# Extent and Distribution of Submerged Aquatic Vegetation (SAV) in the Delaware Estuary

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## Background

- Oceans and Dredge Disposal Program
- Section 404 of the Clean Water Act
- Joint Corps / EPA program
- Examples of EPA responsibilities include:
  - Developing and interpreting environmental criteria used in permit evaluation process
  - Reviewing/commenting on permit applications
  - Enforcing Section 404 provisions

## Purpose

- Determine presence or absence of SAV
- Identify species type
- Focus on areas identified in permit applications
  - Inform 404 staff of observations
- Fill in geographical data gaps
- Make data publicly available

## Why Do We Care about SAV in the Delaware?

- Indicator of estuarine health
- Located in shallow water habitat
- Reduces turbidity
- Buffers nutrient concentrations

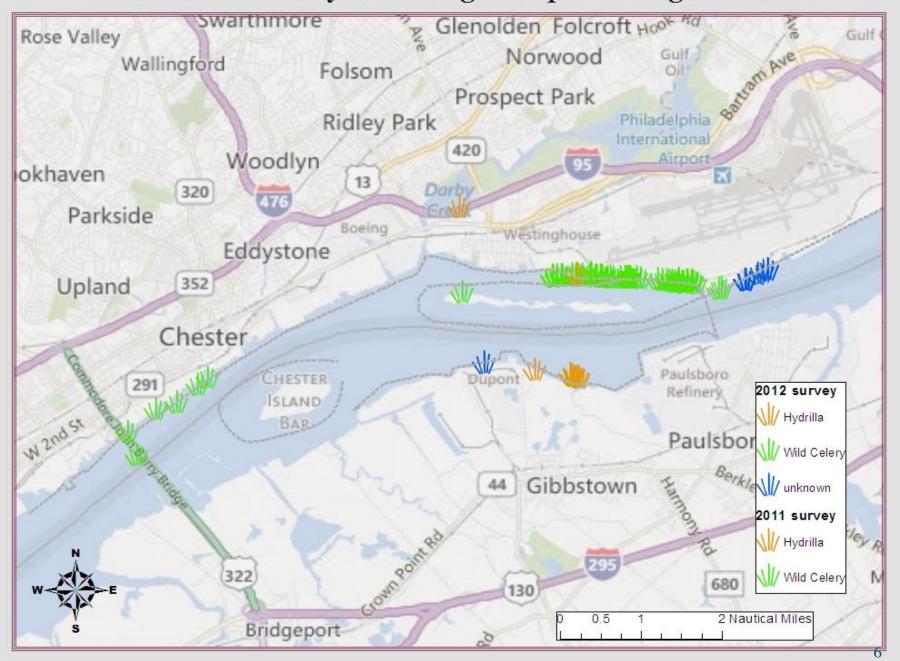
## How do you find SAV anyway?

- Complicated series of grids
- Random sampling
- ROV
- Low tide
- Depth finder





#### Delaware Estuary Submerged Aquatic Vegetation



### Observations

- Two species identified:
  - Wild celery
  - Hydrilla
- Silty substrate
- Health of SAV
- Average depth
- Varied velocity
- Extent / distribution





## Challenges

- Turbidity
- Tidal variance
- Obstructions
- Time / resources

## **Next Steps**

- Broaden geographical coverage
  - Focus on permit applications
- Create more systematic approach
- Collect physicochemical data

## Questions?

