Options for presenting unmet monitoring needs to the PSC: Examples

STAR needs GIT input to message priority monitoring needs of CBP outcomes to the PSC

Potential Options for Presenting Monitoring Needs (All 3 may used in report but would vary by outcome)

1.

- Monitoring Needs addressed in the Science Needs Database

2.

- Short paragraph describing highest priority monitoring need.

3.

- 2-page summary addressing monitoring network considerations

Climate Resiliency Monitoring & Assessment: Option #1 Example

Monitoring Science Need	Status
Better understanding of precipitation changes with regards to intensity, annual amounts, seasonal impacts, storm events and stormwater management	In Database
Data and research needs for impacts of SLR, storm surge, increased temperatures, extreme precipitation events and saltwater inundation on BMP climate resilience (i.e., maintenance, shelf life, siting and design, etc.)	In Database
Better understanding of sea level rise and subsidence impacts related to wetland loss, marsh migration, and adjacent land use considerations	In Database
Method/metrics to track climate resilience progress related to Chesapeake Bay Watershed Agreement goals	In Database
River Flood Frequency Indicator	In Database
River Flood Magnitude	In Database

Action Item for Option #1: Include new monitoring needs in database

Monitoring Science Need	Status
Better understanding of precipitation changes with regards to intensity, annual amounts, seasonal impacts, storm events and stormwater management	In Database
Data and research needs for impacts of SLR, storm surge, increased temperatures, extreme precipitation events and saltwater inundation on BMP climate resilience (i.e., maintenance, shelf life, siting and design, etc.)	In Database
Better understanding of sea level rise and subsidence impacts related to wetland loss, marsh migration, and adjacent land use considerations	In Database
Method/metrics to track climate resilience progress related to Chesapeake Bay Watershed Agreement goals	In Database
River Flood Frequency Indicator	In Database
River Flood Magnitude	In Database
Ocean Acidification Monitoring	NOT IN DATABASE

Climate Resiliency Monitoring & Assessment: Option #2 example

This outcome thoroughly reviewed their indicators to better connect with other Chesapeake Bay Outcomes, but for multiple indicators such as Bay Water Temperature and Flood Frequency, there is a need for partners to provide the data, develop the indicator, or provide continuous maintenance. More work and resources is required to develop metrics that assess impacts and guide projects that improve resiliency and enhance the support of monitoring.

Action Item for Option #2: Tell us what is your priority monitoiring need(s)

Climate Resiliency Monitoring & Assessment Priority Need:

- Indicator data and development support

OR

- Ocean Acidification Monitoring network

Toxic Contaminant: Option #3 Example

Executive Summary available on calendar event page.

- Develop a 2-page summary of potential enhanced monitoring
  - Need for a network (relation to CBP goals and outcomes)
  - Network objectives
  - Monitoring design considerations
  - Existing monitoring that can be utilized
  - Remaining gaps
  - Options to address the gaps. (This would be general, not a detailed network design but could have funding estimates).

Hypoxia Monitoring: Option #3 Example

Any proposed projects on monitoring should aim for a deliverable item outlining cost estimates on how to make it operational.

Total cost for a year with on array is estimated at $47,000 with a breakout costs from the project:

1. Instruments (individual sensors) $5000 each, delivered and calibrated (estimated needing 6 sensors per array, and on average here=30K)
2. UltiBuoy $7000 with controller and cable
3. Mooring anchor/chain $600
4. Mooring Prep by CWLLC, including testing and build $4000 annually
5. Deployment / Recovery / Maintenance per trip, incl. vessel cost, CWLLC $2000 each
6. Data management $1000 .

Action Item for Option #3: Is any other outcome developing a 2-page summary?

- Are you answering some or all 6 questions?
- Do you have cost estimates or future monitoring considerations for any of your monitoring needs?

Summary: STAR needs GIT input to message priority monitoring needs of CBP outcomes to the PSC.

1.
- Monitoring Needs addressed in the Science Needs Database
- **Action Item:** Include new monitoring needs in database

2.
- Short paragraph describing highest priority monitoring need.
- **Action Item:** Tell us what is your priority monitoring need

3.
- 2-page summary addressing monitoring network considerations
- **Action Item:** Tell us if you are developing summary