

**STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS**

SIERRA CLUB,

Petitioner,

vs.

Case No. 19-0644

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

THOMAS GREENALGH,

Petitioner,

vs.

Case No. 19-0645

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

SAVE THE MANATEE CLUB, INC.,

Petitioner,

vs.

Case No. 19-0646

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

SILVER SPRINGS ALLIANCE, INC., AND
RAINBOW RIVER CONSERVATION, INC.,

Petitioners,

vs.

Case No. 19-0647

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

OUR SANTA FE RIVER, INC.; ICHETUCKNEE
ALLIANCE, INC.; GINNIE SPRINGS
OUTDOORS, LLC; AND JIM TATUM,

Petitioners,

vs.

Case No. 19-0648

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

PAUL STILL,

Petitioner,

vs.

Case No. 19-0649

DEPARTMENT OF ENVIRONMENTAL
PROTECTION,

Respondent.

_____/

RECOMMENDED ORDER

Pursuant to notice, a final hearing was held in these consolidated cases on November 12 through 15, and 18 through 20, 2019, in Tallahassee, Florida, before Francine M. Ffolkes, an Administrative Law Judge with the Division of Administrative Hearings (DOAH).

APPEARANCES

For Petitioners Sierra Club, Inc.; Thomas Greenhalgh; Save the Manatee Club, Inc.; Silver Springs Alliance, Inc.; Rainbow River Conservation, Inc.; Our Santa Fe River, Inc.; Ichetucknee Alliance, Inc.; Jim Tatum; and Friends of Wekiva River, Inc. (Joint Petitioners):

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STATEMENT OF THE ISSUES

The issues to be determined in this matter are: (1) whether the five separate orders issued by the Secretary of DEP on June 29, 2018, adopting five basin management action plans (BMAPs) for the Suwannee River, the Volusia Blue Spring, the Silver Springs-Rainbow Spring Group, the Santa Fe River, and the Wekiwa Spring-Rock Springs, comply with the provisions of section 403.067, Florida Statutes, and the Florida Springs and Aquifer Protection Act, sections 373.801 through 373.813, Florida Statutes (the Act); and (2) whether Petitioners demonstrated that their substantial interests were affected and, therefore, have standing.

PRELIMINARY STATEMENT

Petitioners contested five separate orders issued by the Secretary of DEP on June 29, 2018, approving five BMAPs for numerous springs throughout Florida. Petitioners alleged that the five BMAPs did not comply with the provisions of section 403.067 and the Act. DEP contended that the five BMAPs met the requirements of those statutory provisions.

Petitioners filed Amended Petitions that were referred to DOAH by DEP on or about February 5, 2019. Sierra Club, Inc., and Thomas Greenhalgh challenged the Final Order Establishing the Suwanee River BMAP and were assigned Case Nos. 19-0644 and 19-0645, respectively. Save the Manatee Club, Inc. (SMC), challenged the Final Order Establishing the Volusia Blue Spring BMAP and was assigned Case No. 19-0646. Silver Springs Alliance, Inc., and Rainbow River Conservation, Inc., challenged the Final Order Establishing the Silver Springs and Upper Silver River and Rainbow Spring Group and Rainbow River BMAP, and were assigned Case No. 19-0647. Our Santa Fe River, Inc., Ichetucknee Alliance, Inc., Ginnie Springs Outdoors, LLC, and Jim Tatum challenged the Final Order Establishing the Santa Fe River BMAP and were assigned Case No. 19-0648. Paul Still (Still) also challenged the Final Order Establishing the Santa Fe River BMAP and was assigned Case No. 19-0649. Friends of Wekiva River, Inc., challenged the Final Order Establishing the Wekiwa Spring and Rock Springs BMAP and was assigned Case No. 19-0650. The cases were consolidated on February 12 and 14, 2019. Ginnie Springs Outdoors, LLC, filed a Notice of Withdrawal of Petition on August 22, 2019, and was dismissed as a petitioner by Order entered the same day.

On July 18, 2019, DEP filed its Motion in Limine to Exclude Evidence directed to Joint Petitioners; and a separate Motion in Limine to Exclude Evidence directed to Petitioner Still. On July 26, 2019, Petitioner Still filed his response. On July 23, 2019, Joint Petitioners filed a Motion for Order seeking the undersigned's rulings with regard to certain statutory interpretations. DEP filed its response on July 30, 2019. On August 8, 2019, the undersigned entered an Order denying the DEP's motions in limine and denying the Joint Petitioners' motion.

On July 24, 2019, Joint Petitioners filed a Motion for Official Recognition, and DEP filed its response in partial opposition on July 31, 2019. On August 8, 2019, the undersigned entered an Order that:

1. The listed statutory laws and administrative rules (Items P-1 through P-12) are officially recognized.
2. Items P-13 through P-17 (final TMDL reports) are officially recognized and admitted into evidence under the hearsay exception for public records in section 90.803(8), Florida Statutes.
3. Items P-18 through P-22 are the proposed agency actions under challenge in this consolidated proceeding. Official recognition and admission into evidence for the truth of the matters therein of Items P-18 through P-22 are denied without prejudice.
4. Items P-23 through P-25 are officially recognized and admitted into evidence under the hearsay exception for public records in section 90.803(8).

On August 16, 2019, Joint Petitioners filed a Second Motion for Official Recognition. DEP filed a Response in Partial Opposition to Motion for Official Recognition and Cross-Motion to Exclude Evidence on August 23, 2019. On August 26, 2019, Joint Petitioners filed their response in opposition to the cross-motion. An Order Denying Respondent's Cross-Motion to Exclude Evidence was entered on August 26, 2019. Also, on August 26, an Order was entered granting Joint Petitioners' Second Motion for Official Recognition. The Order stated that "[i]tems P-26 through P-35 are officially recognized and admitted into evidence under the hearsay exception for public records in section 90.803(8), Florida Statutes."

The Joint Prehearing Stipulation was filed on September 6, 2019. An Order was entered on October 29, 2019, granting Joint Petitioners' unopposed motion to correct the stipulated exhibit list, officially recognizing,

and admitting into evidence, Joint Petitioners' Exhibit 121. Joint Petitioners' filed a pre-hearing memorandum on November 4, 2019.

Joint Petitioners filed, on November 19, 2019, a Third Motion for Official Recognition of "the legislative history of [s]ections 403.067 and 373.807, Florida Statutes." No response was filed within the time period allowed for filing a response. The Third Motion for Official Recognition is hereby granted. A separate Order was entered on January 28, 2020, in which the undersigned ruled on the parties' designations and cross-designations to admit various deposition testimony and exhibits.

At the hearing, Joint Exhibits 1 through 5 (BMAPs) were admitted as JE-1 through JE-5. Joint Petitioners presented the fact testimony of: Merrilee Jipson (Jipson), Michael Roth (Roth), Burt Eno (Eno), Dennis Jones (Mr. Jones), Faith Jones (Ms. Jones), John Jopling (Jopling), Chris Spontak (Spontak), Mike Cliburn (Cliburn), Chris Mericle (Mericle), Patrick Rose (Rose), Jim Tatum (Tatum), Thomas Greenhalgh (Greenhalgh), and John Moran (Moran); and the expert testimony of: Anthony R. Gaudio (Gaudio), E. Allen Stewart (Stewart), P.E.; Robert L. Knight (Knight), Ph.D.; and Thomas Greenhalgh (Greenhalgh), P.G. The following exhibits were admitted into evidence: P-36 through P-46, P-48 through P-50, P-58, P-61 through P-63, P-65, P-68, P-75, P-80, P-82 through P-84 (pp. 55-58), P-92, P-95, P-99, P-100C through P-100G, P-103 (Greenhalgh memo and attached aerials), P-104 through P-106, P-108, P-109 (pp. 25-26 and cover page), P-110, P-111, P-114 through P-116, P-120, P-121, P-132 through P-139, P-140 through P-142 (corporate representative deposition transcript designations), P-143 (Tripp deposition transcript), P-144 (Dukes deposition transcript designations), and P-149 through P-152.

Dr. Still testified on his own behalf as a fact and expert witness. The following exhibits from Dr. Still were admitted into evidence: S-1 through S-3, S-8 (pp. 5-19 and 23), S-9, and S-10 (pp. 7-8).

DEP presented the fact and expert testimony of Thomas Frick, Gregory DeAngelo, Kevin R. Coyne, Moira R. Homann, Celeste Lyon, Terry Hansen, P.G., and Mary Paulic. DEP also presented the expert testimony of Richard Hicks, P.G. DEP's exhibits DEP-12, DEP-17 through DEP-22, DEP-26 through DEP-31, DEP-34 through DEP-39, DEP-47, DEP-53, and DEP-56 through DEP-63, were admitted into evidence.

The twelve-volume Transcript of the final hearing was filed with DOAH on December 13, 2019. The parties were allowed to submit proposed recommended orders of up to 80 pages. All the parties timely filed their proposed recommended orders, which were carefully considered in the preparation of this Recommended Order.

References to the Florida Statutes are to the 2019 version, unless otherwise indicated.

FINDINGS OF FACT

Based on the parties' stipulations, on matters officially recognized, and the evidence adduced at the final hearing, the following findings of fact are made.

Respondent

1. DEP is the administrative agency of the state statutorily charged with, among other things, protecting and restoring Florida's water resources. The agency's duties include administration and implementation of sections 403.067 and 373.807. Thus, the agency is responsible for developing and implementing Total Maximum Daily Loads (TMDLs) and BMAPs for waters

that do not meet applicable water quality standards, including those for impaired Outstanding Florida Springs (OFS).

Individual Petitioners

2. Petitioner Greenhalgh, is DEP's district geologist for the northeast district, and for the Suwannee River Water Management District (SRWMD). Mr. Greenhalgh and his wife's family own property in the Suwannee River BMAP area, including one-half mile of Suwannee River shoreline, a spring, and a farming operation. For his entire life, Mr. Greenhalgh swam, dived, snorkeled, canoed, and fished in the Suwannee River basin and its springs, and he continues to do so. He has observed in his lifetime that the Suwannee River and springs, once incredibly clear, with vigorous flows, unbelievable numbers of fish, and a bottom covered in eelgrass, now have much lower flows, few fish, and an almost complete coating of algae. Mr. Greenhalgh is concerned that if the water quality of the springs systems and Suwannee River are not adequately addressed, they will remain polluted and he will never be able to enjoy them with his daughter as he did in the past. Mr. Greenhalgh contends that the Suwannee River BMAP does not adequately address nitrate loading, will allow further degradation of water quality, and, consequently, adversely affect his use and enjoyment of the springs and Suwannee River.

3. Petitioner Tatum has lived on the Santa Fe River with his wife since 2003. Their property includes 400 feet of river shoreline and a small spring. There are several other springs near his residence. Mr. Tatum has been scuba diving and collecting fossils in the river and its springs since 1977 and continues to do so. He and his family snorkel, swim, kayak, canoe, and enjoy wildlife-viewing on the river and springs. He has concerns that rising nitrate levels in the springs and river are elevating the nitrate level in his wells, and that proliferation of algae in the river diminishes his use of the springs and river. When Mr. Tatum started diving in the river and springs, he could see to the bottom of the river and springs. Green plants, wildlife, and fish were

abundant. Now the only plant life in the river near his residence is filamentous algae and a green scum. Mr. Tatum is aware that the Santa Fe River BMAP is supposed to reduce nitrates in the river over a 20-year time span, but he is concerned the goals will not be met, and that over the next 20 years conditions will continue to deteriorate.

4. Dr. Still lives on Lake Sampson in Bradford County, Florida. Lake Sampson is in the Upper Santa Fe River Basin. He has used the Lower and Upper Santa Fe River and its springs for recreation since he moved to the area in 1979. He enjoys canoeing, swimming, photography, walking, and observing the environment of the river and springs. Excessive algal growth due to increased nutrients has significantly impacted Dr. Still's use and enjoyment of the river and springs, including swimming and canoeing.

5. The Individual Petitioners proved that their substantial environmental interests could reasonably be affected by the proposed BMAPs.

Organizational Petitioners

6. The Ichetucknee Alliance, Inc., (Alliance) is a 501(c)(3) not-for-profit educational organization with a mission of restoring, preserving, and protecting the Ichetucknee River and its associated contributing springs. Formed in 2013 by advocacy groups looking out for the Ichetucknee River, the Alliance presently has 173 dues-paying members. All but five live in Florida, and 143 live near the Ichetucknee River in Columbia, Suwannee, Gilchrist, or Alachua County. Seven members own property on the Lower Ichetucknee River. The Alliance members use and enjoy the Ichetucknee River and its springs for swimming, tubing, fishing, kayaking, photography, and for its beauty. The Alliance members are concerned that the Santa Fe River BMAP, which includes Ichetucknee springs, would not restore the water quality of the springs and spring run. The Alliance members contend that their substantial interests would be adversely affected by the BMAP's failure to restore water quality.

7. Mr. Jopling is a founding member and current president of the Alliance. Mr. Moran is a member of the Alliance. Both have enjoyed the Ichetucknee River and springs for decades, and continue to do so for swimming, tubing, kayaking, canoeing, photography, and aesthetic appreciation. Both have seen degradation of the Ichetucknee River and are concerned that the BMAP will not result in improvement in water quality to restore the river. Both support the Alliance's challenge to the BMAP. Mr. Moran has been photographing Ichetucknee springs for the past 34 years, including images from 1995 and 2012 showing the degradation of the springs over time.

8. The Alliance is involved in many projects and activities to restore, protect, and preserve the Ichetucknee River and its springs. For example, the Alliance sponsors educational videos. Members participate in a river watch program, perform water clarity and other testing, as well as a fish count to quantify the impact of nitrates and loss of flow on fish life in the Ichetucknee River. Members also participate in regular river clean-up trips. Approximately a third of the Alliance members, about 60 members, are actively involved in these projects.

9. The Alliance actively advocates on behalf of its members for the restoration, protection, and preservation of the Ichetucknee River, including advocacy in front of the Columbia County Commission, DEP, and SRWMD. The Alliance participated in the development of the BMAP for the Santa Fe River by participating in public meetings on the subject and determined that the BMAP would not restore the water quality of the Ichetucknee River or springs.

10. Our Santa Fe River, Inc., (OSFR) is a 501(c)(3) not-for-profit all-volunteer organization. Mr. Roth, the current president of OSFR, testified that the organization has approximately 100 dues-paying members, at least 90 percent from the local area. OSFR's mission is to protect the waters and lands supporting the aquifer, springs, and rivers within the watershed of the Santa Fe River. OSFR accomplishes this mission by promoting public

awareness of the ecology, quality, and quantity of the waters and lands immediately adjacent to and supporting the Santa Fe River, including its springs and underlying aquifer.

11. OSFR provides education, stewardship, and advocacy for the river and springs. It educates about issues impacting the river and springs by providing information booths at various fairs and festivals. OSFR provides stewardship for the river and springs through clean-ups, which occur about four times per year. Approximately 20 to 25 members usually take part in these events. OSFR advocates for the river and springs by attending every SRWMD meeting, by attending both county commission meetings and various city meetings.

12. Most members of OSFR use and enjoy the river and springs by canoeing, kayaking, and swimming. Some members enjoy fishing and diving. Witnesses Mr. Roth, Ms. Jipson, and Mr. Moran are members of OSFR who use and enjoy the Santa Fe River and its springs by kayaking, canoeing, swimming, photography, and aesthetic enjoyment. They have seen the river and springs degrade over time, and support OSFR's challenge of the BMAP.

13. On behalf of its members, OSFR participated in the development of the Santa Fe River BMAP, attending a public hearing, and commenting. OSFR had concerns about the BMAP's funding, enforceability, and failure to address the entire pollutant load. After participating in the BMAP development, OSFR concluded the Santa Fe BMAP was inadequate and decided to file this challenge. OSFR members support this challenge.

14. Friends of the Wekiva River, Inc., (FOWR) has been a non-profit 501(c)(3) corporation since 1982. FOWR's purposes are to promote and protect the unique environmental and recreational values of the Wekiva River and its tributaries, to protect the integrity of the Wekiva River Basin, to work toward restoration and continuation of the Wekiva River, and its tributaries, in their natural state, to engage lawfully in the exchange and dissemination of information concerning the purposes and objectives of the

corporation, and to carry on educational activities to the same end. FOWR has a dues-paying membership of 145, with 80 lifetime members. Almost all reside within the Wekiva basin.

15. Many members of FOWR use and enjoy the Wekiva River and its springs for canoeing, swimming, snorkeling, wildlife photography, and to just enjoy the peace and serenity of the river. For example, Mr. Cliburn, who is the secretary of FOWR, and Ms. Jones use and enjoy the Wekiva River and its springs for canoeing, swimming, birdwatching, and aesthetic enjoyment. They have seen degradation of the river and springs over time. They are familiar with the Wekiwa Spring-Rock Springs BMAP and do not believe it will restore the river and springs, thus affecting their use and enjoyment of the resource in the future.

16. FOWR provides activities for its members to use and enjoy the Wekiva River and its springs, including bird walks, field trips, and nature talks about the natural resources in the Wekiva Basin. FOWR also sponsors clean-up actions for the Wekiva River. FOWR, on behalf of its members, actively participates with governmental agencies concerning protection of the Wekiva River and its springs, FOWR headed up the process leading to the Wekiva River's designation as an Outstanding Florida Water and a National Wild and Scenic River, FOWR aided in the development of the Wekiva Protection Act, and advocated for the installation of sewers in the Wekiva basin.

17. FOWR, on behalf of its members, provided comments and attended meetings concerning DEP's adoption of the BMAP. DEP designated FOWR as a "stakeholder" in the BMAP development process. FOWR representatives concluded that the BMAP would not adequately protect and restore the springs and river and decided to challenge the BMAP. Members strongly favor pursuing the challenge.

18. FOWR and its members are concerned that failure of the BMAP to adequately address nitrate water quality issues in the Wekiva Basin would adversely affect their substantial interests. The proliferation of algae,

damage to fish and wildlife, and loss of water clarity would interfere with and damage their use and enjoyment of the river and springs.

19. Sierra Club, Inc., (Sierra Club) is a national organization comprised of state chapters and local groups. The Suwannee-St. Johns Sierra Club Group (Group) was authorized by Sierra Club to file the petition challenging the Suwannee River BMAP. The mission of the Group is to explore, enjoy, and protect, by any means possible, the natural and wild spaces. There are approximately 2,300 members of the Group.

20. The Group provides information and programs for its members to use and enjoy the Suwannee River Basin and its springs, such as outdoor nature-based exploration activities. Members have expressed concern that filamentous algae are visually impacting their use and enjoyment of the Suwannee River Basin waters and springs; that fishing is diminished; that the habitat does not look like it once did because the submerged and other vegetation are changing; and that people are getting rashes from contact with these waters.

21. Mr. Mericle lives within the Suwannee BMAP basin on the northern Withlacoochee River, and is a member of the Sierra Club. He swims almost daily in the river, fishes, boats, and enjoys the serenity of the river. He is an outings leader for Sierra Club and takes people on canoe and kayak trips on the river. He is concerned that if the goal of the BMAP is not achieved and water quality continues to be diminished or not restored, he will be adversely affected in his guide business, in his property values, and by loss of his intrinsic enjoyment of the river and springs.

22. The Group, on behalf of its members, provided comments to DEP regarding the Suwannee River BMAP. DEP accepted Sierra Club as a "stakeholder" in the BMAP development process. Current Group vice-chair Ms. Jipson and Mr. Mericle testified that their members' substantial interests would be affected if the Suwannee River BMAP is not strengthened.

23. Rainbow River Conservation, Inc. (RRC), is a 501(c)(3) corporation incorporated in 1991. The mission of RRC is to protect and preserve the water quality, the natural beauty, the riverbed, and the floodplains of the Rainbow River, RRC pursues this mission through education, conservation, stewardship, and advocacy. RRC consists of about 250 member families. RRC members are mainly local, with 94 percent living in Florida. About a third of the members live on the Rainbow River.

24. Members of RRC use and enjoy the river and springs in a variety of ways, including kayaking, canoeing, swimming, snorkeling, and diving. Some members enjoy photographing the river and springs and sharing their photography.

25. Mr. Eno, president of RRC, and Senator Jones, an RRC member, testified about their use and enjoyment of the Rainbow River and its springs, including boating, kayaking, and swimming. Board director, Mr. Hart, also testified that he uses and enjoys the Rainbow River for photographing wildlife. Each has observed, and become increasingly concerned, with the degradation of the river and springs. They testified that increases in nitrate, Hydrilla, and algae are adversely impacting their use and enjoyment of the river and springs.

26. RRC provides many programs and activities to protect and preserve the Rainbow River and its springs, including providing a website and brochures to members and the public regarding the river and springs. RRC has organized an annual river clean-up for the past 30 years. Typically, about 150 people participate in the river clean-up. RRC members collect data for river studies to help evaluate the condition of the river.

27. On behalf of its members, RRC addresses governmental agencies about issues concerning the Rainbow River and springs, including at meetings with DEP, the Southwest Florida Water Management District, and the Department of Transportation. RRC was active in the City of Dunnellon's decision to convert septic tanks to centralized sewers. RRC participated in

development of the BMAP for the Rainbow River and springs and was listed as a "stakeholder" in the BMAP. After participating in the BMAP process, RRC decided to challenge the BMAP on behalf of its members because it concluded that the BMAP would not reduce nitrates enough to restore water quality in the river and springs. RRC members support this BMAP challenge.

28. RRC members believe that failure to address water quality problems related to nitrate will affect their substantial interests by continued proliferation of algae. Such proliferation will impact the natural habitat, beauty, and recreational opportunities the RRC members enjoy.

29. Silver Springs Alliance, Inc. (SSA), was incorporated in 2011. Its mission is to protect, restore, and preserve the Silver Springs ecosystem. SSA has approximately 55 dues-paying members, mostly from Marion County. SSA, on behalf of its members, communicates with governmental officials regarding matters affecting the water quality and water quantity of the springs. Mr. Spontak, president of SSA, testified that he has met with county commissioners, state representatives, and state senators about springs issues.

30. Members of SSA use and enjoy Silver Springs and Silver River for kayaking and swimming. Mr. Spontak testified that he kayaks and swims in the river and springs frequently, and has been doing so since the 1950's. He testified that the springs and river once had glistening white sand and bright green eel grass, but over time the condition of the springs and river deteriorated. The silver sand is now covered with a brownish-gray accumulation of dead algae. The main spring, which had been like a fishbowl in the past, is now more of an algal bowl.

31. On behalf of its members, SSA filed the petition challenging the BMAP for Silver Springs because information from scientists involved with this issue indicated that the BMAP would not accomplish the goal of reducing nitrates enough to restore the springs and river. The members are concerned

that their substantial interests would be adversely affected by the BMAP's failure to restore water quality.

32. SMC is a 501(c)(3) corporation formed in 1992. It has over 100,000 members and supporters world-wide, with 15,000 in Florida, and around 850 in Volusia County where Volusia Blue Spring is located. The mission of SMC is to protect imperiled manatees and their aquatic habitat for the future. On behalf of its members, SMC is involved in government actions on local, state, and federal levels that may impact manatees and their aquatic habitat.

33. SMC's efforts have been instrumental in furthering manatee conservation and scientific knowledge. SMC established a manatee observer program, where staff and trained volunteers document manatee use of Volusia Blue Spring and provide data on life histories to further species management efforts. Together, over 50 volunteers have documented nearly 1,800 hours of observations. SMC is also instrumental in educating the public and raises funds by allowing members to adopt specific manatees that populate Volusia Blue Spring. SMC maintains both underwater and above-water cameras at the springs to continuously monitor manatees on a webcam. This monitoring allows for research and for members who adopt a manatee to monitor its activities in the spring. This "manaTV" program is very popular, with thousands of viewing hours from more than 100,000 individuals.

34. Mr. Rose, SMC's executive director, has observed the degradation of Volusia Blue Spring since the 1990's. Mr. Rose testified that more algae is present on the bottom and on plants and sunken tree branches. In the past, the spring looked blue; now, it looks green. He testified that he has observed a steady increase in nitrogen levels and algal growth in the springs.

35. Mr. Rose testified that the algae impacts the manatees in Volusia Blue Spring. Algae attract armored catfish, which aggravate the manatees by constantly moving over them to scrape off epiphytic materials, including skin cells. This irritation causes manatees to constantly roll and move instead of

resting and conserving energy. The nuisance may drive them out of the spring into the river, where they may be exposed to cold stress and increased risk of collision with watercraft. Further increase in algae in the spring could attract other exotic species that affect manatees, such as snails that are vectors for parasitic flukes which are known to impact manatees elsewhere. The increase in algae also reduces visibility, which impacts SMC's manatee observation program.

36. SMC participated in development of the Volusia Blue Spring BMAP, attending meetings with DEP. DEP designated SMC as a "stakeholder" in this BMAP development. SMC determined that the proposed BMAP did not address SMC's concerns and decided to file a petition challenging the BMAP. SMC members, including active volunteers, believe that their use and enjoyment of Volusia Blue Spring, and their ability to engage with, observe, and appreciate manatees, is adversely affected by existing water quality problems that seem to worsen.

37. The Organizational Petitioners proved that a substantial number of their members' substantial interests could reasonably be affected if the BMAPs are inadequate to address pollutant loading, and are inadequate to restore and protect the subject rivers and springs.

The BMAPs at Issue

38. These proceedings were brought by nine petitioners under joint representation, and Dr. Still, pro se separately. Joint Petitioners challenged five BMAPs adopted in 2018: the Santa Fe River BMAP; the Silver and Rainbow Rivers BMAP; the Suwannee River BMAP; the Volusia Blue Spring BMAP; and the Wekiwa Spring-Rock Springs BMAP. Dr. Still challenged the Santa Fe River BMAP.

39. BMAPs were previously adopted for the Santa Fe River basin in 2012 and for Silver Springs, Rainbow Springs, and Wekiwa River-Rock Springs in 2015. The 2018 BMAPs for these water bodies are revisions or replacements

of those earlier BMAPs. The 2018 BMAPs for Suwannee River and Volusia Blue Spring are the first for those waters.

40. In the 2016 legislative session, the Florida Legislature enacted the Act. DEP was required, under section 373.807, to develop and implement BMAPs for all OFSs for which an impairment determination had been made under the numeric nutrient standards in effect for spring vents. For these BMAPs, the relevant standard is 0.35 milligrams of nitrate per liter (0.35 mg-N/l), with the exception of Wekiwa Spring-Rock Springs, where the standard is 0.286 mg-N/l. Of 33 OFSs designated in section 373.802(4), DEP classified 24 as impaired for nitrate, and 15 of the 24 are contained within the areas of the five BMAPs challenged in these proceedings.

41. Both Dr. Knight and Mr. Greenhalgh testified that nitrate levels have increased significantly in OFSs in recent decades, and are continuing to increase. Impacts of elevated nitrate levels in springs are severe. Native aquatic vegetation is largely replaced or smothered by noxious, filamentous algae and other algae. Biological productivity is reduced significantly, and invertebrate and fish populations plummet. Mr. Moran provided pictorial evidence that OFSs are no longer "pools of stunning blue wonder" but are "in ecological collapse." These are some of the signs of impairment that the BMAPs are supposed to eliminate over the next 20 years.

BMAP Overview

42. Section 373.807(1)(b) requires that a BMAP for an OFS must be adopted within two years of initiation, must include "[a] list of all specific projects and programs identified to implement a nutrient total maximum daily load [TMDL]"; and an "implementation plan designed with a target to achieve the nutrient [TMDL] no more than 20 years after the adoption of a [BMAP]." DEP "shall develop a schedule establishing 5-year, 10-year, and 15-year targets for achieving the nutrient [TMDL]." A project is a very specific activity happening on the landscape usually a "turn dirt type" where

something is being built. A program is a set of existing activities, processes, or strategies.

43. Section 403.067(7)(a) authorizes development of a BMAP as one of the ways to implement a TMDL, the calculation of which establishes "the amount of a pollutant that a water body or water body segment may receive from all sources without exceeding water quality standards." A TMDL is a restoration target. However, TMDLs are not self-implementing and a BMAP is one way to implement a TMDL.

44. Each new or revised BMAP shall include the appropriate management strategies available through existing water quality protection programs to achieve TMDLs, which may provide for phased implementation; a description of best management practices adopted by rule; and a list of projects in priority ranking with a planning-level cost estimate, estimated date of completion, source and amount of financial assistance, and a planning-level estimate of each listed project's expected load reduction. *See* §§ 403.067(7)(a) and 373.807(1)(b), Fla. Stat.

45. Section 403.067(7)(b) allows implementation of TMDLs through "existing water quality protection programs." These include permitting programs; nonregulatory and incentive-based programs, such as best management practices, cost sharing, waste minimization, pollution prevention, agreements established pursuant to section 403.061(21), and public education; and other water quality management and restoration activities, such as surface water improvement and management plans approved by water management districts.

46. A BMAP also "must include milestones for implementation and water quality improvement, and an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time." § 403.067(7)(b)6., Fla. Stat. As Mr. Frick testified, DEP collects and receives water quality data from the projects and programs. DEP then assesses progress by looking at the trend or

trajectory of the restoration activities towards achieving the milestones set in the BMAPs. The results of annual updates and scheduled five-year reviews may result in revisions to a BMAP.

47. Each BMAP contains a discussion of strategies to reduce pollutant loads, with a notation of the load reductions necessary at the spring vent, and a summary of the projected load reductions or credits from BMAP actions and policies.

48. In addition, each BMAP includes a set of five-year milestones, with projections to reduce nitrogen loading by certain percentages over five-year increments. Each BMAP has a milestone of achieving the total amount of needed reduction by the 15-year milestone.

Priority Focus Areas

49. Section 373.803 requires the delineation of priority focus areas (PFAs) for each OFS or group of springs identified as impaired. DEP must use the "best available data from the water management districts and other credible sources," and "shall consider groundwater travel time to the spring, hydrogeology, nutrient load, and any other factors that may lead to degradation of an [OFS]." In addition, the delineation "shall use understood and identifiable boundaries such as roads or political jurisdiction for ease of implementation."

50. DEP's expert professional geologist, Mr. Hicks, was a primary researcher and author of the PFA reports for each BMAP. Mr. Hicks testified that the PFAs were areas around the springs of greatest vulnerability and impact. PFAs were normally a subset area within the spring shed delineated with the goal of identifying the most vulnerable area closest to the spring vent. Mr. Hicks described the delineation of a PFA as being based on "aquifer vulnerability, which was related, obviously, to the recharge to groundwater, the soil characteristics," and a "boundary that was easily recognizable by lay people, . . . like a road or a county line or an edge of a river."

51. Petitioners raised criticisms regarding the PFA boundaries in some of the BMAPs. In response, DEP's other professional geologist, Mr. Hansen, testified that because the statute required the boundaries to follow easily identifiable features, some of the PFA boundary lines may fall outside of a spring shed and may even overlap with an adjacent PFA or spring shed. Mr. Hansen persuasively testified that DEP sought to limit such overlap as much as possible.

52. In response to questioning by Dr. Still, Mr. Hansen also explained that spring sheds were defined by utilizing existing potentiometric surface maps from the Florida Geological Survey or the United States Geological Survey. Use of these maps allowed DEP to construct flow nets showing the contributing groundwater flow to a spring or group of springs. Mr. Hansen persuasively testified that use of these maps and other data allowed DEP to conservatively define spring shed boundaries.

53. Dr. Still further questioned Mr. Hansen regarding the nonconclusion of certain dairies, wastewater facilities, and large agricultural operations in the PFA boundary for the Devil's Spring system and Hornsby Spring in the Santa Fe River BMAP. Mr. Hansen testified that from a regulatory standpoint, the importance of PFAs concerned the prohibition on new septic systems on lots less than one acre.

54. None of the Petitioners' criticism cast any serious doubts on the validity of DEP's PFA delineation in each BMAP.

TMDL Initial Allocations versus Estimated Allocations of Pollutant Loads

55. Petitioners took the position that in adopting TMDLs for the springs, DEP made an "initial allocation of allowable pollutant loads among point and nonpoint sources," within the context of section 403.067(6)(b), which would require further action in the BMAP. That further action would be to establish a "detailed allocation to specific point sources and specific categories of nonpoint sources" in the BMAP. *See* § 403.067(6)(b), Fla. Stat.

56. The TMDL rules at issue established reasonable and equitable allocations of the TMDL between point versus nonpoint types of sources of pollution. The TMDL rules did not establish an initial allocation of allowable pollutant loads among point and nonpoint sources. There are no direct discharges of wastewater into the OFSs at issue, so there are no allocations established among individual point sources in these TMDL rules. The TMDL rules establish an allocation between point and nonpoint sources specific, but they do not establish an allocation among the categories of nonpoint sources, such as urban turf fertilizer, sports turf fertilizer, agricultural fertilizer, onsite sewage treatment and disposal systems, wastewater treatment facilities, animal wastes, and stormwater facilities.

57. The TMDLs in question provide, as a target, a reduction to a certain concentration. For example, the TMDL for Silver Springs describes, as a waste load allocation for surface water discharges subject to DEP's Municipal Stormwater Permitting Program, a requirement that sources "are to address anthropogenic sources in the basin such that in-stream nitrate concentrations meet the TMDL target." Fla. Admin. Code R. 62-304.500(20).

58. In the case of Silver Springs, the TMDL does not require any reduction to any particular point source or any specific category of nonpoint source. For nonpoint sources in the aggregate, the TMDL requires an overall reduction in anthropogenic sources in the basin in order to achieve a desired endpoint with respect to nutrient concentrations in the springs. In addition, if the waterbody did not meet the TMDL within a planning period, there would be no way of knowing whether the shortfall could be attributed to any specific source or group of sources. For the same reason, the TMDL did not make an initial allocation of allowable pollutant loads.

59. The same analysis would apply to each of the TMDLs implemented by the BMAPs in this case. The TMDLs for the Santa Fe River, rule 62-304.410(1); for Silver Springs and related water bodies, Florida Administrative Code Rule 62-304.500(20); and for Volusia Blue Spring, rule

62-304.505(15), follow a similar format. The pertinent TMDL for the Suwannee River, rule 62-304.405(2), follows a roughly similar format. The TMDL describes a concentration target, and the next sentence describes a range of reductions necessary to achieve the load allocation. The TMDLs for Wekiwa Spring-Rock Springs show an allocation of percent reductions, based on a period of record from 1996 through 2006.

60. Section 373.807(1)(b) requires that a BMAP for an OFS must include identification of each point source or category of nonpoint sources, and an estimated allocation of the pollutant load for each point source or category of nonpoint sources. The pie charts in section two of each BMAP identified current sources and current load estimates to groundwater from each of the sources described in the pie charts. This estimated allocation was done using the nitrogen source inventory and loading tool (NSILT) described below. The purposes of NSILT and the resulting pie charts were not to establish the TMDL initial or detailed allocations reference above, as argued by Petitioners.

61. The pollutant of concern in each of the BMAPs was nitrogen, which DEP assessed quantitatively as it appears in the form of nitrate. In the instance where phosphorus was raised as a potential pollutant of concern, DEP made a reasonable decision not to conduct a more detailed discussion of strategies to reduce phosphorus concentrations, given that the strategies to address excess nitrates would also act to reduce phosphorus concentrations.

62. Point sources of nitrogen are generally regulated by permits, e.g., wastewater treatment facilities (WWTF). Nonpoint source pollution was the main concern raised in these proceedings. Most nonpoint source nitrogen that leaches into groundwater comes either from land application of urban and agricultural fertilizer, or from human and animal waste. In the Suwannee and Santa Fe BMAP areas, agricultural or farm fertilizer (FF) and livestock waste (LW) are by far the largest sources of nitrogen. In the Silver and Rainbow BMAP areas, septic (OSTDS) leach about as much as agricultural

sources. In the Wekiwa Spring-Rock Springs and Volusia Blue Spring BMAPs, leaching from septics and urban turfgrass fertilizer (UTF) predominates. Sports turfgrass fertilizer (STF) is also identified in the BMAP pie charts.

63. An NSILT yielded the pie charts that depict the relative percent contributions of nitrogen from different pollution sources or categories to groundwater for each of the spring systems addressed in the BMAPs. The NSILT tool and the resulting pie charts, took into account mass loading to the spring shed, the biological attenuation factor, and the hydrologic attenuation factor.

64. There was no serious dispute concerning the NSILT tool. In fact, Dr. Knight concurred with the numbers resulting from the DEP's NSILT analysis for the five BMAPs at issue. He opined that the increasingly excessive levels of nitrate seen in the majority of the springs covered by the five BMAPS are coming from human sources at the land surface as exemplified in DEP's NSILT analysis.

65. Dr. Knight testified that the springs occur in areas of karst geology where the Floridan aquifer is vulnerable to any pollutants put at the land surface. Thus, the place to control sources of nitrogen is at or near the land surface within a spring shed or basin.

Estimated Nutrient Load Reductions

66. As already noted, each BMAP contains a discussion of strategies to reduce pollutant loads, with a notation of the load reductions necessary at the spring vent, and a summary of the projected load reductions or credits from listed projects, programs, and strategies.

67. In each BMAP, DEP calculated the total load reduction required to meet the TMDL at the spring vents, and, determined percent reductions at the 5-year milestones to reach 100 percent in 15 years. However, DEP stated in the BMAPs that "[w]hile reductions to groundwater will benefit the

springs, it is uncertain to know with precision how those reductions will impact the necessary reductions at the spring."

68. DEP's expert witnesses testified that uncertainty involved in the fate and transport of nitrate in groundwater resulted in a lack of sufficient information to find a direct relationship between specific nonpoint source loadings as identified in the pie charts, and the pollutant loadings at the spring vents. Despite this uncertainty, DEP's expert witnesses and the BMAP documents state that the BMAPs are designed to achieve 70 percent of the load reductions needed for the spring vents within 10 years of adoption, and, 100 percent within 15 years.

69. Dr. Knight acknowledged that other experts, including DEP hydrogeologists, had many years of experience with the subject of fate and transport. However, he persuasively testified that nitrate is very stable once it enters the aquifer, i.e., the groundwater, and exits naturally at the spring vents and artificially through well pumping. Further, he acknowledged that "we do have enough information to understand fate and transport enough to know where the loads are coming from and to go after them at the source."

70. Dr. Knight testified that the Blue Water Audit program of the Florida Springs Institute "basically utilize[es] similar tools to DEP for the NSILT analysis." The Blue Water Audit, however, applies an NSILT-type analysis to "every land parcel over five acres in the springs region of Florida so that we have the loads from basically every parcel." The program includes looking at consumptive use, i.e., well pumping, and other factors that were not included in DEP's NSILT analysis.

71. At spring vents, DEP has done isotopic analyses that identify inorganic and organic nitrogen. Dr. Knight testified that since the sources of inorganic nitrogen is fertilizer, and organic nitrogen is animal and human waste, then it is possible to identify categories of nonpoint sources of inorganic and organic nitrogen. Combined with a program like the Blue Water Audit, it is possible to work backwards. Thus, one could get a

reasonable estimate of how much the nitrogen load should be reduced at the land surface because "the percentage reduction needed at the spring vent is essentially the same percentage reduction needed at the land surface."

72. The above quoted statements from the BMAPs, and DEP's expert witnesses, cited fate and transport uncertainty as a reason that a direct relationship cannot be drawn between specific nonpoint source categories as identified in the pie charts and the pollutant loadings at the spring vents.

73. However, the BMAPs also recognize that "reductions to groundwater will benefit the springs," and "[l]oad reduction to the aquifer is needed to achieve the load reductions requirements at the spring vent." Thus, each BMAP establishes restoration actions that are "designed to reduce the amount of nutrients to the aquifer, which will reduce the load at the vent and ultimately achieve the necessary reductions." Monitoring of the spring vent during implementation will be employed to monitor progress.

74. The restoration actions include the following:

New OSTDS – Upon BMAP adoption, the OSTDS remediation plan prohibits new systems on lots of less than 1 acre within the PFA, unless the system includes enhanced treatment of nitrogen as defined by the OSTDS remediation plan, or unless the OSTDS permit applicant demonstrates that sewer connections will be available within 5 years. Local governments and utilities are expected to develop master wastewater treatment feasibility analyses within 5 years to identify specific areas to be sewerred or to have enhanced nitrogen reducing OSTDS within 20 years of BMAP adoption. The OSTDS remediation plan is incorporated as Appendix D.

Existing OSTDS – Upon completion of the master wastewater treatment feasibility analyses, FDOH rulemaking, and funding program for homeowners included in the OSTDS remediation plan, but no later than 5 years after BMAP adoption, modification or repair permits issued by FDOH for all OSTDS within the PFA on lots of less than 1

acre will require enhanced treatment of nitrogen, unless sewer connections will be available based on a BMAP-listed project. All OSTDS subject to the policy must include enhanced treatment of nitrogen no later than 20 years after BMAP adoption.

WWTFs – The effluent standards listed in Table ES-1 will apply to all new and existing WWTFs in the BMAP area (inside and outside the PFA).

[TABLE]

UTF – UTF sources can receive up to 6% credit for DEP's approved suite of public education and source control ordinances. Entities have the option to collect and provide monitoring data to quantify reduction credits for additional measures.

STF – STF sources include golf courses and other sporting facilities. Golf courses can receive up to 10% credit for implementing the Golf Course BMP Manual. Other sports fields can receive up to 6% credit for managing their fertilizer applications to minimize transport to groundwater.

FF – All FF sources are required to implement BMPs or perform monitoring to demonstrate compliance with the TMDL. A 15% reduction to groundwater is estimated for owner-implemented BMPs. Additional credits could be achieved through better documentation of reductions achieved through BMP implementation or implementation of additional agricultural practices, such as precision irrigation, soil moisture probes, controlled release fertilizer, and cover crops.

LW – All LW sources are required to implement BMPs or perform monitoring. A 10% reduction to groundwater is estimated for owner-implemented BMPs. Additional credits could be achieved through better documentation of reductions achieved through BMP implementation.

OSTDS Remediation Plans

75. Section 373.807(3) provides that as part of a BMAP for an OFS, the DEP and other state and local agencies "shall develop an [OSTDS] remediation plan" if the OSTDSs "within a [PFA] contribute at least 20 percent of nonpoint source nitrogen pollution or if the [DEP] determines remediation is necessary to achieve the [TMDL]." The remediation plan shall identify cost-effective and financially feasible projects necessary to reduce the nutrient impacts from OSTDSs, and shall be completed and adopted as part of the BMAP no later than the first five-year milestone. The five-year period would enable local governments to prepare wastewater feasibility plans to determine where additional sewer facilities are feasible.

76. DEP used the pie charts in each BMAP to determine whether to create an OSTDS remediation plan under the statutory thresholds. DEP also used the pie charts to engage interested parties and make decisions on where additional projects might provide the most benefit. Primarily, the pie charts drove the "policy envelopes" for the OSTDS remediation plans, discussed below.

77. The OSTDS remediation plan for each BMAP included management strategies for pollution from septic systems. The BMAPs provide two general management strategies for OSTDS as a nutrient pollution source. First, each OSTDS remediation plan, at a minimum, implements the statutory requirement that for new development within prescribed PFAs, conventional septic systems are prohibited on lots of less than one acre.

78. Conventional septic systems were not designed for nitrogen removal, and thus, do not include enhanced nitrogen removal technology. The BMAPs in some cases required upgrading by installation of certain technologies to OSTDSs, as permitted by the Florida Department of Health (DOH), which would enhance the nitrogen removal process. However, the BMAPs do not create any performance requirements for septic systems. The BMAPs required the installation of certain technology as permitted by DOH.

79. DEP estimated that upgrading conventional septic systems by installing nitrogen reducing technologies would remove 65 percent of existing nitrates over the term of the BMAP, while abandonment of a system and connection to central sewer would remove nitrates at a factor of 9 percent. That figure took into account the potential for technologies that may evolve over the term of the BMAPs.

80. Second, the statute requires DEP to consider options for existing conventional septic systems. This resulted in the development of conceptual "policy envelopes." The term "policy envelope" refers to a range of four remediation options for applying septic upgrades. The remediation options are detailed in each BMAP's Appendix D.

81. In envelope A, the BMAP would require owners with OSTDSs on lots of less than one acre within the PFA to install an enhanced septic system or connect to sewer. In envelope B, the policy would extend to all lots within the PFA, that is, also for lots one acre or greater. In envelope C, the OSTDS policy would apply to all lots within the PFA, and also to the entire spring shed for lots of less than one acre. In envelope D, the policy would apply to all OSTDSs within the spring shed.

82. DEP anticipates that within the first five years after the BMAPs are adopted, it would need to modify the BMAPs for the OSTDS remediation plans to become final and effective. In the case of the Volusia Blue, Wekiwa-Rock, and Silver and Rainbow BMAPs, it would be necessary to amend the BMAPs to adopt, within the OSTDS plan, a requirement to enhance or abandon existing septic tank systems.

83. For the Silver Spring and Rainbow Spring BMAP, for the Volusia Blue Spring BMAP, and for the Wekiwa Spring-Rock Springs BMAP, DEP added a "backstop provision" in section D.1.3 of Appendix D. That provision takes into account the existing OSTDS policy, which would require the installation of an advanced septic system at the time it is replaced or a connection to central

sewer. Under the backstop provision, the homeowner must perform the upgrade no later than 20 years after BMAP adoption.

84. Petitioners' experts testified that DEP made two calculation errors in its NSILT analysis when estimating the amount of nitrogen that reaches groundwater from conventional septic systems. These errors relate to population factors and environmental attenuation factors (EAF).

85. DEP used the United States Environmental Protection Agency's (EPA) national average nitrogen generation rate of 9.012 lbs-N/person/year. However, DEP then applied an "effective population factor" that adjusted the number of people per household to account for daytime residential absenteeism. DEP's expert, Mr. DeAngelo, admitted that the calculations erroneously adjusted for absenteeism, which was already taken into account in EPA's figures. He also testified that DEP would correct this point in the next BMAP revision.

86. DEP's witnesses explained that the calculation error affected both the loading projections as well as the projected credits for nutrient reductions. However, the recalculation would not lead to a change in management strategies in any of the BMAP OSTDS remediation plans, largely because the changed calculation would increase both existing loading, as well as future credits.

Agricultural Best Management Practices

87. Each BMAP must include a description of suitable interim measures or best management practices (BMPs) for agricultural and nonagricultural nonpoint pollutant sources. These BMPs may be adopted by rule by DEP for nonagricultural BMPs, and by the Department of Agriculture and Consumer Services (DACS) for agricultural BMPs.

88. BMPs that are a means of achieving reductions in nitrogen loading from agricultural sources are described in manuals. The manuals for agricultural BMPs are incorporated by reference in rules adopted by DACS. Other than existing BMPs, and some cost-sharing programs authorized by

separate legislation, DEP had no more effective means to reduce nutrient loading from agricultural sources in the BMAPs at issue.

89. Petitioners' expert, Dr. Knight, suggested that DEP could increase the likelihood of TMDL compliance by imposing restrictions on agricultural activities. However, even Dr. Knight acknowledged that DEP's existing statutory authority was limited. DEP's expert witnesses testified that DEP did not adopt policies other than BMPs for the control of nutrients from agricultural sources, it did not limit agricultural practices beyond what was required in BMPs, and it did not require any changes in land use, because it did not have the statutory authority to do so.

90. The BMAPs include a discussion of policy alternatives that the Department may pursue if BMPs prove to fall short. For example, the Santa Fe BMAP states that:

Section 403.067, F.S. requires that, where water quality problems are demonstrated despite the proper implementation of adopted agricultural BMPs, FDACS must reevaluate the practices, in consultation with DEP, and modify them if necessary. Continuing water quality problems will be detected through the BMAP monitoring component and other DEP and SRWMD activities. If a reevaluation of the BMPs is needed, FDACS will also include SRWMD and other partners in the process.

Joint Exhibit 1 at 94.

91. The BMAPs include descriptions of certain agricultural practices that are not included in any adopted BMP manual. These are generically referred to as "Additional Agricultural Reduction Options," or "advanced agricultural practices." Those activities, if pursued, might lead to additional reductions in loading from those agricultural sources. The BMAPs also include information on practices that may be developed "beyond BMP implementation" to achieve additional reductions with the qualification that those practices may require funding and additional design.

92. Petitioners presented evidence regarding alleged shortcomings in the process of verifying the relative success of certain BMPs. DEP's expert witness, Mr. Frick, testified that DEP participates in an "initial verification" of agricultural BMPs, and determines, based on best professional judgment and research, that implementing those BMPs would improve water quality. Mr. Frick also testified that DEP has conducted initial verification of each BMP at issue in this proceeding.

93. DEP's initial verification occurs before DACS adopts a BMP by rule. Petitioners' presentation of alleged shortcomings in the verification process of DACS adopted rules was more in the nature of an administrative rule challenge, which was not within the scope of this proceeding.

94. Mr. Frick testified that DEP has acted with knowledge of a statutory obligation to perform a "confirmatory verification" regarding the effectiveness of agricultural BMPs. DEP has performed confirmatory verifications on only two agricultural BMPs, and neither of those BMPs are cited in the BMAPs at issue in this case.

95. Section 403.067(7) provides that a re-evaluation of a BMP may be required when water quality problems are shown, "despite the appropriate implementation, operation, and maintenance of best management practices, and other measures required by rules adopted under this paragraph." However, DEP is not required to conduct a confirmatory verification as a condition that must occur before it can rely on the BMP in a BMAP.

96. DEP made a projection, in the BMAPs, of nutrient reductions that could be achieved through the implementation of BMPs. The parties presented disputed evidence regarding the percentage of reductions that might be achieved through implementation of those BMPs. But the factual disputes regarding the relative effectiveness of BMPs did not change the limits of DEP's statutory mandate to use BMPs for the control of nutrients from agricultural sources.

97. The preponderance of the evidence showed that DEP made reasonable estimates of expected nutrient reductions that could be achieved through the implementation of agricultural BMPs.

Projected Credits and Projected Reductions

98. Each BMAP contains a discussion of strategies to reduce pollutant loads, with a notation of the load reductions necessary at the spring vent, and a summary of the projected load reductions or credits from BMAP actions and policies. Also, each BMAP includes a set of five-year milestones, with projections to reduce nitrogen loading by certain percentages over five-year increments. Each BMAP has a milestone of achieving the total amount of needed reduction by the 15-year milestone.

99. For the Santa Fe BMAP, the upper range of estimated potential credits from existing BMAP policies and existing credits, together with "Advanced Agricultural Practices and Procedures," is 1,248,134 pounds of nitrogen per year (lb/yr). This amount is substantially less than the needed reduction of 1,853,372 lb/yr. The discussion of "Advanced Agricultural Practices," as with similar discussions in other BMAPs, is based on a range of 10 percent to 50 percent reduction from 100 percent of fertilized agricultural acres.

100. The Santa Fe BMAP also addresses other potential policies in the future that may increase the likelihood of achieving the TMDL. Notably, Table 15 of the BMAP includes a summary of "[p]otential for additional load reductions to groundwater," based on a summary of fertilized acres with a potential change in practice, and a range of potential reductions from 1 to 100 percent.

101. The Silver and Rainbow BMAP addresses two spring basins. The estimated potential credits fall short for both basins. The upper range of total credits for the Upper Silver River BMAP area of 691,719 lb/yr, is less than the needed reductions in the amount of 930,135 lb/year. The upper range for

the total credits for the Rainbow Spring Group and Rainbow River BMAP is 508,644 lb/yr compared to needed reductions in the amount of 1,783,607 lb/yr.

102. The OSTDS remediation plan for the Silver and Rainbow BMAP would apply to all OSTDSs within the BMAP boundaries. The BMAP requires that when it is necessary to repair or replace an OSTDS, the owner would install a system with enhanced treatment of nitrogen. In addition, all OSTDSs would be required to adopt enhanced treatment or connect to central sewer no later than 20 years after BMAP adoption.

103. The Silver and Rainbow Springs BMAP proposes several initiatives on top of the existing management strategies, policies, and programs. These initiatives include additional reductions from urban turf fertilizer, and additional options in agricultural practices. The BMAP also includes the discussion, "Commitment to Implementation," reflecting a consensus agreement among interested parties to implement additional policies and reduce nitrogen discharges.

104. Also, and particularly notable given the conditions discussed below, the BMAP plans additional actions to identify locations with consistently high nitrate concentrations for the purposes of prioritization, additional policy implementation, or remediation of identified sources.

105. As explained in the BMAP, the instream nutrient calculations for the Rainbow Spring Group and Rainbow River yielded unexpected results. This presented a substantial challenge for restoration of the spring. The total loading calculated for the Rainbow Spring Group and Rainbow River BMAP area is substantially larger than what was estimated using the NSILT. There are several possible explanations for this difference:

- Legacy loads already in groundwater have moved through the system to be discharged at the springs.
- Rainbow Spring Group is discharging water that may be originating in DEP's defined Silver Springs and Upper Silver River BMAP area.

- There is an unidentified source(s) of loading not accounted for in the NSILT analysis.
- Hydrogeological changes have occurred that move water more quickly to the springs potentially reducing the attenuation of sources.

106. The policies and submitted projects included for the Rainbow Spring Group and Rainbow River BMAP area will achieve a reduction of 340,689 to 508,644 lb/yr to groundwater. While reductions to groundwater will benefit the springs, DEP is uncertain how those reductions would impact the necessary reductions at the springs. As projects are implemented, DEP will continue to monitor the springs to evaluate those reductions against the required load reductions. The BMAP is designed to achieve 70 percent of the load reductions needed for the spring vents within 10 years of adoption and 100 percent within 15 years.

107. DEP will evaluate progress towards the milestones for both Silver Springs and Rainbow Spring Group and will report to the Governor and Florida Legislature on both BMAP areas. DEP will adjust management strategies to ensure the target concentrations are achieved, including periodic water quality evaluations and estimation of loading from the spring vents. This may include additional policy implementation or adjustment and development of improved or new BMPs to address nitrogen sources, or expanding the area to which the OSTDS remediation policies apply. Any such changes would be incorporated into an updated BMAP through a formal adoption process.

108. Current policies and submitted projects for both BMAP areas provide less than the required reductions. Additional strategies and actions could be identified through modeling and data analysis tools that can identify groundwater locations with consistently high nitrate concentrations, and assist in determining reasons for the high concentration of nitrate. These areas may need prioritization for policy implementation, additional policy

implementation or adjustment, or simply the remediation of identified sources. An additional source identification effort described in Section 1.6.4 is a potentially collaborative effort between DEP, state agencies, local governments, and the water management districts.

109. As with other BMAPs, the Silver and Rainbow BMAP includes milestones for reducing nitrogen loading in five-year increments so that it achieves 100 percent of the needed reductions at the time of the 15-year milestone.

110. For the Suwannee BMAP, the upper range of total potential credits of 4,859,027 lb/yr exceeds the needed reduction of 4,075,935 lb/yr. However, the figure for credits relies extensively on "Advanced Agricultural Practices and Procedures," based again upon a certain percentage of reduction from fertilized acres with a change in practice. Those practices are encouraged, but not required, in the BMAP. Implementation of those practices will require additional funding and more detailed design.

111. For the Volusia Blue BMAP, the lower range of total potential credits of 169,714 lb/yr far exceeds the needed reductions of 61,653 lb/yr. The majority of those credits are derived from reductions in OSTDS discharges.

112. For the Wekiwa-Rock BMAP, the lower range of total predicted credits of 311,612 lb/yr exceeds the needed reductions of 209,428 lb/yr. The majority of those credits are derived from reductions in OSTDS discharges, and with a substantial contribution from improvements in wastewater treatment facilities.

113. In summary, each of the BMAPs include an estimate of the total reductions that may be achieved through implementation of projects, and also include an estimate of the load to groundwater. Some of those estimated reductions, i.e., advanced agricultural practices, are not mandated, are not within DEP's statutory authority to mandate, and are likely to require additional funding and stakeholder commitment. Each BMAP includes a series of five-year milestones for achieving the total reductions by the

fifteenth year, and DEP is required to submit a report to the Legislature if it determines that those milestones will not be met. *See* § 403.0675, Fla. Stat.

114. DEP's experts testified that while a comparison of credits and necessary load reductions may be useful in selecting the appropriate suite of management strategies, a direct comparison is not overly meaningful, because of DEP's position regarding uncertainty in the fate and transport of nutrients. Dr. Knight's testimony regarding fate and transport of nutrients was persuasive. However, DEP was correct that ultimate success can only be determined by monitoring at the spring vent.

115. Petitioners' "global issue" argument appeared to be that the BMAPs must be perfect when first adopted. However, Petitioners' contention was not supported by the evidence and the law discussed below. Even where the projected benefits from projects and programs fall short of the projected required reductions, DEP fulfilled its duty to create implementation plans designed with a target to achieve the TMDL within 20 years. For each BMAP, DEP pursued reasonable strategies, within its existing statutory authority, to achieve the milestones and the restoration targets.

Future Projections

116. Each BMAP contained a discussion of future growth management strategies, and that section identified mechanisms that would address future increases in pollutant loading. This section of the BMAPs provided the information required in the only statutory mandate on the subject. *See* § 403.067(7)(a)2., Fla. Stat.

117. The record reflects that DEP had access to data that shows reasonable projections of increased population in the BMAP areas, as well as increases in agricultural uses. DEP did not include those projections in the proposed BMAPs based on its experience with other programs.

118. For example, Mr. Frick testified that in a similar program, the implementation of a "reasonable assurance plan" for Tampa Bay, the plan was able to achieve the restoration goal notwithstanding an increase of over

one million people to the population. Mr. DeAngelo testified that as populations increase, the increase is offset by installation of wastewater treatment facilities, which are more efficient than advanced septic systems in reducing nitrogen loading. Thus, DEP reasonably concluded that restoration goals can be achieved notwithstanding substantial increases in population. This is particularly true where "mechanisms," such as legal land use restrictions, are put in place while a plan is implemented.

119. On those occasions where growth may create new challenges for meeting the restoration target, increases in loading will be controlled to the maximum extent permitted by existing legal authority.

120. Contrary to Petitioners' contentions, the NSILT tool, while useful for showing conditions at a given point in time, was not useful for running hypothetical scenarios to depict what may happen in the future.

Petitioner Paul Still's objections

121. DEP determined that three springs in the Santa Fe River Basin are impaired OFSs. The three springs are Devils Ear Spring; Hornsby Spring; and the Ichetucknee Spring Group. Petitioner Still initially alleged that DEP erroneously concluded that Santa Fe Spring was not an OFS. Petitioner Still withdrew that allegation on the record, and DEP's expert, Mr. DeAngelo, confirmed that Santa Fe Spring was not impaired.

122. Petitioner Still took issue with DEP's use of a monthly average as a restoration target in the Santa Fe BMAP. In the Santa Fe/Suwannee Technical Report for the nutrient TMDL in the Suwannee and Santa Fe Basins, DEP explained the reason for using a monthly average as follows:

In conclusion, based on the information currently available, the Department believes that a monthly average nitrate concentration of 0.35 mg/L should be sufficiently protective of the aquatic flora or fauna in the Suwannee and Santa Fe River Basins. A monthly average is considered to be the appropriate time frame as the Suwannee periphyton data set was based on a 28 day

deployment and a the response of algae to nutrients is on the order of days to weeks. An elevated pollutant concentration in the system alone does not necessarily constitute impairment as long as there is no negative response from the local aquatic flora or fauna. Based on information provided above, 0.35 mg/L nitrate is the target concentration that will not cause an imbalance in the aquatic flora or fauna in the Suwannee and Santa Fe River Basins.

DEP Exhibit 3 at page 68.

123. Petitioner Still also took issue with DEP's discussion of the restoration target stated in the Santa Fe TMDL, which refers to nitrate, as opposed to other nitrate compounds. Mr. Frick explained that DEP, in the TMDLs, generally referred to total nitrogen as opposed to a discussion of more specific nitrogen compounds. This usage was appropriate, given the ultimate conversion of organic nitrogen compounds to nitrate.

124. Petitioner Still raised an issue regarding whether it would be appropriate to create two BMAPs for the Santa Fe basin, and to make separate analyses for the lower and upper basins. However, because pollutants from the upper basin flow to the lower basin, DEP's creation of a BMAP for the entire basin is reasonable. No persuasive evidence to the contrary was presented.

125. Petitioner Still noted that the PFA for the Santa Fe BMAP extended in some cases beyond the springshed. This was necessary, in some instances, to follow identifiable boundaries.

126. Other objections raised by Petitioner Still were considered and rejected as irrelevant or unpersuasive.

Summary

127. Each BMAP included the appropriate management strategies available through existing water quality protection programs to achieve TMDLs, a description of BMPs adopted by rule, and a list of projects in

priority ranking. Each BMAP included a list of projects for which certain information was unavailable, and thus the information was not included. Each DEP witness, who was the basin management coordinator for that BMAP, persuasively testified that they undertook best reasonable efforts to find the information. Those efforts will be ongoing throughout the life of each BMAP.

128. Each BMAP included a priority rank for each listed project, given the context and explanation provided in the text of the BMAP. That text, together with the list itself, showed the priority rank for each listed project.

129. Each BMAP included a description identifying mechanisms that would address potential future increases in pollutant loading. Petitioners did not present any persuasive evidence that the descriptions of those mechanisms were untruthful or inaccurate.

130. Each BMAP was designed with a target to achieve the TMDL within 20 years after adoption. The water quality monitoring component in each BMAP was sufficient to evaluate whether reasonable progress in pollutant load reductions will be achieved over time.

131. Each BMAP included all the information required by the Act and section 403.067(7).

CONCLUSIONS OF LAW

Standing

132. It is well-established, that to demonstrate that a person or entity has a substantial interest in the outcome of a proceeding, two things must be shown. First, there must be an injury-in-fact of sufficient immediacy to entitle one to a hearing. Second, it must be shown that the substantial injury is of a type or nature which the proceeding is designed to protect. The first has to do with the degree of the injury, and the second with the nature of the injury. *See Agrico Chem. Co. v. Dep't of Env'tl. Reg.*, 406 So. 2d 478, 482 (Fla. 2d DCA 1981), *rev. den.*, 415 So. 2d 1359 (Fla. 1982).

133. *Agrico* was not intended as a barrier to the participation in proceedings under chapter 120, Florida Statutes, by persons who are affected by the potential and foreseeable results of agency action. See *Peace River/Manasota Reg'l Water Supply Auth. v. IMC Phosphates Co.*, 18 So. 3d 1079, 1082-83 (Fla. 2d DCA 2009)("[S]tanding is a legal concept that requires a would-be litigant to demonstrate that he or she reasonably expects to be affected by the outcome of the proceedings, either directly or indirectly." (quoting *Hayes v. Guardianship of Thompson*, 952 So. 2d 498, 505 (Fla. 2006))).

134. Rather, the intent of *Agrico* was to preclude parties from intervening in a proceeding where those parties' substantial interests are remote and speculative. See *Vill. Park Mobile Home Ass'n v. Dep't of Bus. Reg.*, 506 So. 2d 426, 433 (Fla. 1st DCA 1987). Standing is a forward-looking concept, not to be confused with prevailing on the merits. In substantial interest cases, the question is whether the party's substantial interests "could be" affected by the proposed agency action, or whether the party's substantial interests "could reasonably be affected by the proposed activities." *Palm Beach Cty. Envtl. Coal. v. Dep't of Envtl. Prot.*, 14 So. 3d 1076, 1078 (Fla. 4th DCA 2009); *St. Johns Riverkeeper, Inc. v. St. Johns River Water Mgmt. Dist.*, 54 So. 3d 1051, 1054 (Fla. 5th DCA 2011) (citing *Peace River/Manasota Reg'l Water Supply Auth. v. IMC Phosphates Co.*, 18 So. 3d 1079, 1084 (Fla. 2d DCA 2009)).

135. The Individual Petitioners proved that their substantial environmental interests could reasonably be affected by the proposed BMAPs.

136. The Organizational Petitioners must prove their associational standing by satisfying the three-prong test for environmental associational standing established in *Friends of the Everglades, Inc. v. Board of Trustees of the Internal Improvement Trust Fund*, 595 So. 2d 186 (Fla. 1st DCA 1992). In *Friends of the Everglades*, the Court held that an environmental organization

must meet both the two-pronged test for standing of *Agrico*, and the test for standing of associations under *Florida Home Builders Association v. Department of Labor and Employment Security*, 412 So. 2d 351 (Fla. 1982).

137. The Organizational Petitioners proved their environmental associational standing by demonstrating: 1) that a substantial number of their members were substantially affected by the challenged agency action; (2) that the agency action they sought to challenge was within their general scope of interest and activity; and (3) that the relief they requested was of the type appropriate for them to receive on behalf of their members. *See St. Johns Riverkeeper, Inc. v. St. Johns River Water Mgmt. Dist.*, 54 So. 3d at 1054.

138. The Organizational Petitioners' burden is not whether they have or will prevail on the merits, but rather whether they have presented sufficient proof of injury to their asserted interests within the two-prong standing test. *See Bd. of Comm'rs of Jupiter Inlet Dist. v. Thibadeau*, 956 So. 2d 529 (Fla. 4th DCA 2007). The Organizational Petitioners proved that a substantial number of their members' substantial interests could reasonably be affected if the BMAPs are inadequate to address pollutant loading, and to restore and protect the subject rivers and springs.

Legal Standards

139. "As in court proceedings, the burden of proof, apart from statute, is on the party asserting the affirmative of an issue before an administrative tribunal." *Balino v. Dep't of HRS*, 348 So. 2d 349, 350 (Fla. 1st DCA 1977). Petitioners had the burden to prove the merits of their challenge at the final hearing. Petitioners failed to carry that burden.

140. "Findings of fact shall be based upon a preponderance of the evidence, . . . and shall be based exclusively on the evidence of record and on matters officially recognized." § 120.57(1)(j), Fla. Stat.

141. "It is well recognized that the powers of administrative agencies are measured and limited by the statutes or acts in which such powers are

expressly granted or implicitly conferred." *State Dep't of Env'tl. Reg. v. Puckett Oil Co.*, 577 So. 2d 988, 991 (Fla. 1st DCA 1991); *see also Coastal Petroleum Co. v. State Dep't of Env'tl. Prot.*, 649 So. 2d 930 (Fla. 1st DCA 1995). "An agency may not increase its own jurisdiction and, as a creature of statute, has no common law jurisdiction or inherent power such as might reside in, for example, a court of general jurisdiction." *Dep't of Env'tl. Reg. v. Falls Chase Special Taxing Dist.*, 424 So. 2d 787, 793 (Fla. 1st DCA 1982), *rev. denied*, 436 So. 2d 98 (Fla. 1983).

142. DEP argued in its proposed legal conclusions that the applicable statutes do not contain standards that guide the agency in developing BMAPs. DEP suggests that its general exercise of discretion in designing a BMAP is not constrained "as long as it includes a 'target' to comply with the TMDL within twenty years and does so in a manner consistent with other existing water quality protection programs." For this proposition, DEP cited to sections 373.807(1)(b)8. and 403.067.

143. Contrary to DEP's proposition, the Act and section 403.067(7), which authorizes development of BMAPs, include criteria or standards to guide DEP's development of BMAPs for OFSs. *See* §§ 403.067(7) and 373.807(1)(b), Fla. Stat. It is axiomatic that a statutory framework contain sufficient standards and guidelines to enable the agency and the courts to determine whether the agency is carrying out the legislature's intent. *See Dep't of State v. Martin*, 916 So. 2d 763, 773 (Fla. 2005); *State v. Scharlepp*, 292 So. 3d 872, 875 (Fla. 1st DCA 2020). Adequate standards and guidelines preclude the agency from acting through whim, favoritism, or unbridled discretion. *See Imhotep-Nguzo Saba Charter School v. Dep't of Educ.*, 947 So. 2d 1279, 1282 (Fla. 4th DCA 2007).

144. The statutory framework's standards and guidelines also support DEP's contention that a BMAP is enforceable. Aside from their planning purposes, BMAPs have four general types of regulatory consequences. First, if a responsible stakeholder fails to complete a project on time, for example,

DEP can take enforcement action against that stakeholder.

See § 403.067(7)(d), Fla. Stat. Second, the statute provides regulatory incentives, in the form of defenses to enforcement actions, to parties who follow management practices or strategies adopted in the BMAP. Third, the statute prohibits certain activities in a PFA, an area which is designated as part of BMAP adoption. *See* § 373.811, Fla. Stat. Fourth, DEP can proscribe specific conditions in permits under existing regulations.

The Act

145. The Act's legislative findings include that "springs are a unique part of this state's scenic beauty," and provide "critical habitat for plants and animals, including many endangered or threatened species." § 373.801(1), Fla. Stat. In addition, the Legislature found that "[w]ater quality of springs is an indicator of local conditions of the Floridan Aquifer, which is a source of drinking water for many residents of this state," and that "springs provide recreational opportunities for swimming, canoeing, wildlife watching, fishing, cave diving, and many other activities." *Id.*

146. The Legislature found that "[f]or regulatory purposes, [DEP] has primary responsibility for water quality; the [WMDs] have primary responsibility for water quantity; [DACS] has primary responsibility for the development and implementation of agricultural best management practices"; and local governments "have primary responsibility for providing domestic wastewater collection and treatment services and stormwater management." § 373.801(2), Fla. Stat. "The foregoing responsible entities must coordinate to restore and maintain the water quantity and water quality of the [OFSs]." *Id.*

147. The Legislature recognized that:

- (a) A spring is only as healthy as its aquifer system. The groundwater that supplies springs is derived from water that recharges the aquifer system in the form of seepage from the land surface and through direct conduits, such as sinkholes. Springs may be

adversely affected by polluted runoff from urban and agricultural lands; discharges resulting from inadequate wastewater and stormwater management practices; stormwater runoff; and reduced water levels of the Floridan Aquifer. **As a result, the hydrologic and environmental conditions of a spring or spring run are directly influenced by activities and land uses within a springshed and by water withdrawals from the Floridan Aquifer.**

(b) Springs, whether found in urban or rural settings, or on public or private lands, may be threatened by actual or potential flow reductions and declining water quality. Many of this state's springs are demonstrating signs of significant ecological imbalance, increased nutrient loading, and declining flow. **Without effective remedial action, further declines in water quality and water quantity may occur.**

(c) **Springshed boundaries and areas of high vulnerability within a springshed need to be identified and delineated using the best available data.**

(d) Springsheds typically cross water management district boundaries and local government jurisdictional boundaries, so a coordinated statewide springs protection plan is needed.

(e) **The aquifers and springs of this state are complex systems affected by many variables and influences.**

(4) **The Legislature recognizes that action is urgently needed and, as additional data is acquired, action must be modified.**

(Emphases added).

§ 373.801(3) and (4), Fla. Stat.

148. Under section 373.807, DEP was required to develop and implement BMAPs for all OFSs for which an impairment determination had been made

under the numeric nutrient standards in effect for spring vents. A BMAP for an OFS must be adopted within two years of initiation and must include "[a] list of all specific projects and programs identified to implement a nutrient total maximum daily load [TMDL]"; and an "implementation plan designed with a target to achieve the nutrient [TMDL] no more than 20 years after the adoption of a [BMAP]." DEP "shall develop a schedule establishing 5-year, 10-year, and 15-year targets for achieving the nutrient [TMDL]."

§ 373.807(1)(b), Fla. Stat.

149. Section 403.067(7)(a) authorizes development of a BMAP as one of the ways to implement a TMDL. Each new or revised BMAP shall include the appropriate management strategies available through existing water quality protection programs to achieve TMDLs, which may provide for phased implementation; a description of best management practices adopted by rule; and a list of projects in priority ranking with a planning-level cost estimate, estimated date of completion, source and amount of financial assistance, and a planning-level estimate of each listed project's expected load reduction. *See* §§ 403.067(7)(a) and 373.807(1)(b), Fla. Stat.

150. The preponderance of the evidence established that each BMAP included the appropriate management strategies available through existing water quality protection programs to achieve TMDLs; a description of BMPs adopted by rule; and a list of projects in priority ranking. Each BMAP included a list of projects for which certain information was unavailable. However, each DEP witness, who was the basin management coordinator for that BMAP, persuasively testified that they undertook best reasonable efforts to find the information. Those efforts will be ongoing throughout the life of each BMAP. The Legislation recognized this eventuality. *See* 373.801(4), Fla. Stat.

151. Section 403.067(7)(b) allows implementation of TMDLs through "existing water quality protection programs" that include permitting programs; nonregulatory and incentive-based programs, such as BMPs,

cost sharing, waste minimization, pollution prevention, agreements established pursuant to section 403.061(21), and public education; and other water quality management and restoration activities, for example, surface water improvement and management plans approved by water management districts or BMAPs.

152. A BMAP also "must include milestones for implementation and water quality improvement, and an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time." § 403.067(7)(b)6., Fla. Stat. As Mr. Frick testified, DEP collects and receives water quality data from the projects and programs. DEP then assesses progress by looking at the trend or trajectory of the restoration activities towards achieving the milestones set in the BMAPs. The results of annual updates and scheduled five-year reviews may result in revisions to a BMAP.

153. The preponderance of the evidence established that each BMAP contains strategies to reduce pollutant loads, with a notation of the load reductions necessary at the spring vent, and a summary of the projected load reductions or credits from BMAP actions and policies. In addition, each BMAP includes a set of five-year milestones, with projections to reduce nitrogen loading by certain percentages over five-year increments. Each BMAP has a milestone of achieving the total amount of needed reduction by the 15-year milestone.

Petitioners' Objections

154. Petitioners contended that these BMAPs were invalid because they were not designed to achieve the TMDLs, as required by sections 373.807 and 403.067, and failed to implement provisions of those laws. Contrary to Petitioners' contention, the preponderance of the evidence established that each BMAP complied with the applicable statutory framework and legislative intent of the Act, and of section 403.067(7) regarding the development of BMAPs.

RECOMMENDATION

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

RECOMMENDED that the Department of Environmental Protection enter a Final Order approving the five separate orders issued by the Secretary on June 29, 2018, adopting five BMAPs for the Suwannee River, the Volusia Blue Spring, the Silver Springs-Rainbow Spring Group, the Santa Fe River, and the Wekiwa Spring-Rock Springs.

DONE AND ENTERED this 17th day of February, 2021, in Tallahassee, Leon County, Florida.



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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.