BETTER TOGETHER:

Lessons Learned from the Chesapeake Bay Sentinel Site Cooperative

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Chesapeake Bay Sentinel Site Cooperative

Integrate science findings from local observations across the Chesapeake Bay region to improve planning and management decisions regarding sea level rise and ecological changes.

CHESAPEAKE BAY

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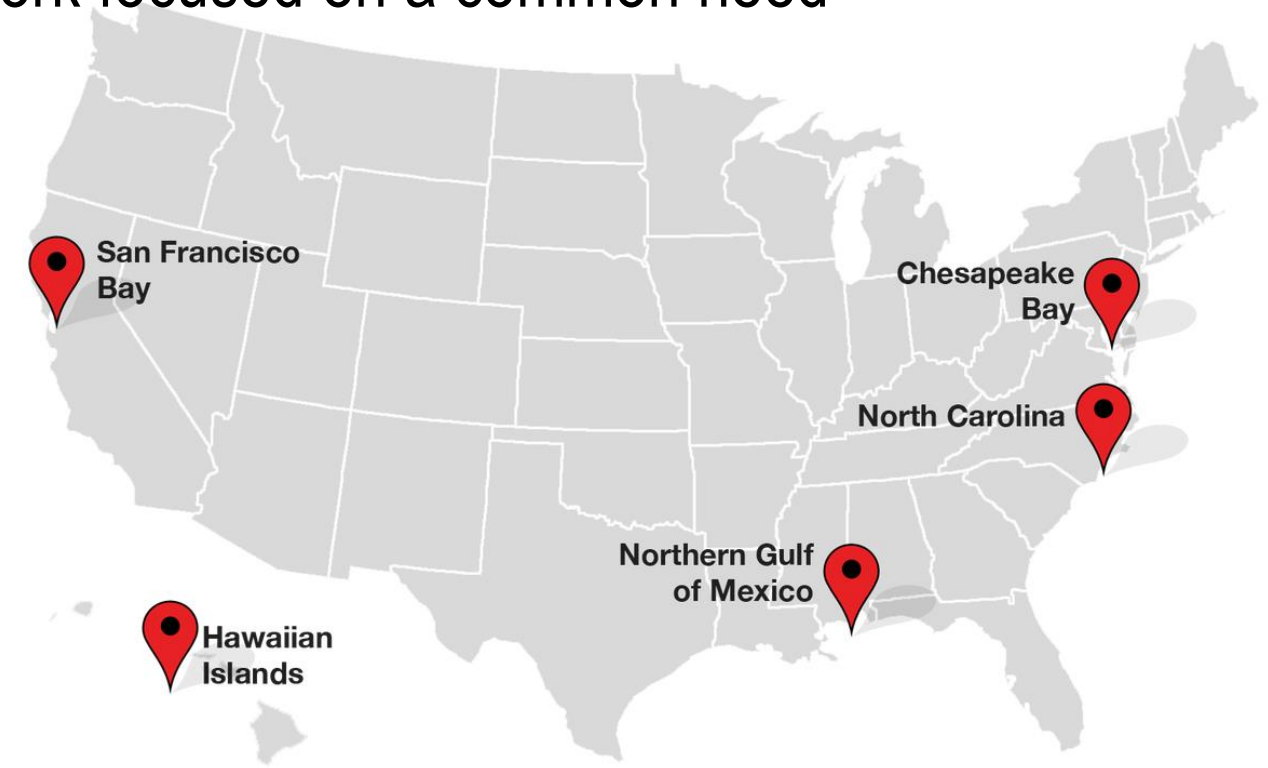
The NOAA Sentinel Site Program

- The whole is greater than the sum of its parts
- Strength of a network focused on a common need
  - Sea Level Rise



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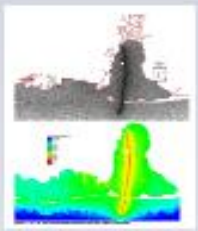
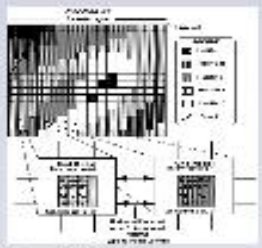
Observe & Monitor

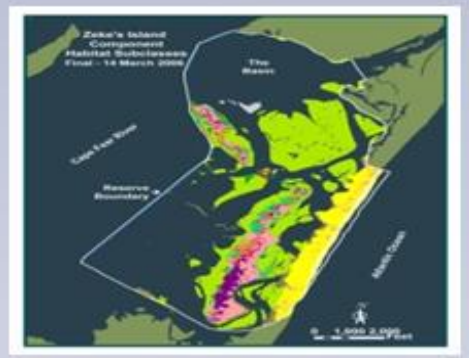
Applied Research



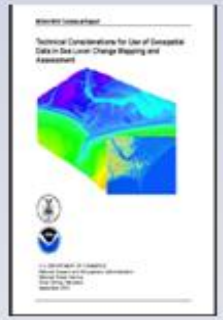


Models & Predictions

Science



Spatial Analysis & Visualization



Information Transfer

Service

Management & Decision Making

Education & Outreach

Stewardship

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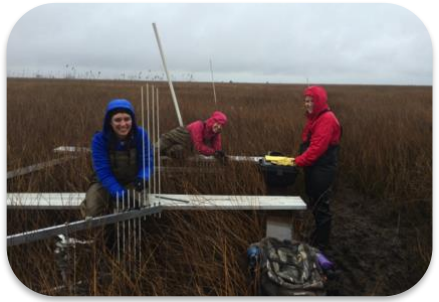
Our Sentinel Sites

Assateague NSS

Blackwater NWR

CBNERR-VA



CBNERR-MD

Poplar Island

SERC

VCR

VCU

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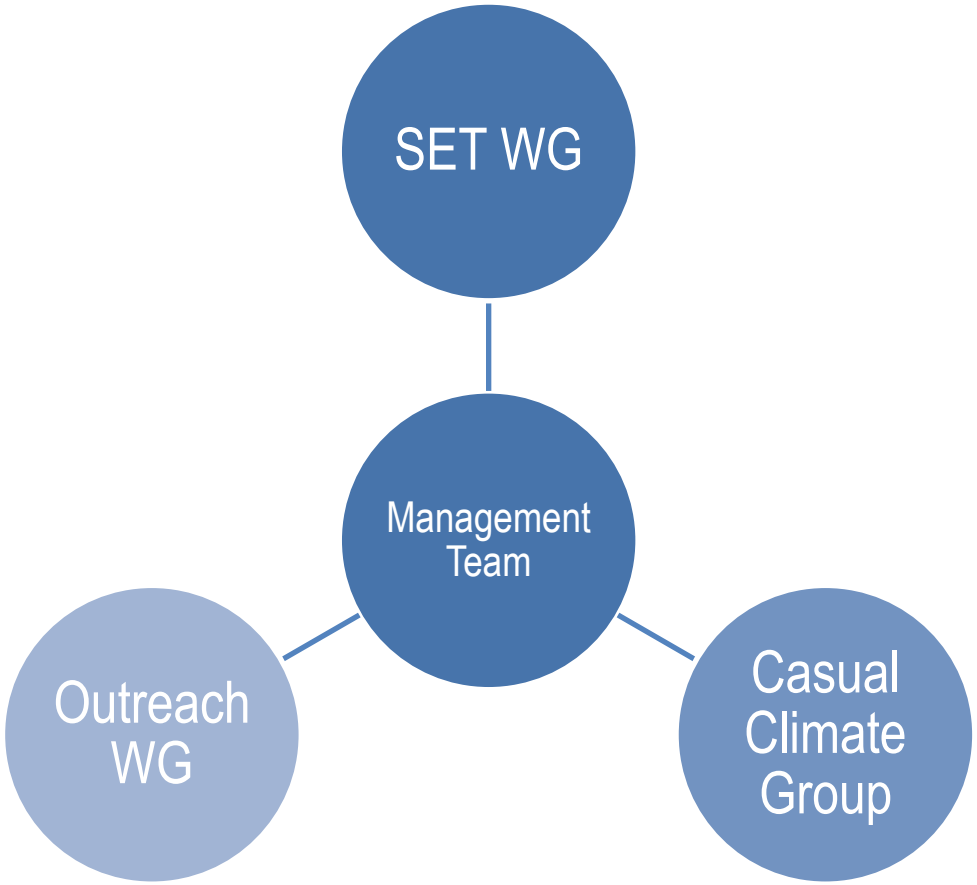
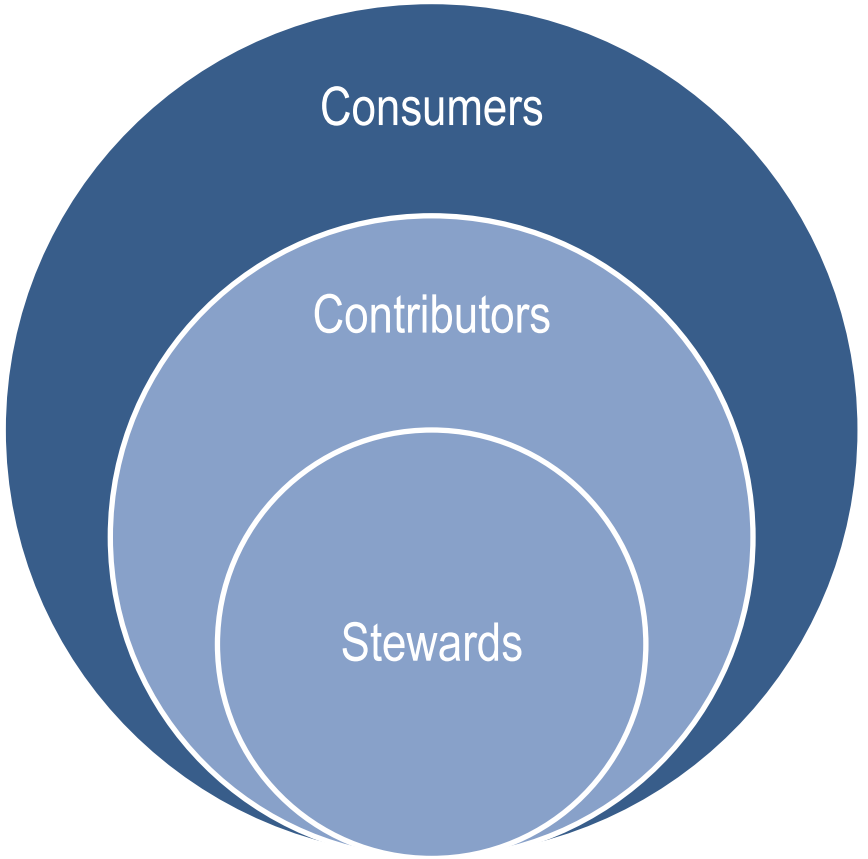
CBSSC Structure





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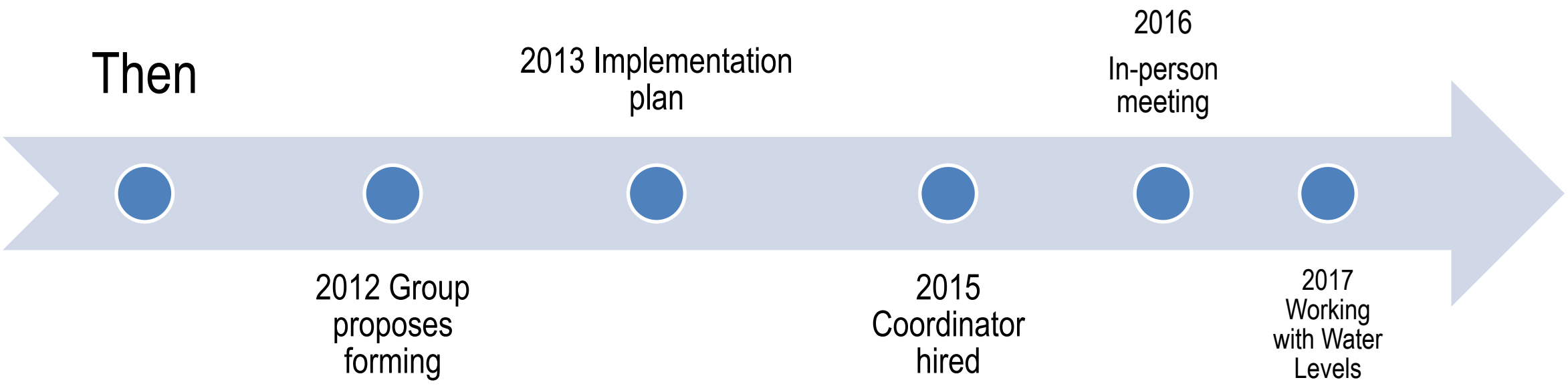
Surface Elevation Table Working Group

- Linda K. Blum, University of Virginia
- Joel Carr, USGS
- Edward Crawford, VCU
- Patricia Delgado, Jug Bay Wetlands Sanctuary
- Kyle Derby, Chesapeake Bay National Estuarine Research Reserve – Maryland
- Glenn Guntenspergen, USGS
- Lora Harris, UMCES
- James Holmquist, Smithsonian Institute
- Keryn Gedan, GWU
- Scott B Lerberg, VIMS
- Ronaldo Lopez, VCU
- James Lynch, National Park Service
- Patrick Megonigal, Smithsonian Institute
- Willy Reay, Chesapeake Bay National Estuarine Research Reserve – Virginia
- Erin M. Reilly, VIMS
- Lorie Staver, UMCES
- Court Stevenson, UMCES
- Carly Toulan, Maryland Coastal Bays
- David Walters, USGS

Events Timeline



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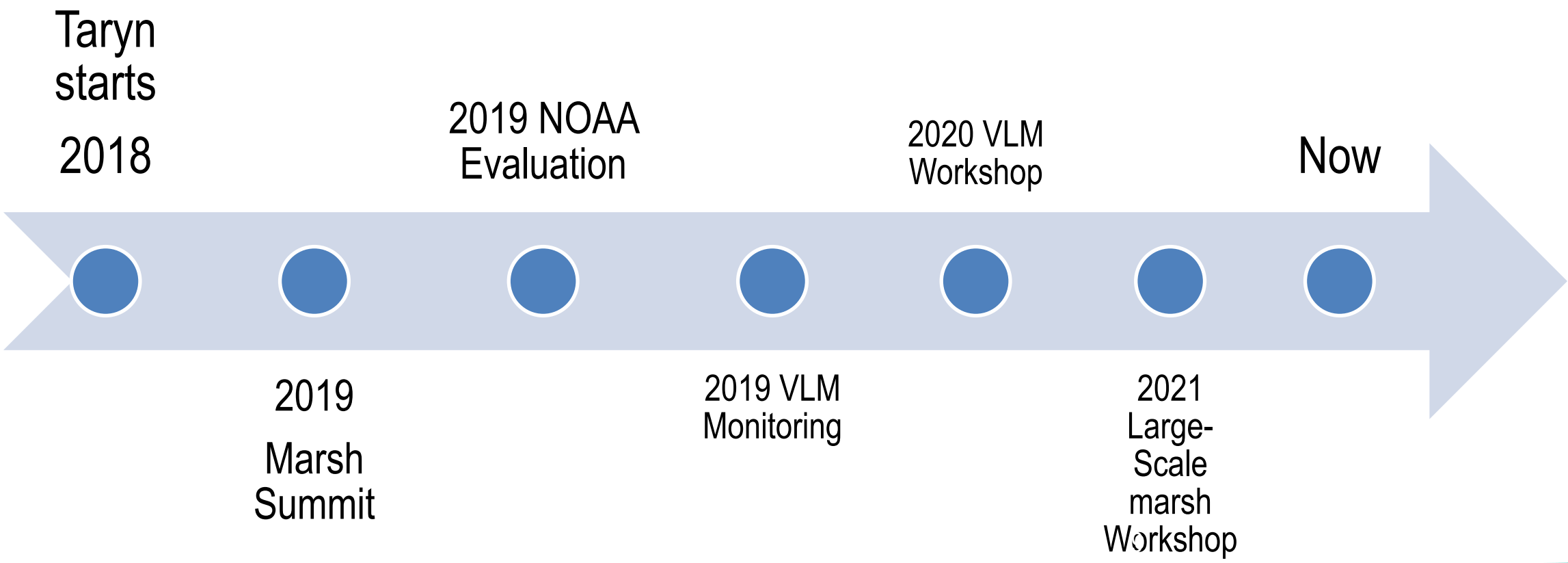
Events Timeline



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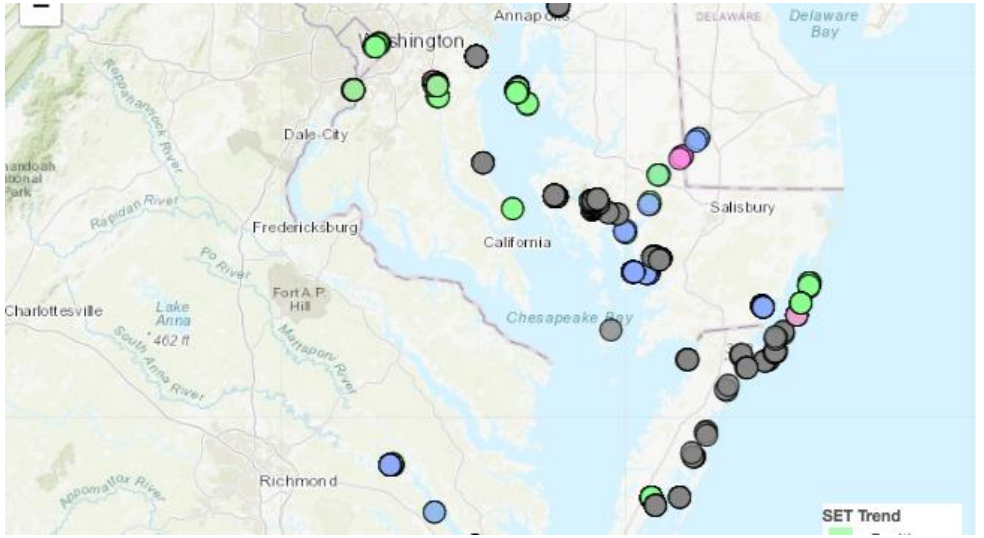
What we do



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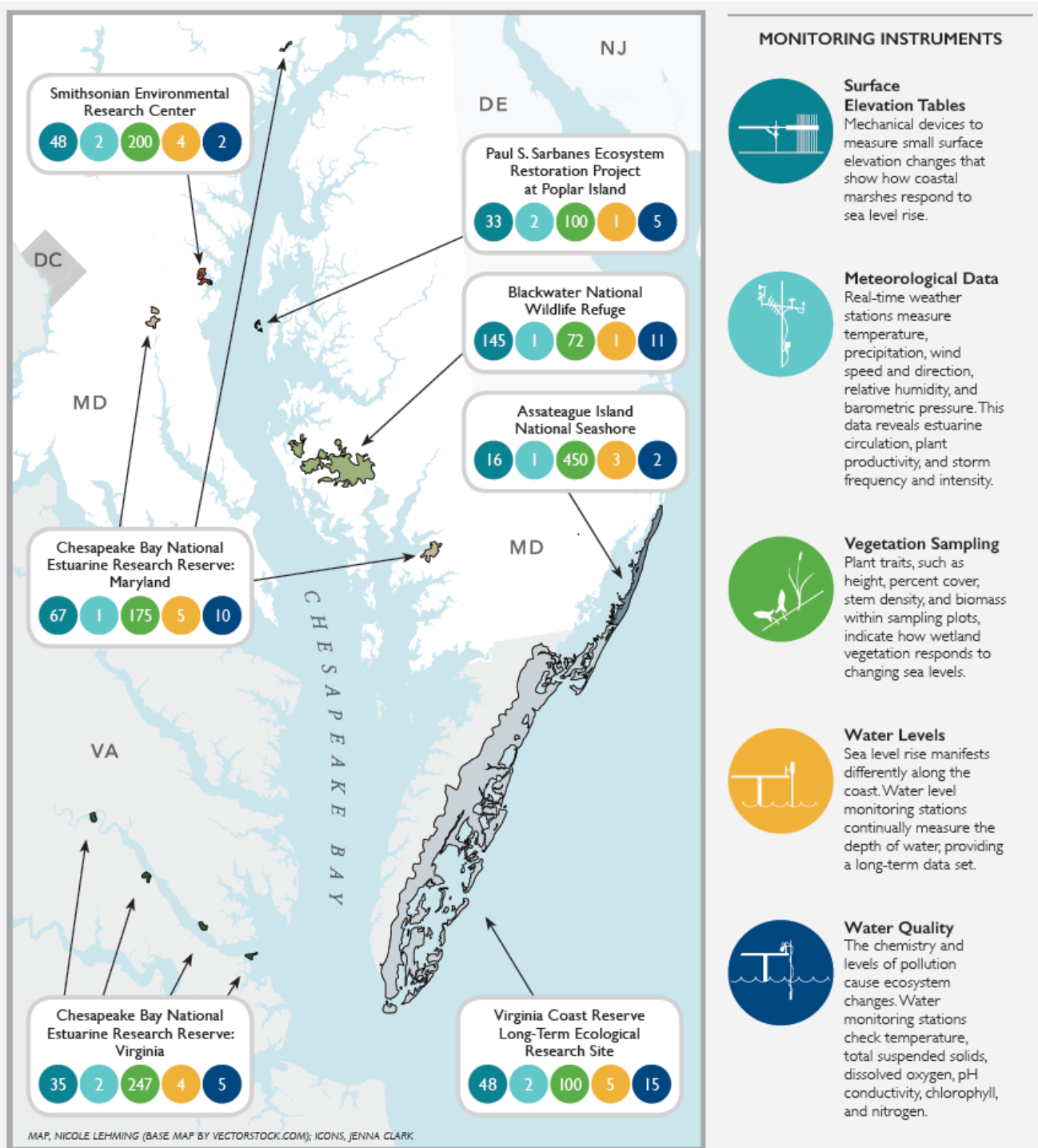
What we do

- Data synthesis
- Information Exchange
- Research collaboration
- Education

What we're measuring

- "Sentinel" criteria:
  - SETS, Meteorological data, vegetative sample, water levels, water quality
- Primarily Surface Elevation Tables
- Variety of marsh geomorphologies, salinities, vegetative communities across the Bay
- Effectiveness of different restoration techniques



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Why? What is the data used for?

- Long term data sets
  - Establish baseline
  - Track resiliency
- Specific management questions?
  - Individual sites tend to be answering those questions
  - Network connections

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Funding for monitoring vs group funding

- Monitoring for sites built into each group
  - Government, academia, long-term grants
  - Time and travel costs, accessibility, infrastructure
- Group funding limited
  - Intitially some for coordinator
  - Some travel and convening budget

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What I do

- Common thread across members and projects
  - Coordinate meetings, relationship building
- Represent the group across other partners/networks
  - Website maintenance, outreach materials
- Expertise: Convening, synthesis
  - Not *really* tidal wetlands, not environmental statistics

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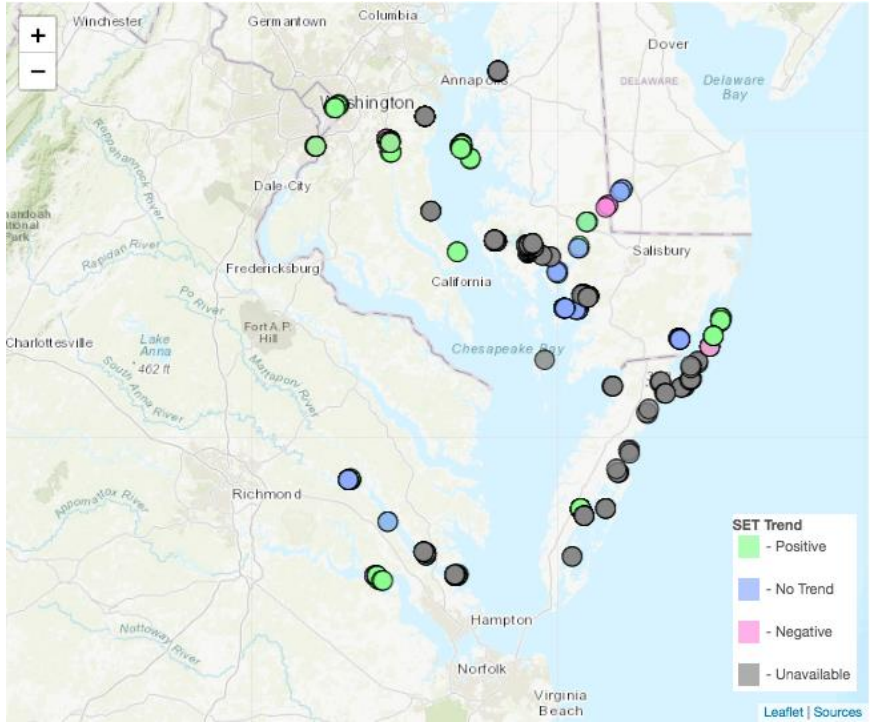
Data struggles

- Data sharing
  - Institutional silos
  - Publish!
  - Credit where credit is due
- Different data compilation
- Changing relevant data sets
- TIME



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Products

Data Synthesis

- Data Infrastructure Report (2017)
- SET Map (2018)
- MARS-Lite (2018--)
- USGS/Ganju LoS (2019)
- Conceptual Model (2021)

Information Exchange

- Many group meetings
- Wetlands Special Feature (2020)
- NOAA RTK (2019)
- NERRS SET Visualizations
- "Partners Call"
- SERC research (2022)

Grants

- EESLR (2019)
- NERRS Capacity Grant (2019)
- NERRS Sci Collab (2020)
- NERRS Sci Collab (2022)

Education

- CBSSC Brochure (2017)
- CBSSC Website (2018)
- SET 101 Webinar (2019)
- Southwings (2019)
- Turning the Tide (2020)

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Themes

Connection

- Niche
- Scale
- Frequency

Momentum

- Leadership
- Funding
- Investment

Impact

- Individual
- Overall

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What's next for the CBSSC?

- Inspiration from other SET WGs
- SET research synthesis
- Drone community of practice
- Opportunity awaits!

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