance with the construction sequencing document contained therein. After construction of all or

part of the System, the permittee shall operate and maintain the constructed System in accordance with permit IND-083-130588-4.

22. The permittee must implement the Nutrient Management Plan for the East Tract dated April 30, 2014, and received by the District on May 2, 2014, in accordance with the schedule contained therein.

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

    (a) Meet the submittal requirements of section 4.2 of the Applicant's Handbook: Consumptive Uses of Water, September 16, 2012;

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

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