A Review of the Work of Staffers

Melissa Merritt's Interests: Coordination and Science Visualization

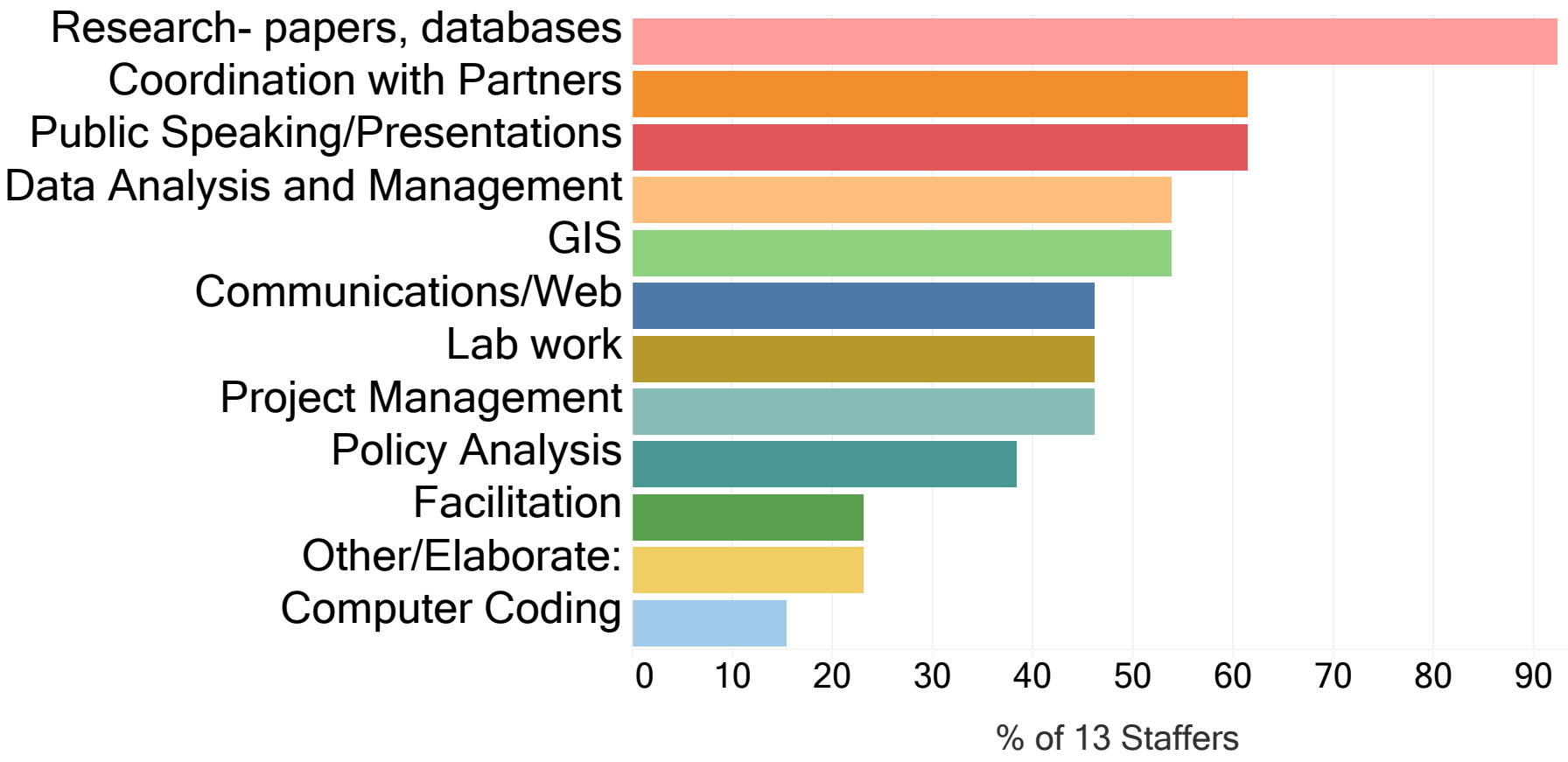
- Staffer Professional Development Meetings
- SAV Synthesis

Coordination

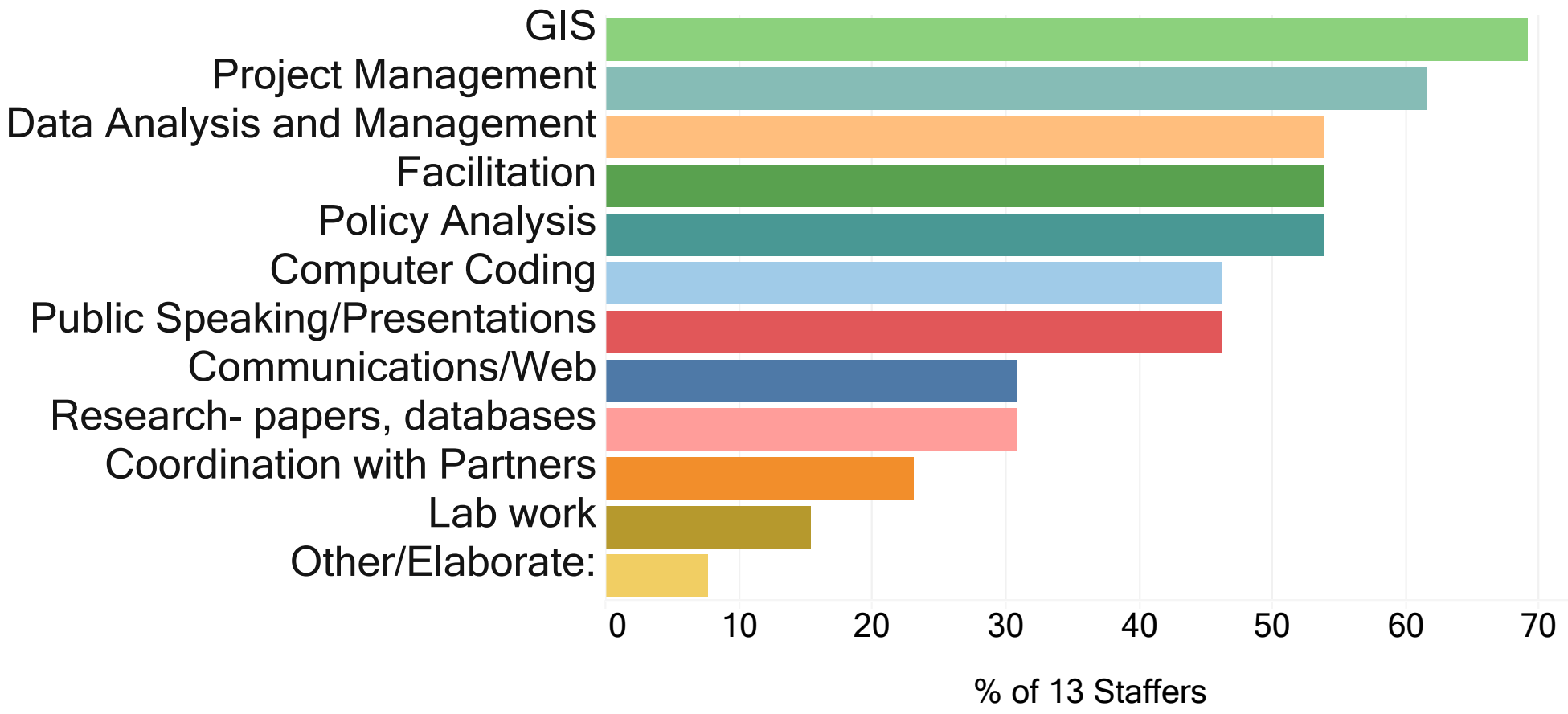
Organize staffer meetings for professional development

- Learn about the work we're all doing
- Learn about the opportunities available
- Determine common areas of interest to create professional development opportunities

50% or more of staffers are skilled in Database work, Data Analysis, GIS and coordination.



GIS, Project Management, Data Analysis, Facilitation, and Policy Analysis are priorities for professional development.



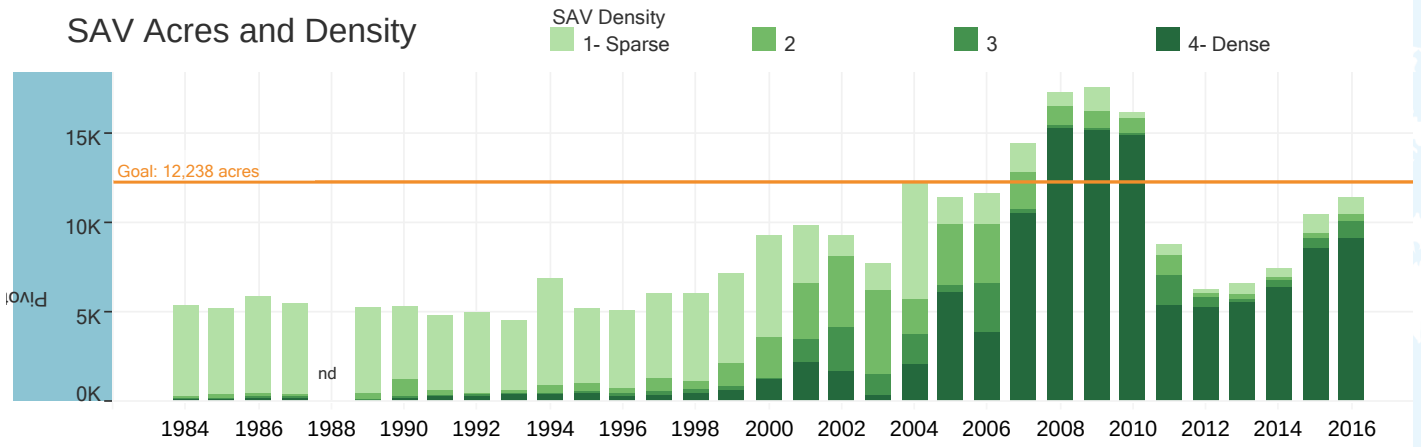
Staffers generate content and direction.

- Staffers lead sessions on their expertise
- Staffers provide updates on their work
- Staffers network between each other for opportunities

Science Visualization

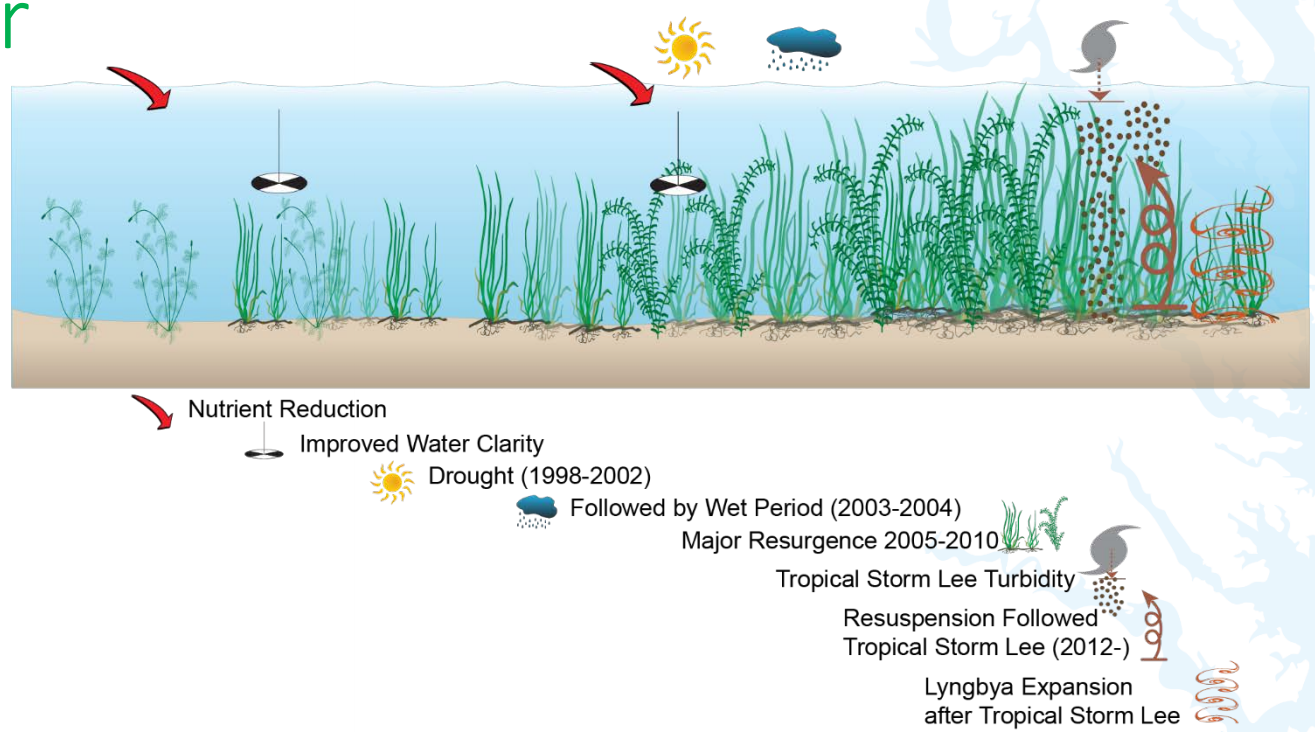
Visualize SAV trends over time using multiple programs

- Tableau



Visualize SAV trends over time using multiple programs

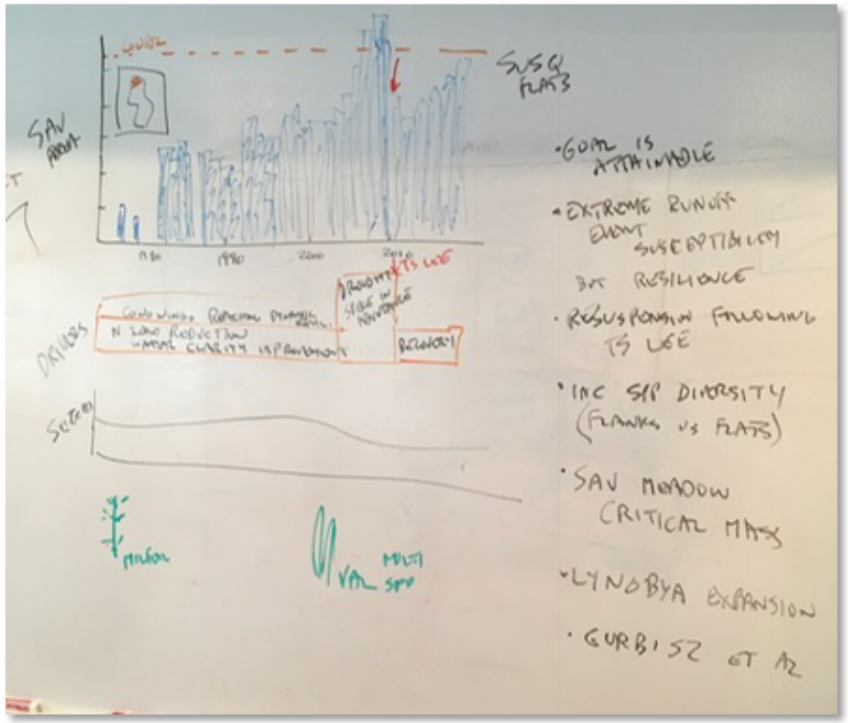
- Adobe Illustrator



Visualize SAV trends over time using multiple programs

- GIS

Visualize Information



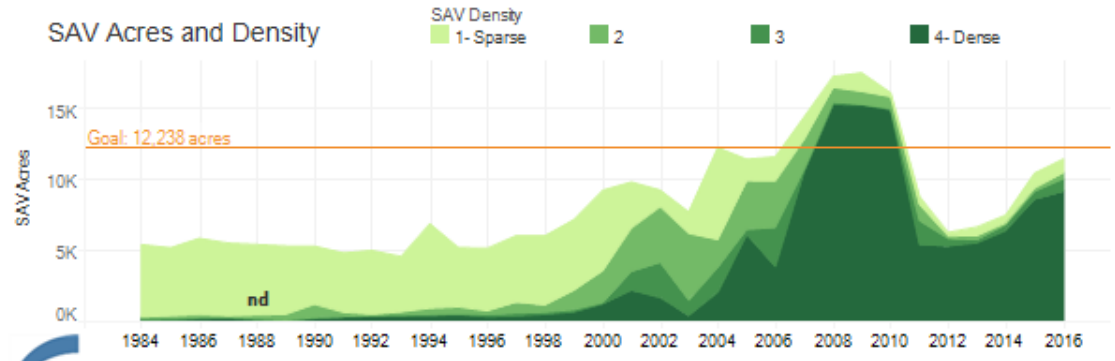
SAV Segment Susquehanna Flats (CBTF2 and NORTF)

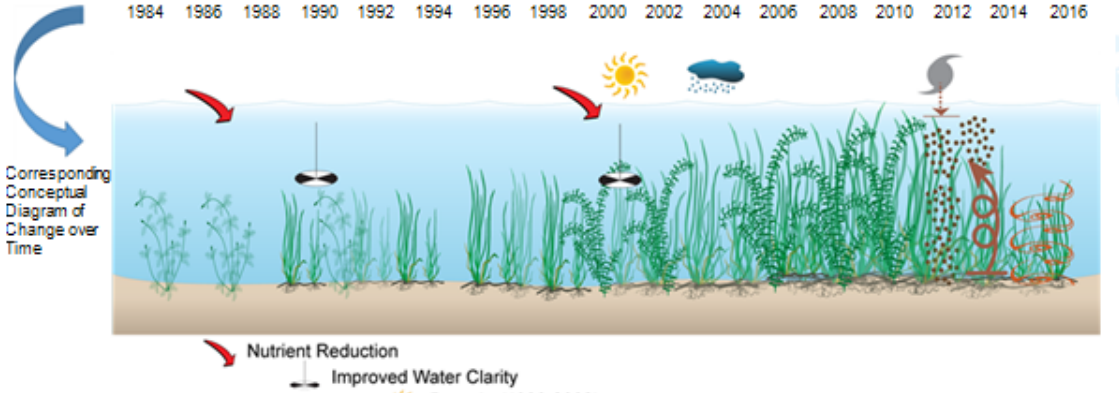
(http://vims.edu/bio/sav/SegmentAreaChart.htm)

Current Expansive Freshwater SAV Beds in the Upper Chesapeake Bay near Havre de Grace

Executive Summary

While historic records indicate that SAV once covered over 12,000 acres of the Susquehanna Flats and supported large populations of migrating waterfowl, those beds were in serious decline by the mid-1900s. Stress to native SAV populations allowed for non-native Eurasian watermilfoil to dominate the SAV that persisted and when Tropical Storm Agnes tore over the Flats in 1972, most of the remaining SAV was lost with the rapid onslaught of sediment and nutrient pollution to the estuary. After two decades of minimal recovery, SAV beds on the Susquehanna Flats began to experience a resurgence as a result of reductions in total nitrogen and the consequent improvements in water clarity. By 2008, SAV reached and surpassed its restoration goal in these associated segments until 2011 when Tropical Storm Lee hit the region. Scour and turbidity reduced SAV in the Flats by approximately 1/3 following the storm, but steady recovery since then has been facilitated by the dense, resilient SAV bed that persisted.





Take Home Points

- Goal is attainable
- Extreme Runoff Event Susceptibility, but Resilient
- Resuspension following Tropical Storm Lee
- Changing patterns in SAV species diversity and habitat quality
- SAV Meadow Critical Mass
- *Lyngbya* Expansion
- Management Implications

Work summarized:
Coordination and Science Visualization

- Coordinate meetings for staffers to gain professional development opportunities
- Visualize data trends and drivers for science communication