

Springs of the Aucilla, Coastal, and Waccasassa Basins in Florida



January 2000

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WR00-03

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Acknowledgements

Over 27 years ago, the “Springs of Florida,” a classic reference on springs by Jack Rosenau, was published. This publication attempts to honor the quality and spirit of that publication by bringing together information on the springs of the Aucilla River, Coastal, and Waccasassa River Basins that will be of interest to scientists and those who simply enjoy the beauty and mystique of springs.

We would like to express our appreciation to several people who helped make this report a reality: Suzanne Richardson for her editing assistance; Cindy Boyette for creation of the location maps and for her assistance in field locating the springs; and Donald Monroe for his assistance in field locating the springs.

This report was funded under the Suwannee River Water Management District’s Surface Water Improvement and Management (SWIM) Program.

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Terms

cfs	cubic feet per second
mgd	million gallons per day
mg L ⁻¹	milligrams per liter
SWIM	Surface Water Improvement and Management
SRWMD	Suwannee River Water Management District
USGS	United States Geological Survey
EPA	Environmental Protection Agency
H ₂ S	hydrogen sulfide
est.	Estimated
Boil	Water movement on the surface caused by a spring discharge
Pool area	A small natural body of water around a spring
Spring	A place where ground water flows naturally from rock or soil onto the land or into a surfacewater body
Run	The watercourse that emanates from a spring
NO ₃ -N	Nitrate-nitrogen
Head spring	The source, beginning or upper part of a spring-fed stream

Conversion

$$1 \text{ cfs} = 0.64 \text{ mgd}$$
$$^{\circ}\text{C} = 0.556 \times (^{\circ}\text{F} - 32)$$

Introduction

Springs are valuable natural and scenic resources that have played an important role in North Florida's history. Native Indians located their villages near springs and many springs were used by 19th century Floridians as a source of drinking water, as well as a place to take a cool swim in the summer. Some spring runs were modified to funnel the water through channels to power mills. Early in the 1900's, resorts were developed around sulfur springs due to the perceived medicinal effects of bathing in these springs. Today, springs in the region continue to attract visitors who enjoy their beauty and recreational opportunities.

In spite of the historical importance of springs to the early residents of North Central Florida, only in recent times has the full geographic scope of the springs come to light. Much of the data in this report was collected from a survey of springs conducted by the Suwannee River Water Management District (SRWMD) during 1999. As late as 1995, only ten first-magnitude springs had been reported for the Suwannee River Water Management District in scientific publications (Spechler and Schiffer, 1995). From a survey completed by the SRWMD in 1998, eighteen first-magnitude springs were located in the Suwannee River Basin (Hornsby and Ceryak, 1998) [Table 1]. This 1999 survey, confirmed three additional first-magnitude springs (Table 1). Of the 56 springs in this report, 32 were previously unreported. These "new" springs were found by carefully field surveying the rivers and tidal areas.

Table 1. First-magnitude Springs in the SRWMD.

Name	County	Discharge (cfs)
Alapaha Rise*	Hamilton	608
Ichetucknee Group*	Columbia	360
Holton Spring*	Hamilton	243
Manatee Spring*	Levy	178
Troy Spring*	Lafayette	152
Hornsby Spring*	Alachua	148
Falmouth Spring*	Suwannee	145
Fannin Springs*	Levy	113
Wacissa Group*	Jefferson	388
Blue Spring*	Madison	106
ALA112971 ⁺	Alachua	406
Blue Hole ⁺	Columbia	106
Columbia ⁺	Columbia	306
COL61981 ⁺	Columbia	150
July ⁺	Columbia	117
Santa Fe Rise ⁺	Columbia	442
GIL1012973 ⁺	Gilchrist	370
Blue ⁺	Lafayette	162
Lime Run Sink ⁺	Suwannee	173
Wacissa	Jefferson	200
Steinhatchee Rise	Taylor	350
Nutall Rise	Taylor	400

* Cataloged in Ferguson, et al., 1947, Rosenau, et al., 1977 or Spechler and Schiffer, 1995.

⁺ Cataloged in Hornsby and Ceryak, 1998.

The objectives of this survey were to identify as many riverine and coastal springs as possible in the survey area and to assess the water quality for general field parameters and nitrate nitrogen (NO₃-N) concentrations.

Survey Area

The survey area included the Aucilla River, Coastal Rivers (Econfina, Fenholloway, and Steinhatchee Rivers) and Waccasassa River Basins (Figure 1).

Classification System

Springs are classified in this report using a discharge rating system devised by the United States Geological Survey (USGS) in 1927. The system relates the discharge to a range of magnitudes (Table 2). Discharge is measured in cubic feet per second (cfs) and is reported in millions of gallons per day (mgd).

Table 2. Magnitude Classification System for Springs.

Magnitude	Average Flow
1	100 cfs or more (64 mgd)
2	10 - 100 cfs (6.4-64 mgd)
3	1 - 10 cfs (0.64-6.4 mgd)
4	0.1 - 1 cfs (0.064-0.64 mgd)

Spring Numbering Convention

A spring is considered to be cataloged if it has been cited in the "Springs of Florida" 1947 edition or 1973 edition. This survey identified a large number of uncataloged springs. The following numbering convention was used to identify the uncataloged springs. The identification number was derived by taking the first three letters of the county in which the spring was located, the date on which the spring was located, and a numeric sequence number for the order in which the spring was located on that day; for example, TAY616991 corresponds to: Taylor County, June 16, 1999, spring number 1.

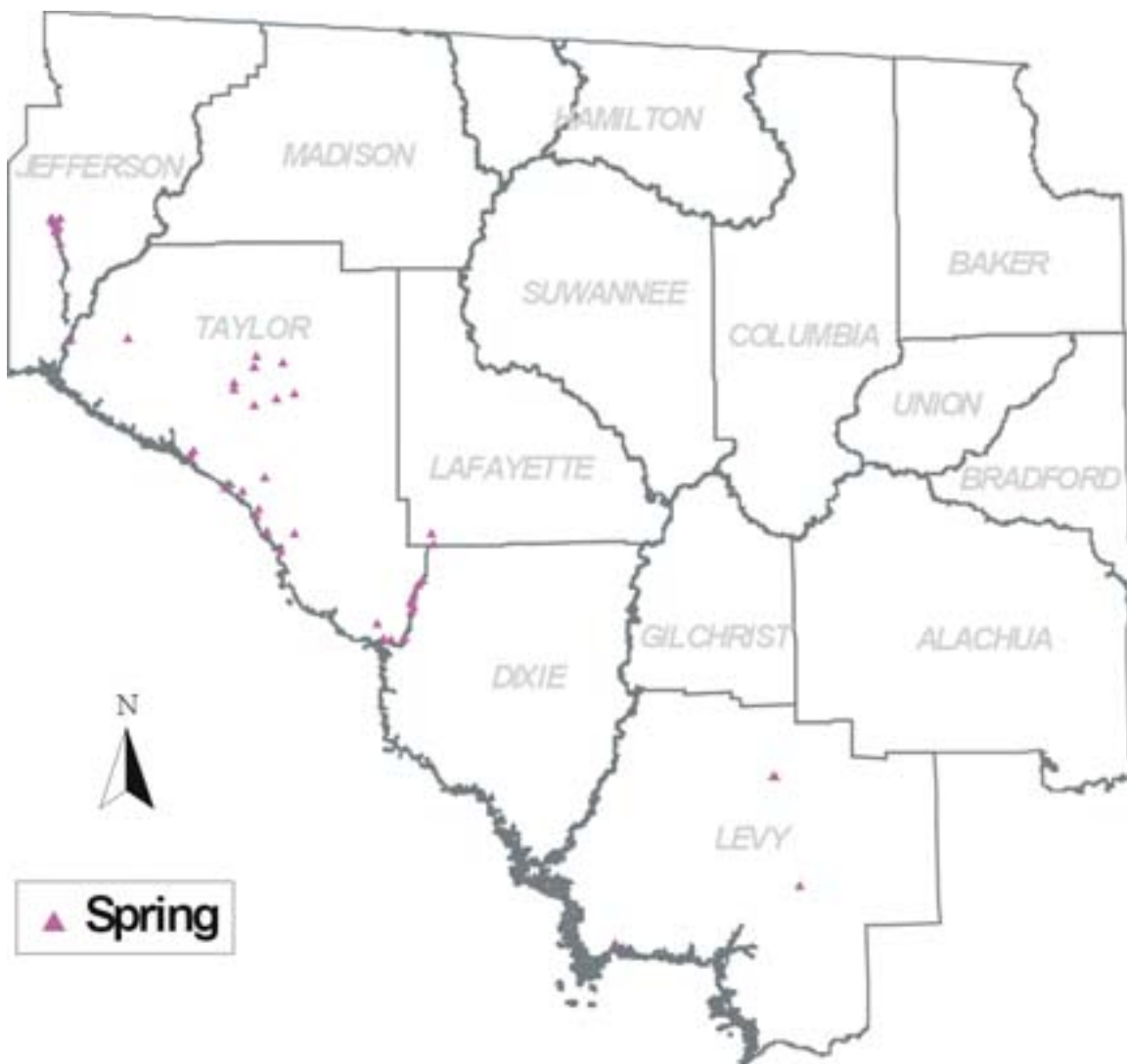


Figure 1. Springs of the Aucilla, Coastal, and Waccasassa Basins.

Report Format

Each spring surveyed has an information sheet, which has the following:

Spring Name or identification numbers

Spring Photo

Site Description

Information Section

Other name(s) [if available]

Latitude and longitude

River basin

County

Historical data (printed in appendices)

Data Section (measured parameters)

Comment Section (as needed)

Physical and Chemical Parameters Presented

Specific Conductance (Sp. Conductance)

Conductivity is a measure of water's ability to conduct electrical current. Conductivity is measured in units of micromhos cm^{-1} ($\mu\text{mhos cm}^{-1}$); is related to the amount of dissolved salts (ions) in the water; and is determined by using Environmental Protection Agency (EPA) method 120.1. The SRWMD's surface waters, with generally low concentrations of dissolved salts, have lower conductivity. Ground water from the Floridan aquifer system has relatively high concentrations of dissolved salts. As ground water enters the rivers via springs and seeps, the conductivity of the river increases.

pH

pH is the negative log of the activity of hydronium ion, which is a measure of the acidity or alkalinity of water. The pH is determined by using EPA method 150.1. The pH scale is 0 to 6.99 acidic, 7 neutral, and 7.01 to 14 basic. Aquatic life is greatly affected when the pH is below 3 or above 11.

Ground waters are generally basic (i.e., pH greater than 7) due to dissolution of the calcium carbonate from the carbonate rock in the Floridan aquifer system. In a natural system, pH rarely goes below 3 or above 11.

Temperature

Temperature is the degree of hotness or coldness measured on the Celsius ($^{\circ}\text{C}$) scale and was determined by using EPA method 170.1.

The mean water temperature for ground water (spring water) is 22.2°C , which is an approximation of the mean air temperature of the region.

Nitrate-Nitrogen (Nitrate plus Nitrite-Nitrogen [$\text{NO}_3+\text{NO}_2\text{-N}$])

Nitrate-nitrogen is a nutrient required by aquatic organisms for growth and reproduction. Concentration of nitrates is expressed as milligrams of nitrogen per liter of water ($\text{mg of NO}_3\text{-N L}^{-1}$) and was determined by using EPA method 353.3. High concentrations of nitrates may create an imbalance in a natural surfacewater system, causing algal blooms or other adverse effects. Nitrate-nitrogen concentrations that exceed the drinking water standard ($10 \text{ mg of NO}_3\text{-N L}^{-1}$) can result in methemoglobinemia or "blue baby" syndrome in infants.

Discharge

Discharge is the measurement of the volume of water flowing past a point. Discharge is determined by multiplying the velocity of the water that passes a point by the cross-sectional area of the flowing water at that point. Discharge is measured in units of cubic feet per second (cfs).

Discharge measurements were conducted using either a Price-AA or pygmy current meter (vertical axis meters) or a Global Water velocity meter.

Vertical axis meter measurements were conducted as described in the USGS Techniques of Water Resources Investigations by Buchanan and Somers (1969). The measurements were conducted for velocities greater than or equal to 0.20 feet per second for the predominant number of sections in a measurement cross section. Water depth in the cross section was predominantly greater than 1.5 feet for AA meters and between 0.3 and 1.5 feet for pygmy measurements.

Vertical-axis meter discharge measurements were conducted such that, as a general rule, no partial section contains more than 5 percent of the flow in the stream. The two-point method was used for velocity measurement in each partial section for water depths equal to or exceeding 2.5 feet. Otherwise, the six-tenths or the three-point methods was employed as appropriate to the instrument capabilities, velocity profile characteristics, and the partial section depth. Partial section values were then summed for a discharge total for the cross section. Measurements conducted in this manner have an estimated accuracy range of ± 5 to 15 percent of actual discharge.

For the velocity meter, a comparable technique was employed in that partial sections were measured. To obtain average velocities in the partial sections, the meter was raised and lowered (4 times) in the partial section. Partial section values were then summed for a discharge total for the cross section. Measurements conducted in this manner have an estimated accuracy range of ± 15 percent of actual discharge.

Hydrogeology

Three different aquifer systems exist in the SRWMD: the Floridan aquifer system, the intermediate aquifer system, and multiple surficial aquifer systems. The carbonate Floridan aquifer system is the deepest and exists everywhere beneath the SRWMD. In the northeast portion of the SRWMD, the intermediate aquifers exist within units of the Hawthorn Formation (above the Floridan). A third aquifer, the surficial aquifer, exists at land surface in sand that overlies portions of the intermediate aquifer and Floridan aquifer system.

A massive, thick sequence of carbonate rock underlies the entire SRWMD and constitutes the Floridan aquifer system. The majority of the rock is limestone, which is calcium carbonate. The remaining rock is dolomite, which is calcium-magnesium carbonate. Dolomite is basically harder than limestone, but has similar hydrogeologic properties. Unconsolidated material (sand or clay) usually overlies the Floridan aquifer system. However, once the carbonate rock is encountered in the subsurface, it is rare to find sand or clay (except in sinkhole fill). The carbonates of the Tertiary period are up to 2,500 feet thick in the SRWMD and are saturated with water. The potable portion of this aquifer generally ranges between 250 and 1,200 feet below land surface.

The Floridan aquifer system extends throughout peninsular Florida and the southern portions of Alabama, Georgia, and South Carolina. It generally underlies all of the Southeastern Coastal Plain and partially extends under the Atlantic Ocean and the Gulf of Mexico (Miller, 1986).

At the zenith of the last ice age (approximately 13,000 years ago), sea level was nearly 300 feet below its present altitude. It was from that time to the present that this regional aquifer system filled up with fresh water. As rain water recharges the aquifer system, the carbon dioxide in the rain water creates carbonic acid. This weak acid in the rain water dissolves the limestone and creates cavities and caverns in the aquifer. This results in a type of land form known as karst. A karst region typically lacks well developed surface drainage and has many sinkholes and springs. Also, a high percentage of rainfall will recharge directly into the aquifer in a karst region.

The Floridan aquifer system is the water source for all of the springs in this report, as well as the major source of drinking water in North Central Florida.

Characteristics of Springs

There are two main physiographic regions in the SRWMD: the Northern Highlands and the Gulf Coastal Lowlands. As a river descends from the Highlands in the northeast, it cuts through the confining sediments that overlie the Floridan aquifer system. Springs can occur in the SRWMD whenever the potentiometric surface of the aquifer extends above land surface and there is an opening for the water to escape through. Once in the Lowlands, the rivers have eroded down into the limestone of the Floridan aquifer system. For a spring to flow, there must be a conduit and cavity system for the water to gather in and flow through; and the water level in the aquifer must be higher than the water level in the river. A large quantity of ground water seeps into the river via the banks, riverbed, and springs. The advanced karst development in the river corridors exhibits well developed underground drainage. The overburden has collapsed into sinkholes, caves have formed, and a portion of ground water flows through well developed conduits. Springs are the outflow from the conduits (Figure 2).

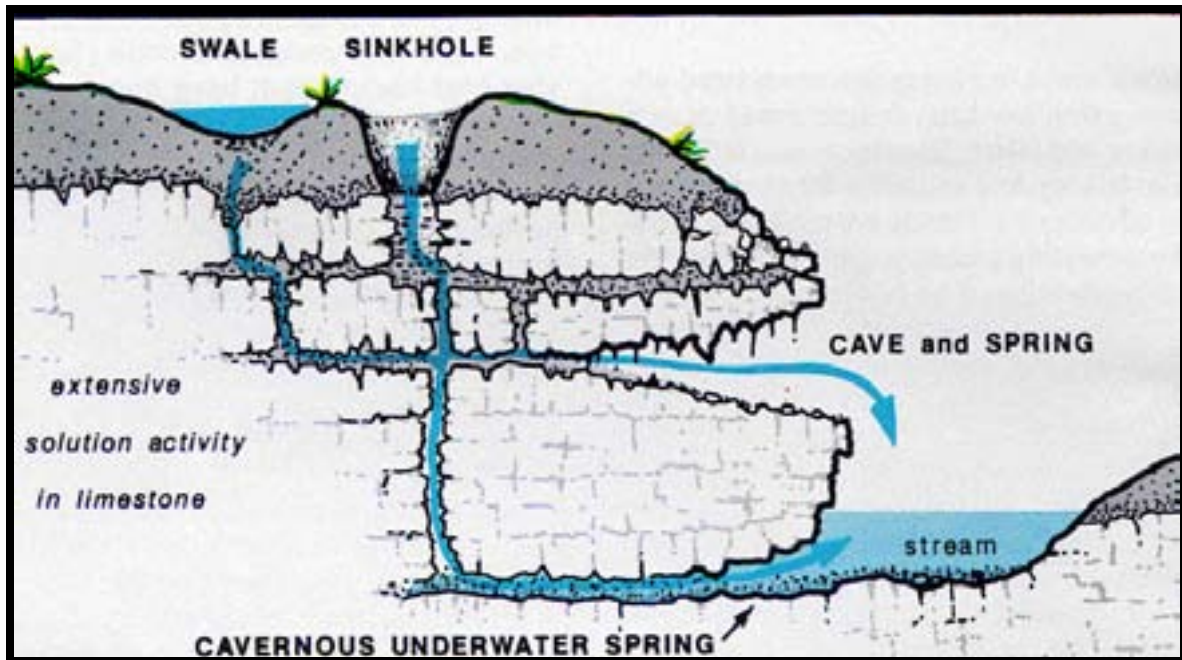


Figure 2. Advance Karst Development (Lane,1994).

Protection of Ground Water

Springs are indicators of the overall quality of the ground water of the region that contributes to their flow. The activities of humans on the land surface can greatly affect the quality and quantity of ground water. Pollutants generated by human activities can move into the ground water. For example, sinkholes are often referred to as go-away holes and are used for the disposal of unwanted items that can pollute the drinking water.

Spring Summaries

The distribution of springs by county is shown in Table 3. Each county has a listing of the total number of springs, number of previously cataloged springs, number of first, second, third, and fourth magnitude springs, total flow in cfs and mgd, nitrate-nitrogen concentration range, and the number of springs in each river basin. The distribution of springs between river basins is given in Table 4. Each river basin has a listing of the total number of springs, number of previously cataloged springs, number of first, second, third, and fourth magnitude springs, total flow in cfs and mgd, and nitrate-nitrogen concentration range.

Summary

There were 56 springs identified in this survey and 24 were previously cataloged. There are 3 first-magnitude, 29 second-magnitude, 17 third-magnitude, 4 fourth-magnitude, and 3 springs were not visited due to lack of access. The nitrate-

nitrogen concentrations ranged from <0.01 to 0.65 mg L⁻¹. The springs discharge a combined estimated total of 1730.27 cfs or 1107.38 mgd.

Table 3. Spring Summary by County.

County	Dixie	Jefferson	Lafayette	Levy	Taylor
Total Number	4	16	2	4	30*
Previously Cataloged	0	11	2	2	9
Magnitude					
1 st		1			2
2 nd	1	13		2	13
3 rd	3	2		2	10
4 th			2		2
Total Flow (cfs)	49.78	532.42	1	53.19	1093.88
Total Flow (mgd)	31.86	340.74	0.64	34.04	700.1
Range Nitrate-N (mg L ⁻¹)	0.09 to 0.26	<0.01 to 0.39	<0.02 to 0.06	<0.02 to 0.65	<0.02 to 0.38
Basin					
Aucilla					1
Coastal				1	12
Econfina					1
Fenholloway					9
Steinhatchee	4		2		7
Waccasassa				3	
Wacissa		16			

* Three springs were not field-visited due to limited access.

Table 4. Spring Summary by Basin.

Basin	Aucilla	Coastal	Econfina	Fenholloway	Steinhatchee	Waccasassa	Wacissa
Total Number	1	13	1	9*	13	3	16
Previously cataloged		4		5	2	2	11
Magnitude							
1 st	1				1		1
2 nd		9	1	1	3	2	13
3 rd		4		4	6	1	2
4 th				1	3		
Total Flow (cfs)	400	219.72	6	25.93	498.01	48.19	532.42
Total Flow (mgd)	256	140.62	3.84	16.6	318.73	30.84	340.75
Range Nitrate-N (mg L ⁻¹)	0.08	<0.02 to 0.07	<0.02	<0.02 to 0.38	<0.02 to 0.26	0.03 to 0.65	<0.01 to 0.39

* Three springs were not field-visited due to limited access.

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Aucilla River Spring



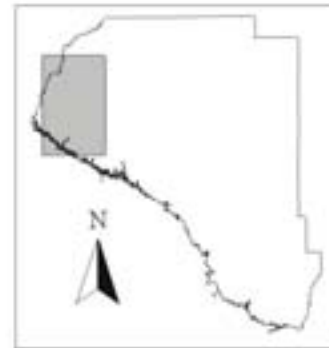
Note:
This map was prepared for informational purposes and
does not conform to National Map Accuracy Standards.

SWIM

Taylor County



Note
This map was prepared for informational purposes and
does not conform to National Map Accuracy Standards



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
1	Nutall Rise	No	13	400	1

SWIM

Nuttall Rise

The spring is surrounded by private property. The pool area is approximately 300 feet wide and maximum depth is approximately 20 feet.

Latitude: 30° 09' 00"
Longitude: 83° 57' 53"
County: Taylor
Historic Data: Yes
River Basin: Aucilla

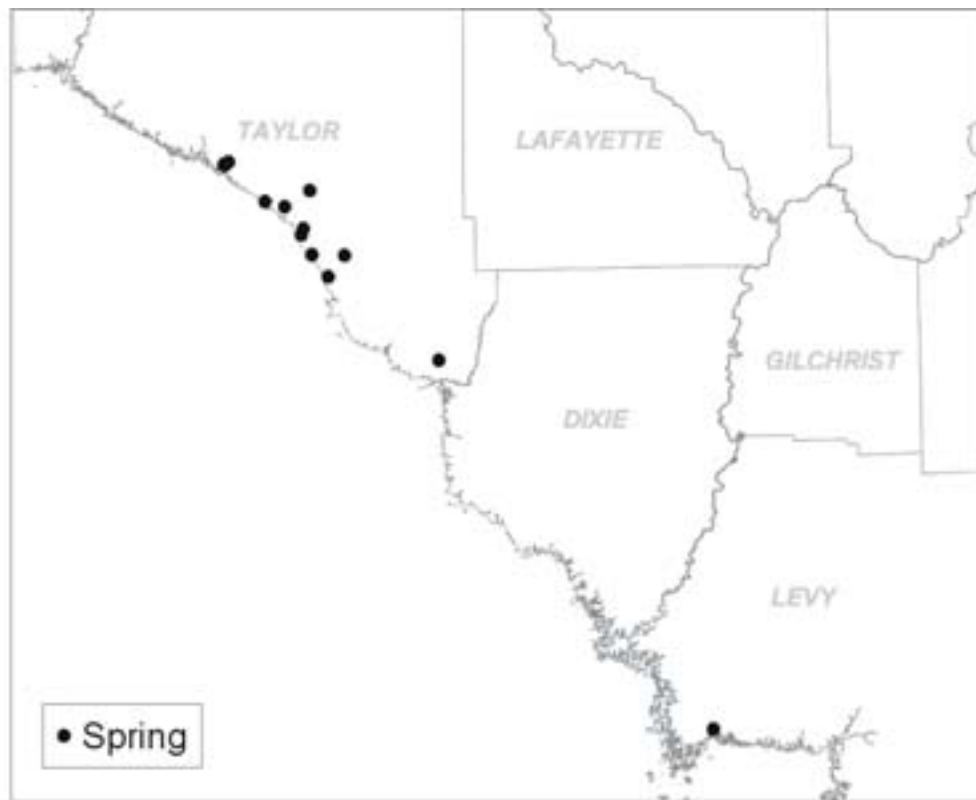
Parameters	Value
Sp. Conductance	229
pH	7.15
Temperature	25.1
Nitrate nitrogen	0.08
Discharge (cfs)	400 est.
Discharge (mgd)	256 est.
Magnitude	1
Date sampled	7/6/99



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SWIM

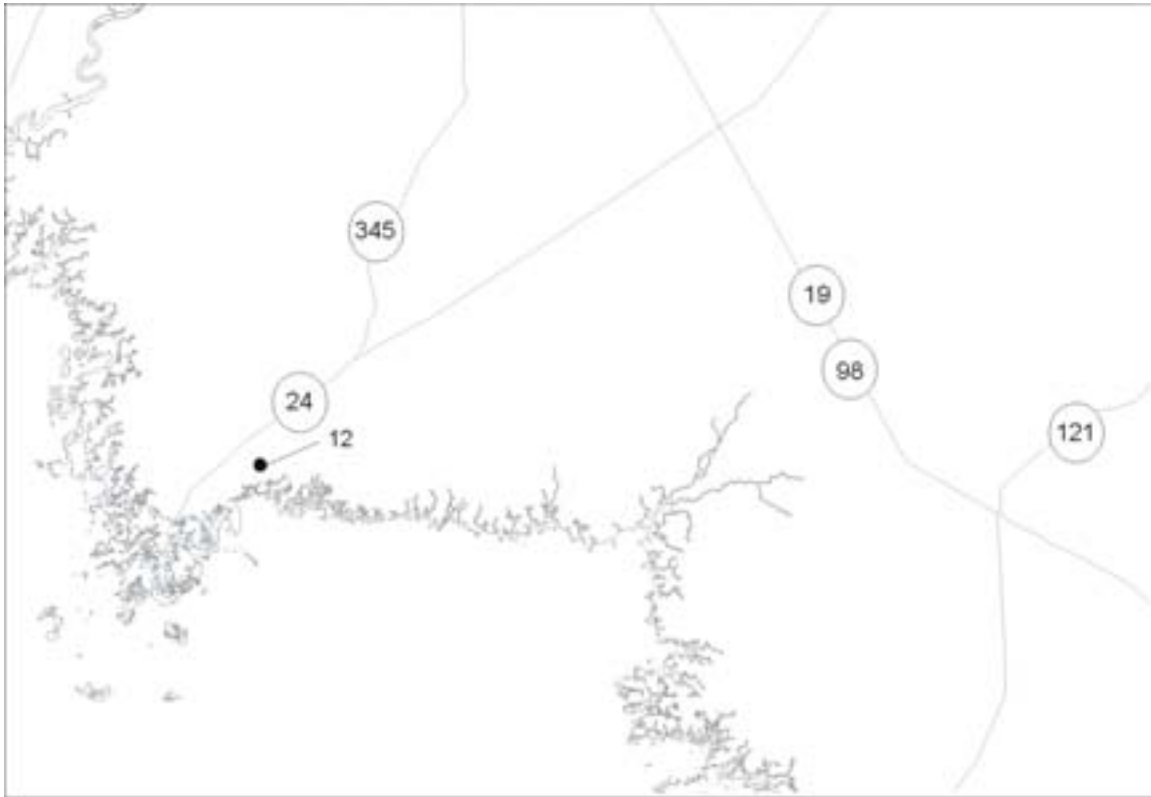
Coastal Springs



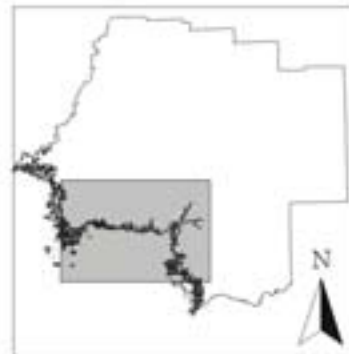
Note:
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SWIM

Levy County



Note:
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 does not conform to National Map Accuracy Standards



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
12	LEV97991	No	16	5	3

SWIM

LEV97991

The spring is surrounded by posted private property. The spring is the headwaters of Spring Creek. The pool area is 25 feet wide with a maximum depth of 8 feet.

Latitude: 29° 11' 30"
Longitude: 82° 59' 19"
County: Levy
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	1,957
pH	6.93
Temperature	24.64
Nitrate nitrogen	<0.02
Discharge (cfs)	5 est.
Discharge (mgd)	3.2 est.
Magnitude	3
Date sampled	9/7/99



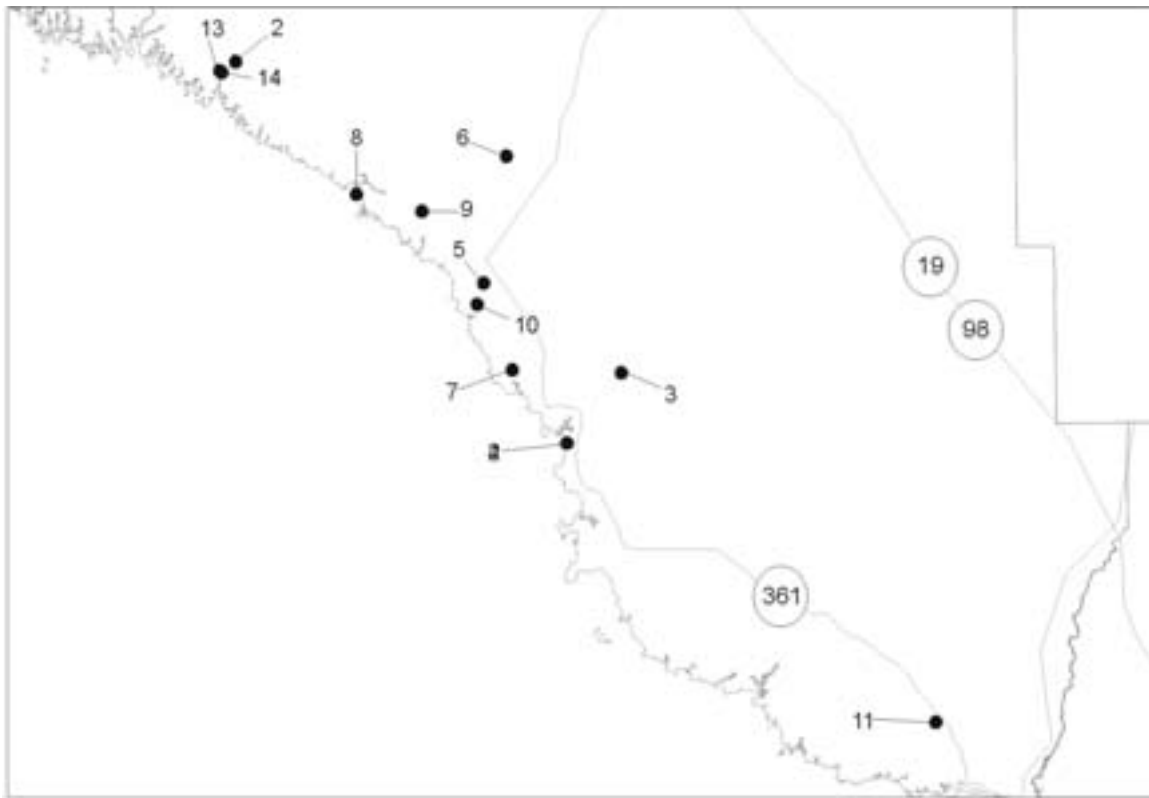
Comments:

There is a very pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water.

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SWIM

Taylor County



Note
This map was prepared for informational purposes and
does not conform to National Map Accuracy Standards



SWIM

Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
2	Big	Yes	19	18.42	2
3	Blue	Yes	19	10	2
4	Cedar Island	Yes	20	15	2
5	Jabo	No	20	6.72	2
6	Spring Warrior	Yes	21	23.16	2
8	TAY616991	No	21	15	2
9	TAY616992	No	22	33.36	2
10	TAY622991	No	22	50	2
7	TAY819991	No	23	28.95	2
11	Bradley	No	23	5.47	3
14	TAY69991	No	24	3.64	3
13	TAY69992	No	24	5	3

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SWIM

Big

The spring is located in Big Spring Creek Wildlife Management Area. The pool area is approximately 150 feet wide and maximum depth is approximately 33 feet. The bottom and exposed limestone are covered with green algae. The water is cloudy due to the dissolved iron. The run is approximately 5,000 feet long.

Latitude: 29° 58' 27"
Longitude: 83° 44' 20"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	616
pH	7.15
Temperature	21.32
Nitrate nitrogen	0.07
Discharge (cfs)	18.42
Discharge (mgd)	11.79
Magnitude	2
Date sampled	6/9/99



Blue

The spring is surrounded by posted private property. The pool area is approximately 40 feet wide with a maximum depth of 4 feet. Three boils are present in the pool area. There is an H₂S odor associated with the spring water. The run was modified to create a lake in the early 1950's.

Latitude: 29° 50' 41"
Longitude: 83° 33' 28"
County: Taylor
Historic Data: Yes
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	<0.02
Discharge (cfs)	10 est.
Discharge (mgd)	6.4 est.
Magnitude	2
Date sampled	9/24/99



Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

SWIM

Cedar Island

The spring is surrounded by private property. The pool area is approximately 150 feet wide and maximum depth is approximately 7 feet, which varies with tides. The water was slightly cloudy.

Also known As: Sandpiper
Latitude: 29° 48' 57"
Longitude: 83° 35' 01"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	23,970
pH	6.86
Temperature	25.30
Nitrate nitrogen	<0.02
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	6/22/99



Jabo

The spring is surrounded by private property and the property is posted. The spring forms two pool areas each approximately 200 feet wide with a maximum depth of 4 feet.

Latitude: 29° 52' 56"
Longitude: 83° 37' 21"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	256
pH	7.09
Temperature	24.09
Nitrate nitrogen	<0.02
Discharge (cfs)	10.5
Discharge (mgd)	6.72
Magnitude	2
Date sampled	6/22/99



SWIM

Spring Warrior

The spring is surrounded by private property and the property is posted. The headspring was not located due to lack of access. The spring forms the head waters of Spring Warrior creek.

Latitude: 29° 56' 04"
Longitude: 83° 36' 41"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	355
pH	7.02
Temperature	22.19
Nitrate nitrogen	<0.02
Discharge (cfs)	23.16
Discharge (mgd)	14.82
Magnitude	2
Date sampled	7/6/99

Comments:

There is a very pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water.

TAY616991

The spring is located approximately 300 feet southwest of the mouth of Spring Warrior creek in the Gulf of Mexico. There is a boil approximately 3 feet in diameter associated with this spring.

Latitude: 29° 55' 09"
Longitude: 83° 40' 56"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	12,641
pH	6.95
Temperature	21.34
Nitrate nitrogen	<0.02
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	6/16/99

SWIM

TAY616992

The spring is surrounded by private property and the property is posted. The spring is a tributary of Little Spring Creek.

Latitude: 29° 54' 43"
Longitude: 83° 39' 05"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	413
pH	6.40
Temperature	21.06
Nitrate nitrogen	0.07
Discharge (cfs)	33.36
Discharge (mgd)	21.35
Magnitude	2
Date sampled	6/16/99



Comments:

There is a very pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water.

TAY622991

The spring is surrounded by private property and the property is posted. There are two spring vents associated with this spring system. The upper spring had a discharge of 11.29 cfs. The combined discharge was an estimated 50 cfs. There is a boil associated with the upper spring which is approximately 2 feet in diameter.

Latitude: 29° 52' 24"
Longitude: 83° 37' 32"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	372
pH	7.11
Temperature	21.28
Nitrate nitrogen	<0.02
Discharge (cfs)	50 est.
Discharge (mgd)	32 est.
Magnitude	2
Date sampled	6/22/99



SWIM

TAY819991

The spring is surrounded by private property and the property is posted. The spring is a tributary of Sweet Water Creek. A boil is present that is approximately 4 feet in diameter. The pool area is approximately 60 feet wide with a maximum depth of 3 feet.

As Known As: Jug Island
Latitude: 29° 50' 47"
Longitude: 83° 36' 33"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	452
pH	7.12
Temperature	22.26
Nitrate nitrogen	0.03
Discharge (cfs)	28.95
Discharge (mgd)	18.53
Magnitude	2
Date sampled	8/19/99

Comments:

There is a very pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water.

Bradley

A public park surrounds the spring. The pool has been enclosed in the past for bathing. There is an H₂S odor associated with the spring water.

Latitude: 29° 42' 00"
Longitude: 83° 24' 40"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	0.02
Discharge (cfs)	5.47
Discharge (mgd)	3.50
Magnitude	3
Date sampled	6/22/99

Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

SWIM

TAY69991

The spring is located in a tidal salt marsh near Big Spring creek. A boil is present that is approximately 2.5 feet in diameter.

Latitude: 29° 58' 11"
Longitude: 83° 44' 43"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	23,699
pH	6.99
Temperature	22.67
Nitrate nitrogen	0.06
Discharge (cfs)	5 est.
Discharge (mgd)	3.2 est.
Magnitude	3
Date sampled	6/9/99



TAY69992

The spring is located in a tidal salt marsh near Big Spring creek.

Latitude: 29° 58' 14"
Longitude: 83° 44' 47"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	8,754
pH	7.44
Temperature	21.87
Nitrate nitrogen	0.05
Discharge (cfs)	3.64
Discharge (mgd)	2.33
Magnitude	3
Date sampled	6/22/99



SWIM

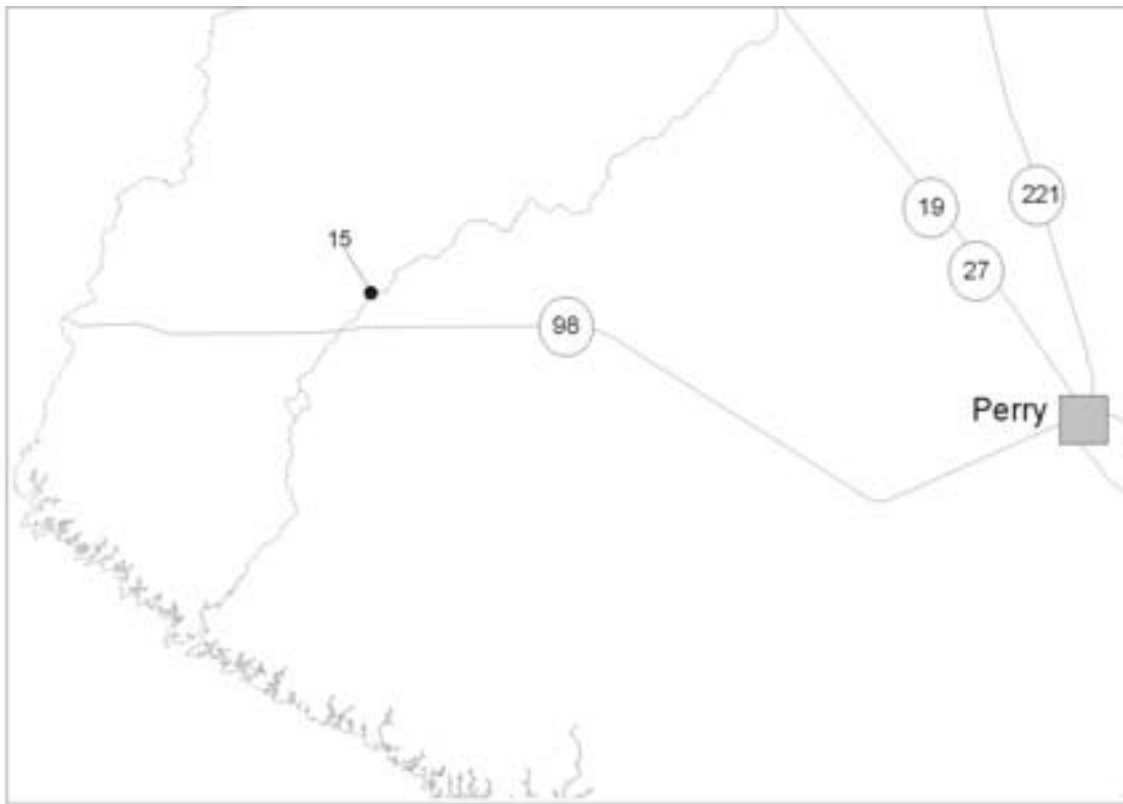
Econfina River Spring



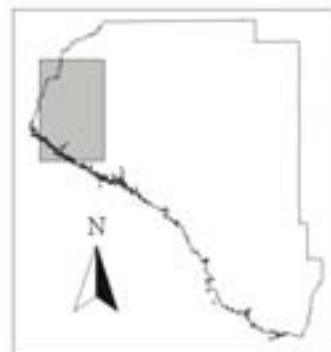
Note:
This map was prepared for informational purposes and
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SWIM

Taylor County



Note:
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does not conform to National Map Accuracy Standards.



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
15	TAY730991	No	27	6	2

SWIM

TAY730991

Spring flow is from a fracture approximately 4 feet long in the riverbed. SRWMD lands are adjacent to the spring. A boil is present with a diameter of 4 feet.

Latitude: 30° 09' 12"
Longitude: 83° 51' 20"
County: Taylor
Historic Data: No
River Basin: Coastal

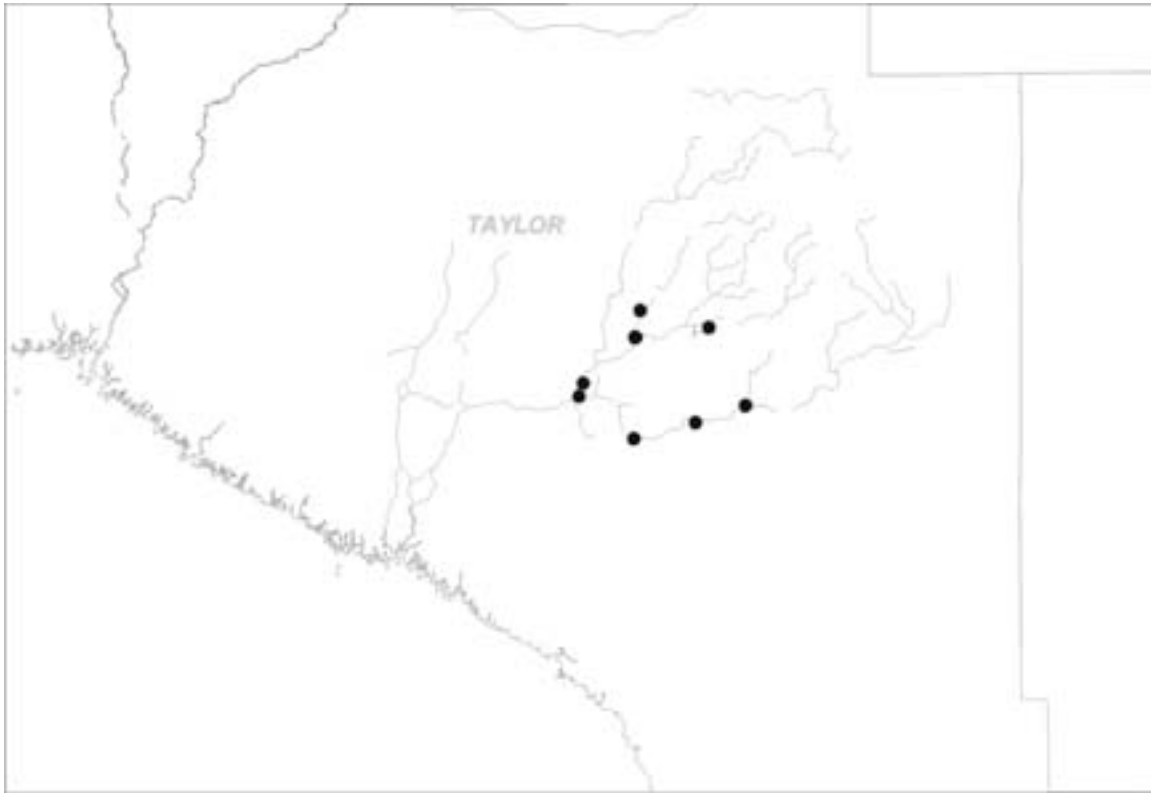
Parameters	Value
Sp. Conductance	393
pH	7.24
Temperature	23.67
Nitrate nitrogen	<0.02
Discharge (cfs)	6 est.
Discharge (mgd)	3.84 est.
Magnitude	3
Date sampled	7/30/99



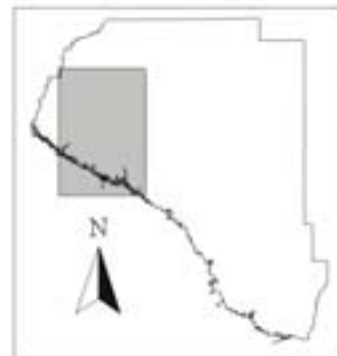
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SWIM

Fenholloway River Springs

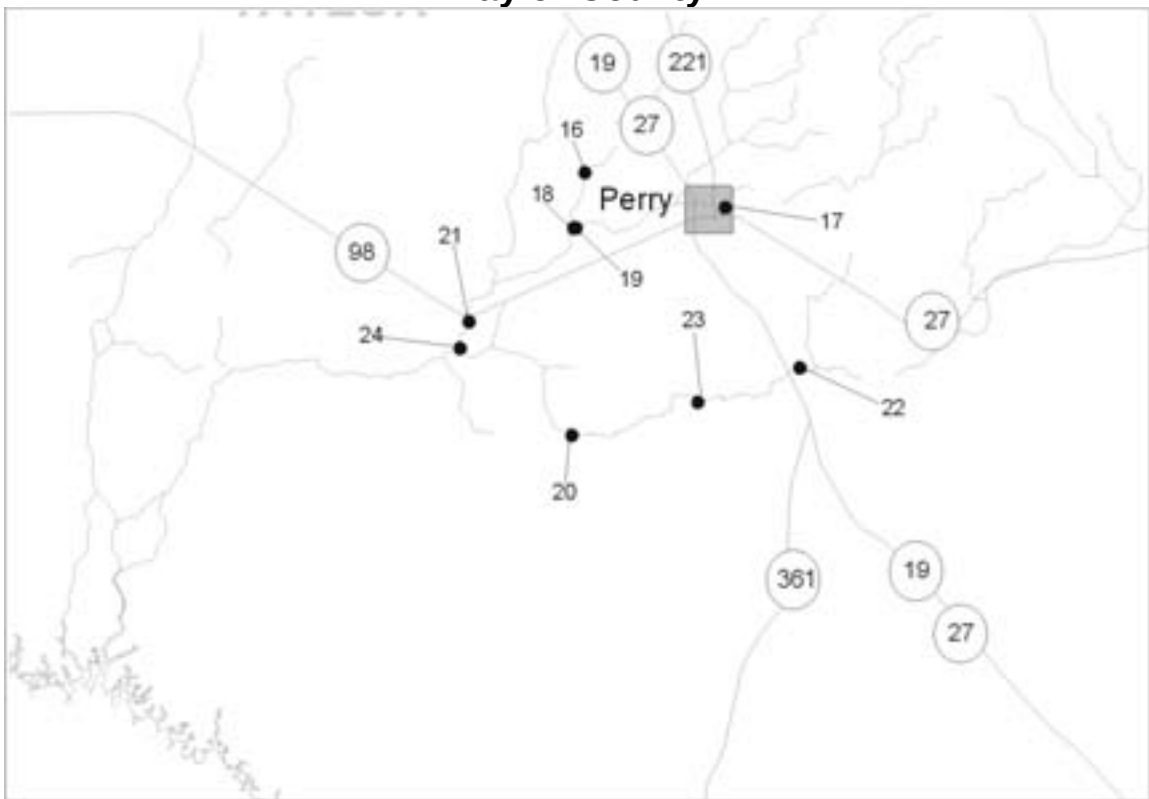


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SWIM

Taylor County



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
16	Woods Creek Rise	No	30	16.55	2
17	Folsom	No	30	2	3
20	Waldo	Yes	31	3.17	3
19	TAY924991	No	31	1	3
18	TAY924993	No	32	3	3
21	Hampton	Yes	32	0.213	4
22	Camp Ground	Yes	33		
23	Carlton	Yes	33		
24	Ewing	Yes	33		

SWIM

Woods Creek Rise

The spring is surrounded by private property. The pool area is approximately 75 feet wide with a maximum depth of 8 feet. The run is filled with green filamentous algae.

Latitude: 30° 07' 26"
Longitude: 83° 37' 27"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	351
pH	7.10
Temperature	22.07
Nitrate nitrogen	0.38
Discharge (cfs)	16.55
Discharge (mgd)	10.59
Magnitude	2
Date sampled	8/7/99



Folsom

A public park surrounds the spring. The pool area receives stormwater input and is closed to swimming. The pool area and run was covered with duckweed and filamentous algae.

Latitude: 30° 06' 49"
Longitude: 83° 34' 41"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	313
pH	6.73
Temperature	22.22
Nitrate nitrogen	<0.02
Discharge (cfs)	2 est.
Discharge (mgd)	1.28 est.
Magnitude	3
Date sampled	9/24/99



SWIM

Waldo

The spring is located in a public park. The pool area is approximately 75 feet wide and was covered with duckweed. The run is approximately 100 feet long.

Latitude: 30° 02' 56"
Longitude: 83° 37' 47"
County: Taylor
Historic Data: Yes
River Basin: Coastal

Parameters	Value
Sp. Conductance	360
pH	7.65
Temperature	22.34
Nitrate nitrogen	0.06
Discharge (cfs)	3.17
Discharge (mgd)	2.03
Magnitude	3
Date sampled	6/15/99



Comments:

There is a very pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water.

TAY924991

The spring is surrounded by private property. The pool area water level was raised by 1 to 1.5 feet due to a beaver dam across the run.

Latitude: 30° 06' 29"
Longitude: 83° 37' 38"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	0.03
Discharge (cfs)	1 est.
Discharge (mgd)	0.64 est.
Magnitude	3
Date sampled	9/24/99



SWIM

TAY924993

The spring is located in the bed of Spring Creek. There are two boils associated with this spring. The creek channel around the spring is filled with hydrilla.

Latitude: 30° 06' 29"
Longitude: 83° 37' 41"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	0.26
Discharge (cfs)	3 est.
Discharge (mgd)	1.92 est.
Magnitude	3
Date sampled	9/24/99



Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

Hampton

The spring is located on the bank of Spring Creek. There is a strong H₂S odor associated with the water. The area around the spring was developed into a hotel and resort and was surrounded by concrete to create a swimming pool and bathing area.

Latitude: 30° 04' 53"
Longitude: 83° 39' 46"
County: Taylor
Historic Data: Yes
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	<0.02
Discharge (cfs)	0.213
Discharge (mgd)	0.136
Magnitude	4
Date sampled	6/9/99



Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

SWIM

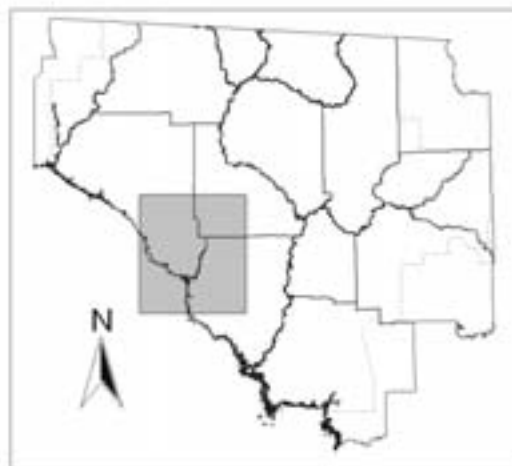
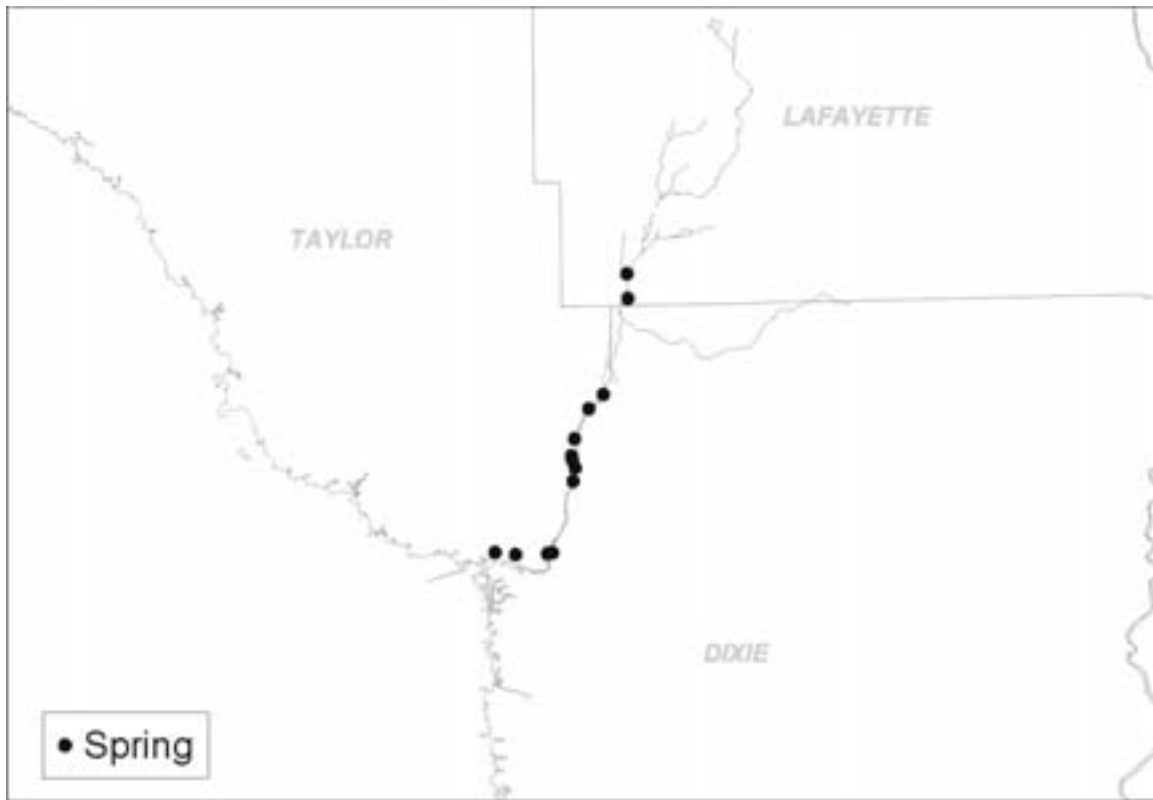
Other Known Springs

Spring	Latitude	Longitude	Historical Data
Carlton	30° 03' 29"	83° 35' 15"	Yes
Camp Ground	30° 04' 03"	83° 33' 14"	No
Ewing	30° 04' 26"	83° 39' 57"	No

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SWIM

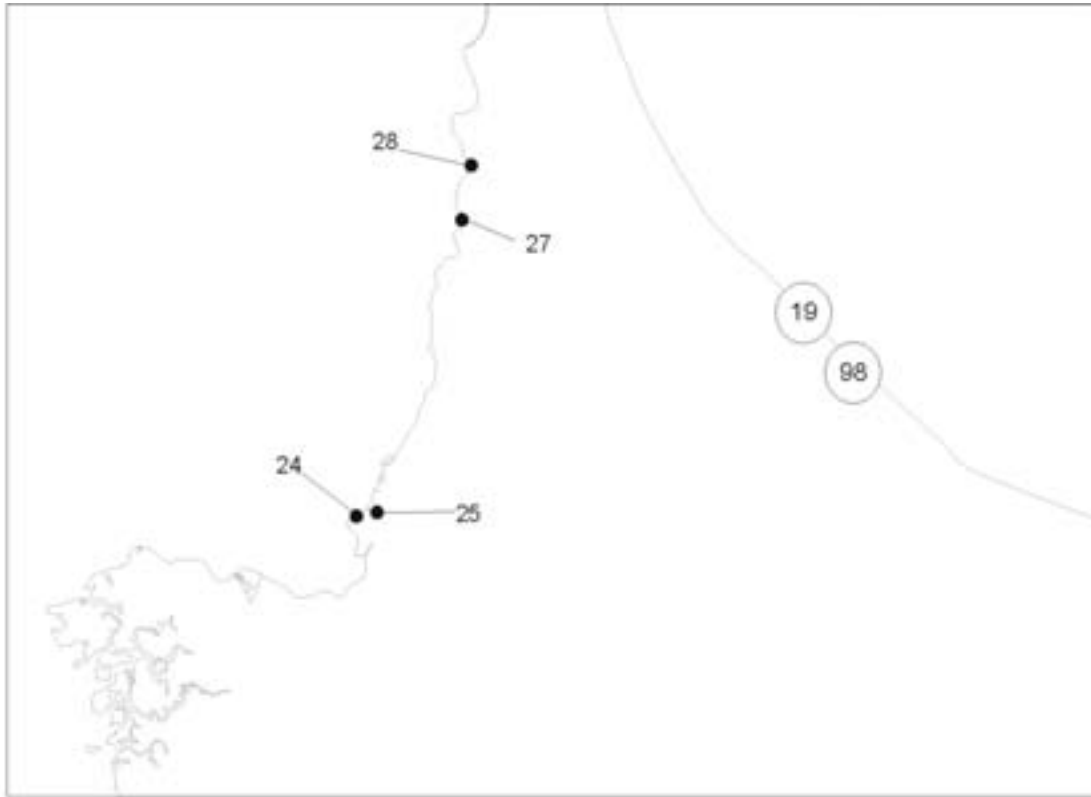
Steinhatchee River Springs



Note:
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does not conform to National Map Accuracy Standards.

SWIM

Dixie County



Note:
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does not conform to National Map Accuracy Standards



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
25	DIX625993	No	36	35.35	2
28	DIX625991	No	36	6.74	3
27	DIX625992	No	37	1	3
26	DIX625994	No	37	6.69	3

SWIM

DIX625993

The spring flows from the base of a lime rock outcrop. The spring water has a yellowish-brown color.

Latitude: 29° 40' 37"
Longitude: 83° 21' 38"
County: Dixie
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	13,757
pH	7.12
Temperature	25.58
Nitrate nitrogen	0.17
Discharge (cfs)	35.35
Discharge (mgd)	22.62
Magnitude	2
Date sampled	6/25/99



DIX625991

SRWMD lands surround the spring system, which consist of a series of spring vents. The run is approximately 4,000 feet long.

Latitude: 29° 43' 36"
Longitude: 83° 20' 40"
County: Dixie
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	1,354
pH	7.30
Temperature	25.0
Nitrate nitrogen	0.09
Discharge (cfs)	6.74
Discharge (mgd)	4.31
Magnitude	3
Date sampled	6/25/99



SWIM

DIX625992

Public lands surround the spring. There is an H₂S odor associated with spring water.

Latitude: 29° 43' 08"
Longitude: 83° 20' 46"
County: Dixie
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	0.17
Discharge (cfs)	1 est.
Discharge (mgd)	0.64 est.
Magnitude	3
Date sampled	6/25/99



Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

DIX625994

Private property surrounds the spring. The run is approximately 60 feet long. The spring flows from the base of a lime rock outcrop.

Latitude: 29° 40' 33"
Longitude: 83° 21' 50"
County: Dixie
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	8,030
pH	7.31
Temperature	24.5
Nitrate nitrogen	0.26
Discharge (cfs)	6.69
Discharge (mgd)	4.28
Magnitude	3
Date sampled	6/25/99

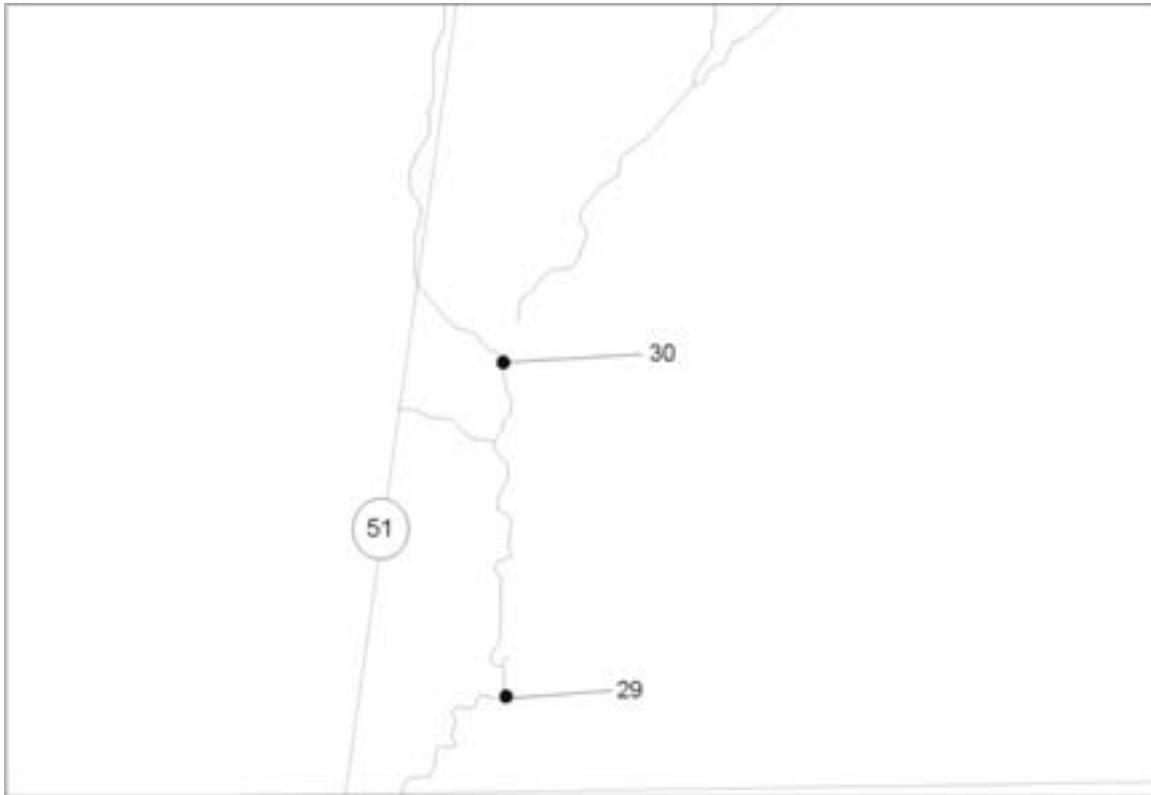


Comments:

Pieces of pottery jars were found in the spring run. The spring was apparently used for a source of water in the past.

SWIM

Lafayette County



Note
This map was prepared for informational purposes and
does not conform to National Map Accuracy Standards



Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
30	Steinhatchee	Yes	38	0.5	4
29	Iron	Yes	38	0.5	4

SWIM

Steinhatchee

The spring is located in a public park. The spring has been enclosed to create a bathing pool. There is a strong H₂S odor associated with the spring water.

Latitude: 29° 50' 28"
Longitude: 83° 18' 29"
County: Lafayette
Historic Data: Yes
River Basin: Coastal



Parameters	Value
Sp. Conductance	793
pH	6.94
Temperature	20.2
Nitrate nitrogen	0.06
Discharge (cfs)	0.5 est.
Discharge (mgd)	0.32 est.
Magnitude	4
Date sampled	4/12/99

Iron

The spring flows from the base of the riverbank. A slight H₂S odor is associated with the water.

Latitude: 29° 49' 35"
Longitude: 83° 18' 28"
County: Dixie
Historic Data: No
River Basin: Coastal

Picture not available.

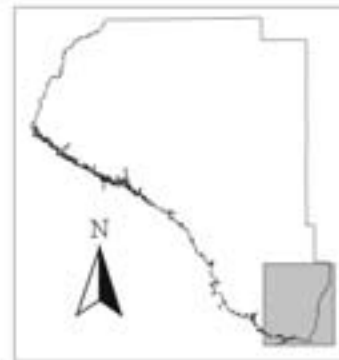
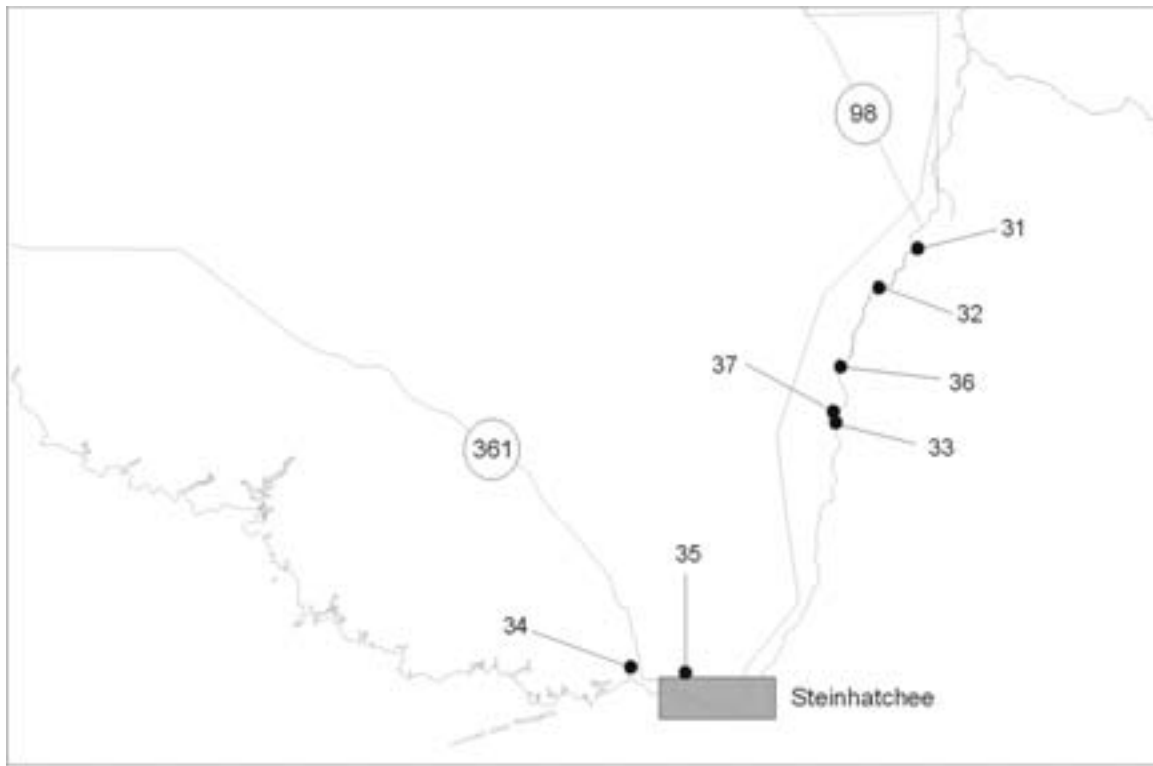
Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	<0.02
Discharge (cfs)	0.5 est.
Discharge (mgd)	0.32 est.
Magnitude	4
Date sampled	10/12/99

Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

SWIM

Taylor County



Note:
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does not conform to National Map Accuracy Standards

Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
31	Steinhatchee Rise	No	41	350	1
33	TAY625993	No	41	15	2
32	TAY76992	No	42	74.98	2
34	Eva	No	42	1.72	3
36	TAY625991	No	43	1.33	3
35	TAY76991	No	43	4	3
37	TAY625995	No	44	0.2	4

SWIM

Steinhatchee Rise

SRWMD lands surround the spring. The spring discharges tannic colored water (blackwater).

Latitude: 29° 46' 12"
Longitude: 83° 19' 30"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	213
pH	6.71
Temperature	25.5
Nitrate nitrogen	0.03
Discharge (cfs)	350 est.
Discharge (mgd)	224 est.
Magnitude	1
Date sampled	7/6/99



Comments:

This spring is the re-emergence of the Steinhatchee River, which goes underground approximately 3 miles upgradient of the spring.

TAY625993

The spring flows from a fracture in the riverbed, which is approximately 6 feet long. A boil is present with a diameter of approximately 3 feet. There is an H₂S odor associated with the spring water.

Latitude: 29° 43' 53"
Longitude: 83° 20' 47"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	<0.02
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	6/25/99



Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

SWIM

TAY76992

SRWMD lands surround the spring. The pool area is approximately 60 feet wide. The run is approximately 1,500 feet long.

Latitude: 29° 45' 41"
Longitude: 83° 20' 06"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	502
pH	7.12
Temperature	20.92
Nitrate nitrogen	<0.02
Discharge (cfs)	74.98
Discharge (mgd)	47.98
Magnitude	2
Date sampled	7/6/99

Comments:

There is a pronounced copper-colored staining of the bank and trees surrounding the spring due to iron deposition from the spring water. The run has been modified in the past to accommodate a water powered mill.

Eva

The spring is surrounded by private property. The pool area is lined with concrete and the pool area is approximately 60 feet wide. A boil is present and the maximum depth is 8 feet. The water has a greenish color.

Latitude: 29° 40' 39"
Longitude: 83° 23' 57"
County: Taylor
Historic Data: No
River Basin: Coastal



Parameters	Value
Sp. Conductance	563
pH	6.98
Temperature	21.77
Nitrate nitrogen	<0.02
Discharge (cfs)	1.72
Discharge (mgd)	1.10
Magnitude	3
Date sampled	6/25/99

SWIM

TAY625991

SRWMD lands surround the spring. The run is filled with aquatic weeds.

Latitude: 29° 44' 38"
Longitude: 83° 20' 42"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	428
pH	7.15
Temperature	23.77
Nitrate nitrogen	0.02
Discharge (cfs)	1.33
Discharge (mgd)	0.85
Magnitude	3
Date sampled	6/25/99



TAY76991

The spring is surrounded by private property. The pool area is approximately 25 feet wide. A boil is present with a diameter of 1 foot.

Latitude: 29° 40' 34"
Longitude: 83° 23' 07"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	417
pH	6.83
Temperature	21.37
Nitrate nitrogen	0.02
Discharge (cfs)	4 est.
Discharge (mgd)	2.56 est.
Magnitude	3
Date sampled	7/6/99



SWIM

TAY625995

The spring flows from a small cave at the base of the riverbank. There is a H₂S odor associated with the spring water.

Latitude: 29° 44' 02"
Longitude: 83° 20' 49"
County: Taylor
Historic Data: No
River Basin: Coastal

Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	<0.02
Discharge (cfs)	0.2 est.
Discharge (mgd)	0.13 est.
Magnitude	4
Date sampled	6/25/99



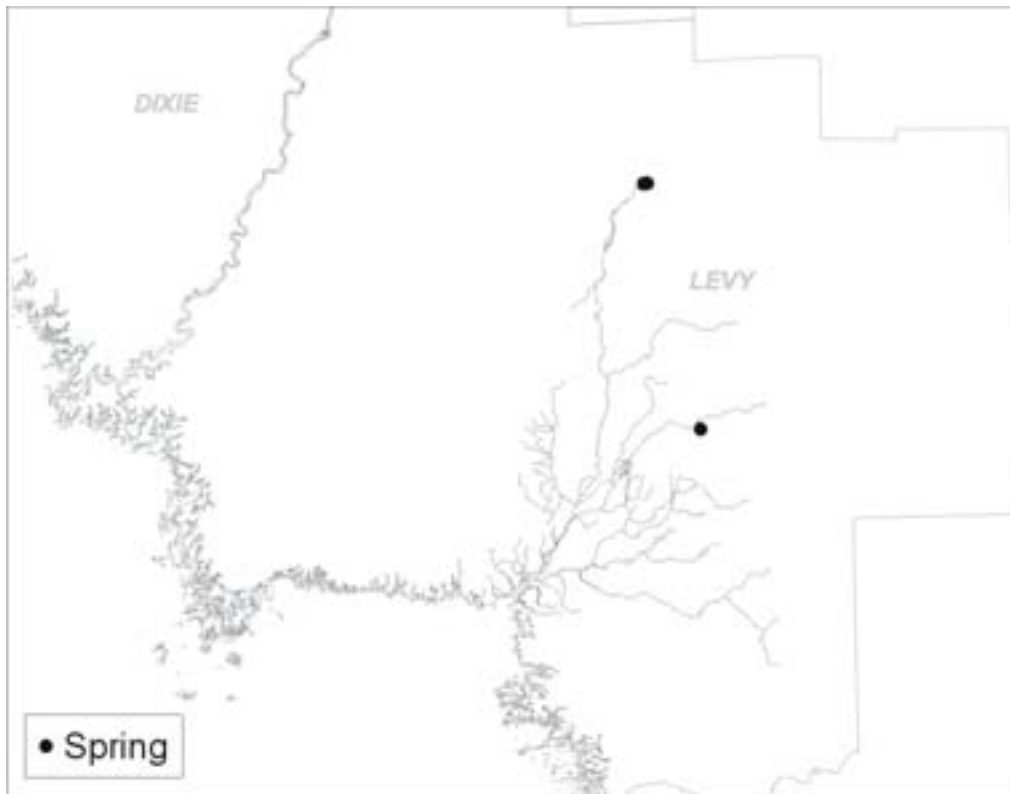
Comments:

Conductivity, pH, and temperature were not collected to prevent fouling of the probes by H₂S in the water.

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SWIM

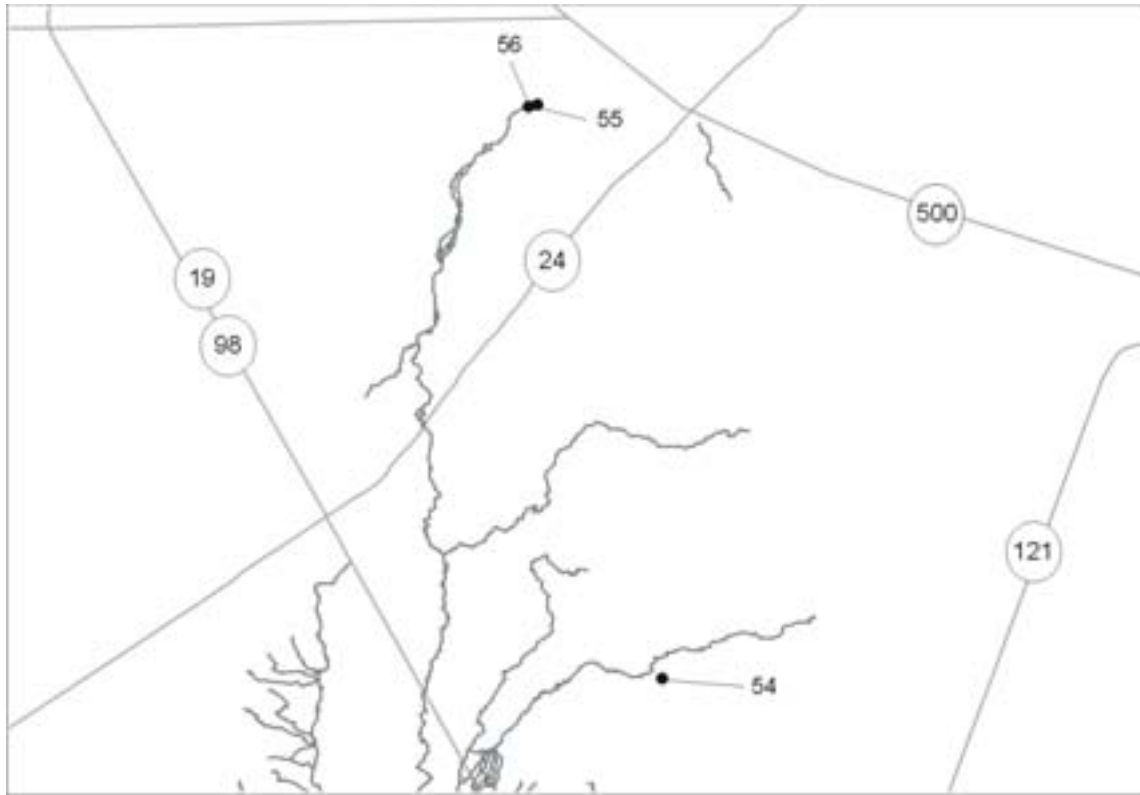
Waccasassa River Springs



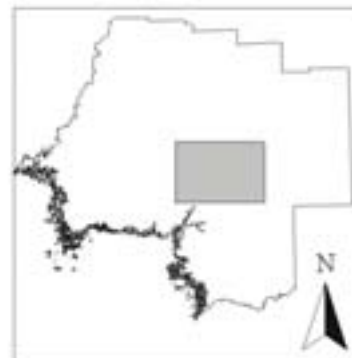
Note:
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SWIM

Levy County



Note:
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Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
54	Wekiva	Yes	47	26.28	2
55	LEV719991	No	47	15	2
56	Blue	Yes	48	6.91	3

SWIM

Wekiva

The spring is surrounded by private property and the property is posted. The spring water has a bluish color. There are two boils present. The main pool area is approximately 110 feet wide. The run is approximately 70 feet long.

Latitude: 29° 16' 42"
Longitude: 82° 39' 22"
County: Levy
Historic Data: Yes
River Basin: Waccasassa



Parameters	Value
Sp. Conductance	194
pH	7.05
Temperature	22.9
Nitrate nitrogen	0.43
Discharge (cfs)	26.28
Discharge (mgd)	16.82
Magnitude	2
Date sampled	7/30/97

LEV719991

The spring is surrounded by private property and the property is posted. The pool area is approximately 100 feet wide with a maximum depth of 12 feet. A boil is present with a diameter of 3 feet. The water has a bluish color.

Latitude: 29° 27' 03"
Longitude: 82° 41' 43"
County: Levy
Historic Data: No
River Basin: Waccasassa



Parameters	Value
Sp. Conductance	213
pH	7.03
Temperature	22.38
Nitrate nitrogen	0.03
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	7/19/99

SWIM

Blue

The spring is located in a county park and an entrance fee is required. The pool area is approximately 230 feet wide with a maximum depth of 15 feet.

Latitude: 29° 27' 02"
Longitude: 82° 41' 55"
County: Levy
Historic Data: Yes
River Basin: Waccasassa

Parameters	Value
Sp. Conductance	216
pH	6.59
Temperature	21.6
Nitrate nitrogen	0.65
Discharge (cfs)	6.91
Discharge (mgd)	4.42
Magnitude	3
Date sampled	9/26/97



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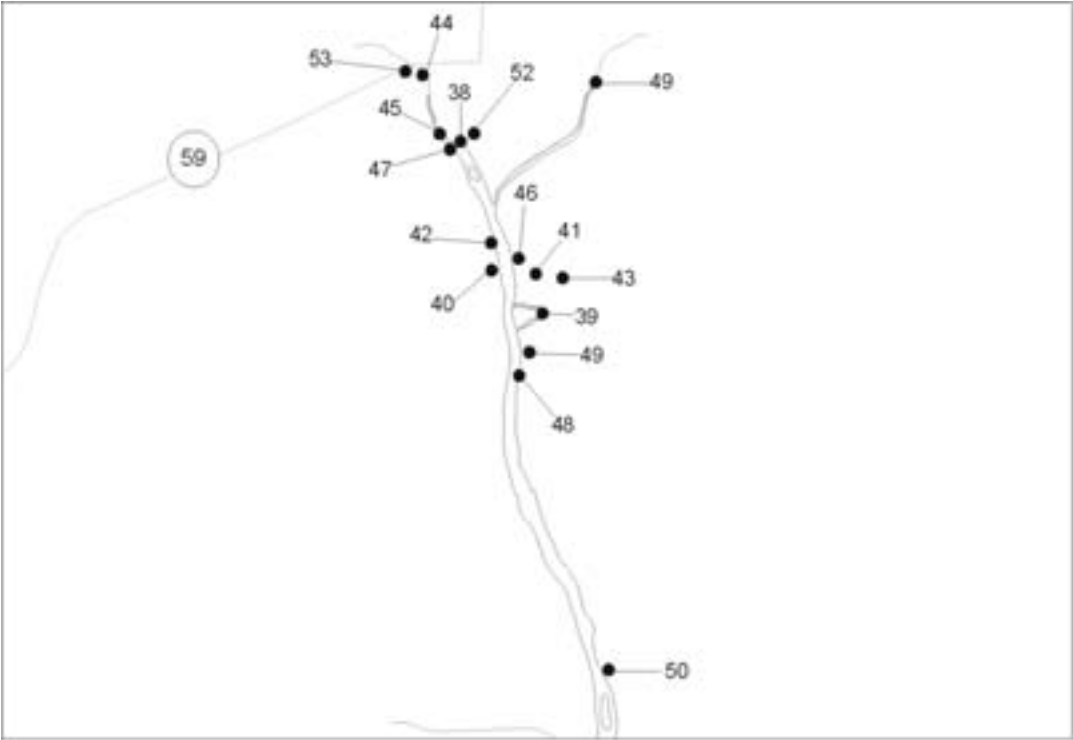
Wacissa River Springs



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does not conform to National Map Accuracy Standards.

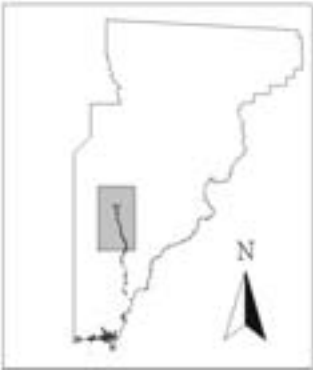
SWIM

Jefferson County



 Roads
 Spring

Note:
This map was prepared for informational purposes and
does not conform to National Map Accuracy Standards



SWIM

Map #	Spring Name	Previously cataloged	Page #	Flow (cfs)	Magnitude
38	Wacissa	Yes	52	200	1
39	Big	Yes	52	44.6	2
40	Blue	Yes	53	10	2
41	Buzzer's Log	Yes	53	15	2
42	Cassida	Yes	54	44.36	2
43	Garner	Yes	54	10	2
44	Horse Head	Yes	55	15	2
45	Log	Yes	55	50	2
46	Minnow	Yes	56	15	2
47	Thomas	Yes	56	30	2
51	JEF63991	No	57	10	2
48	JEF63992	No	57	10	2
50	JEF63993	No	58	25	2
49	JEF64991	No	58	40	2
52	Aucilla	Yes	59	8.81	3
53	JEF312991	No	59	4.65	3

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SWIM

Wacissa

A county park surrounds the spring. The pool area is approximately 150 feet wide with a maximum depth of 14 feet. There are series of three boils associated with this spring. The pool area of the spring is filled with hydrilla.

Latitude: 30° 20' 25"
Longitude: 83° 59' 29"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	281
pH	7.58
Temperature	20.62
Nitrate nitrogen	0.39
Discharge (cfs)	200 est.
Discharge (mgd)	128 est.
Magnitude	1
Date sampled	6/4/99



Big

The spring is surrounded by private property. The pool area is approximately 150 feet wide with a maximum depth of 31 feet. A boil is present with a diameter of 15 feet. The water has a bluish color. The spring forms two runs each approximately 450 feet long. The run and shallow areas of the pool area are filled with hydrilla.

Also Known As: Big Blue
Latitude: 30° 19' 39"
Longitude: 83° 59' 05"
County: Jefferson
Historic Data: Yes
River Basin: Aucilla

Parameters	Value
Sp. Conductance	281
pH	7.35
Temperature	20.15
Nitrate nitrogen	0.17
Discharge (cfs)	44.6
Discharge (mgd)	28.54
Magnitude	2
Date sampled	3/19/99



SWIM

Blue

Private land surrounds the spring. The pool area is approximately 60 feet wide with a maximum depth of 15 feet. A boil is present with a diameter of approximately 2 feet. The run is approximately 400 feet long. The pool area and run are filled with hydrilla, duckweed, and other aquatic weeds.

Latitude: 30° 19' 50"
Longitude: 83° 59' 20"
County: Jefferson
Historic Data: Yes
River Basin: Aucilla

Parameters	Value
Sp. Conductance	263
pH	7.79
Temperature	20.30
Nitrate nitrogen	0.26
Discharge (cfs)	10 est.
Discharge (mgd)	6.4 est.
Magnitude	2
Date sampled	3/19/99



Buzzer's Log

The spring is surrounded by private property. There are two pool areas associated with the spring system. Each is approximately 12 feet wide with a maximum depth of 5 feet. A boil is present in each pool area with a diameter of 3 feet. The run is approximately 450 feet long. The run and pool area are filled with hydrilla.

Latitude: 30° 19' 49"
Longitude: 83° 59' 07"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	266
pH	7.79
Temperature	20.41
Nitrate nitrogen	0.25
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	3/19/99



SWIM

Cassida

Private land surrounds the spring. The pool area is approximately 60 feet wide with a maximum depth of 29 feet. Two boils are present each with a diameter of approximately 5 feet. The run is approximately 50 feet long. The pool area and run are filled with hydrilla and other aquatic weeds.

Latitude: 30° 19' 57"
Longitude: 83° 59' 20"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	308
pH	7.57
Temperature	20.53
Nitrate nitrogen	0.28
Discharge (cfs)	44.36
Discharge (mgd)	28.39
Magnitude	2
Date sampled	6/4/99



Garner

The spring is surrounded by private property. The pool area is approximately 50 feet wide with a maximum depth of 12.5 feet. The run is approximately 800 feet long. The run and pool area are filled with hydrilla.

Latitude: 30° 19' 48"
Longitude: 83° 58' 59"
County: Jefferson
Historic Data: Yes
River Basin: Aucilla

Parameters	Value
Sp. Conductance	278
pH	7.72
Temperature	20.11
Nitrate nitrogen	0.17
Discharge (cfs)	10 est.
Discharge (mgd)	6.4 est.
Magnitude	2
Date sampled	3/19/99



SWIM

Horse Head

The spring is surrounded by private property and the property is posted. The pool area is approximately 100 feet wide with a maximum depth of 5 feet. A boil is present over a fracture. The pool area and run are filled with hydrilla, duckweed, and other aquatic weeds.

Latitude: 30° 20' 40"
Longitude: 83° 59' 40"
County: Jefferson
Historic Data: No
River Basin: Aucilla



Parameters	Value
Sp. Conductance	No Sample
pH	No Sample
Temperature	No Sample
Nitrate nitrogen	0.25
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	3/12/99

Log

The spring flows from a 100-foot long fracture in the bottom of the riverbed. The maximum depth of the spring is 23 feet and a boil is present.

Latitude: 30° 20' 25"
Longitude: 83° 59' 35"
County: Jefferson
Historic Data: No
River Basin: Aucilla



Parameters	Value
Sp. Conductance	231
pH	7.55
Temperature	20.23
Nitrate nitrogen	0.35
Discharge (cfs)	50 est.
Discharge (mgd)	32 est.
Magnitude	2
Date sampled	3/19/99

SWIM

Minnow

Private land surrounds the spring. The pool area is approximately 45 feet wide with a maximum depth of 5 feet. A boil is present. The pool area and run are filled with hydrilla and other aquatic weeds.

Latitude: 30° 19' 53"
Longitude: 83° 59' 12"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	317
pH	7.30
Temperature	20.44
Nitrate nitrogen	0.23
Discharge (cfs)	15 est.
Discharge (mgd)	9.6 est.
Magnitude	2
Date sampled	6/3/99



Thomas

The spring flows from a fracture in the bottom of the riverbed. The maximum depth of the spring is 17 feet. There are two boils present. The riverbed is filled with hydrilla.

Latitude: 30° 20' 21"
Longitude: 83° 59' 32"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	211
pH	7.56
Temperature	20.02
Nitrate nitrogen	0.34
Discharge (cfs)	30 est.
Discharge (mgd)	19.2 est.
Magnitude	2
Date sampled	3/19/99



SWIM

JEF63991

Private land surrounds the spring. The run is filled with hydrilla and other aquatic weeds.

Latitude: 30° 19' 29"
Longitude: 83° 59' 09"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	341
pH	7.21
Temperature	21.03
Nitrate nitrogen	0.17
Discharge (cfs)	10 est.
Discharge (mgd)	6.4 est.
Magnitude	2
Date sampled	6/3/99



JEF63992

Private land surrounds the spring. The run is filled with hydrilla and other aquatic weeds.

Latitude: 30° 19' 23"
Longitude: 83° 59' 12"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	345
pH	7.26
Temperature	21.37
Nitrate nitrogen	0.06
Discharge (cfs)	10 est.
Discharge (mgd)	6.4 est.
Magnitude	2
Date sampled	6/3/99



SWIM

JEF63993

Private land surrounds the spring. The run is filled with hydrilla and other aquatic weeds.

Latitude: 30° 18' 08"
Longitude: 83° 59' 46"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	337
pH	7.21
Temperature	20.33
Nitrate nitrogen	0.13
Discharge (cfs)	25 est.
Discharge (mgd)	16 est.
Magnitude	2
Date sampled	6/3/99



JEF64991

Private land surrounds the spring. The pool area is approximately 75 feet wide. The run is filled with hydrilla and other aquatic weeds.

Latitude: 30° 20' 38"
Longitude: 83° 59' 49"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	314
pH	7.29
Temperature	20.46
Nitrate nitrogen	0.22
Discharge (cfs)	40 est.
Discharge (mgd)	25.6 est.
Magnitude	2
Date sampled	6/4/99



SWIM

Aucilla

The spring is located in a county park. The pool area is approximately 40 feet wide with a maximum depth of 3 feet. There are two boils in the pool area. The run is approximately 120 feet long and is filled with hydrilla and other aquatic weeds.

Latitude: 30° 20' 25"
Longitude: 83° 59' 25"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	284
pH	7.60
Temperature	20.54
Nitrate nitrogen	0.38
Discharge (cfs)	8.81
Discharge (mgd)	5.64
Magnitude	3
Date sampled	6/4/99



JEF312991

Private land surrounds the spring. The spring water is clear with some tannic color. The run discharges into Horse Head spring.

Latitude: 30° 20' 41"
Longitude: 83° 59' 45"
County: Jefferson
Historic Data: No
River Basin: Aucilla

Parameters	Value
Sp. Conductance	274
pH	---
Temperature	---
Nitrate nitrogen	<0.01
Discharge (cfs)	4.65
Discharge (mgd)	2.98
Magnitude	3
Date sampled	3/12/99



SWIM

Appendices

- Appendix A – Historical Data for Aucilla River Spring
- Appendix B – Historical Data for Coastal Springs
- Appendix C – Historical Data for Fenholloway River Springs
- Appendix D – Historical Data for Steinhatchee River Springs
- Appendix E – Historical Data for Waccasassa River Springs
- Appendix F – Historical Data for Wacissa River Springs

Appendix A – Historical Data for Aucilla River Spring

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Taylor	Aucilla	Nutall Rise	4/14/95	162	7.2	20.9	0.07	
Taylor	Aucilla	Nutall Rise	8/22/95	340	7.25	26	0.04	
Taylor	Aucilla	Nutall Rise	10/11/95	459	7.6	23.1	0.07	
Taylor	Aucilla	Nutall Rise	2/16/96	300	7.3	17.3	0.04	
Taylor	Aucilla	Nutall Rise	4/12/96	111	6.49	15.8	0.02	
Taylor	Aucilla	Nutall Rise	7/19/96	344	6.82	26.9	0.08	
Taylor	Aucilla	Nutall Rise	12/16/94	182	7.49	14.6	0.05	
Taylor	Aucilla	Nutall Rise	10/7/94	72	6.69	22.5	0.02	
Taylor	Aucilla	Nutall Rise	10/10/96	94	6.57	18.6	0.08	
Taylor	Aucilla	Nutall Rise	2/21/97	97	6.54	17	0.02	
Taylor	Aucilla	Nutall Rise	4/14/97	259	6.98	19.3	0.05	
Taylor	Aucilla	Nutall Rise	7/10/97	185	7.03	24.5	0.07	
Taylor	Aucilla	Nutall Rise	10/14/97	333	6.7	23.2	0.06	
Taylor	Aucilla	Nutall Rise	1/15/98	164	7.14	15	0.04	
Taylor	Aucilla	Nutall Rise	5/13/98	295	7.17	23.1	0.1	
Taylor	Aucilla	Nutall Rise	9/14/98	134	6.89	23	<0.01	
Taylor	Aucilla	Nutall Rise	10/20/98	130	6.82	21.9	<0.01	
Taylor	Aucilla	Nutall Rise	1/5/99	321	6.8	13.1	0.15	
Taylor	Aucilla	Nutall Rise	4/12/99	293	7.45	24.4	0.11	
Taylor	Aucilla	Nutall Rise	7/6/99	229	7.15	25.1	0.08	

Appendix B – Historical Data for Coastal Springs

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Taylor	Coastal	Blue	12/4/75	290	7.7	21.5		

(Blank)

Appendix C – Historical Data for Fenholloway River Springs

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Taylor	Fenholloway	Carlton	12/5/75	300	7.8	22.5		
Taylor	Fenholloway	Carlton	1/30/79	491	7.4	21.2	0.05	
Taylor	Fenholloway	Hampton	11/21/23			21.1		0.61
Taylor	Fenholloway	Hampton	1/25/29					0.16
Taylor	Fenholloway	Hampton	7/23/46	1320	6.9	22.8		0.47
Taylor	Fenholloway	Hampton	5/3/56					0.05
Taylor	Fenholloway	Hampton	12/8/60					0.18
Taylor	Fenholloway	Hampton	3/23/72	1120	7.6	22		0.21
Taylor	Fenholloway	Hampton	1/30/79	1111	7.19	21.6	0.03	
Taylor	Fenholloway	Hampton	3/2/82	1160		22.2		
Taylor	Fenholloway	Hampton	6/29/82	1033		23.5		
Taylor	Fenholloway	Hampton	5/25/82	1184		22.5		
Taylor	Fenholloway	Hampton	12/8/81	1202		22.6	0.01	
Taylor	Fenholloway	Hampton	9/8/81			23.2		
Taylor	Fenholloway	Hampton	10/7/81	1276		25.5		
Taylor	Fenholloway	Hampton	11/9/81	1215		22.5		
Taylor	Fenholloway	Fenholloway	1/30/79	1010	7.39	21.8	0.02	
Taylor	Fenholloway	Waldo	7/24/46					3.3
Taylor	Fenholloway	Waldo	5/1/56					0
Taylor	Fenholloway	Waldo	12/8/60					7.1
Taylor	Fenholloway	Waldo	3/27/69					6.9
Taylor	Fenholloway	Waldo	6/26/69					4.6
Taylor	Fenholloway	Waldo	4/17/72					4.4
Taylor	Fenholloway	Waldo	1/30/79	424	7.43	19	0.17	

Appendix D – Historical Data for Steinhatchee River Springs

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Lafayette	Steinhatchee	Steinhatchee	4/17/72	760	7.1	20	0.02	
Lafayette	Steinhatchee	Steinhatchee	10/31/72					0.79
Lafayette	Steinhatchee	Steinhatchee	11/9/92	263	7.29	11.7	0.05	
Lafayette	Steinhatchee	Steinhatchee	12/4/92	310	7.34	10.5	0.05	
Lafayette	Steinhatchee	Steinhatchee	6/4/93	765	6.85	20.5	0.05	
Lafayette	Steinhatchee	Steinhatchee	7/12/93	768	6.91	20.7	0.05	
Lafayette	Steinhatchee	Steinhatchee	8/6/93	739	6.93	23	0.06	
Lafayette	Steinhatchee	Steinhatchee	9/9/93	741	6.84	20.3	0.05	
Lafayette	Steinhatchee	Steinhatchee	6/3/94	755	6.93	20.4	0.05	
Lafayette	Steinhatchee	Steinhatchee	9/15/94	771	6.81	20.4	0.05	
Lafayette	Steinhatchee	Steinhatchee	6/9/95	707	6.94	20.2	0.01	
Lafayette	Steinhatchee	Steinhatchee	7/17/95	718	7.05	20.3	0.01	
Lafayette	Steinhatchee	Steinhatchee	8/11/95	724	6.81	20.4	0	
Lafayette	Steinhatchee	Steinhatchee	9/18/95	808	7.03	20.2	0.04	
Lafayette	Steinhatchee	Steinhatchee	6/6/96	793	6.53	20.2	0.04	
Lafayette	Steinhatchee	Steinhatchee	8/8/96	776	6.99	20.1	0	
Lafayette	Steinhatchee	Steinhatchee	6/12/97	751	6.81	20.3	0.01	
Lafayette	Steinhatchee	Steinhatchee	8/18/97	776	6.82	20.1	0.04	

Appendix E – Historical Data for Waccasassa River Springs

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Levy	Waccasassa	Blue	2/15/67					22
Levy	Waccasassa	Blue	6/24/70			23.5		
Levy	Waccasassa	Blue	5/1/72	175		23		
Levy	Waccasassa	Blue	7/11/72	550		23		
Levy	Waccasassa	Blue	6/28/73					4.5
Levy	Waccasassa	Blue	8/4/80	199	8.2	24	0.35	
Levy	Waccasassa	Blue	9/26/97	216	6.59	22.1	0.65	
Levy	Waccasassa	Blue	9/26/97	216	6.59	22.1	0.65	6.91
Levy	Waccasassa	Wekiva	2/1/29					100
Levy	Waccasassa	Wekiva	6/19/67					29
Levy	Waccasassa	Wekiva	4/19/72	156	7.9	23.5	0.07	
Levy	Waccasassa	Wekiva	10/18/78	158	7.65	24	0.11	
Levy	Waccasassa	Wekiva	7/30/97	194	7.05	22.7	0.43	
Levy	Waccasassa	Wekiva	7/30/97	194	7.05	22.7	0.42	26.28

Appendix F – Historical Data for Wacissa River Springs

County	Basin	Spring Name	Date Sampled	Sp. Conductance	pH	Temp (°C)	Nitrate as N	Discharge (cfs)
Jefferson	Aucilla	Big	7/23/46	320	7.4		0.066	
Jefferson	Aucilla	Big	12/7/60	318	7.9	20		
Jefferson	Aucilla	Big NW run	7/16/42					46.7
Jefferson	Aucilla	Big SW run	7/16/42					22.7
Jefferson	Aucilla	Blue	7/16/42					9.43
Jefferson	Aucilla	Blue	12/7/60					2.6
Jefferson	Aucilla	Blue	12/7/60	286	7.9	20	0.16	
Jefferson	Aucilla	Garner	7/16/42					17