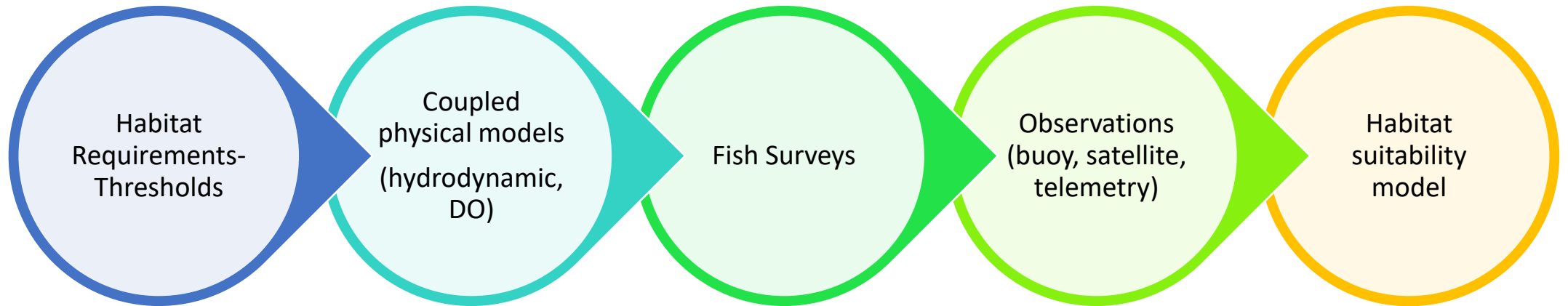# Fish Habitat Models

Bruce Vogt
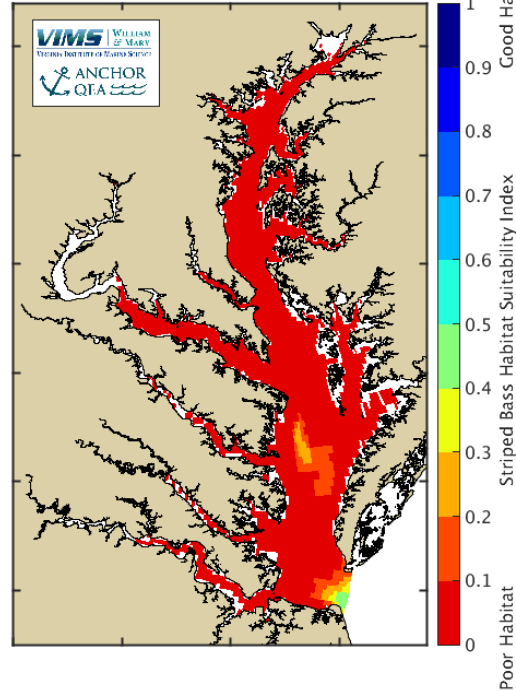
STAR December 17, 2019
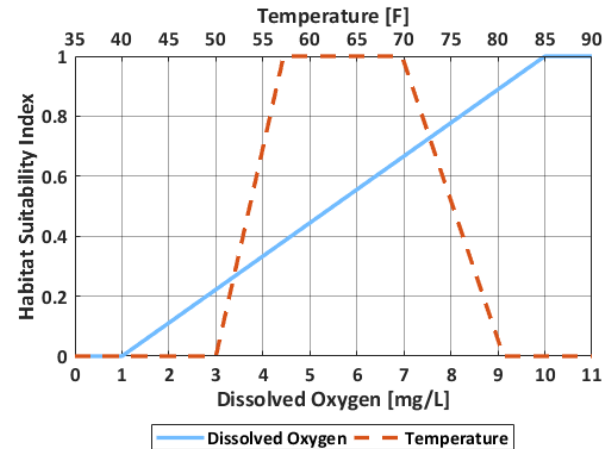
Quantify and map quality of fish habitat

Bottom Habitat Suitability: Forecast
December 10, 2019

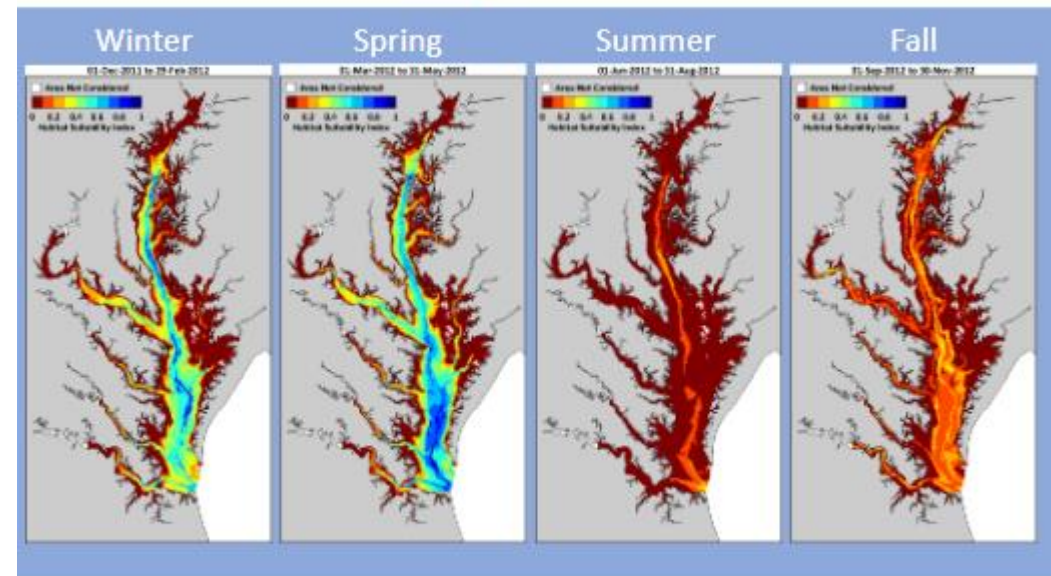## Striped Bass Habitat Suitability Relationships

Fishing Conditions Forecast

December 11 - 17, 2019

As we approach the end of striped bass season in mid-December, Bay temperatures continue to drop. The cool weather has reduced the water temperature of upper Bay mainstem and rivers to the mid-40s, and main-Bay surface waters from Annapolis south to the State line to the upper-40s (°F). This cooling will continue over the next week. Warmest waters continue to be found in the bottom quarter of the water column from the mouth of the Patuxent River down to the MD/VA state line. So while Bay fish can be present chasing shallow schools of baitfish, focus on the warmer, deeper waters near prime habitat areas for larger concentrations of baitfish and hungry gamefish as they migrate to the their winter holding areas. As always, make sure to focus on moving water periods for best results.

Seasonal HSI_gm for Spotted Hake

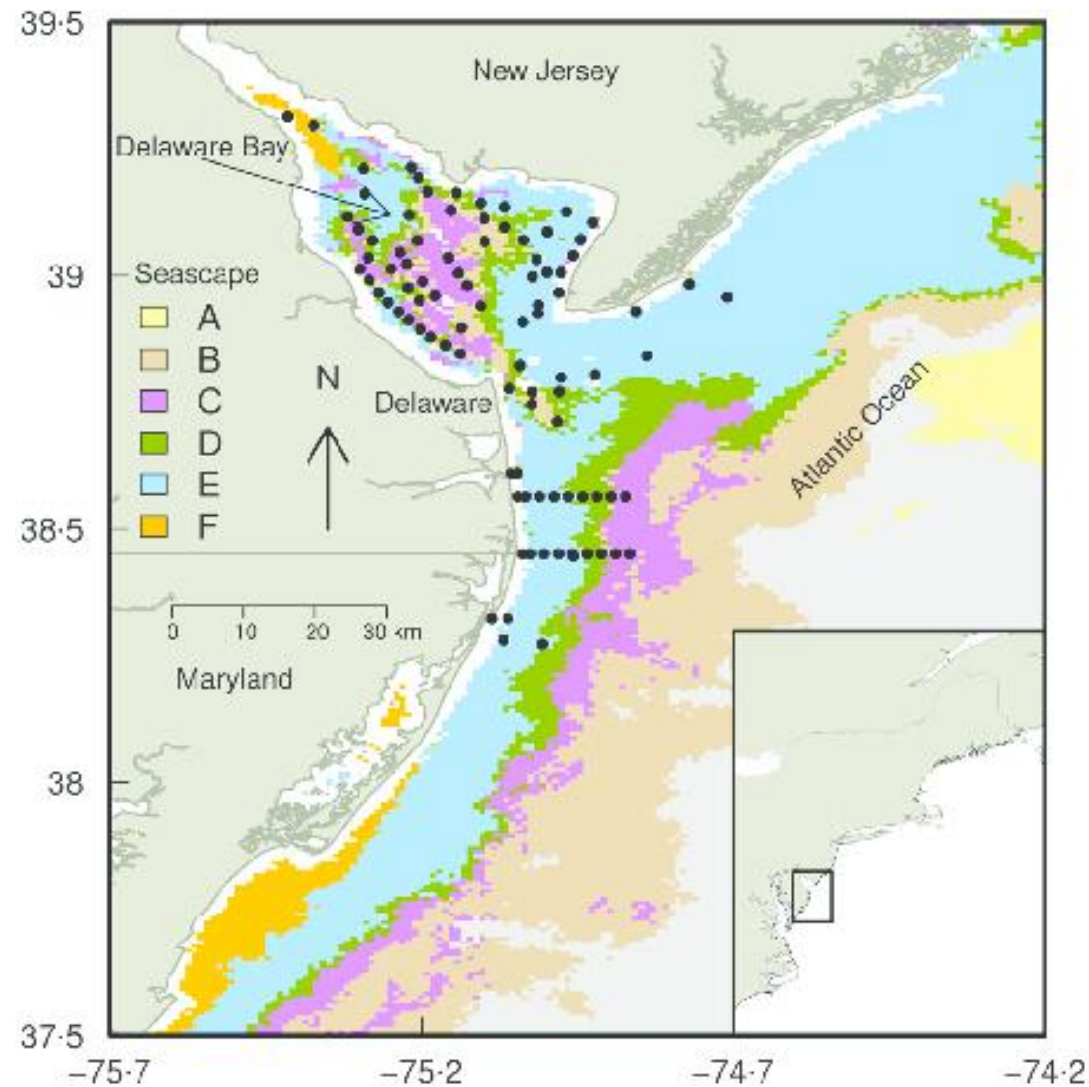| Winter	Spring	Summer	Fall

Dec 2011 – Nov 2012

Median of seasonal environmental conditions used for plotted HSI

Fabrizio

Dynamic seascapes and A. Sturgeon

Breece et al 2016

Management

- Fishing guidance to reduce mortality
- High value habitat areas for conservation
- Indicator development
- Climate change scenarios
- State of Ecosystem Synthesis