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

- **Timeframe:** Contract through 6/30/19

Key Project Outcomes

- 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
  - Designed for transfer to an eventual ArcGIS Open Data repository

Project Steps

Step	Status
1. Plan and scope the effort	Done
2. Identify data sources and compile key information	Done
3. Gather feedback and revise	Done
4. Curate the data (i.e., criteria scoring)	Done
5. Populate remaining fields	Nearly done
6. Gather and incorporate final feedback	In process
7. Conduct final QC review	To do
8. Create maintenance plan	In process
9. Incorporate into Open Data; keep up to date	Future effort

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

Criteria Example #1: Salinity

Dataset #1: **MD DNR and VIMS Long-Term Salinity Monitoring**

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

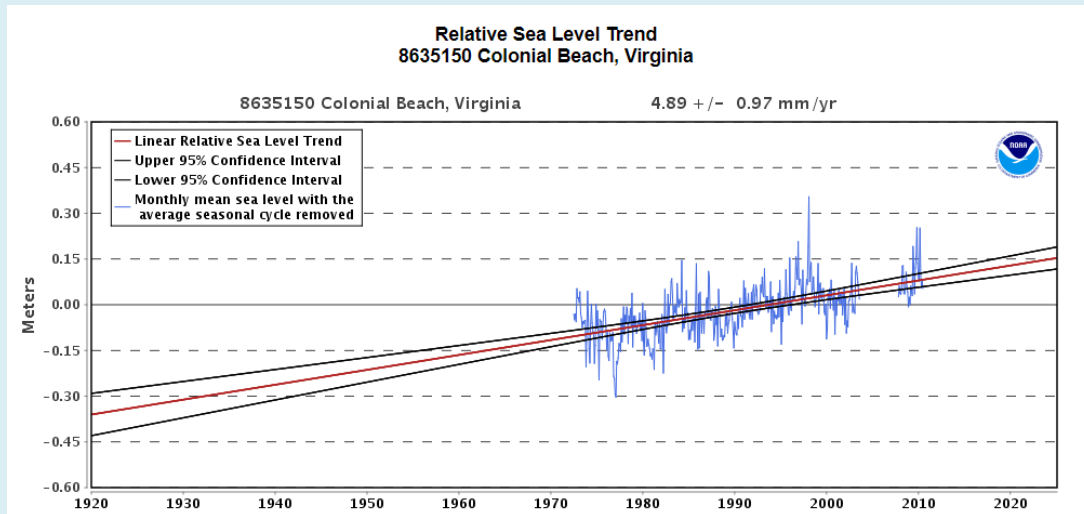Dataset #2: **CBIBS Continuous Salinity Monitoring**

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

Dataset #3: **CBIBS Sea Nettle Probability**

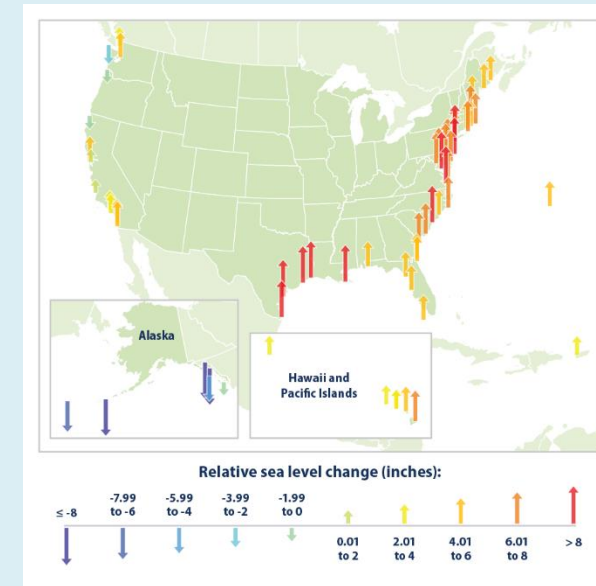|	
Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	
Final decision	Exclude

Criteria Example #2: Relative Sea Level Change

Dataset #1: **NOAA NWLON Long-Term Tide Gauge Sea Level Change Data**

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

Dataset #2: **EPA Trend Analysis of NOAA Long-Term Tide Gauge Sea Level Change Data**

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

Criteria Example #3: Bird Populations and Phenology

Dataset #1: National Audubon Society Christmas Bird Count

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

Dataset #2: Breeding Bird Survey (USGS et al.)

Publicly accessible data	✓
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Keep

Dataset #3: Cornell eBird Observations

Publicly accessible data	✓
Expect future updates	✓
Credible source	
Unique value	✓
Final decision	Exclude

Dataset #4: MAPS Netting Data

Publicly accessible data	
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Exclude

Dataset #5: CCB Colonial Waterbird Survey; Heron Data

Publicly accessible data	
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Exclude

Dataset #6: CBNERR-MD Marsh Bird Monitoring

Publicly accessible data	
Expect future updates	✓
Credible source	✓
Unique value	✓
Final decision	Exclude

Thanks to the Workgroup's Feedback, We…

- Added a few layers that are important inputs to the watershed model
  - Including a few projections

- Explored additional sources

- Filled some gaps in the table

Results

- Developed and refined metadata fields
  - Capture useful detail from user's point of view
  - Minimize maintenance burden

- Located and catalogued 123 unique data sources
  - Knowledge transfer from related projects; web research; interviews

- Applied criteria
  - 93 records retained
  - 30 records excluded

View master Excel file

Questions?

Final Input Requested by Monday, June 24

1. Is anything about the current presentation unclear or potentially confusing to a user? If so, what would you suggest improving?

2. Do you have any information that could help to fill any of the remaining gaps in the MASTER TABLE worksheet?

3. Do you see any information in the MASTER TABLE that you feel we have captured inaccurately?

4. Can you suggest any other notable datasets that we might have missed that would:
   a. Address an important climate-related topic; and
   b. Meet all the criteria outlined on the "REF-Criteria Scoring" worksheet?

Final Steps for the Project Team

- Compile and address CRWG input
- Fill remaining gaps
- Proof all entries
- Complete long-term maintenance plan
- Deliver product

Thank you!