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Orlando, FL 32801
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Memo

Date: May 5, 2025
To: Richard Marcil, PMP. Design Project Manager
Organization: Florida Department of Environmental Protection
From: Amy Daly, Director of Environmental Services
Re: **Ordinary High Water Line Determination – Big Shoals State Park Trail Bridge Replacement**
CPH Job No.: F13637

The Florida Department of Environmental Protection (FDEP) is proposing improvements to a trail bridge project within the Big Shoals State Park. The project location is situated adjacent to the Suwannee River. The approximate 1.04-acre Big Shoals Trail Bridge Improvement Project consists of three (3) project locations along the existing Long Branch Trail within the State Park.

A storm event destroyed the trail bridge crossing at Location A (Latitude 30° 21' 19.72" N and Longitude -82° 41' 07.63" W) and the trail is currently closed to the public for safety concerns. The project proposes the replacement of the damaged trail bridge at Location A. The existing trail bridge at Location B (Latitude 30° 21' 18.64" and Longitude -82° 41' 09.22" W) will be replaced with a new trail bridge that meets current design standards. There is a low spot along the dirt trail at Location C (Latitude 30° 21' 14.81" N and Longitude -82° 41' 13.48" W) that is seasonally inundated. The project proposes the construction of a new trail bridge at Location C to improve trail access to the public and to remove trail activity from the jurisdictional limits. The ±1.04-acre project areas at Locations A through C are located just north of the Big Shoals State Park entrance parking area and canoe launch off SE 94th Street within Section 35, Township 1 South, and Range 16 East, Hamilton County (**Figures, Attachment A**). The proposed trail bridge improvements will allow the park to reopen the Long Branch Trail to the public.

The purpose of this memorandum is to document CPH's location of the Ordinary High Water Elevation within and adjacent to the project area. The ACOE requested the OHW be determined and labeled on plans and permit exhibits. CPH first contacted the FDEP to determine if an Ordinary High Water elevation had been established along this area of the Suwannee River. The FDEP Bureau of Survey and Mapping stated the OHW had not be established at this site (**Attachment B**).

The Florida Supreme Court has defined the ordinary high water line (OHWL) as the property line that separates the sovereignty submerged lands beneath navigable freshwater lakes from riparian uplands. (*Trustees of the Internal Improvement Trust Fund vs. Florida National Properties*, 338 So. 2d 13,19 (Fla. 1976)).

The State of Florida relies upon Tilden vs. Smith, 113 So. 708, 94 (Fla. 1927) in the establishment of the ordinary high water. The Tilden vs. Smith case law outlines the physical fact criteria for identifying the ordinary high water line. This case law is used for navigable, nontidal waterbodies and defines the ordinary high water mark as the highest limits of a navigable, nontidal water body as it exists in its ordinary condition.

METHODOLOGY

In making a determination of an OHWL gathering and reviewing data and conducting a field investigation must be conducted. A field investigation was conducted on July 5, 2024.

The presence of water has a distinct character upon the soil and the vegetation. In Florida where topography is relatively flat in most areas, the demarcation on the banks and vegetation may be subtle. Tilden vs. Smith identifies the physical fact criteria necessary to identify the OHWL. The physical fact criteria requires confirmation that the presence of water has destroyed, or will prevent, the value of the land for agricultural purposes by preventing the growth of vegetation. Vegetative indicators can provide a reliable indication to hydrologic regimes as vegetation patterns correspond to hydrologic regimes.

Vegetation should be described from the water to the shoreline to the uplands. Changes of vegetation should be noted. Ancillary indicators which may be observed include, but are not limited to, rafting of organic litter, presence of large wood, leaf litter disturbance or washed away, exposed roots and water staining. A break in slope on the bank should be described if observed. Observations should be taken to identify where the presence and action of water are reoccurring, or ordinary, over a period of time to make a mark on the land that is distinct.

Field investigators should walk up and down the assessment area noting all potential OHWL indicators. Make observations on transitions in vegetation such as species, density and age along with where the observations converge with breaks in the slope. Changes in sediment deposition and erosional features on a bank, changes in vegetation and sediment type are also indicators to record if observed. Man-made disturbances should be recorded as well. Look for the same indicator at multiple locations. Observing multiple indicators at the same elevation is a strong physical fact in identifying the OHWL.

The following information was gathered and reviewed in concert with the physical marking of the OHWL during the field investigation:

- Historical aeriels and maps;
- Hydrologic data; and
- Review of historical permit and regulatory documents pertaining to this area of the Suwannee River.

During the field investigation the following information was recorded to identify the OHWL:

- Vegetation;
- Biological indicators;
- Topographic changes along the shoreline;
- Observable shoreline characteristics; and
- Soils examination.



HISTORICAL DOCUMENTATION

Documents reviewed included historical aerals and hydrologic data collected by USGS.

Historical Aerials

Due to the closed canopy of the forest, aerial interpretation did not provide information to assist with this determination.

Hydrologic Data

Hydrologic data reviewed was obtain from the USGS Water Level Data (waterdata.usgs.gov) The nearest data collection site along the Suwannee River is identified by Data Reference # 02315500 and located at Latitude 30°19'32", Longitude 82°44'18" NAD27 within Columbia County, Florida, Hydrologic Unit 03110201. The drainage area for this portion of the Suwannee River is approximately 2,430.00 square miles. The data presented below is in NGVD29 according to the USGS.

Flood Stages

Minor 74.83

Moderate 80.83

Major 86.83

Historic & Recent Crests

Historic and recent crests recorded by the USGS are provided in **Attachment C**. The hydrologic data referenced to the built environment up stream and down stream of the project area is provided in **Attachment D**. The Ordinary High Water would be below the crest and flood level as a flood it is not an ordinary condition.

FIELD INVESTIGATION

The setting of the OHWL points along the Suwannee River reflect the effects of water or wave action that is ordinary, or common, with observations of topography, biological characteristics, soils, vegetation and ancillary characteristics which match up to have a distinct mark on land. The identification of the OHWL should be ascertained in a natural setting, not an artificial setting consisting of sea walls for example. The water must be allowed to occupy an area to wrest vegetation and/or make a mark upon the topography which culminates with a distinct demarcation upon the land. The presence of water and wave action must be continuous, or ordinary, and have a long-term presence. The OHWL is not the highest high water elevation, not the NHWE and not the lowest water elevation.

Project Area A – Seasonal High Water Elevation (SHWE) set at 76.05. The wetland line elevation is at approximately 78.5. Project Area A is higher in elevation than the Suwannee River which is the receiving water of this tributary. SHWE indicators were not distinct as this is a system that is flowing and stagnant water due to topography is not a characteristic of this system. Season high locations were identified at buttressing and low limits of lichen lines on a sweet gum for two locations. The third location a faint water line was observed on a sweet gum. The ordination high water line was identified by a change in topography with a shelf that indicated water had a distinct mark on the landscape which corresponded with vegetation change. The OHWE is at 75.80.

Project Area B - This intermittent system is narrow and shallow with steep slopes. The location of trail bridge at this wetland area is upslope of the Suwannee River. Water level marks observed on cypress and red maple. The wetland line elevation is at approximately 77.5. Seasonal High Water Elevation (SHWE) set at 76.78. A OHWE is not within this intermittent system due to the nature of the intermittent system.

Project Area C – The SWHE was determined during wetland delineation based on topography and limits of hydrologic vegetation. Water level marks were not observed within this narrow intermittent system. The location of trail bridge at this wetland area is upslope of the Suwannee River. Seasonal High Water Elevation (SHWE) set at 80.92. The wetland line elevation is at approximately 82.0. OHWE is not within this intermittent system.

Ordinary High Water Elevation on the northern side of the Swannee River adjacent to project area

POINTS 1 through 5 - There is a clear indication the water level rose ordinary to a level by the change in topography creating a “step-up” on the land as to physically change the characteristic of the landscape. At the OHWL, the shoreline was steep with debris rafting corresponding with a vegetation change. There was a recent high water event with a higher level of debris rafting. The change in topography and vegetation growth correspond indicating the water or wave action made a distinct mark on the land. The OHWL was located at elevation 72.168, 71.66, 71.602, 71.538, and 70.94, respectively. The OHW elevation at this location was identified as 71.58. Top-of-bank of the river system is at 78 with the recent storm high water elevation identified at 72.79 with the edge-of water identified on the day of the survey at 69. The datum used was NAD 83.

The common attributes observed in the field along Suwannee River included:

- 1) A steep slope from the water edge with a soil ledge;
- 2) The topographic change was always accompanied with more permanent vegetative growth (trees) landward of the OHWL; and
- 3) The topographic change was accompanied by rafted debris immediately downslope, or at, the point where the OHWL was identified along with other ancillary indicators.

SUMMARY CONCLUSION

The OHWL investigation began by researching readily available historical documentation. After review of readily available documentation and data, field investigation was conducted to record observations of the surrounding landscape such as physical characteristics, vegetation, hydrologic indicators and identify altered conditions. In Florida, the topographic relief is typically gradual. This is not the case along this portion of the Suwannee River. The line of the ordinary high water is at times difficult to identify, and therefore, the best evidence and methods should be gathered and used along within reasonable scientific judgement to identify the ordinary high water line.

It is also important to determine relevance, strength and reliability of indicators observed in the field. Indicators are relevant if disturbance such as draught or flooding has not occurred to change the area dramatically. Suwannee River is a dynamic system based on the hydrologic data reviewed and available.

The strength of an indicator is determined by its persistence across the landscape being evaluated. If an observation is seen at all, or the majority of, the assessment points, the indicator strength is high.

The reliability of an indicator is related to determining if that indicator will be observed across the landscape for a significant amount of time. If an indicator persists across seasons, natural disturbances and historical land uses the observation is reliable.

The identification of the OHWL should be ascertained in a natural setting, not an artificial setting. The water must be allowed to occupy an area to wrest vegetation and/or make a mark upon the topography which culminates with a distinct demarcation upon the land. The presence of water and wave action must be continuous, or ordinary, and have a long-term presence. The OHWL is not the highest high water elevation, and not the lowest water elevation.

The OHWL along this portion of the Suwannee River was established by using the physical fact criteria. The common attributes observed in the field along River OHWL included:

- 1) A steep slope from the water's edge to the topographic change;
- 2) The topographic change was always accompanied with more permanent vegetative growth (trees) landward of the OHWL; and
- 3) The topographic change was accompanied by the upper limits of rafted debris immediately downslope, or at, the point where the OHWL was identified along with other ancillary indicators.

The field investigation on July 5, 2024 of the Suwannee River identified indicators and physical marks on the land were reliable, strong and relevant. The indicators were repeated in the assessment areas across the landscape and converged at a break in the topography. Data collected and reviewed corroborated the observations in the field.

Tilden vs. Smith identifies the physical fact criteria necessary to identify the OHWL. The physical fact criteria requires confirmation that the presence of water has destroyed, or will prevent, the value of the land for agricultural purposes by preventing the growth of vegetation. Based on field observation, the presence of water at these locations will prevent the use of the land below the OHWL established for agricultural purposes.

The OHWL investigation has demonstrated the use of appropriate methodology and investigative procedures using technical and scientific observations combined with reasonable scientific judgement has collected and evaluated the best evidence to support the identification of the OHW.

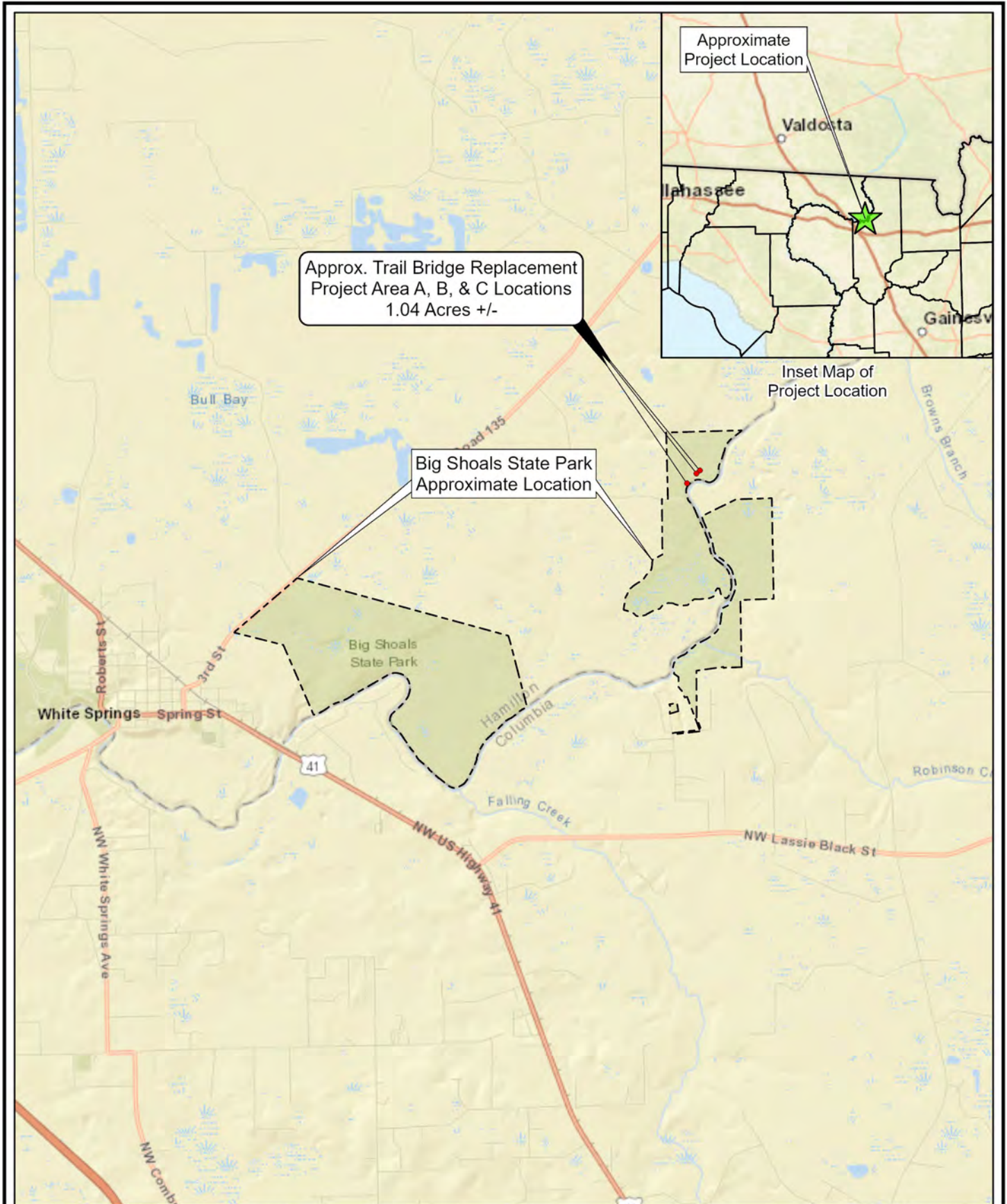
Attachments:

Attachment A – Figures

Attachment B – Letter from FDEP Bureau of Survey and Mapping

Attachment C – Historic and Recent Crests USGS Hydrologic Data

Attachment D – Flood Impacts referenced to the built environment.



Scale: 1 inch = 1 mile

Date: 11/7/2024

Photo Date: N/A

Project No. F13637

Biologist: CK

GIS: ERR

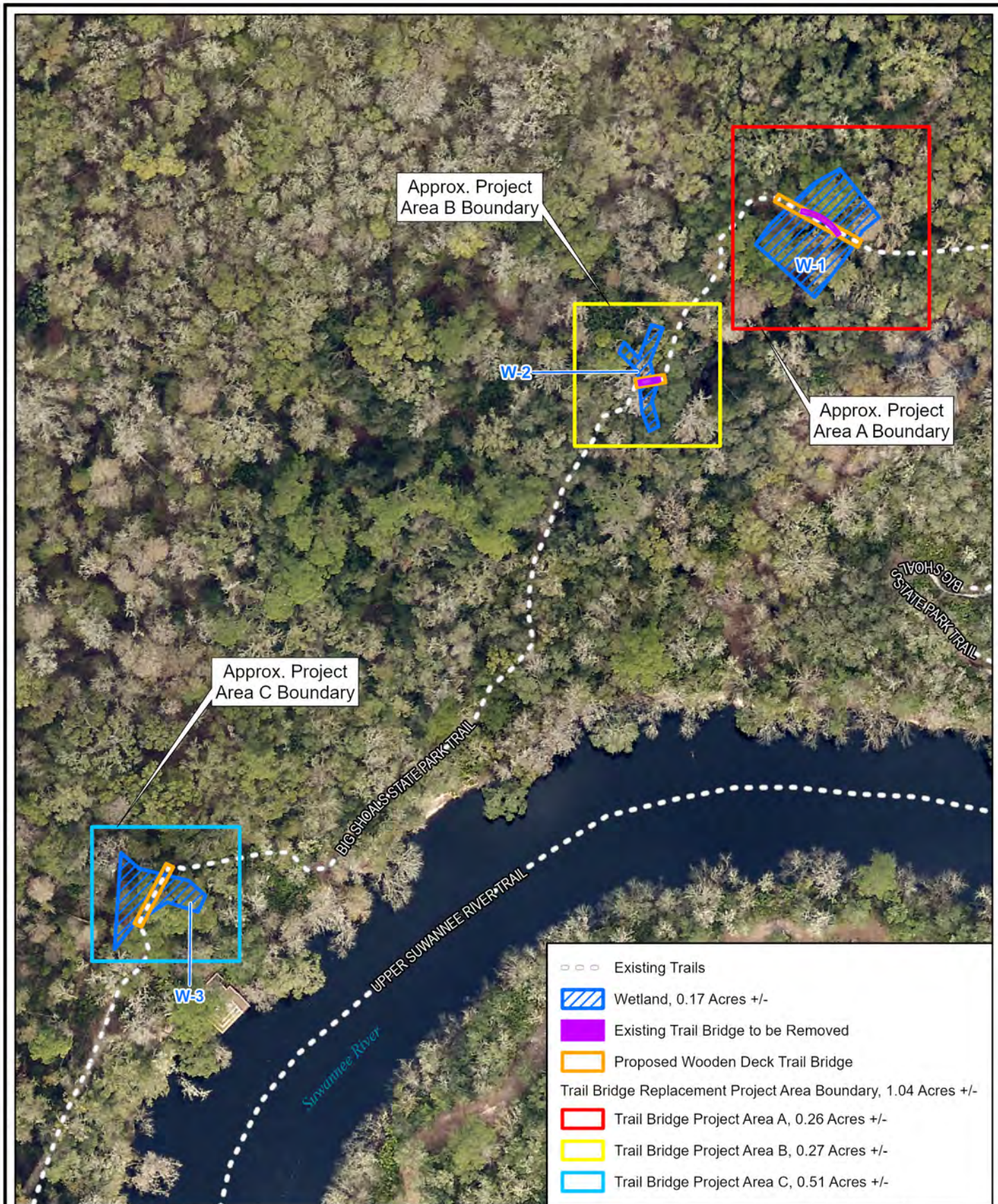
N



LOCATION MAP

BIG SHOALS STATE PARK TRAIL BRIDGE REPLACEMENT
SECTION 35, TOWNSHIP 1 SOUTH, RANGE 16 EAST
HAMILTON COUNTY, FLORIDA

**FIGURE
1**

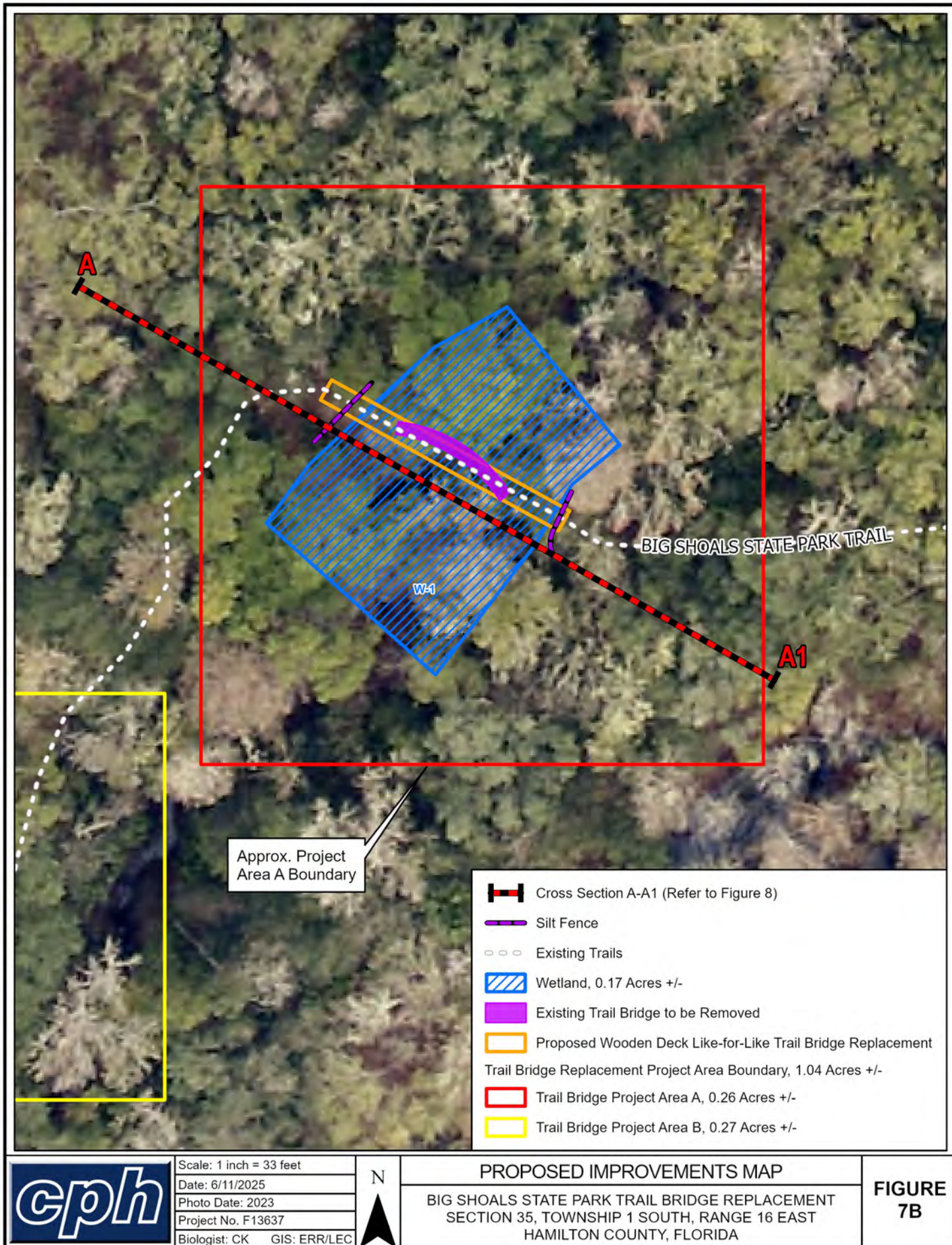


Scale: 1 inch = 100 feet
 Date: 4/21/2025
 Photo Date: 2023
 Project No. F13637
 Biologist: CK GIS: ERR



PROPOSED IMPROVEMENTS MAP BIG SHOALS STATE PARK TRAIL BRIDGE REPLACEMENT SECTION 35, TOWNSHIP 1 SOUTH, RANGE 16 EAST HAMILTON COUNTY, FLORIDA

FIGURE
7A





Scale: 1 inch = 25 feet
 Date: 4/21/2025
 Photo Date: 2023
 Project No. F13637
 Biologist: CK GIS: ERR



PROPOSED IWETLAND 2 IMPROVEMENTS MAP
 BIG SHOALS STATE PARK TRAIL BRIDGE REPLACEMENT
 SECTION 35, TOWNSHIP 1 SOUTH, RANGE 16 EAST
 HAMILTON COUNTY, FLORIDA

**FIGURE
7C**

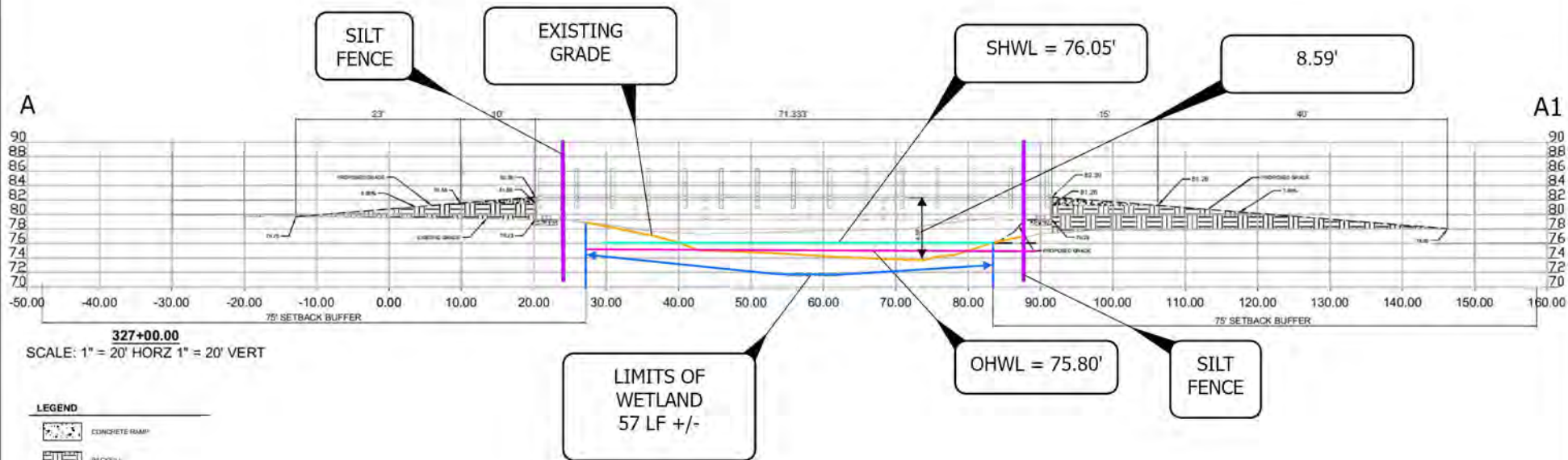


Scale: 1 inch = 25 feet
 Date: 4/21/2025
 Photo Date: 2023
 Project No. F13637
 Biologist: CK GIS: ERR



PROPOSED WETLAND 3 IMPROVEMENTS MAP
 BIG SHOALS STATE PARK TRAIL BRIDGE REPLACEMENT
 SECTION 35, TOWNSHIP 1 SOUTH, RANGE 16 EAST
 HAMILTON COUNTY, FLORIDA

**FIGURE
7D**



NOTE: Refer to Figure 7B for Plan View of Cross Section A-A1.



Scale: 1 inch = 300 feet
 Date: 6/11/2025
 Photo Date: N/A
 Project No. F13637
 Biologist: AED GIS: LEC

CROSS SECTION A

BIG SHOALS STATE PARK TRAIL BRIDGE REPLACEMENT
 SECTION 35, TOWNSHIP 1 SOUTH, RANGE 16 EAST
 HAMILTON COUNTY, FLORIDA

FIGURE 8



FLORIDA DEPARTMENT OF Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, FL 32399

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

Memorandum

TO: Nathan Myers
CPH Consulting, LLC
1117 East Robinson Street
Orlando, FL 32801
Telephone: 407-425-0452 ext 2056
Email: nmyers@cphcorp.com

FROM: Kevin Mears, PLS II
Email: Kevin.Mears@FloridaDEP.gov

SUBJECT: Safe Upland Line (SUL)
River/Lake: Suwannee River
County: Hamilton
STR: Section 35, Township 1 South, Range 16 East
Location: Big Shoals State Park – Long Branch Trails
30 21 16.4N, 082 41 09.5W

DATE: February 1, 2024

Dear Mr. Myers,

Our records indicate that the submerged lands lying below the Ordinary High Water Line of the Suwannee River are state-owned sovereign submerged lands.

An Ordinary High Water Line (OHWL) has not been determined at this site. Based on available records, as of this date, an elevation of 66.6 feet National Geodetic Vertical Datum of 1929 along the natural shoreline is sufficient for use as a Safe Upland Line (SUL), at or above the OHWL. The OHWL is an ambulatory boundary that will shift in response to long term natural changes in the shoreline (i.e., accretion, erosion, reliction and submergence).

As you are locating the elevation provided, please keep in mind that it is based on hydrologic records and should be above the OHWL. If the line varies greatly from your estimation of where it should be please contact Bureau of Survey and Mapping at the telephone number below

Please contact me at the letterhead address, mail station 105, or by phone at (850) 245.2640 if you have any questions.

Approved

Attachment C

USGS Historic & Recent Crests of the Suwannee River in White Springs

1.	87.73 ft on 04-10-1973	26.	78.30 ft on 04-30-1928
2.	84.63 ft on 06-28-2012	27.	78.15 ft on 03-19-2003
3.	84.57 ft on 04-10-1984	28.	78.09 ft on 03-30-1930
4.	84.36 ft on 04-05-1948	29.	77.95 ft on 01-15-1942
5.	83.90 ft on 02-26-1998	30.	77.48 ft on 04-08-1970
6.	83.53 ft on 09-17-1964	31.	77.25 ft on 04-18-1937
7.	83.20 ft on 10-03-2004	32.	77.06 ft on 03-11-1965
8.	83.16 ft on 10-29-1947	33.	76.99 ft on 07-30-1945
9.	82.32 ft on 03-22-1959	34.	76.97 ft on 09-22-1932
10.	82.24 ft on 11-13-1947	35.	76.90 ft on 12-25-1947
11.	81.61 ft on 10-01-1928	36.	76.68 ft on 02-17-1933
12.	81.24 ft on 12-21-2018	37.	76.56 ft on 03-09-1987
13.	81.21 ft on 10-05-1929	38.	76.49 ft on 09-13-2017
14.	80.91 ft on 08-25-1945	39.	76.48 ft on 04-24-1975
15.	80.82 ft on 04-26-2014	40.	76.36 ft on 04-10-1962
16.	80.67 ft on 03-18-1984	41.	76.34 ft on 03-20-1942
17.	80.09 ft on 03-19-1948	42.	76.23 ft on 08-25-1928
18.	79.91 ft on 04-12-2005	43.	76.18 ft on 12-20-1976
19.	79.85 ft on 08-14-2021	44.	76.07 ft on 10-08-1953
20.	79.84 ft on 02-21-1986	45.	75.96 ft on 09-09-2004
21.	79.21 ft on 05-05-1964	46.	75.93 ft on 02-15-1991
22.	78.96 ft on 03-20-1991	47.	75.60 ft on 04-13-2009
23.	78.69 ft on 08-07-2024	48.	75.59 ft on 03-09-1964
24.	78.61 ft on 08-30-1970	49.	75.52 ft on 09-26-1947
25.	78.50 ft on 03-20-1966	50.	75.47 ft on 06-10-1957

51.	75.45 ft on 12-28-1964	79.	70.38 ft on 06-28-1973
52.	75.14 ft on 06-17-2020	80.	69.89 ft on 02-21-1967
53.	74.99 ft on 02-14-1972	81.	69.81 ft on 04-12-1928
54.	74.71 ft on 03-27-1929	82.	69.78 ft on 02-23-1973
55.	74.21 ft on 06-27-1972	83.	69.78 ft on 03-19-1960
56.	74.01 ft on 08-22-1964	84.	69.61 ft on 10-04-1937
57.	74.00 ft on 04-11-1958	85.	69.47 ft on 08-16-1991
58.	73.83 ft on 10-09-1996	86.	69.34 ft on 07-12-2005
59.	73.82 ft on 08-11-1946	87.	69.24 ft on 03-12-1980
60.	73.65 ft on 03-28-1983	88.	68.78 ft on 09-22-1935
61.	73.51 ft on 04-04-1987	89.	68.61 ft on 01-01-1908
62.	73.43 ft on 02-08-1987	90.	68.30 ft on 07-10-2013
63.	73.16 ft on 01-28-1964	91.	68.09 ft on 10-13-1994
64.	72.99 ft on 02-13-1994	92.	67.92 ft on 03-04-1963
65.	72.90 ft on 04-12-1983	93.	67.85 ft on 03-16-2008
66.	72.74 ft on 04-30-1961	94.	67.31 ft on 03-20-1978
67.	72.63 ft on 09-06-1971	95.	67.05 ft on 01-05-1952
68.	72.62 ft on 09-12-1949	96.	66.77 ft on 02-14-2010
69.	72.58 ft on 02-19-1942	97.	66.72 ft on 08-28-1939
70.	72.49 ft on 02-06-1966	98.	66.58 ft on 02-10-2015
71.	72.36 ft on 10-02-1998	99.	66.50 ft on 06-03-1976
72.	72.33 ft on 01-11-1977	100.	66.09 ft on 02-14-2006
73.	72.08 ft on 08-11-1944	101.	65.46 ft on 02-20-1940
74.	71.90 ft on 08-17-1966	102.	64.13 ft on 09-27-1969
75.	70.91 ft on 07-16-1906	103.	63.91 ft on 02-25-1936
76.	70.85 ft on 03-06-1988	104.	62.87 ft on 10-30-1950
77.	70.66 ft on 03-12-1994	105.	62.71 ft on 01-24-1931
78.	70.43 ft on 01-27-1993	106.	62.61 ft on 04-03-1996

107. 62.58 ft on 09-12-1985
 108. 62.44 ft on 05-17-1979
 109. 62.43 ft on 09-15-1974
 110. 62.32 ft on 03-02-1990
 111. 61.69 ft on 09-19-1955
 112. 61.23 ft on 08-29-1992
 113. 61.23 ft on 07-27-1941
 114. 60.71 ft on 03-07-1981
 115. 60.57 ft on 04-12-1982
 116. 59.68 ft on 03-04-2004
 117. 59.11 ft on 08-24-1907
 118. 58.91 ft on 09-08-1950
 119. 58.75 ft on 03-05-2002
 120. 57.81 ft on 08-13-1934
 121. 56.45 ft on 08-07-2001
 122. 55.88 ft on 05-11-1956
 123. 54.32 ft on 08-04-2000
 124. 53.45 ft on 10-02-1942
 125. 53.37 ft on 10-05-1988
 126. 53.33 ft on 08-15-2007
 127. 52.52 ft on 01-05-1968
 128. 52.45 ft on 02-11-2011

Recent Crests

1. 78.69 ft on 08-07-2024
 2. 79.85 ft on 08-14-2021
 3. 75.14 ft on 06-17-2020
 4. 81.24 ft on 12-21-2018
 5. 76.49 ft on 09-13-2017
 6. 66.58 ft on 02-10-2015
 7. 80.82 ft on 04-26-2014
 8. 68.30 ft on 07-10-2013
 9. 84.63 ft on 06-28-2012
 10. 52.45 ft on 02-11-2011
 11. 66.77 ft on 02-14-2010
 12. 75.60 ft on 04-13-2009
 13. 67.85 ft on 03-16-2008
 14. 53.33 ft on 08-15-2007
 15. 66.09 ft on 02-14-2006
 16. 69.34 ft on 07-12-2005
 17. 79.91 ft on 04-12-2005
 18. 83.20 ft on 10-03-2004
 19. 75.96 ft on 09-09-2004
 20. 59.68 ft on 03-04-2004
 21. 78.15 ft on 03-19-2003
 22. 58.75 ft on 03-05-2002
 23. 56.45 ft on 08-07-2001
 24. 54.32 ft on 08-04-2000
 25. 72.36 ft on 10-02-1998
 26. 83.90 ft on 02-26-1998
 27. 73.83 ft on 10-09-1996

28.	62.61 ft on 04-03-1996	56.	66.50 ft on 06-03-1976
29.	68.09 ft on 10-13-1994	57.	76.48 ft on 04-24-1975
30.	70.66 ft on 03-12-1994	58.	62.43 ft on 09-15-1974
31.	72.99 ft on 02-13-1994	59.	70.38 ft on 06-28-1973
32.	70.43 ft on 01-27-1993	60.	87.73 ft on 04-10-1973
33.	61.23 ft on 08-29-1992	61.	69.78 ft on 02-23-1973
34.	69.47 ft on 08-16-1991	62.	74.21 ft on 06-27-1972
35.	78.96 ft on 03-20-1991	63.	74.99 ft on 02-14-1972
36.	75.93 ft on 02-15-1991	64.	72.63 ft on 09-06-1971
37.	62.32 ft on 03-02-1990	65.	78.61 ft on 08-30-1970
38.	53.37 ft on 10-05-1988	66.	77.48 ft on 04-08-1970
39.	70.85 ft on 03-06-1988	67.	64.13 ft on 09-27-1969
40.	73.51 ft on 04-04-1987	68.	52.52 ft on 01-05-1968
41.	76.56 ft on 03-09-1987	69.	69.89 ft on 02-21-1967
42.	73.43 ft on 02-08-1987	70.	71.90 ft on 08-17-1966
43.	79.84 ft on 02-21-1986	71.	78.50 ft on 03-20-1966
44.	62.58 ft on 09-12-1985	72.	72.49 ft on 02-06-1966
45.	84.57 ft on 04-10-1984	73.	77.06 ft on 03-11-1965
46.	80.67 ft on 03-18-1984	74.	75.45 ft on 12-28-1964
47.	72.90 ft on 04-12-1983	75.	83.53 ft on 09-17-1964
48.	73.65 ft on 03-28-1983	76.	74.01 ft on 08-22-1964
49.	60.57 ft on 04-12-1982	77.	79.21 ft on 05-05-1964
50.	60.71 ft on 03-07-1981	78.	75.59 ft on 03-09-1964
51.	69.24 ft on 03-12-1980	79.	73.16 ft on 01-28-1964
52.	62.44 ft on 05-17-1979	80.	67.92 ft on 03-04-1963
53.	67.31 ft on 03-20-1978	81.	76.36 ft on 04-10-1962
54.	72.33 ft on 01-11-1977	82.	72.74 ft on 04-30-1961
55.	76.18 ft on 12-20-1976	83.	69.78 ft on 03-19-1960

84.	82.32 ft on 03-22-1959	107.	77.95 ft on 01-15-1942
85.	74.00 ft on 04-11-1958	108.	61.23 ft on 07-27-1941
86.	75.47 ft on 06-10-1957	109.	65.46 ft on 02-20-1940
87.	55.88 ft on 05-11-1956	110.	66.72 ft on 08-28-1939
88.	61.69 ft on 09-19-1955	111.	69.61 ft on 10-04-1937
89.	76.07 ft on 10-08-1953	112.	77.25 ft on 04-18-1937
90.	67.05 ft on 01-05-1952	113.	63.91 ft on 02-25-1936
91.	62.87 ft on 10-30-1950	114.	68.78 ft on 09-22-1935
92.	58.91 ft on 09-08-1950	115.	57.81 ft on 08-13-1934
93.	72.62 ft on 09-12-1949	116.	76.68 ft on 02-17-1933
94.	84.36 ft on 04-05-1948	117.	76.97 ft on 09-22-1932
95.	80.09 ft on 03-19-1948	118.	62.71 ft on 01-24-1931
96.	76.90 ft on 12-25-1947	119.	78.09 ft on 03-30-1930
97.	82.24 ft on 11-13-1947	120.	81.21 ft on 10-05-1929
98.	83.16 ft on 10-29-1947	121.	74.71 ft on 03-27-1929
99.	75.52 ft on 09-26-1947	122.	81.61 ft on 10-01-1928
100.	73.82 ft on 08-11-1946	123.	76.23 ft on 08-25-1928
101.	80.91 ft on 08-25-1945	124.	78.30 ft on 04-30-1928
102.	76.99 ft on 07-30-1945	125.	69.81 ft on 04-12-1928
103.	72.08 ft on 08-11-1944	126.	68.61 ft on 01-01-1908
104.	53.45 ft on 10-02-1942	127.	59.11 ft on 08-24-1907
105.	76.34 ft on 03-20-1942	128.	70.91 ft on 07-16-1906
106.	72.58 ft on 02-19-1942		

Flood Impacts referenced to the on elevation of built environment – Elevation Datum 1929

- 97.9 - Water reaches the top of the Interstate 75 bridge railing.
- 96.5 - Water reaches the top of the US 41 bridge railing.
- 96.3 - Water reaches the top of the SR 136 bridge railing.
- 94.9 - Water begins to flood the main Interstate 75 bridge travel lanes.
- 94.5 - Water begins to flood the SR 136 bridge travel lanes.
- 93.5 - Water begins to flood the US 41 bridge travel lanes.
- 92.6 - Water begins to flood the Interstate 75 bridge travel lanes just south of the Suwannee River in Suwannee County.
- 90.7 - Water reaches the approach road surface to the US 41 bridge.
- 89.7 - Water reaches the approach road surface to the Interstate 75 bridge over the Suwannee River.
- 89.2 - Water reaches the base of the Interstate 75 bridges over the Suwannee River. Water also reaches the base of the SR 136 bridge near White Springs.
- 88.5 - Water reaches the base of the US 41 bridge.
- 88 - The railroad tracks flood near the US 41 crossing.
- 87 - Water reaches the base of the old US 129 foot bridge across the river. Homes in this area are subject to flooding.
- 86.8 - Water reaches the approach road surface to the SR 136 bridge just north of the agriculture inspection station.
- 85.5 - Water begins to flood SR 136 well south of the bridge in Columbia County.
- 85 - Water reaches the base of the railroad bridge at US 41.
- 82 - Water begins to surround homes along NW Stephen Foster Drive in Columbia County. Homes in the area not elevated flood at this level. In Hamilton County, the Gazebo at the Stephen F Foster State Park floods at this level.
- 81 - Water reaches the observation deck at the White Springs Swim House. Water floods areas south of SE 100th Way in Hamilton County. Homes not elevated in this area are subject to flooding.
- 80 - Water moves toward NW Stephen Foster Drive and begins to flood travel lanes in the 500 block in Columbia County.
- 79 - Water reaches the top of the bank at the Stephen F Foster State Park. Low areas within the park begin to flood at this level. **This elevation corresponds with the 78 (NAD83) top-of-bank at the project site.**
- 77 - Homes on NW Null Road in Columbia County not elevated begin to flood at this level.
- 75 - Access to White Springs Swim House is impassible.
- 74 - The parking lot to the Blue Sink launch floods in Suwannee County. The area is not accessible above this level. Flooding expands into the park at US 41 in Hamilton County. Much of NW Null Road in Columbia County is impassible, isolating several homes near the river.
- 72 - Water reaches the top of the bank at the park at US 41 in Hamilton County. All public boat ramps between White Springs and Suwannee Springs are subject to closure. A portion of NW Null Road begins to flood in Columbia County. **The established OHW at the project site is 71.58 NAD83.**
- 70 - Water reaches the top of the boat ramp at US 41 in Hamilton County.