SAB DAARWG recommendations concerning the NOAA Data Strategy Implementation Plan

The Data Archiving and Access Requirements Working Group (DAARWG) of the NOAA Science Advisory Board (SAB) is grateful for the opportunity to comment on the "NOAA Data Strategy Implementation Plan - Draft Narrative and Actions" issued on 2021 Jan 11 (hereafter "the Plan"). WG members were instructed to comment primarily on the Actions, as the Goals and Objectives were previously finalized and approved.

Overall, the Goals and Objectives are worthwhile, and the Actions generally support them. We applaud the continued focus on open data sharing and use of data standards in Goals 2 and 3, and are pleased to see an explicit call for stakeholder engagement in Goal 5. It would be helpful to make more clear what is new vs old in the Plan for NOAA people not familiar with past practice, current governance, etc. The planned actions are reasonable and achievable if NOAA actually provides the resources to complete them. We note that there are a large number of Actions (22) and associated Tasks (65) in the Plan. This may be too many; consider prioritizing or reducing to something do-able in the desired timeframe. Also, NOAA should add target due dates and responsible parties/groups to the tasks.

Action 1.1 Establish the NOAA CDO organizational structure.

- 1.1.1 Define the roles and responsibilities of the NOAA CDO.
- 1.1.2 Establish a budget for the NOAA CDO to ensure the resources are available to have a meaningful impact.

Clearly defining the roles and responsibilities of the NOAA Chief Data Officer (CDO) and establishing a budget for that Office are important.

Recommendation 1: The Plan should state who ultimately owns and evolves the Data Strategy for NOAA -- is it the CDO, or another individual or body?

Recommendation 2: The Plan should clarify the source of the CDO's budget and how it can be protected from cuts in future years.

Action 1.2 Ensure the NOAA CDO is represented on the appropriate NOAA decision making bodies.

- 1.2.1 Analyze the charters/ToRs of all NOAA councils, committees, and boards to identify data connections.
- 1.2.2 Add the NOAA CDO (or their representative) as a member of the appropriate NOAA decision making and strategic bodies.

Having the CDO represented on every NOAA council and committee that has a "data connection" might stretch the office too thin, and would not necessarily reduce stovepiping unless the CDO is empowered to approve or correct work by those other bodies.

Recommendation 3: Carefully consider which groups should actually have CDO representation, and ensure all groups follow existing and future data-related policies.

Action 2.1 Establish a NOAA Data Governance Body.

- 2.1.1 Recommend the establishment of a diverse NOAA Data Governance Body and seek approval to establish the new body from NOAA strategy councils and NOAA leadership.
- 2.1.2 Establish expert teams (committees) within the NOAA Data Governance Body as appropriate.

We are most concerned about the scope and function of the proposed Data Governance Body (DGB) and its relation to the existing Environmental Data Management Committee (EDMC). Having both DGB and EDMC may be confusing, counterproductive, and a dilution of resources. Also, we note that NOAA already has Councils and Committees, but does not seem to have any other "governance bodies." The Federal Data Strategy cited in Action 2.1 says data governance bodies "are commonly called by such names as Data Governance Boards, Data Councils, or Data Strategy Teams."

Recommendation 4: Either (a) very clearly delineate the scope and relationship of DGB and EDMC, or (b) rename EDMC as DGB, or (c) recharter EDMC to include the functions and authority intended for DGB.

Recommendation 5: If a separate (non-EDMC) body is to be created, consider following established NOAA nomenclature and having it be called the Data Council; EDMC could then report to the Data Council instead of to both the NOAA Observing Systems Council and CIO Council as currently done.

Recommendation 6: Consider whether the CDO should be Chair *ex officio* of the Data Council, DGB, or EDMC, as appropriate.

Action 3.2: Publish and promote a NOAA Open Data Plan.

How would the proposed "NOAA Open Data Plan" differ from the NOAA Plan for Public Access to Research Results (PARR Plan) issued in 2015, in response to the OMB Holdren Memo of 2013? NOAA seems to have already satisfied this Federal Data Strategy requirement, and has long been ahead of many other agencies.

Recommendation 7: The Plan should avoid duplicating or rewriting past policies unless there is an identified shortcoming with the prior documents.

Action 3.3: Maintain a comprehensive NOAA data inventory, including standard metadata, that is published to NOAA and Federal data catalogs (data.gov) to ensure that NOAA's data are discoverable and accessible to external stakeholders.

This "comprehensive NOAA data inventory, including standard metadata" seems to already exist, in the form of the NOAA Data Catalog established in ~2016 at (https://data.noaa.gov/dataset/) and designed to be harvested by data.gov. **Recommendation 8:** The Plan should avoid duplicating past actions or reinventing past methods unless there is an identified shortcoming with the prior approach.