

# NOAA NCEI: Through the Data Policy Looking Glass

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November 23, 2022

## **Abstract**

NOAA National Centers for Environmental Information (NCEI) hosts and provides access to one of the most significant archives on Earth, with comprehensive oceanic, atmospheric, and geophysical data. From the depths of the ocean to the surface of the sun and from million-year-old ice core records to near-real-time satellite images, NCEI is the Nation's leading authority for environmental information. These data are impressively heterogeneous in terms of platforms, instruments, formats, and user communities. As a federal agency, NCEI must follow laws, mandates, guidance, best practices, and national and international standards. This presentation will showcase the policies that support the framework of NCEI's data preservation and stewardship mission with a look toward current gaps and future needs for data policies.

# NOAA NCEI: Through the Data Policy Looking Glass

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NOAA National Centers for Environmental Information




**Background**



NOAA National Centers for Environmental Information (NCEI) leads and provides access to one of the most sophisticated scientific data sets on Earth, with environmental, oceanic, atmospheric, and geophysical data. From the depths of the ocean to the surface of the earth, from millimeters to miles, NCEI is the Nation's leading authority for environmental information. These data are increasingly...

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**Policies Supporting Mission**

Select Policies Supporting NCEI's Preservation and Stewardship Mission



**Comptroller**

- Fiscal Year 2012 Resolution (Jan 10 2012)
- Geospatial Data (Jan 10 2012)

**Office of Management and Budget (OMB)**

- Climate Data (Jan 10 2012) - Coordination of Geographic Information and Related Spatial Data Activities
- Climate Data (Jan 10 2012) - Managing Information as a Strategic Resource
- Climate Data (Jan 10 2012) - Open Data Policy/Managing Information as a Good

**Office of Science and Technical Policy (OSTP)**

- Increasing Access to the Results of Federally Funded Scientific Research

**NOAA**

- NOAA 2012-10: Management of Environmental Data and Information
- Response to Public Access to Research Results
- Research Data to Managing Environmental Data

**NCEI**

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**Treating All Data as an Asset**

**Federal Data Strategy**

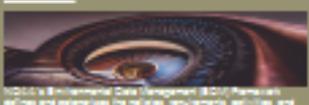


In March of 2012, the President's Council on Data Governance released a report, "Federal Data Strategy: A Plan for the 21st Century." The report outlines a vision for the Federal Government to become a data-driven organization...

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**Environmental Data Management**

**Framework**



NOAA's Environmental Data Management (EDM) Framework defines and oversees the national requirements, activities, and...

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**Next Steps for NOAA**

**NOAA's Data Strategy**



In January 2012, NOAA's Data Strategy (DS) was published. The DS provides a framework for NOAA's Data Strategy...

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## BACKGROUND



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# ENVIRONMENTAL DATA MANAGEMENT

## **Framework**



NOAA's Environmental Data Management (EDM) Framework defines and categorizes the policies, requirements, activities, and technical considerations relevant to the management of observational data and derived products by the NOAA. These data are an irreplaceable national resource that must be well-documented, discoverable, accessible, and preserved for future use.

The Framework (<http://nosc.noaa.gov/EDMC/framework.php>) recommends that environmental data management be coordinated across the agency, properly defined, and adequately resourced in order to ensure the usability, quality, and preservation of NOAA data and it includes Principles, Governance, Resources, Standards, Architecture, and Assessment that apply broadly to many classes of data throughout the Data Lifecycle.

## **Governance**

Governance is required to support the NOAA EDM Committee, framework and procedural directives. Recently National Environmental Satellite, Data, and Information Service (NESDIS) setup a Data Management Working Group and NCEI initiated its Data Stewardship Council. These organizational governance teams are intended to emphasize the importance of data stewardship and management throughout the organization. The goal is to improve data activities and coordination across the organization. Currently the NESDIS is focused on compliance with the NOAA Procedural Directives. NCEI's Data Stewardship Council are currently focused on data, stewardship and management guidance and policies.



- More are planned for FY19

# TREATING ALL DATA AS AN ASSET

## Federal Data Strategy



In March of 2018, the President's Management Agenda (<http://www.performance.gov/PMA/PMA.html>) laid out a new Cross-Agency Priority (CAP) Goal: Leveraging Data as a Strategic Asset ([http://www.performance.gov/CAP/CAP\\_goal\\_2.html](http://www.performance.gov/CAP/CAP_goal_2.html)) to develop and implement a comprehensive Federal Data Strategy (<http://strategy.data.gov/>) applying to all Federal Data Assets. Over the course of the next year, with input from the full spectrum of government and non-government stakeholders, the first government-wide data strategy is being developed, along with plans for implementation.

# NEXT STEPS FOR NOAA

## NOAA's Data Strategy



In late 2018, NOAA's Chief Data Officer, Edward J. Kearns, Ph.D gathered a few brave volunteers to draft NOAA's Data Strategy. Additional volunteers are being requested to further the strategy. Input from NOAA Leaders will also be incorporated.

Notional Timeline:

- Initial comment period mid-December - mid-January
- Comments on second draft mid-February - mid-March
- Final draft mid-April

Volunteer by sending an email to [data.strategy@noaa.gov](mailto:data.strategy@noaa.gov)

LINK:

# AUTHOR INFORMATION

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# ABSTRACT

NOAA National Centers for Environmental Information (NCEI) hosts and provides access to one of the most significant archives on Earth, with comprehensive oceanic, atmospheric, and geophysical data. From the depths of the ocean to the surface of the sun and from million-year-old ice core records to near-real-time satellite images, NCEI is the Nation's leading authority for environmental information. These data are impressively heterogeneous in terms of platforms, instruments, formats, and user communities. As a federal agency, NCEI must follow laws, mandates, guidance, best practices, and national and international standards. This presentation will showcase the policies that support the framework of NCEI's data preservation and stewardship mission with a look toward current gaps and future needs for data policies.