Project Update

Climate Data and Mapping Repository

and

Climate Change Indicators

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Part 1

Climate Data and Mapping Repository

Project Overview

- **Source:** FY'18 GIT-funded project to support the CRWG
- **Project need:** Provide a "one-stop shopping" solution for internal and external users who seek data to answer questions about climate change in the Chesapeake Bay watershed
- **Solution:** Create and populate a registry/repository that will compile information in one place

What We Will Do

- Create and store mapping layers and geospatial metadata *in cases where these items do not already exist*
  - Case in point: CBP climate change indicators
- Point to datasets (geospatial and non-geospatial) that are already hosted elsewhere
- Capture standardized metadata in a database
  - Fields designed to support search, sort, and filter

Stepwise Process

1. Select topics of interest
   - Tiered approach:
     - **Tier 1:** topics in the proposed suite of 21 climate change indicators
     - **Tier 2:** other topics that CBP or the CRWG specifically identifies as being a high priority for this project
     - **Tier 3:** other topics from the list of ~67 “high-priority” topics that were carried through to our “value-added” scoring exercises
     - **Tier 4:** other topics from the master list of ~210 topics
     - **Tier 5:** any additional topics that we have time to capture

Stepwise Process

2. Locate data sources
3. Populate key parts of our matrix to inform the next step
4. Apply data quality criteria to curate the data
   - Criterion #1: The data are publicly accessible.
   - Criterion #2: We have a reasonable expectation that the data source will continue to be updated.
   - Criterion #3: The data come from a credible source.
   - Criterion #4: The dataset provides unique value.
5. Populate the remainder of the matrix
   - Review the matrix…

Project Timeline

Step	Timeframe
Planning and scoping	Through October
Identify data sources and compile key information	November
Curate the data and populate remaining fields	December
Gather feedback and revise	January
Create maintenance plan	February
Create geospatial data layers	Ongoing, as needed

Questions?

Part 2

Climate Change Indicators

Project Objectives

Track progress toward the climate resiliency goal and outcomes in the 2014 Watershed Agreement:

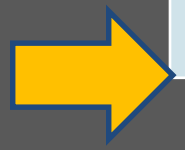
- **Goal:** Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure, and communities, to withstand adverse impacts from changing environmental and climate conditions.

- **Monitoring and Assessment outcome:** Continually monitor and assess the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects.

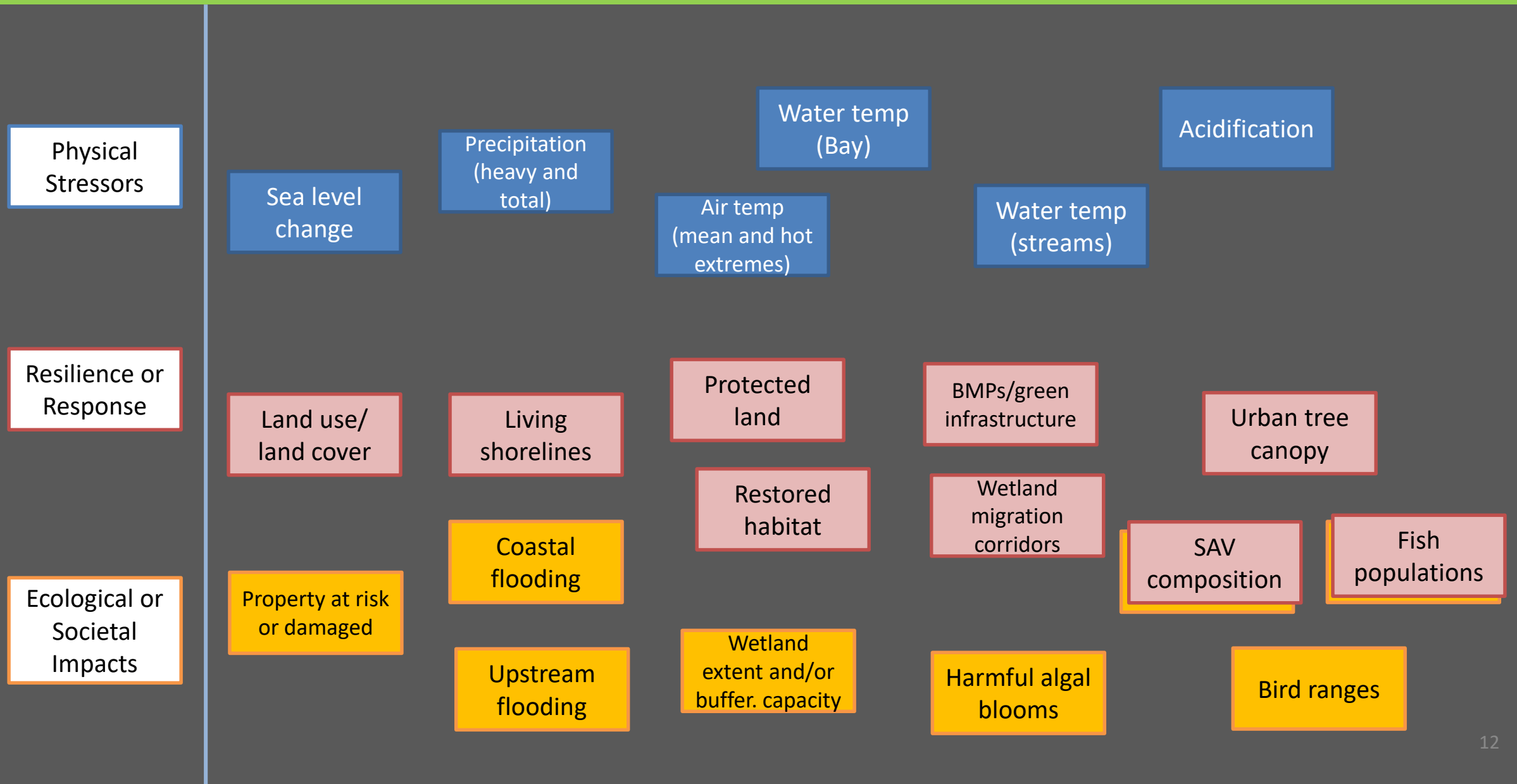
- **Adaptation outcome:** Continually pursue, design, and construct restoration and protection projects to enhance the resiliency of Bay and aquatic ecosystems from the impacts of coastal erosion, coastal flooding, more intense and more frequent storms and sea-level rise.

Indicator Development Process

Step	Timeframe
Establish framework (categories, definitions, criteria)	May 2017
Compile lists of potential topics and data sources	May-June 2017
Evaluate candidate topics against the criteria	June-October 2017
Gather feedback and prioritize candidate topics	October-Nov. 2017
Flesh out sources and specific metrics for indicator topics; develop implementation plan	Dec. 2017-January 2018
Develop the top three to six indicators	March-April 2018
Compile final results	May-July 2018



Proposed Suite of Climate Indicators



Completed Products

- Implementation plan
- Summary report with complete set of files to document the process
- Added climate to two existing *Chesapeake Progress* indicators:
  - Restored habitat and protected land
- Developed portions of six additional indicators
  - Including maps, summary text, and “Analysis and Methods” documentation

Questions?


Thank you!