

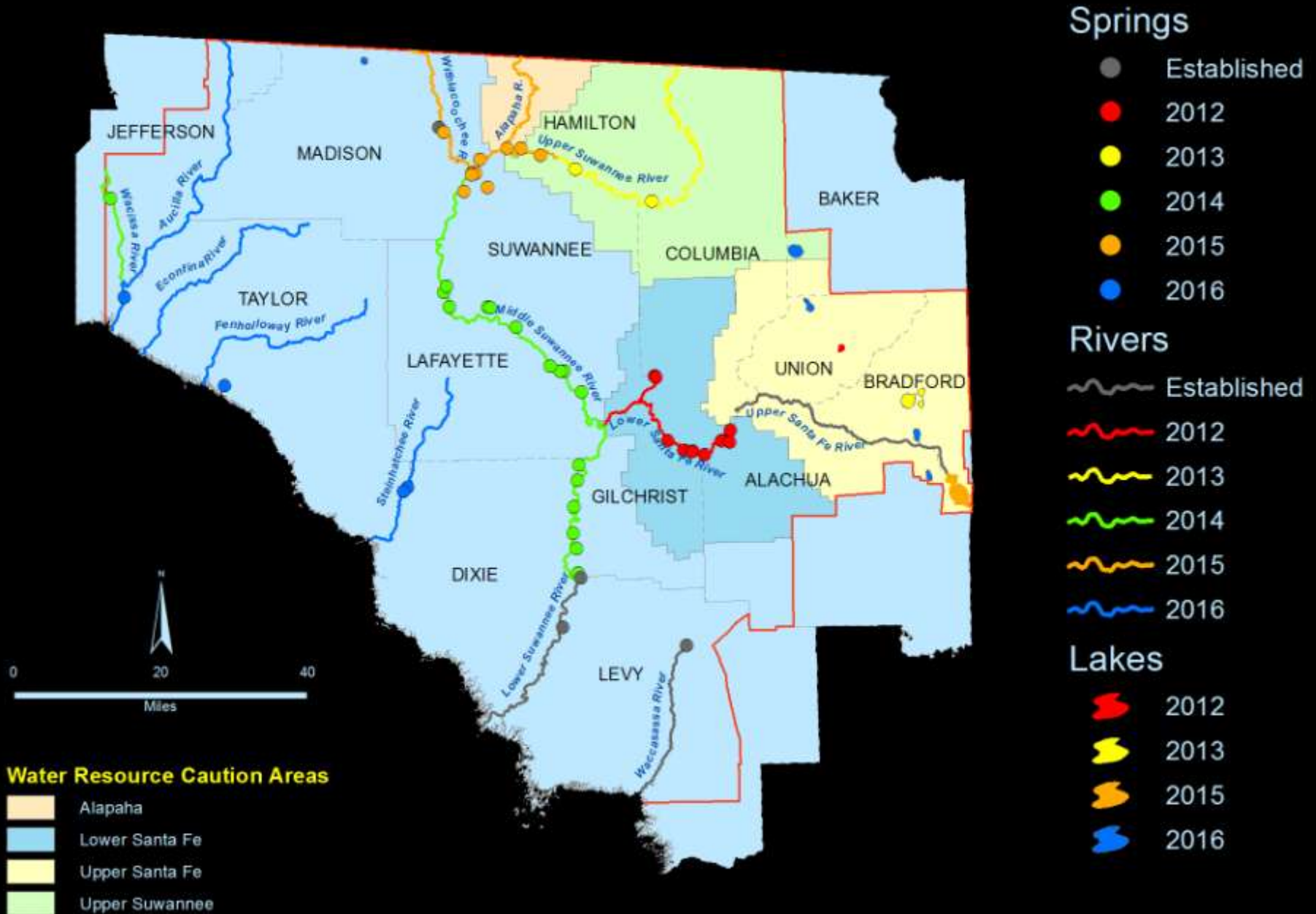
Lower Santa Fe – Ichetucknee Rivers & Springs MFL

An Update for the Santa Fe
Springs Working Group
January 12, 2012

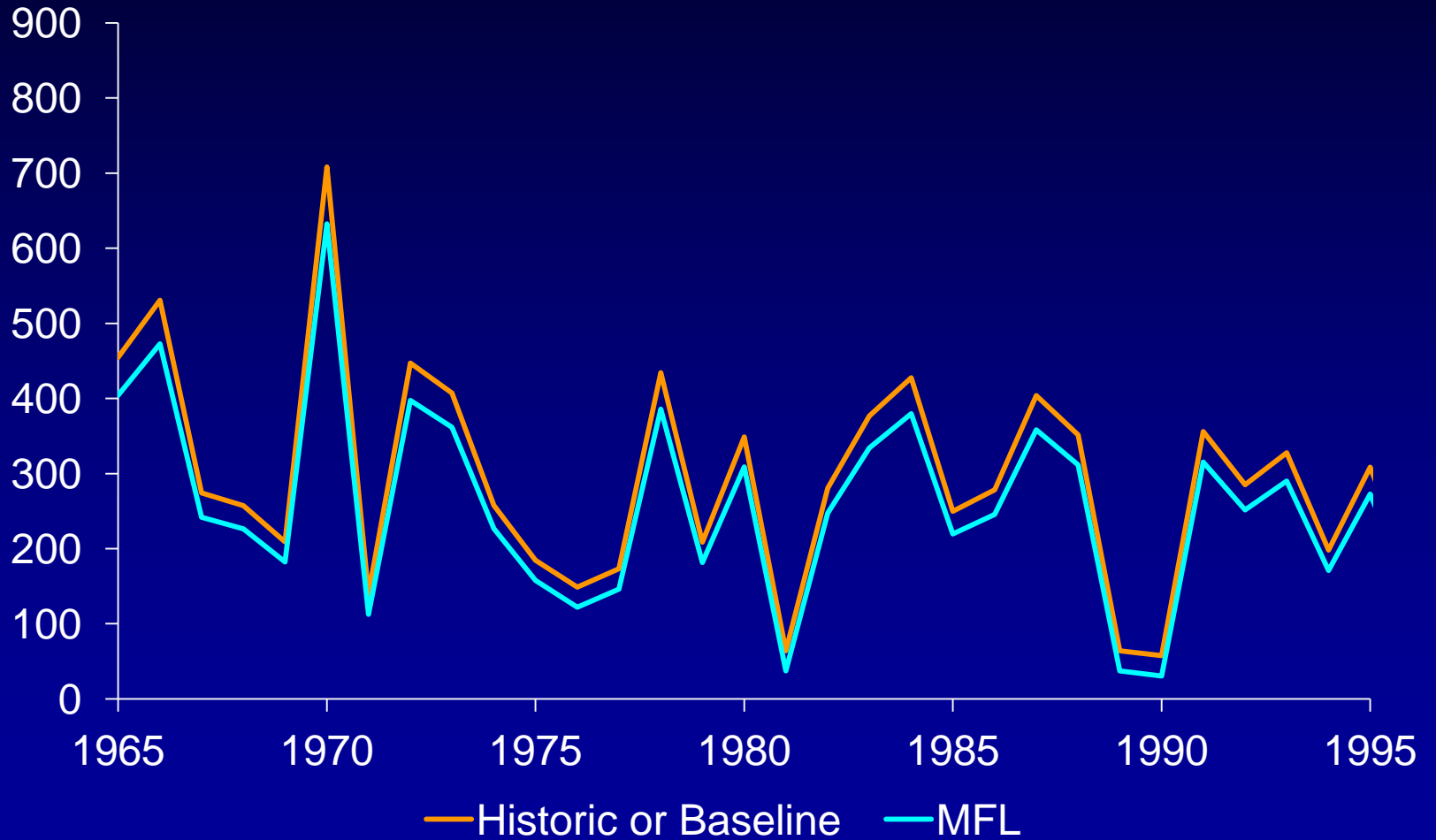
Minimum Flows and Levels

- Required by Chapter 373, F.S.
- Determines how much water is needed to maintain the health of rivers, springs, lakes and aquifers
- “The minimum flow for a given watercourse shall be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.”

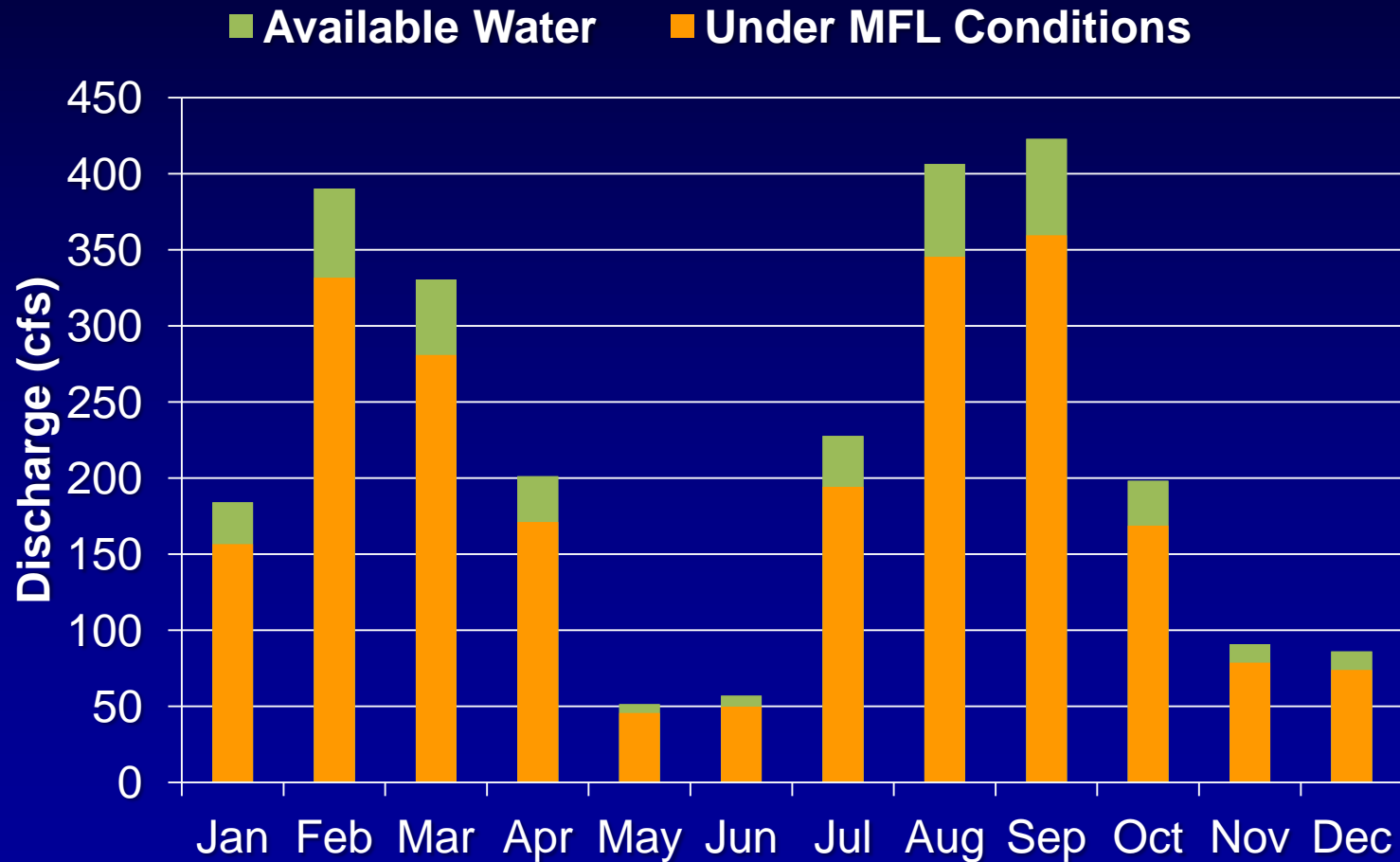
SRWMD MFL Schedule - 2012



An acceptable maximum shift in the natural regime



Typical Conditions

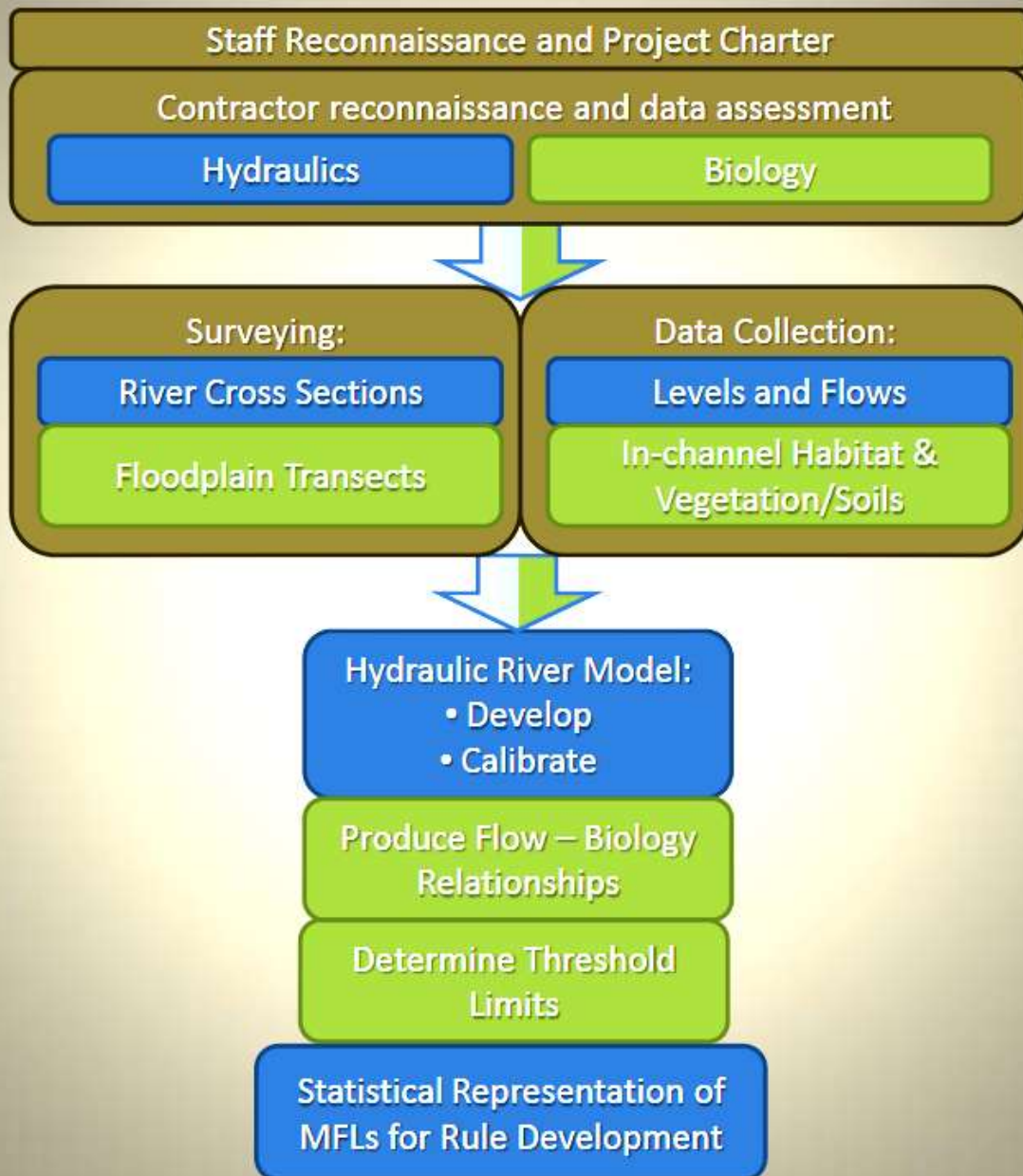


62-40 F.A.C.

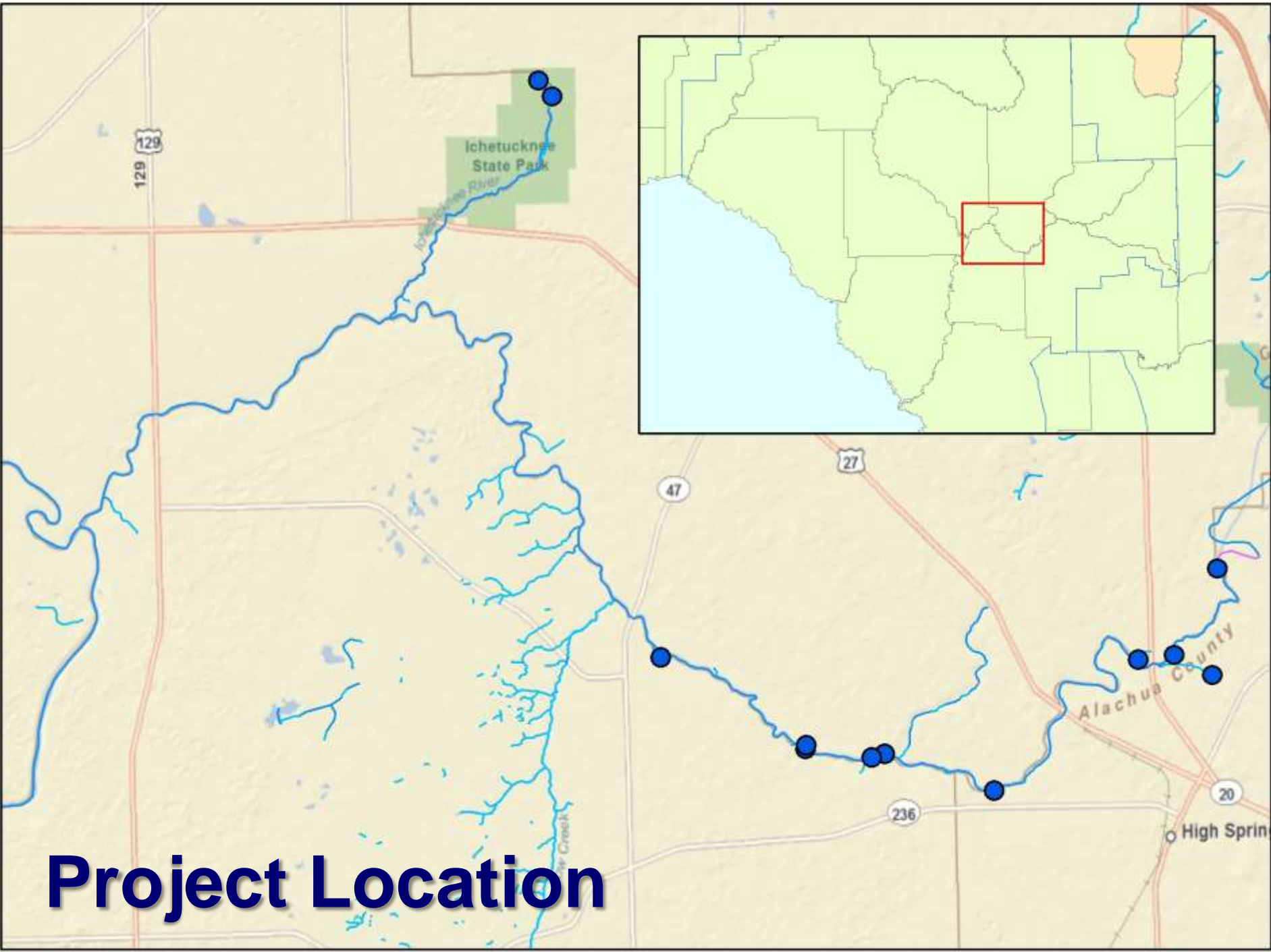
MFL Environmental Values

- Recreation
- Fish & wildlife habitats and passage of fish
- Estuarine resources
- Detrital transfer
- Freshwater storage and supply
- Aesthetic and scenic attributes
- Pollutant filtration and adsorption
- Sediment
- Water quality
- Navigation

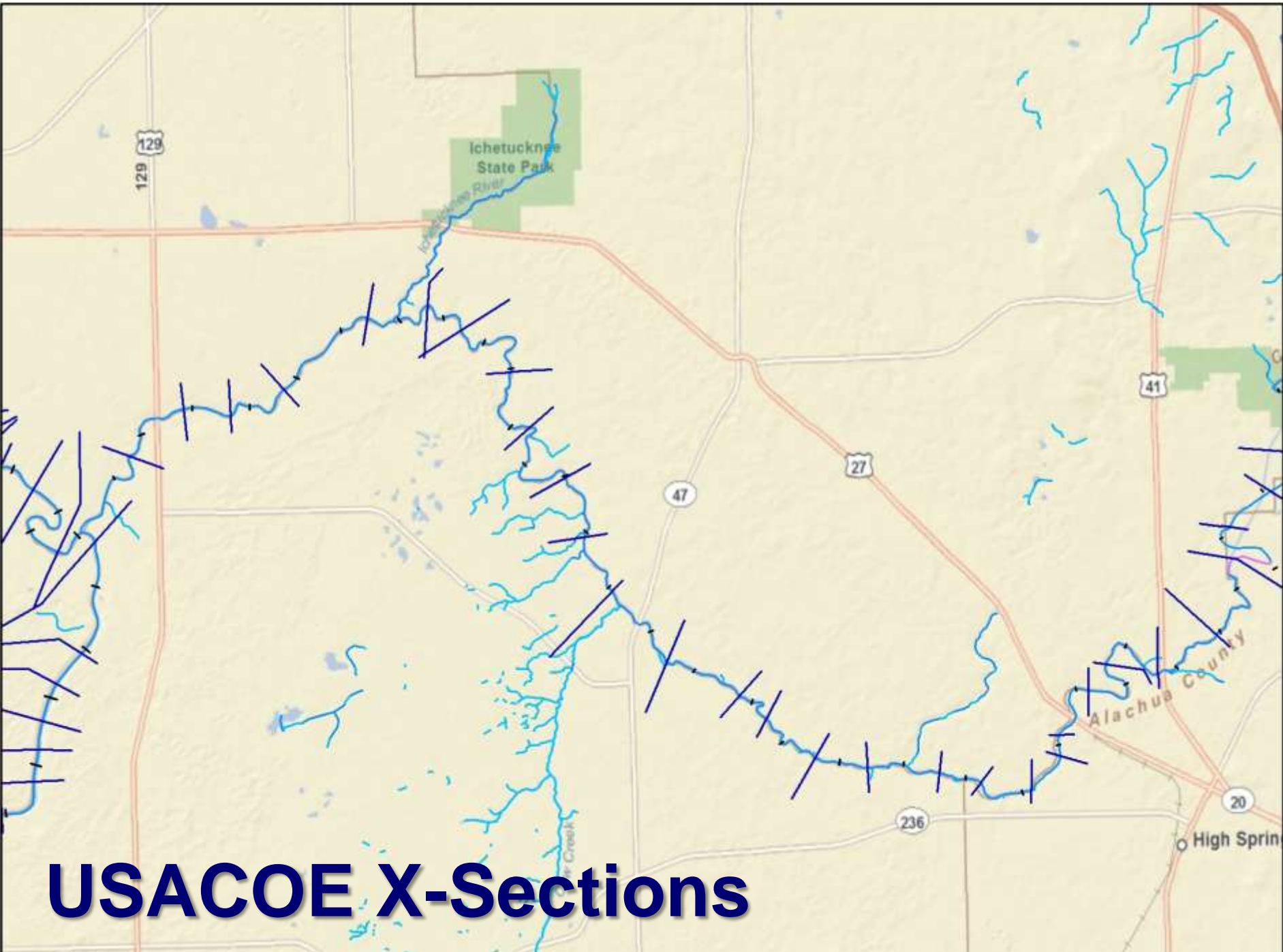
River MFL Development Process



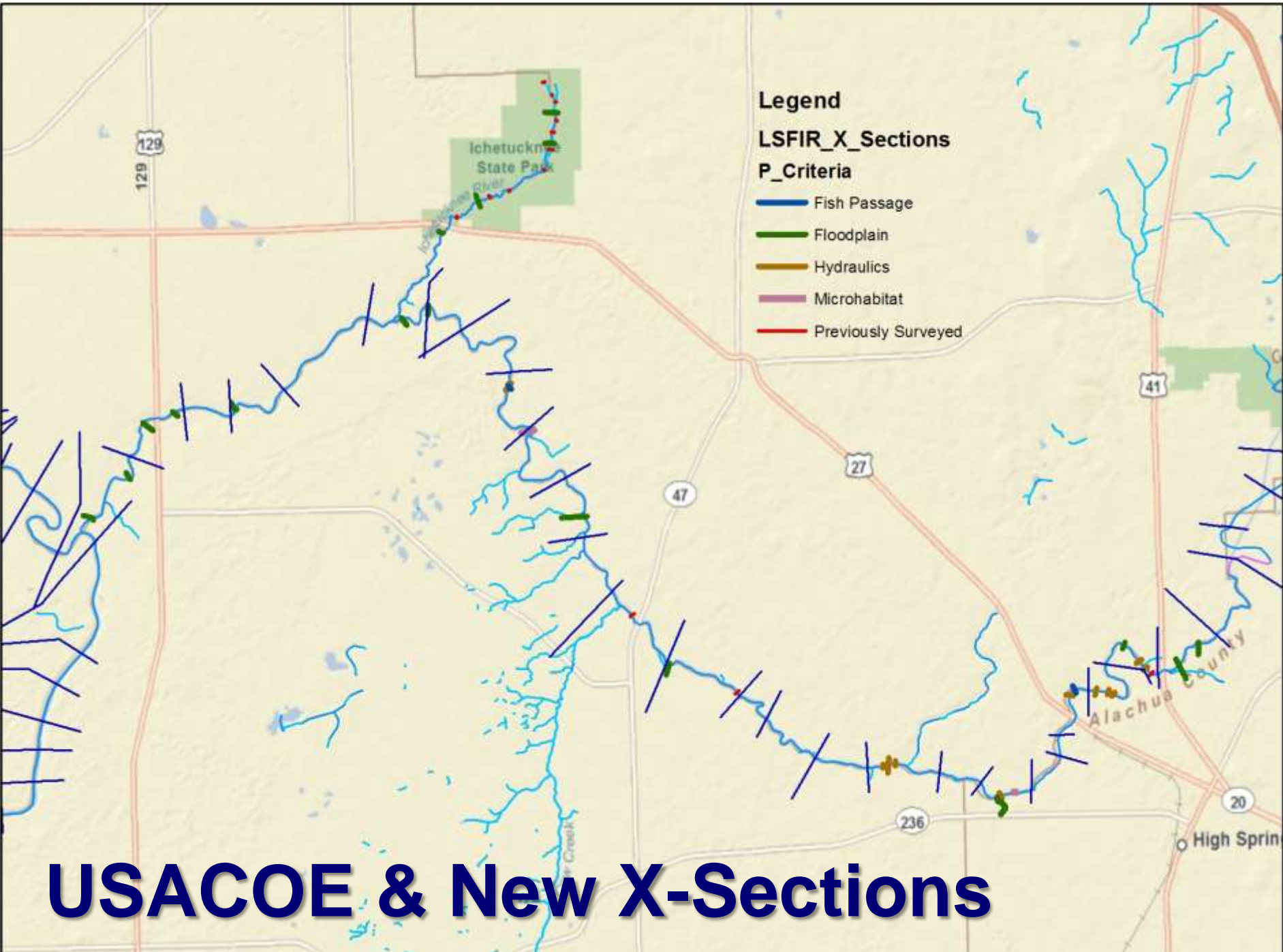
MFL Establishment Process



Project Location



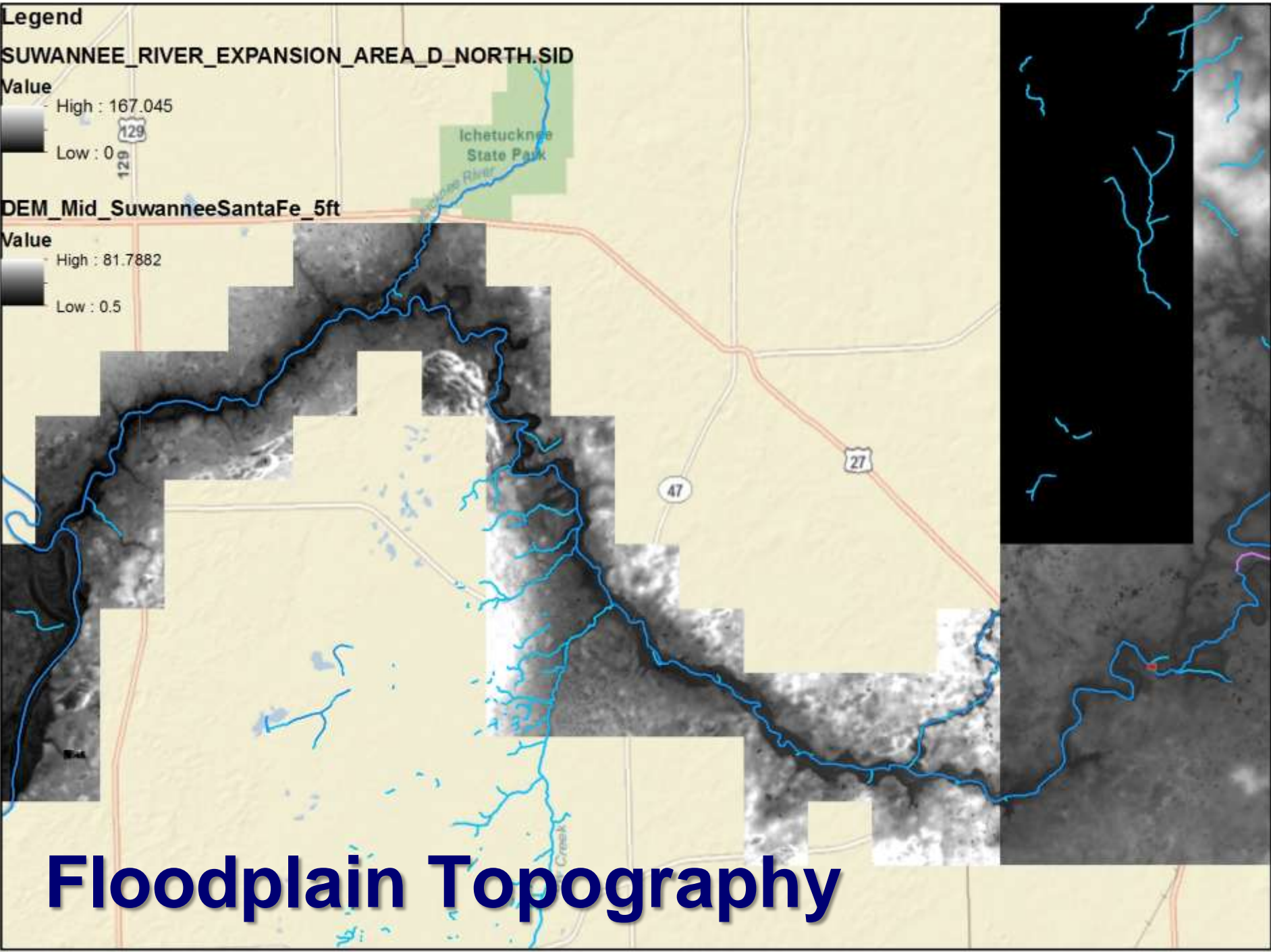
USACOE X-Sections



USACOE & New X-Sections

Legend
SUWANNEE_RIVER_EXPANSION_AREA_D_NORTH.SID
Value
High : 167.045
Low : 0

DEM_Mid_SuwanneeSantaFe_5ft
Value
High : 81.7882
Low : 0.5



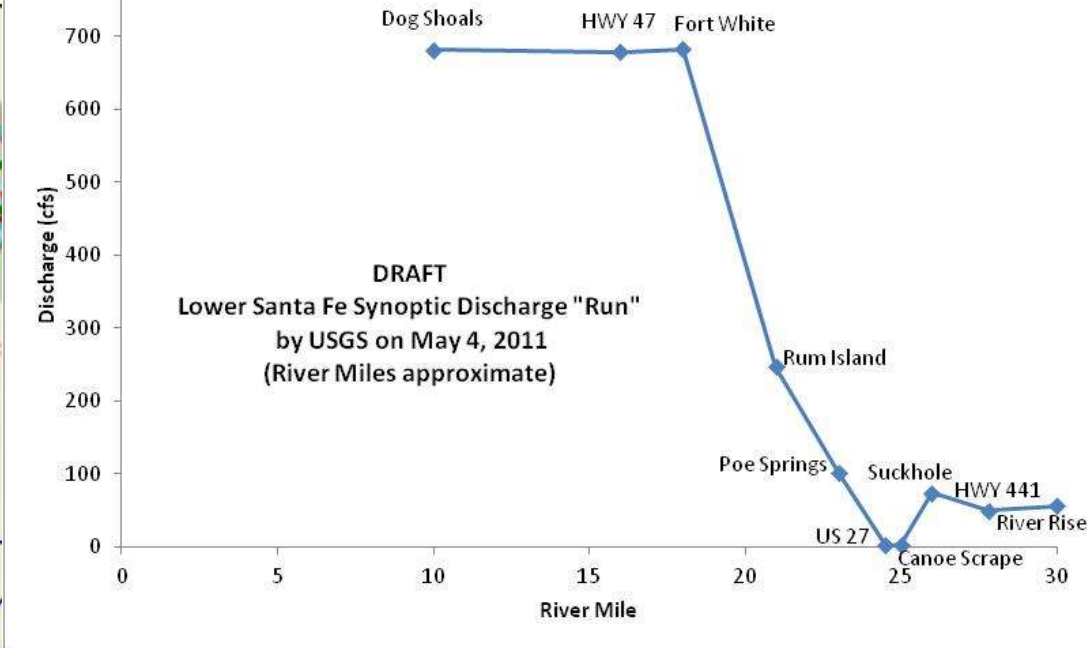
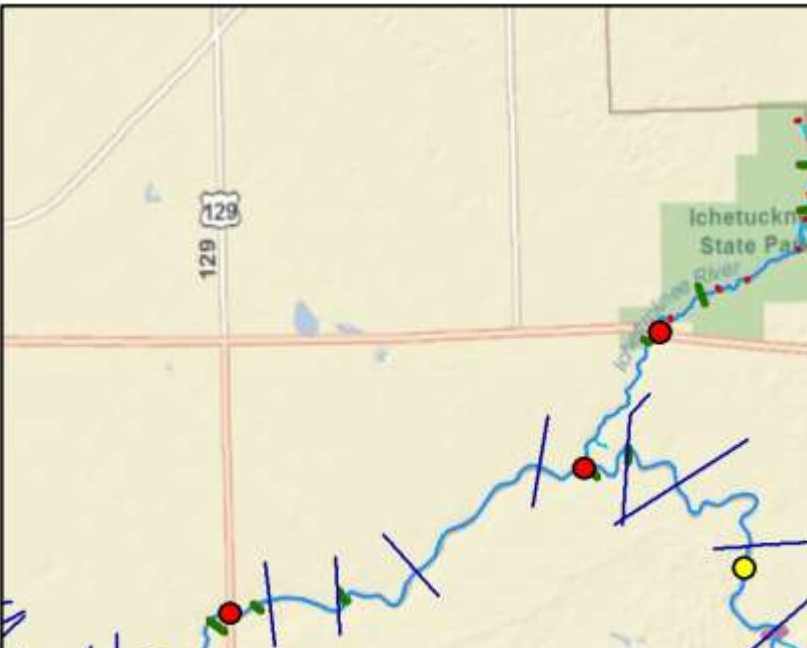
Floodplain Topography



**Close-up
Topography**

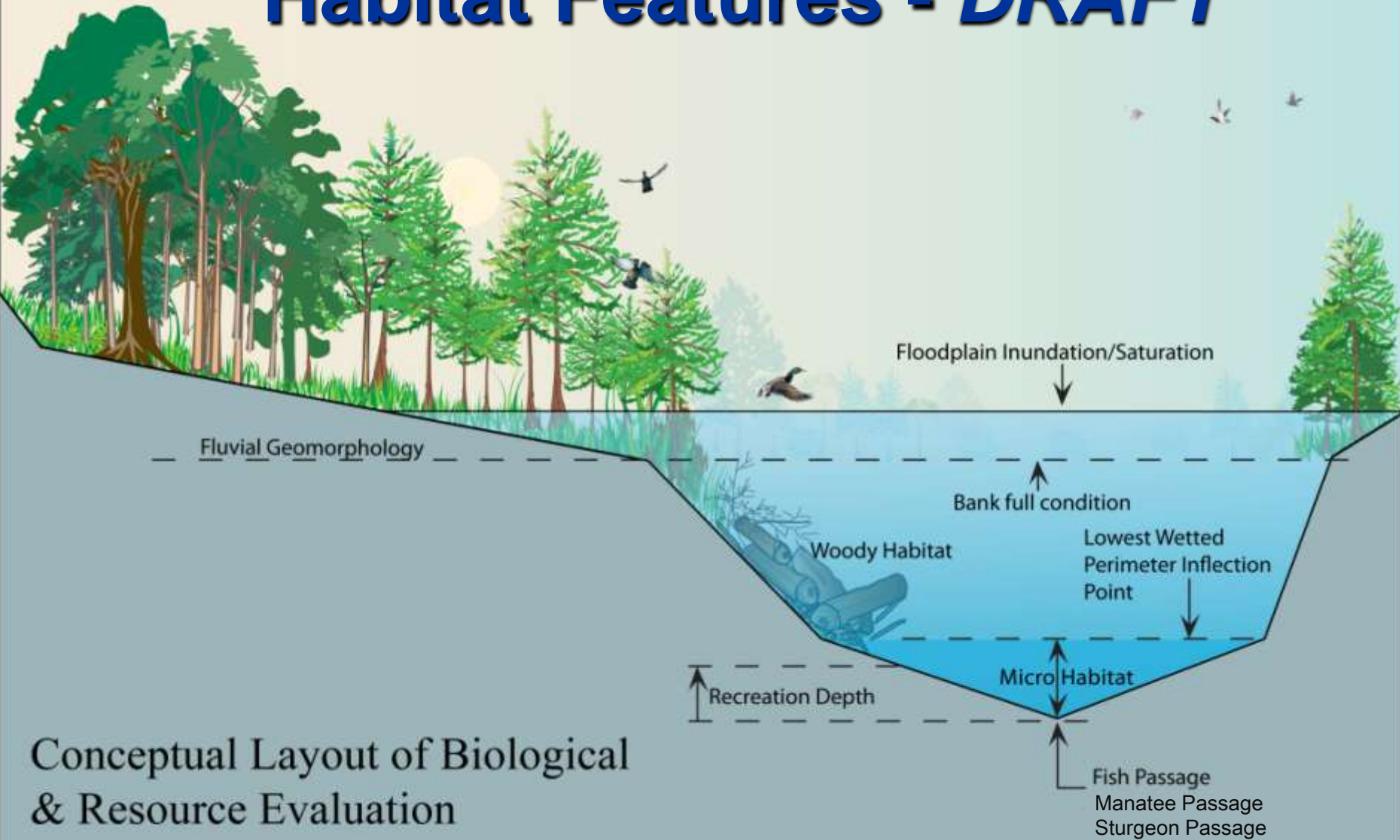
HEC-RAS

- Build model geometry
- Define boundary conditions
 - Upstream/Downstream
 - Lateral Inflow
- Identify calibration targets
- Calibrate
- “Production” runs



Gauge Locations

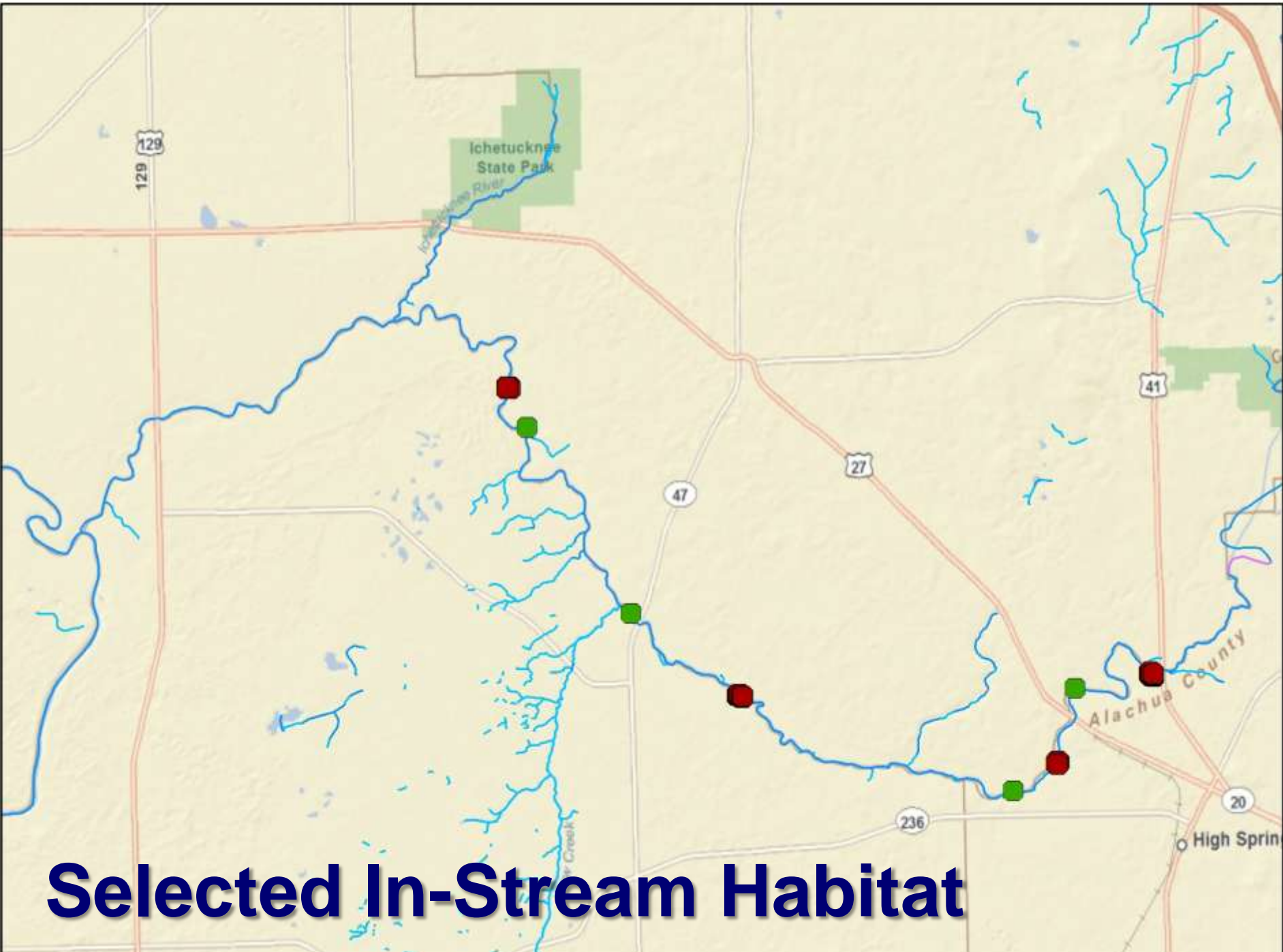
Habitat Features - *DRAFT*



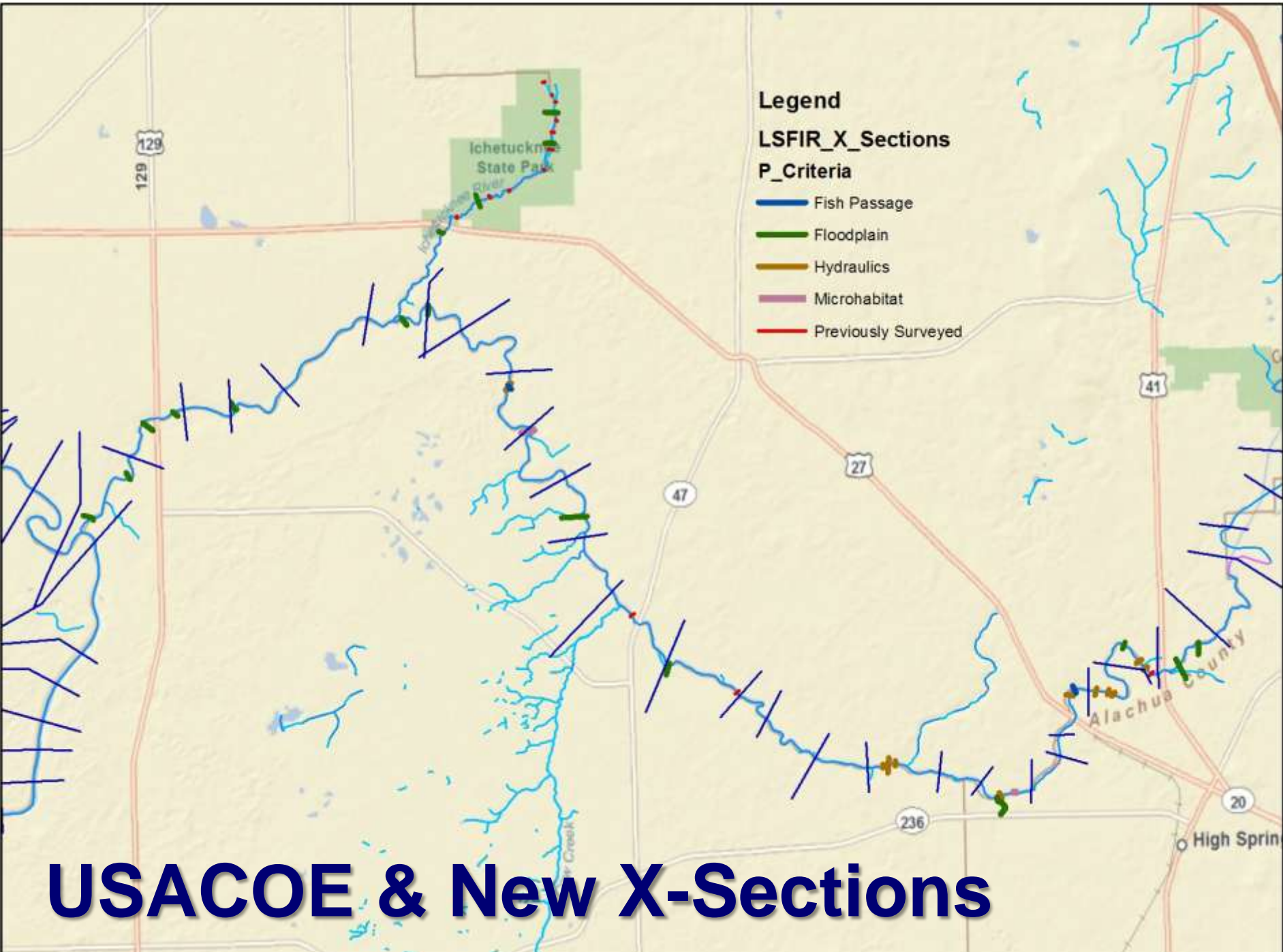
Conceptual Layout of Biological
& Resource Evaluation



Potential In-Stream Habitat



Selected In-Stream Habitat



- Legend**
- LSFIR_X_Sections**
- P_Criteria**
- Fish Passage
 - Floodplain
 - Hydraulics
 - Microhabitat
 - Previously Surveyed

USACOE & New X-Sections

Shoals are a challenge



SE Reso

Cason

N 212 Ave

Cheeota Ave

Boatramp Rd

41

20

27

Chew Ave

Chew Ave

Northeast 252nd St

NW 204th Pl

NW 250th St

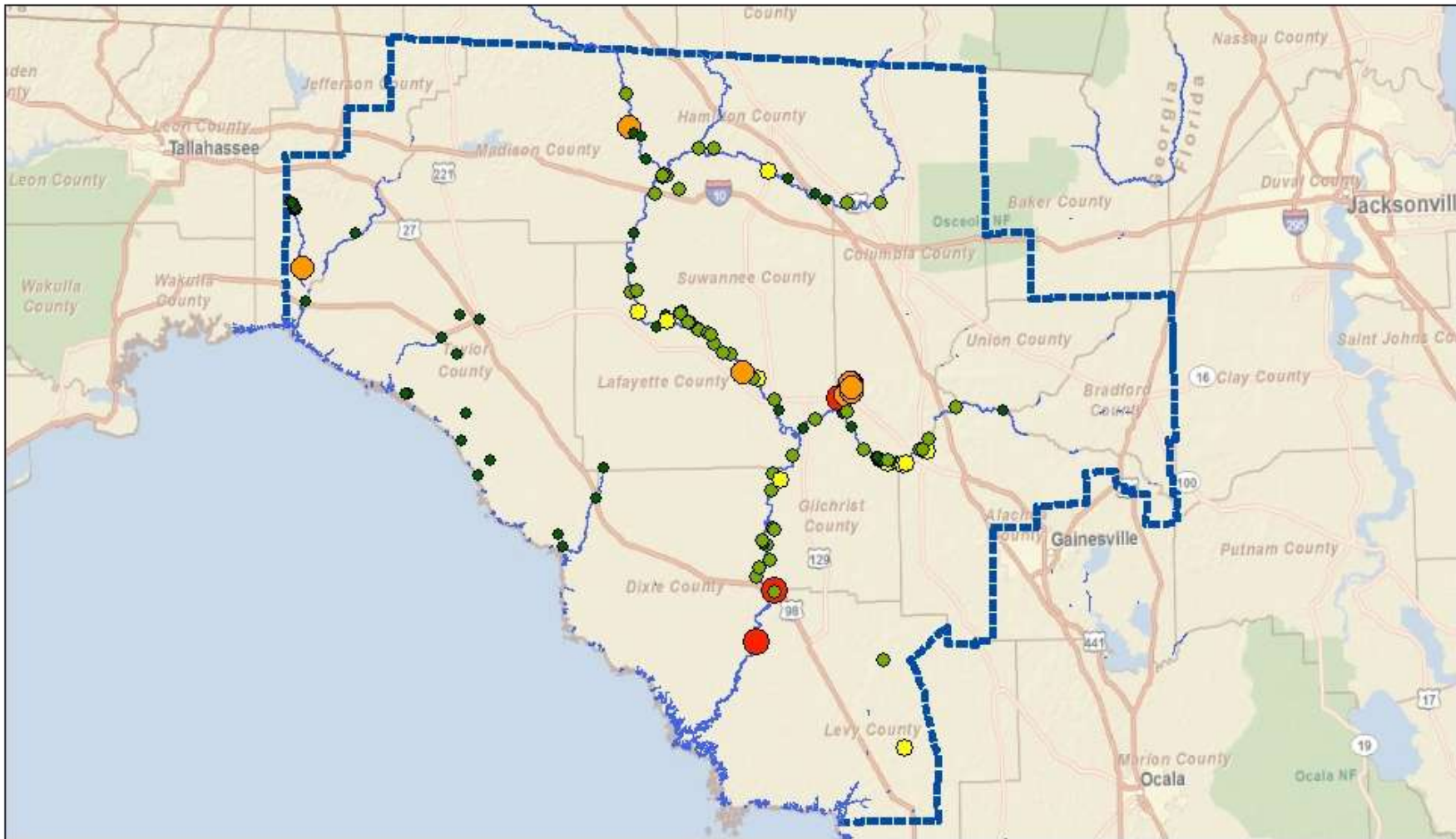
NW Santa Fe Bl

© 2011 Google
Image USDA Farm Service Agency

© 2010

Imagery Date: 5/7/2007

29°51'00.38" N 82°37'02.53" W elev. 324ft



DISCHARGE COUNT
Cnt_UPDATE

- 1
- 2 - 73
- 74 - 160
- 161 - 3334
- 3335 - 4013



Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.
Map Created on: 11/8/2011



DISCHARGE COUNT

Cnt_UPDATE

- 1
- 2 - 73
- 74 - 160
- 161 - 3334
- 3335 - 4013



Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.
Map Created on: 11/8/2011

