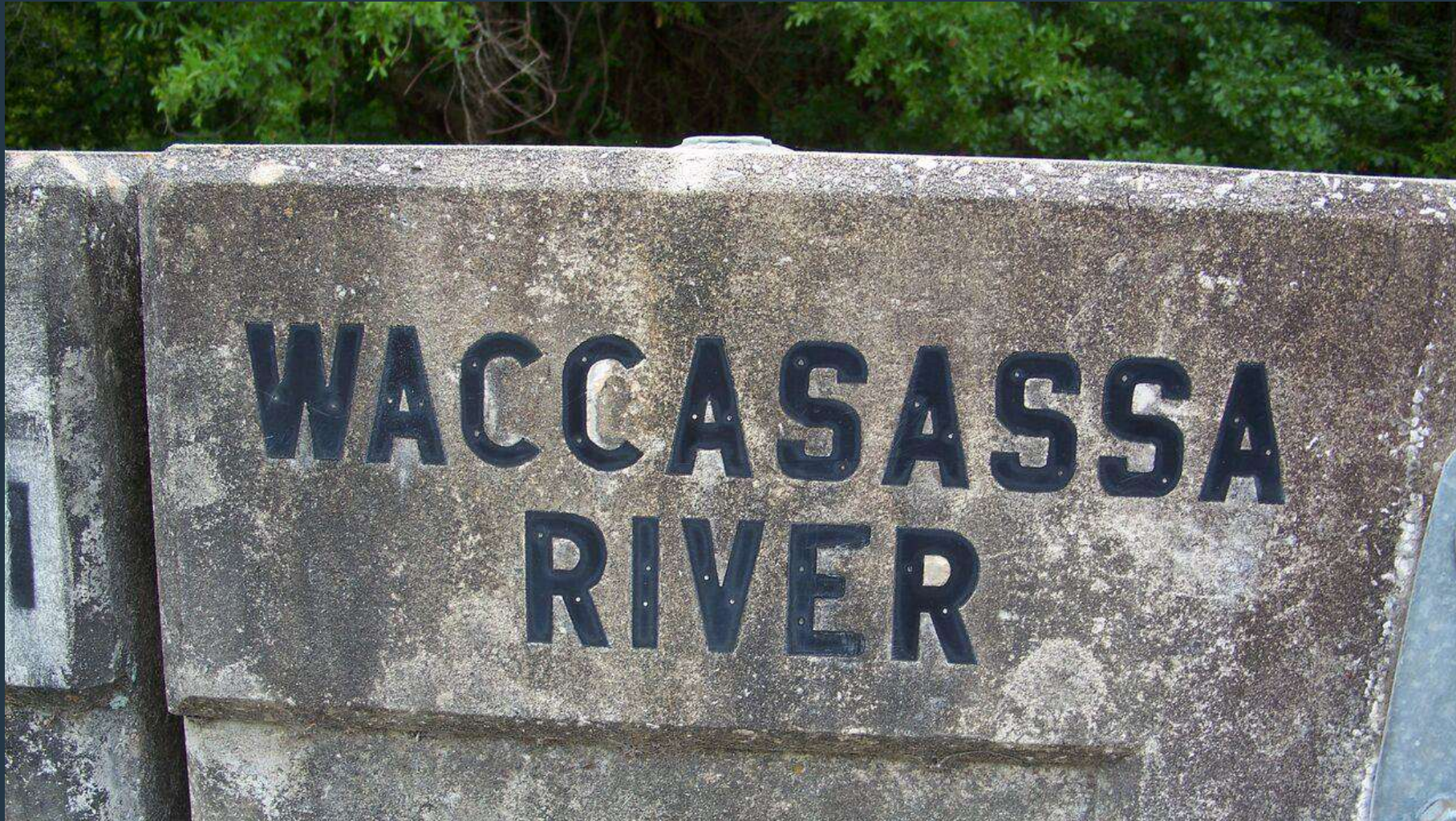


Waccasassa Watershed Flood Risk Review



History



FEMA-SRWMD MOU
11/24/1999

Paper FIRMs
1999-2005

Map Modernization
2005-2010

Risk MAP
2010-2017

Risk MAP (2.0)
2017-Present



- Five year effort to modernize maps
- Result: digital flood data and digital maps for 92% of population
- Improved flood data quality
- Limited up-front coordination
- Scoping not mandatory
- Appendix I includes 200 pages of tables and templates

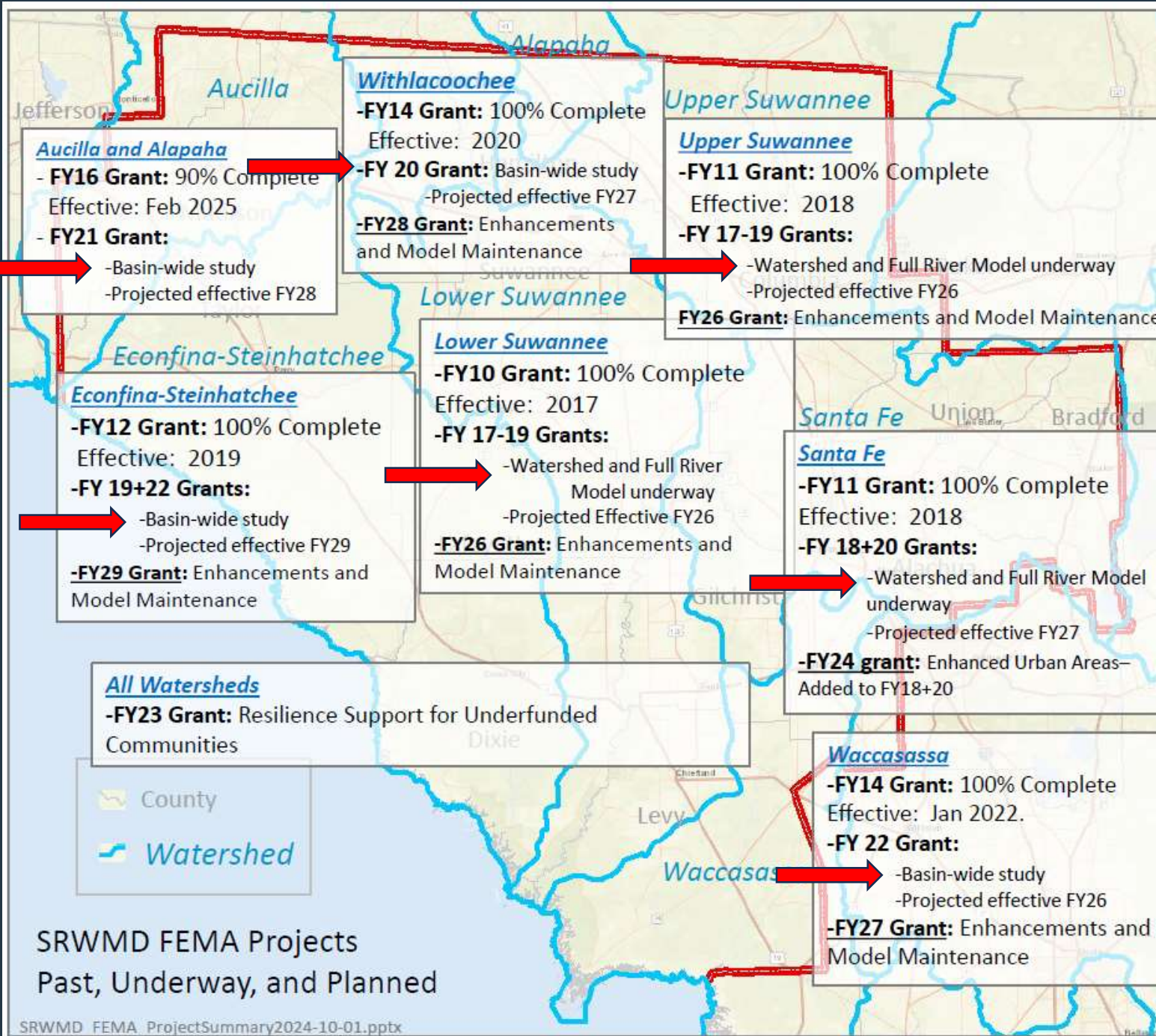
RiskMAP

Increasing Resilience Together

- Collaborative approach
- Goals: quality data, public awareness, action that reduces risk
- Watershed-oriented
- Focus on up-front coordination
- Discovery is mandatory
- Appendix I includes no templates and is currently draft



Study History



FEMA/SRWMD Floodplain Mapping Structure



FEMA

Manages the National Flood Insurance Program (NFIP), funds flood risk projects nationwide, provides standards & guidance, owns mapping products, decision authority.



SRWMD

Cooperating Technical Partner (CTP) with FEMA. Manages the flood risk mapping program at a local level, controls timeline, DOES NOT HAVE DECISION AUTHORITY.

Subcontractors

Atkins Realis

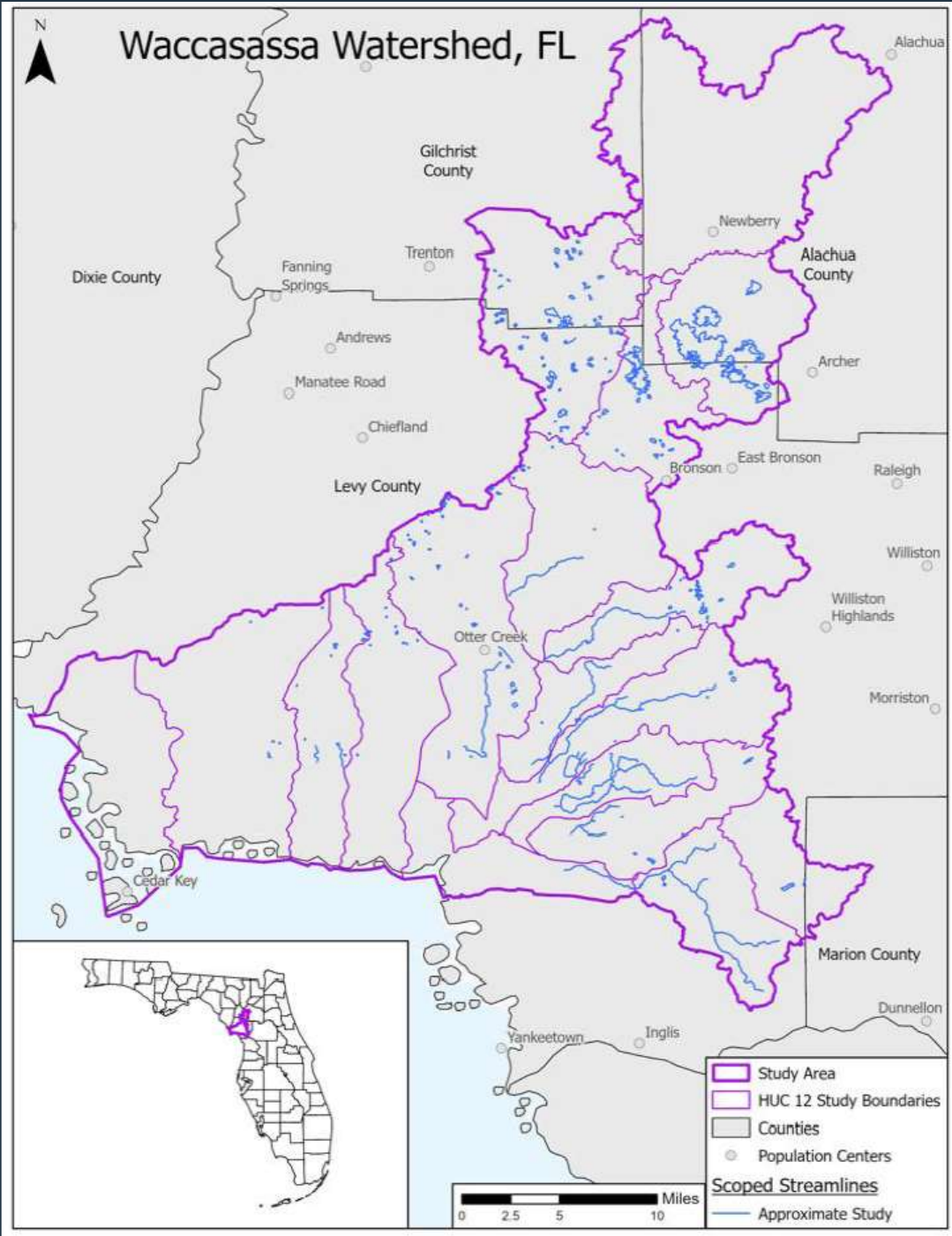
WSP

North Florida Professional Services

Program Management Contractor for SRWMD

Flood Risk Project Contractor for SRWMD

Local Business Subcontractor to WSP



Study Area

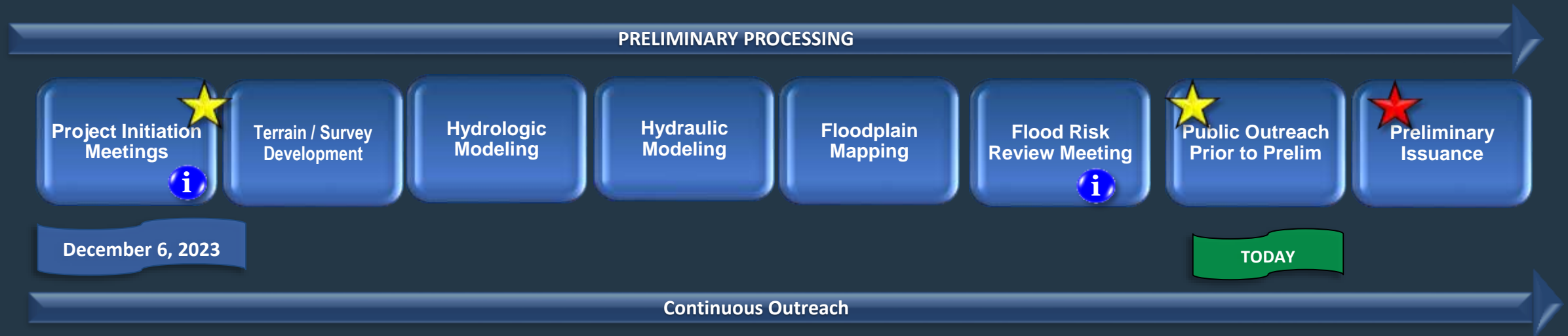


Alachua County
City of High Springs
City of Newberry
City of Alachua
City of Archer

Gilchrist County

Levy County
Town of Bronson
Town of Otter Creek

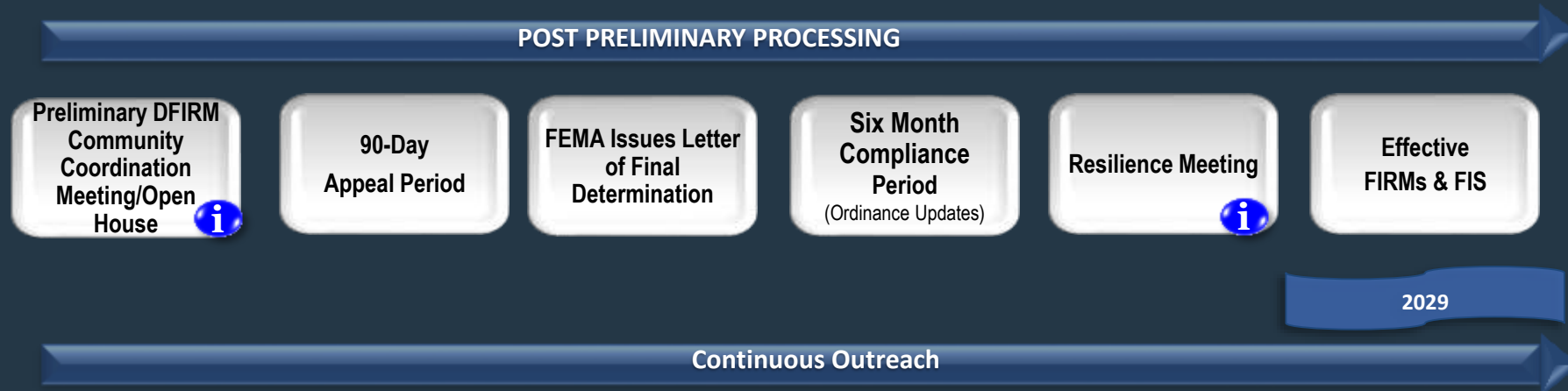
Mapping Process



FEMA Community Meetings = 

SRWMD Additional Meeting/Outreach = 

Mapping Process



FEMA Community Meetings = 

SRWMD Additional Meeting = 

How much Rain is a 1% (100 yr) event



PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)¹

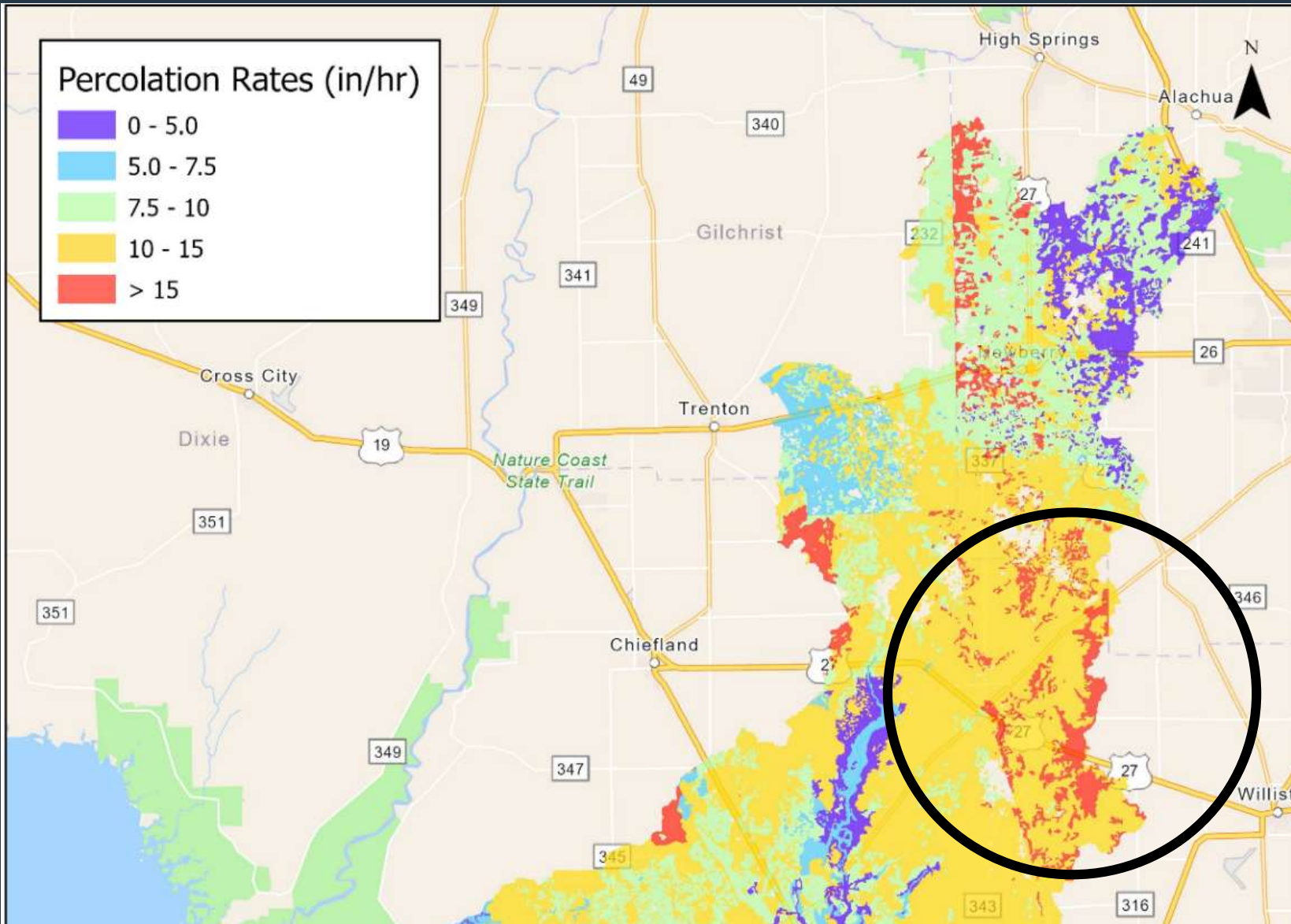
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.548 (0.449-0.671)	0.622 (0.510-0.762)	0.742 (0.606-0.912)	0.840 (0.682-1.04)	0.973 (0.761-1.24)	1.07 (0.820-1.40)	1.17 (0.865-1.58)	1.27 (0.899-1.77)	1.40 (0.951-2.02)	1.50 (0.991-2.21)
10-min	0.802 (0.658-0.982)	0.911 (0.746-1.12)	1.09 (0.887-1.34)	1.23 (0.998-1.52)	1.42 (1.11-1.82)	1.57 (1.20-2.05)	1.72 (1.27-2.31)	1.86 (1.32-2.59)	2.05 (1.39-2.96)	2.20 (1.45-3.23)
15-min	0.978 (0.802-1.20)	1.11 (0.910-1.36)	1.32 (1.08-1.63)	1.50 (1.22-1.85)	1.74 (1.36-2.22)	1.92 (1.46-2.50)	2.10 (1.54-2.82)	2.27 (1.60-3.16)	2.50 (1.70-3.61)	2.68 (1.77-3.94)
30-min	1.44 (1.18-1.77)	1.64 (1.35-2.02)	1.97 (1.61-2.42)	2.23 (1.81-2.76)	2.59 (2.02-3.31)	2.86 (2.18-3.72)	3.12 (2.30-4.19)	3.38 (2.39-4.70)	3.72 (2.52-5.36)	3.98 (2.63-5.86)
60-min	1.86 (1.53-2.28)	2.12 (1.74-2.60)	2.55 (2.08-3.13)	2.90 (2.36-3.59)	3.40 (2.66-4.36)	3.78 (2.89-4.94)	4.17 (3.08-5.62)	4.56 (3.22-6.36)	5.09 (3.45-7.34)	5.48 (3.62-8.08)
2-hr	2.28 (1.88-2.77)	2.60 (2.14-3.16)	3.13 (2.57-3.82)	3.58 (2.92-4.39)	4.21 (3.32-5.38)	4.71 (3.62-6.12)	5.22 (3.88-7.00)	5.74 (4.08-7.96)	6.45 (4.41-9.26)	6.99 (4.65-10.2)
3-hr	2.51 (2.07-3.04)	2.85 (2.36-3.46)	3.45 (2.84-4.19)	3.96 (3.24-4.85)	4.72 (3.74-6.04)	5.33 (4.12-6.93)	5.96 (4.46-8.00)	6.64 (4.75-9.21)	7.57 (5.20-10.9)	8.31 (5.55-12.1)
6-hr	2.98 (2.48-3.59)	3.37 (2.80-4.06)	4.09 (3.38-4.94)	4.75 (3.91-5.78)	5.77 (4.64-7.42)	6.65 (5.20-8.66)	7.59 (5.73-10.2)	8.63 (6.24-12.0)	10.1 (7.02-14.5)	11.3 (7.62-16.4)
12-hr	3.60 (3.01-4.30)	4.04 (3.38-4.84)	4.92 (4.09-5.90)	5.78 (4.78-6.97)	7.16 (5.83-9.24)	8.40 (6.63-11.0)	9.77 (7.44-13.1)	11.3 (8.25-15.7)	13.6 (9.50-19.4)	15.4 (10.4-22.2)
24-hr	4.27 (3.58-5.07)	4.82 (4.04-5.73)	5.93 (4.96-7.07)	7.05 (5.86-8.45)	8.88 (7.29-11.4)	10.5 (8.36-13.7)	12.4 (9.48-16.5)	14.4 (10.6-19.9)	17.5 (12.3-24.9)	20.0 (13.6-28.6)
2-day	4.93 (4.16-5.81)	5.64 (4.76-6.66)	7.05 (5.92-8.34)	8.44 (7.06-10.1)	10.7 (8.83-13.7)	12.7 (10.2-16.4)	15.0 (11.6-19.9)	17.5 (12.9-24.0)	21.2 (15.1-30.0)	24.3 (16.7-34.5)
3-day	5.39 (4.56-6.33)	6.14 (5.19-7.22)	7.63 (6.43-9.00)	9.12 (7.65-10.8)	11.6 (9.56-14.7)	13.7 (11.0-17.6)	16.1 (12.5-21.4)	18.9 (14.0-25.8)	22.9 (16.3-32.2)	26.2 (18.0-37.1)

Has it ever happened?



According to SRWMD records and a records search of available datasets, there has not been a rain event above 12 inches in 24-hours since 1957 at the Usher Tower

What percolation/runoff rates were used?



Percolation rates:

In/hr = 2 ft/day

Ex

15 in/hr = 30 ft/day

Runoff:

Lawns (sandy soil)

2–7% grade:

= 0.05–0.15 or 5 – 15%

Information from the Consultant
used in the study:

LiDAR -- Aerials -- Floodplains

Light Detection
and Ranging

high-resolution
images and data

As proposed



LiDAR:

2020

Red – High

Blue - Low

Aerials:

2022

Floodplains:

Dark Pink > 6 inches

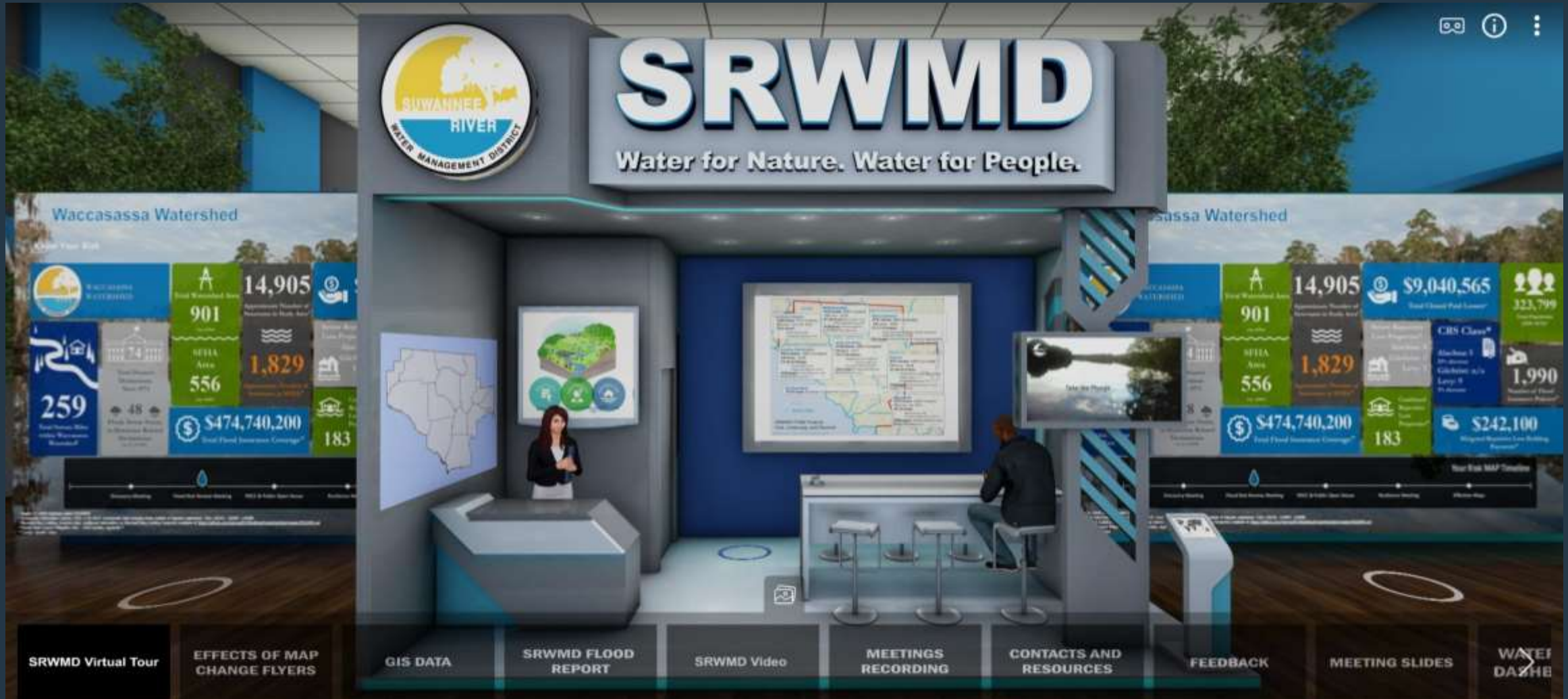
Zone A

Light Pink < 6 inches

Zone X-shaded

Where do I get additional Information

<https://www.theasys.io/viewer/SMF8oW8A087EvAXYZqsu4oT4h5x3UY/>



Where can I see my property



COMMENT

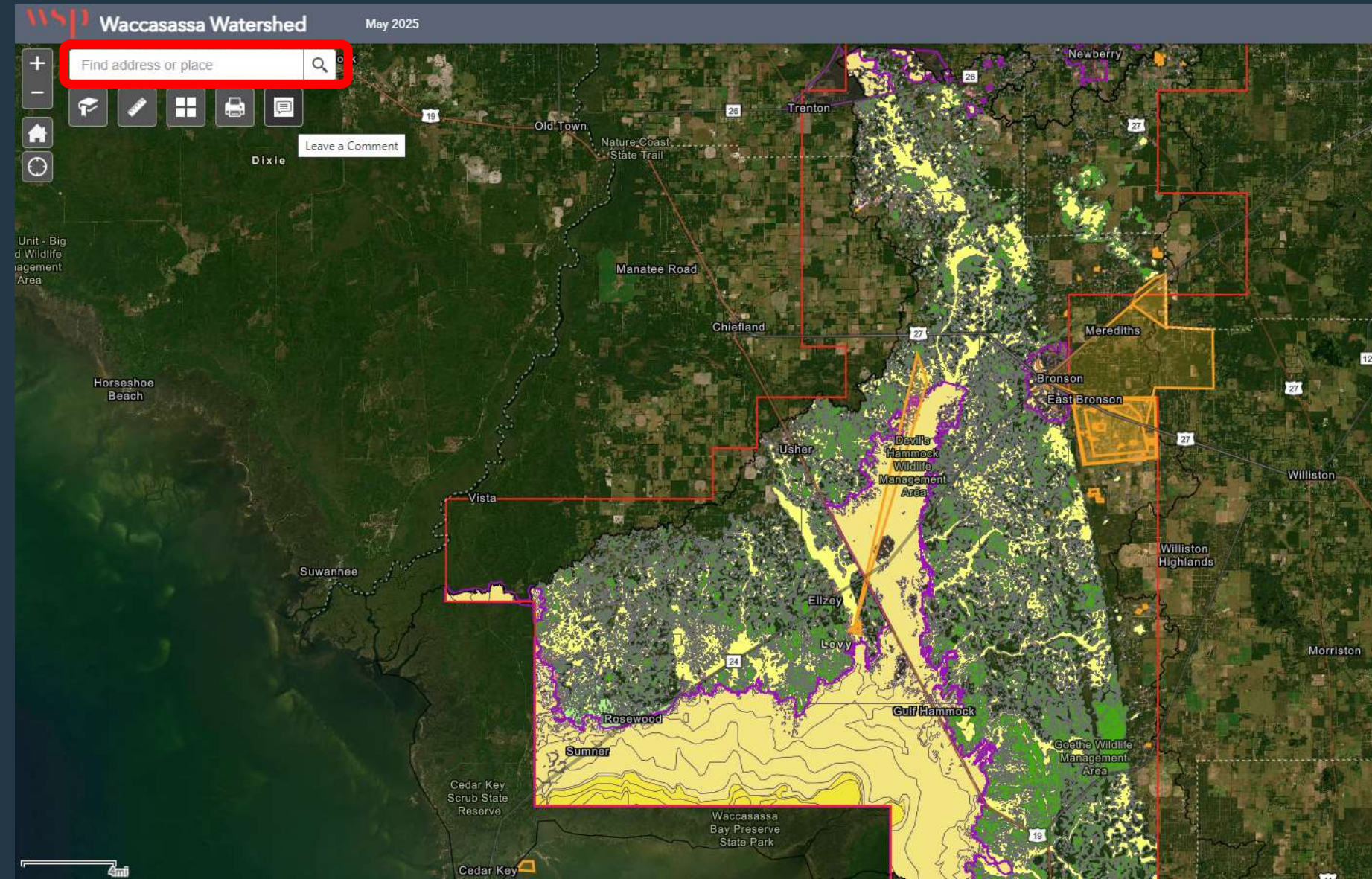
<https://wspglobal.maps.arcgis.com/apps/webappviewer/index.html?id=99fc08af532d4a2fa1245165985f9edf>

What is being mapped?

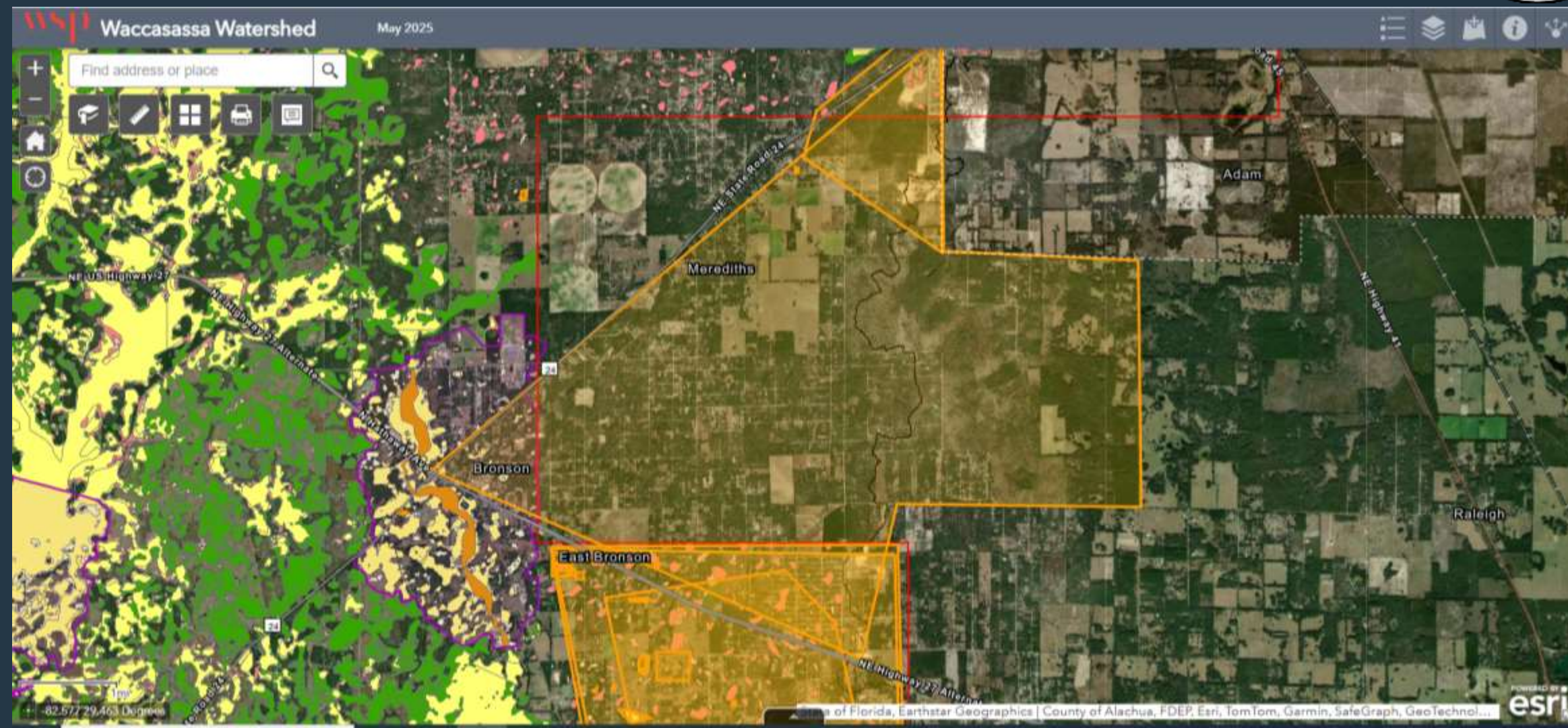


Areas within the Red lines.

Areas that are purple are not being re-studied.



What is being mapped?



Flood Risk Review Meeting Additional Meeting



- September 23, 2025
- Levy County Government Center Auditorium
 - 310 School Steet
 - Bronson, FL 32621
 - 3 PM

RECAP



- FEMA has decision authority over what is mapped, requirements of mapping, what gets changed and what does not.
- 2-D mapping allows for larger mapping areas, usually including areas that have not been mapped.
- At this point in the process, only entities can comment, not citizens.
- 1% (100 yr) is 12.4 inches of rain in 24 hours. Bronson has not seen that much rain since 1957.
- Percolation rates are 20+ feet per day and runoff is < 15%.
- One more opportunity to meet with SRWMD staff before



SUWANNEE RIVER
WATER MANAGEMENT DISTRICT

QUESTIONS?