

# Monitoring Inventory & Needs Assessment for the Delaware Estuary - Update Annual STAC-MACC Meeting, June 9, 2021



Credit: Susan Rogozinski, Thompsons Beach, NJ



Credit: PDE, Longwood



Credit: PDE, Milford, DE



Credit: Victoria Gordon, Medford, NJ

# WHY?

## Monitoring Approach in Revised 2019 Comprehensive Conservation & Management Plan (CCMP)

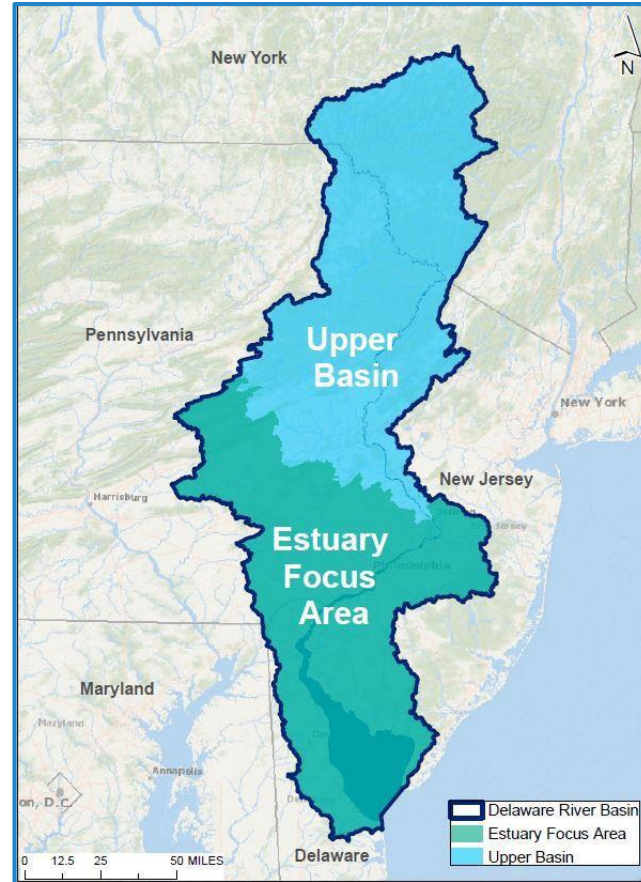
- STAC-MACC Meeting (every year)
- TREB/State of Estuary (every 5 years)
- Monitoring Workshop (every 5 years)

## Monitoring Goals for Delaware Estuary Program (DELEP)

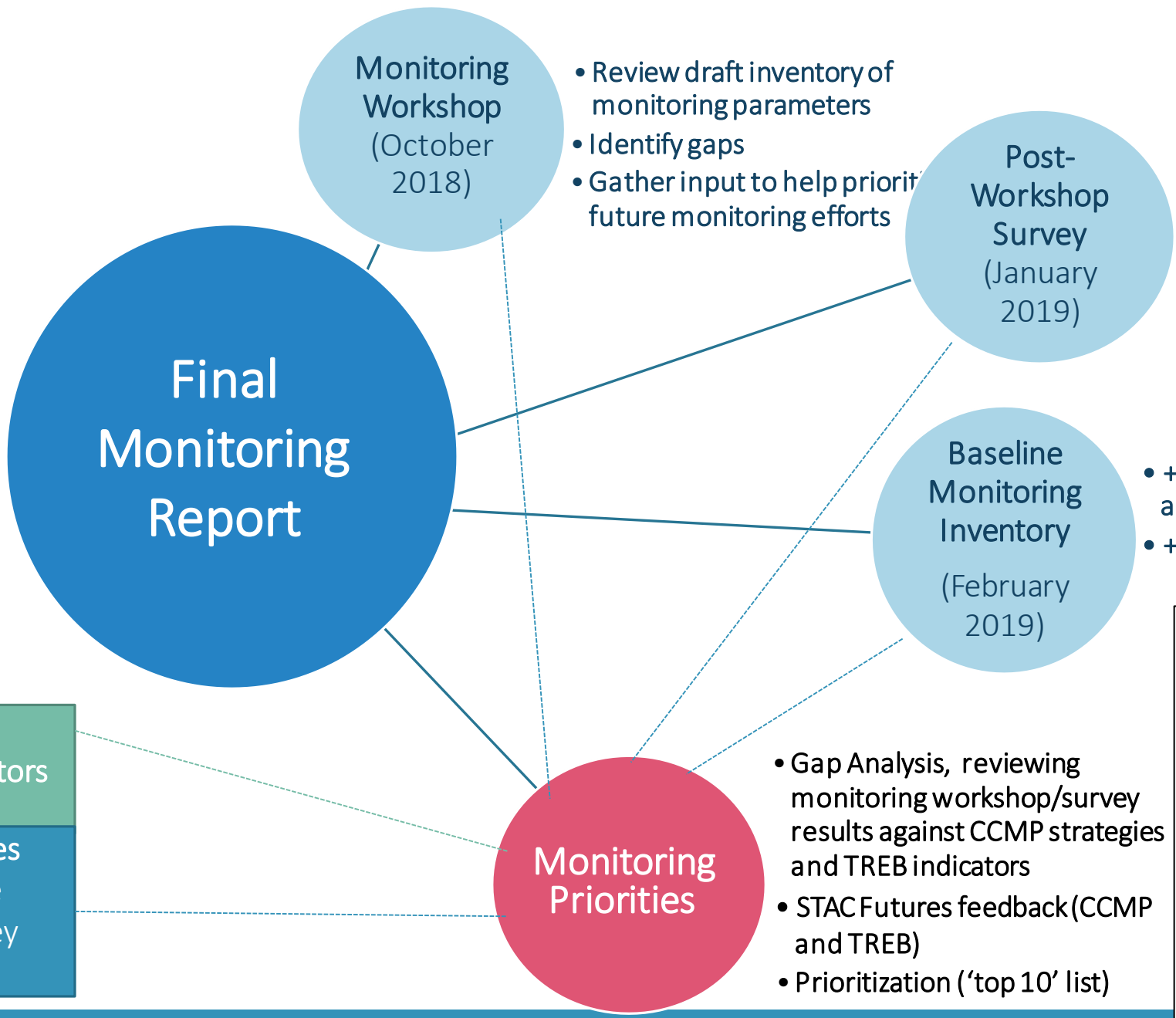
- Inventory critical monitoring in region
- Create a list of monitoring priorities

## Focus

- CCMP tracking
- Delaware Estuary Focus Area



# HOW?



**Monitoring Workshop (October 2018)**

- Review draft inventory of monitoring parameters
- Identify gaps
- Gather input to help prioritize future monitoring efforts

**Post-Workshop Survey (January 2019)**

- Evaluate results from Monitoring Workshop
- Aid in prioritizing/ranking monitoring parameters (non-plant living resources, plant and habitat, water quality)

**Baseline Monitoring Inventory (February 2019)**

- +640 regional monitoring activities
- +40 contributing organizations

**Monitoring Priorities**

- Gap Analysis, reviewing monitoring workshop/survey results against CCMP strategies and TREB indicators
- STAC Futures feedback (CCMP and TREB)
- Prioritization ('top 10' list)

**2017 TREB Indicators**

**CCMP Strategies (Performance Measures & Key Deliverables)**

**White Paper on the Status and Needs of Science in the Delaware Estuary**

*A Publication of the Partnership for the Delaware Estuary  
A National Estuary Program  
Report Number 06-01  
January 25, 2006  
[www.DelawareEstuary.org](http://www.DelawareEstuary.org)*

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<http://www.delawareestuary.org/scienceandresearch/datasetsandreports/index.asp>

# WHAT'S IN THE MONITORING INVENTORY?



## Living Resources

- Animals (29)
- Vegetation (24)
- Microbiological (15)
- Biological (7)

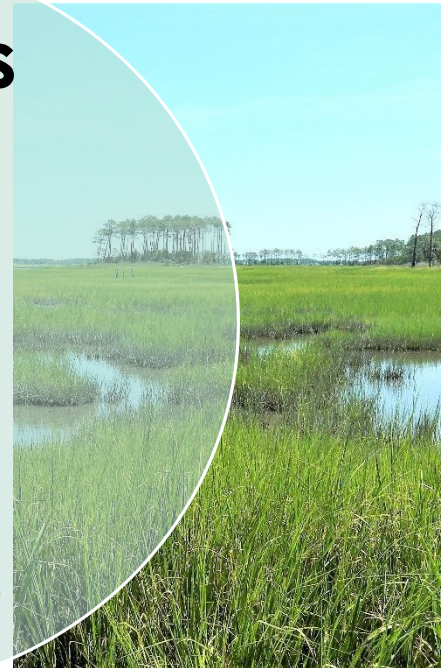
## Water

- Nutrients (118)
- Water Quality (111)
- Inorganics (81)
- Organics (79)
- Chemical/Chemistry (25)
- Toxicity (6)
- PCBs/Pesticides (4)



## Habitats

- Physical (33)
- Sediment (30)
- Spatial (11)
- Hydrology (10)
- Habitat (7)
- Geology (6)
- Buffer (5)
- Atmospheric (2)



640 monitoring parameters  
Submitted by ~40 organizations

# MONITORING REPORT OVERVIEW

## Background Information

- Delaware Estuary Watershed
- Delaware Estuary Program/National Estuary Program
- TREB Environmental Indicators
- Delaware Estuary CCMP Tracking (Performance Measures, Monitoring Approach)

## Monitoring Activities & Feedback

- Inventory of Current Long-Term Monitoring Programs
- Monitoring Expert Survey Results
- Monitoring Workshop Results
- Expert Participant Recommendations

## Future Monitoring Priorities

- CCMP-TREB Action Comparison Matrix
- Gap Analysis
- Prioritization of Monitoring Parameters & Needs ('top ten' list of future monitoring needs)

## Reference Documents

- Delaware Estuary Monitoring Inventory
- Monitoring Survey and Workshop Results Summary Report
- NOAA ERMA Delaware Estuary Monitoring Inventory Layer
- 2019 CCMP
- 2017 TREB

# Monitoring Inventory and Needs Assessment for the Delaware Estuary



Photo Credit: PDE

| Steps  | Time Allotted                    | Deadlines and notes   |
|--|----------------------------------|---|
| Draft 1 to STAC & MACC                                     | 4 weeks for STAC and MACC review | Comments due 6/30/2021  |
| PDE staff revise   | 2 weeks                          | Sent to EIC by 7/15/2021  |
| Draft 2 to EIC   | 2 weeks for EIC review           | Comments due 7/30/2021  |
| PDE staff (and STAC if needed) revise                      | 3 weeks for revision             | Sent to EIC by 8/20/2021  |
| Draft 3 to EIC and Steering                                | 2 weeks for EIC review           | Comments due 9/3/2021   |
| PDE staff revise   | 2 weeks for revision             | Sent to EIC/SC by 9/17/2021                                     |
| Draft 4 to EIC and Steering Committee                      | 3 weeks for SC review            | Comments due 10/8/2021<br><i>(Includes EIC briefing for SC)</i> |
| PDE staff (and STAC if needed) to resolve comments; revise | 3 weeks for finalization         | Sent to EIC/SC by 10/29/2021                                    |
| Final Draft for SC approval                                | 1 week for SC concurrence        | By 11/5, 2021   |
| EPA transmits to HQ  | HQ concurrence                   | By 11/12/2021   |

# BASELINE FOR FUTURE

