

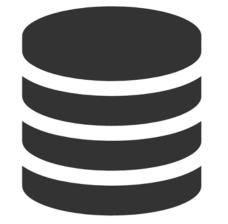
Collaborative Planning for Apalachicola Restoration in High Resolution

Colin Stief Senior Application Designer, Chesapeake Conservancy











Data

High-resolution

Large extent

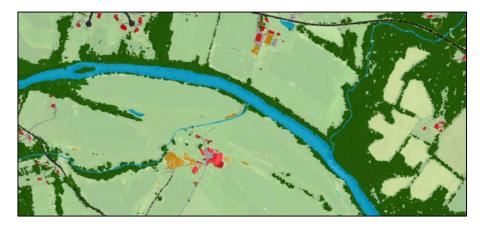
Web-based tools

Visualization

Project management

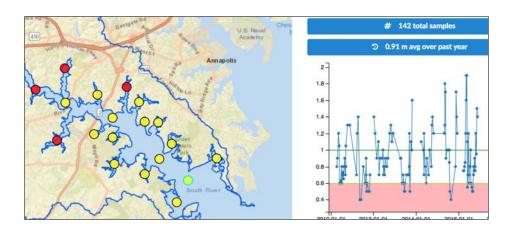


B Data















CENTER for **SPATIAL ECOLOGY** and **RESTORATION**













Ongoing projects

- 1. Culvert survey analysis
- 2. Prescribed burn extent identification
- 3. Evapotranspiration analysis



Culvert survey analysis



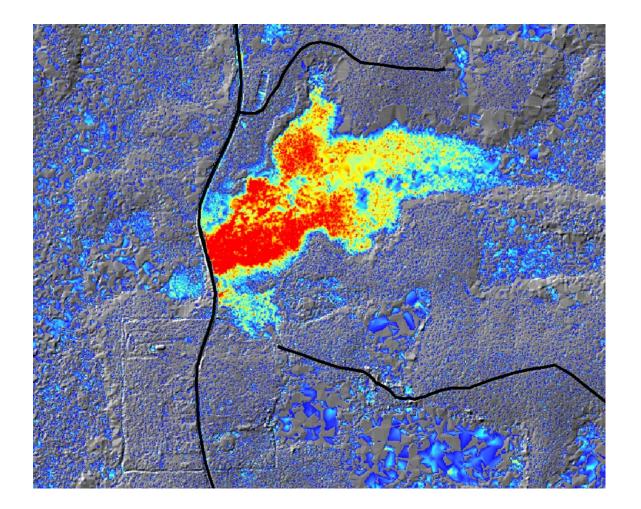
2014: Developed test methods

2017-18: Inventory drainage structures

Attributes: type, shape, materials, dimensions, condition, flow, photos



Culvert survey analysis

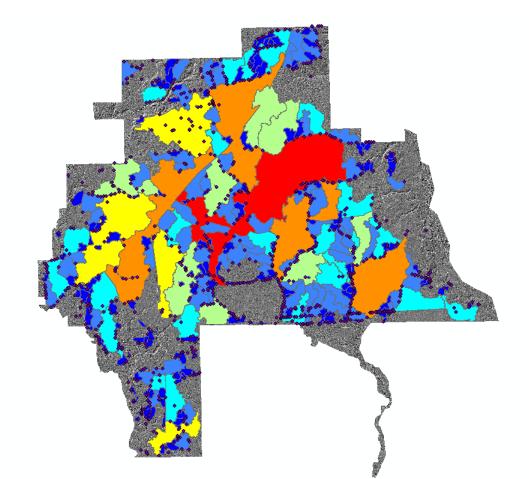


Drainage areas: hydro-corrected digital elevation model

Where are depressions adjacent to structures or roads?



Culvert survey analysis



Prioritization:

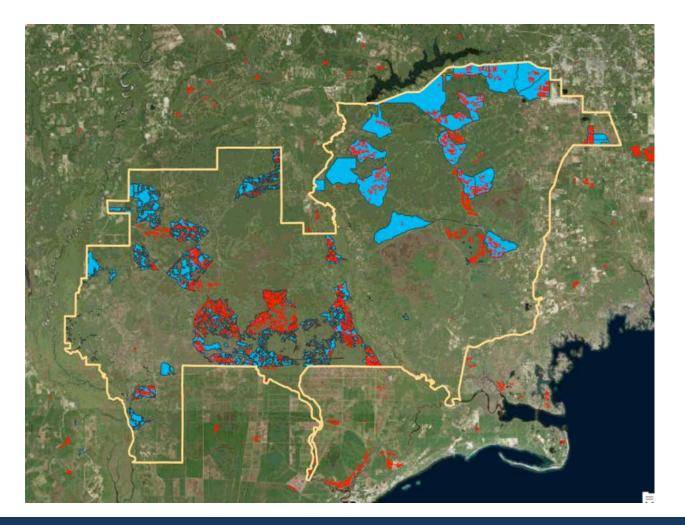
- 1. Existing culverts
- 2. Construction opportunities

Goals:

Aquatic organism passage Improved drainage



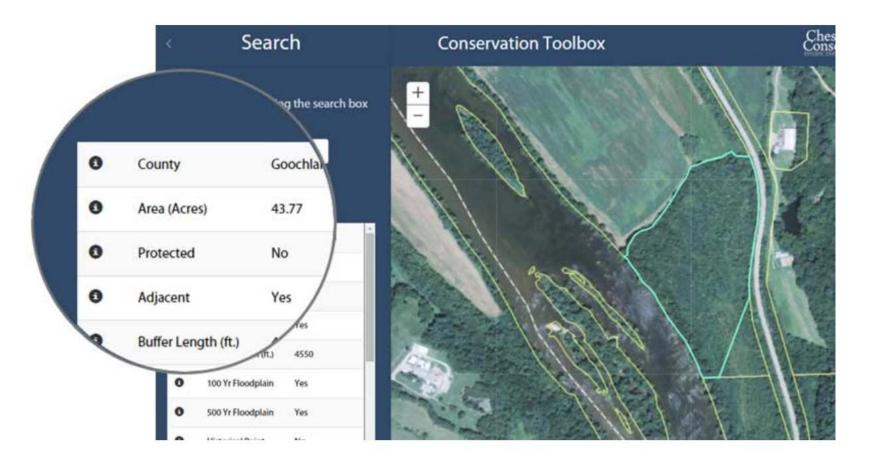
Prescribed burn analysis



Perimeter/extent: derived from satellite imagery



Prescribed burn analysis

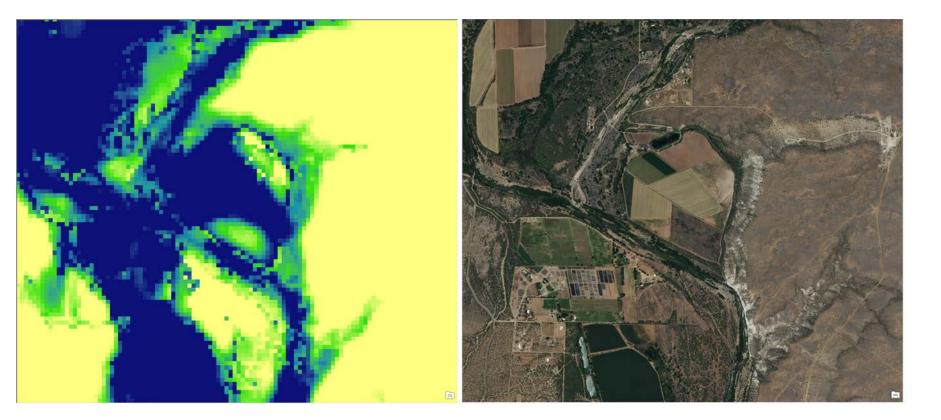


Web-based mapping application

Visual catalog Historic burn extents Supplementary data



Evapotranspiration (ET) analysis



EEFlux Google Earth Engine tool

Relationship between ET and ground cover



Colin Stief

cstief@chesapeakeconservancy.org

www.chesapeakeconservancy.org