



NOAA

Program design, products, and impacts for NOAA science

National Academies “First in Class” Workshop
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NOAA is a science agency

NOAA's Mission: Science, Service and Stewardship

1. To understand and predict changes in climate, weather, oceans and coasts;
2. To share that knowledge and information with others; and
3. To conserve and manage coastal and marine ecosystems and resources.

NOAA is a science agency



Satellite &
Info Service



Fisheries
Service



Ocean Service



Weather Service

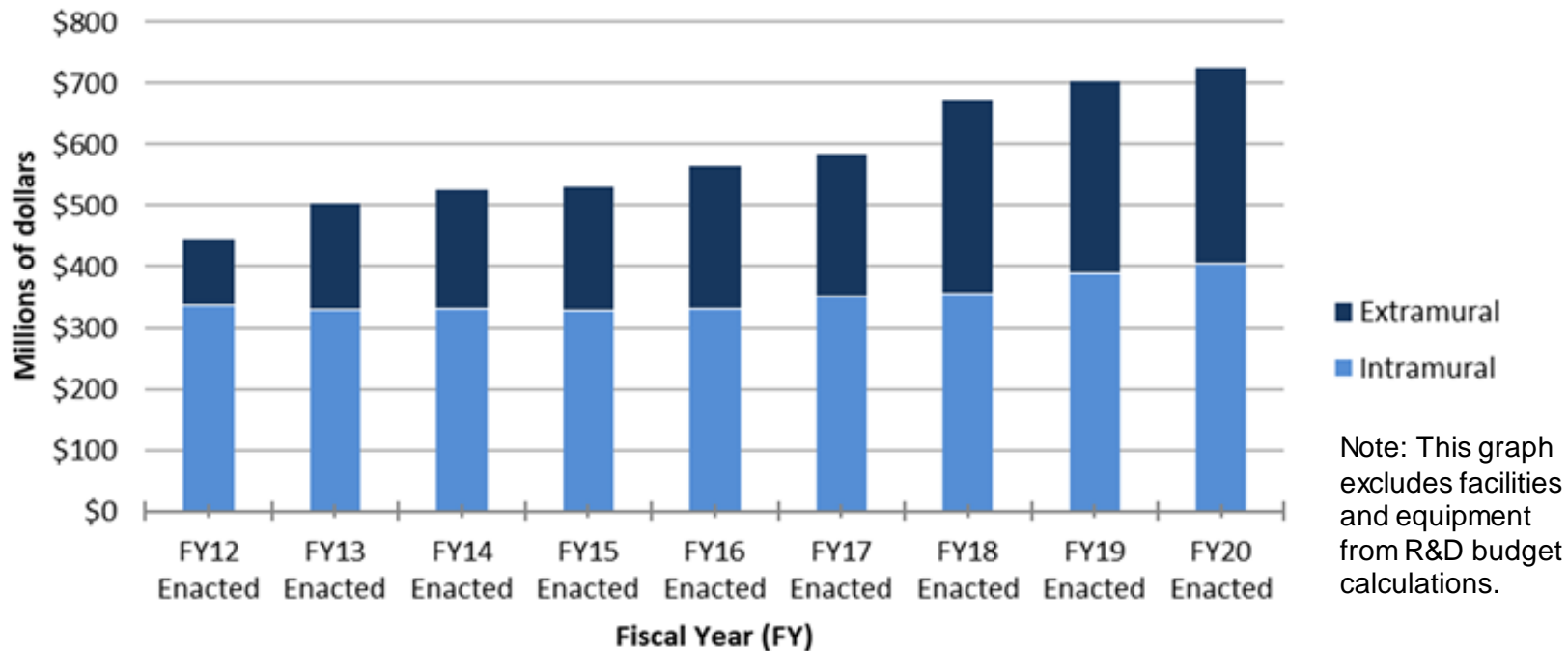


Research



OMAO

Internal and external science



Structural components of NOAA science

Leadership and Governance

NOAA Chief Scientist

NOAA Science Council

Who Conducts the Science? (Internal)

Laboratories
Science Centers
Programs
Offices
Internal NOAA
announcements

Who Conducts the Science? (External)

Cooperative Institutes	Grants
Cooperative Science	Federal Register
Centers	Notice
Sea Grant	Interagency
Cooperative Research and	Agreements
Development Agreements	

Databases

NOAA Research and
Development Database

NOAA Institutional
Repository

Identifying science needs

Weather Act

"For the protection of life, property & enhancement of the national economy"

Magnuson-Stevens Act

"To provide for the conservation & management of the fisheries, & for other purposes."

Global Change Research Act

Requires U.S. research on climate change; production of the National Climate Assessment Report

EO on Climate

"The United States will also move quickly to build resilience, both at home and abroad, against the impacts of climate change..."

EO on Racial Equity

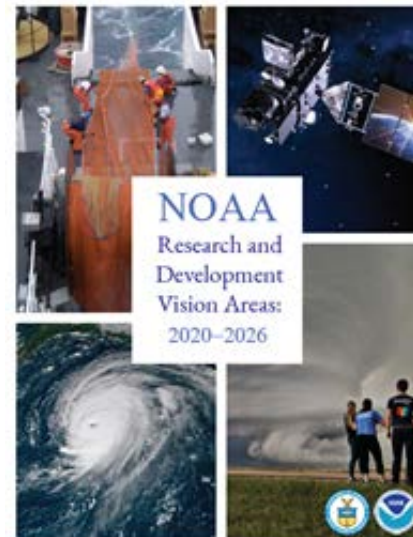
"The Federal Government should pursue a comprehensive approach to advancing equity for all"

Identifying science needs

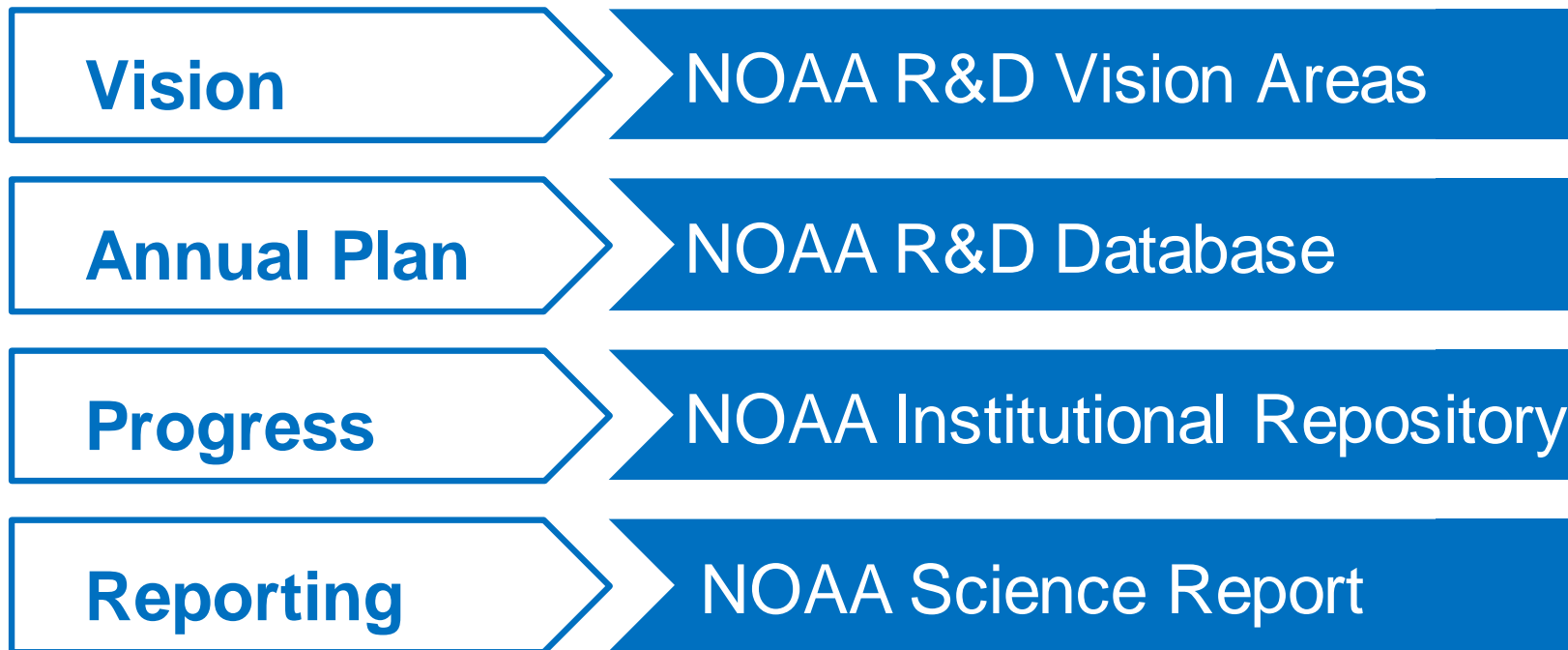


NOAA R&D Vision Areas: 2020-2026

- The [NOAA Research and Development Vision Areas: 2020-2026 \(Vision\)](#) provides a characterization of the priorities and guidance for NOAA's R&D activities for the next seven years.
 - Uses for the *Vision* include:
 - Provide direction and guide investments for NOAA and NOAA-funded R&D priority research areas
 - Set concrete targets with which to measure progress
 - Create a common understanding of the purpose of NOAA's R&D for NOAA's leadership, workforce, partners, constituents, and Congress

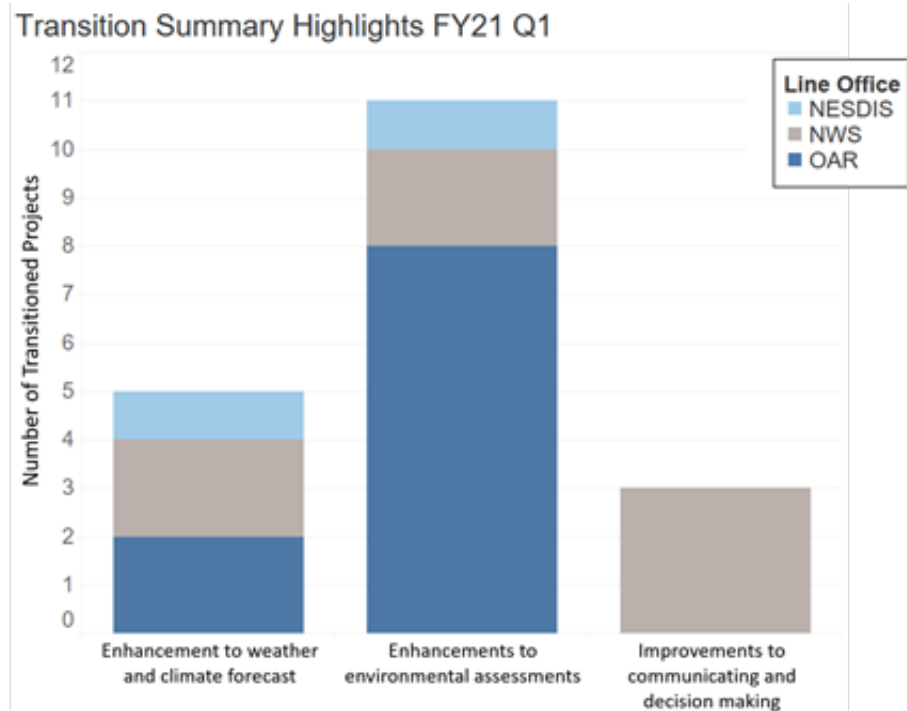


Tracking progress on the Vision Areas



Program outputs: tracking transition

- Quarterly Transition Reports provided to the NOAA Science Council
- NOAA Research's Annual Transition Technical Memos
- Collecting transition plans and Readiness Levels in the NOAA R&D Database



Evaluation and program improvements

- Science Reviews
 - Individual NOAA laboratories and science programs are reviewed every five years
 - Reviews of NOAA's laboratories and programs include an independent panel of experts
 - Individual Sea Grant Programs and Cooperative Institutes are reviewed by Federal Advisory Boards

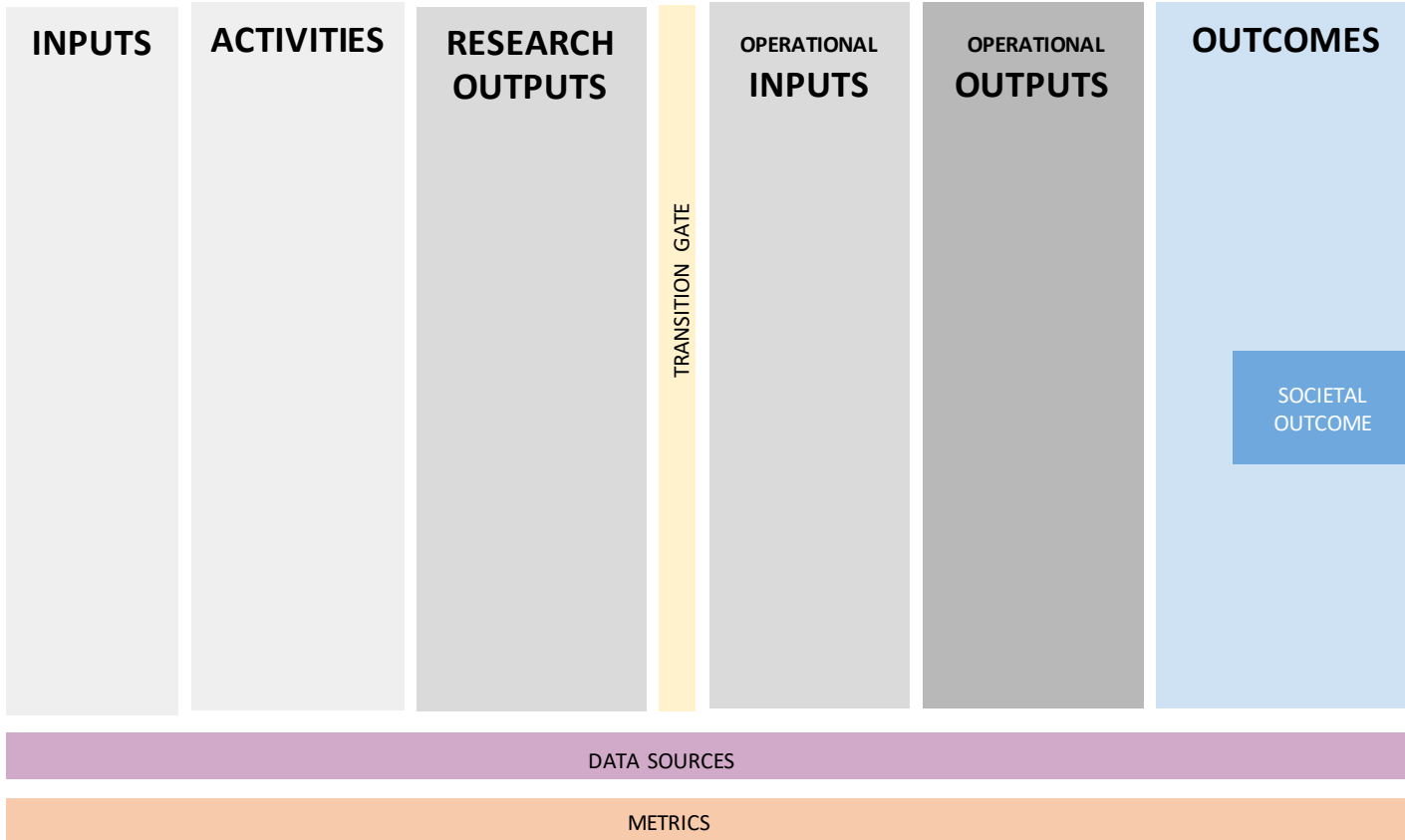
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- NOAA Science Advisory Board (SAB)
 - Provides necessary input to ensure that NOAA's science programs are of the highest quality and provide optimal support to resource management, and environmental assessment and prediction.

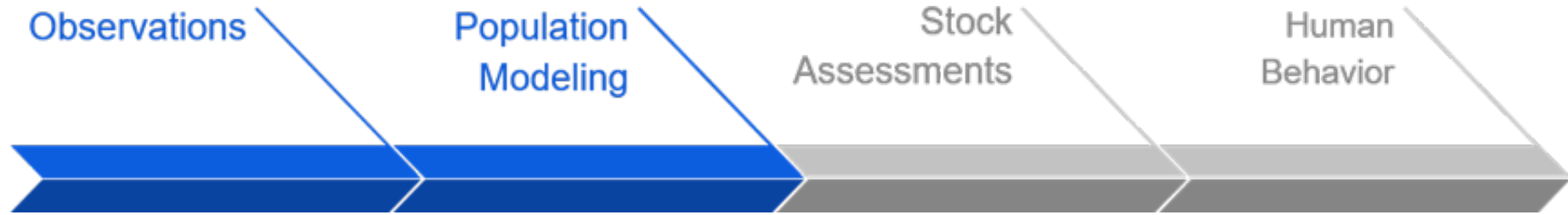
Evaluation

- Logic models provide a tool for evaluating the progress made toward achieving the goals stated in the *NOAA R&D Vision Areas: 2020-2026*
 - Identify successes and gaps in the chain of activities from research to outcomes
 - Identify where more resources (e.g., additional R&D, infrastructure, organizational structure/process) are needed to strengthen links between activities
 - Provide a holistic view of the NOAA R&D enterprise
 - Report NOAA's scientific accomplishments (e.g., through the annual NOAA Science Report)

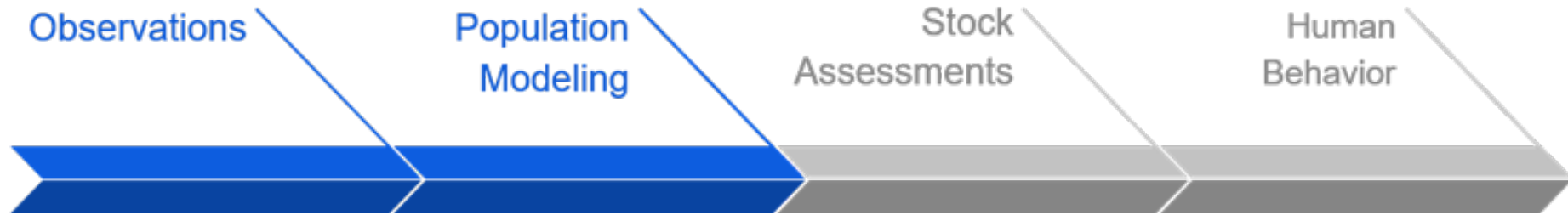
Capturing program outputs and impacts through logic models



Example of NOAA logic model thinking (sustainable fisheries)

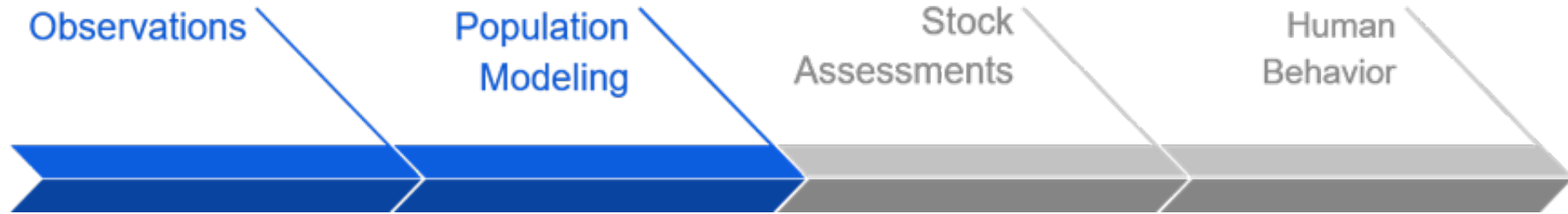


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NOAA scientists collect data on the number, age, and location of Alaska walleye pollock

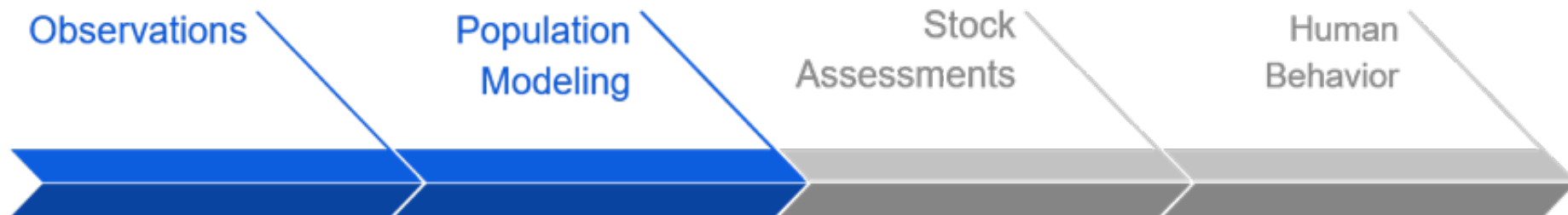
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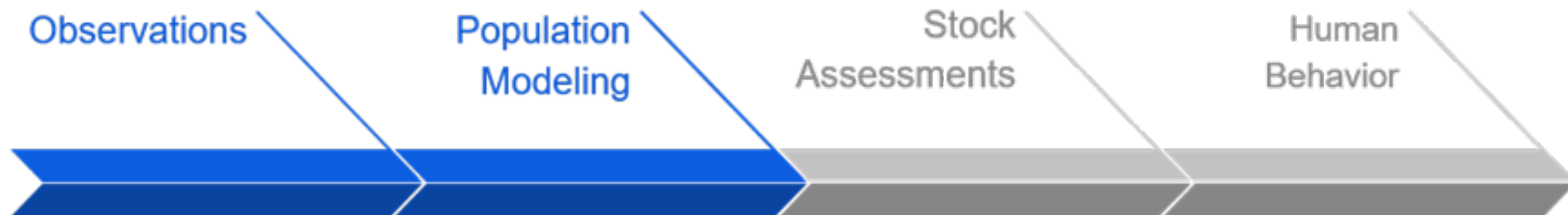


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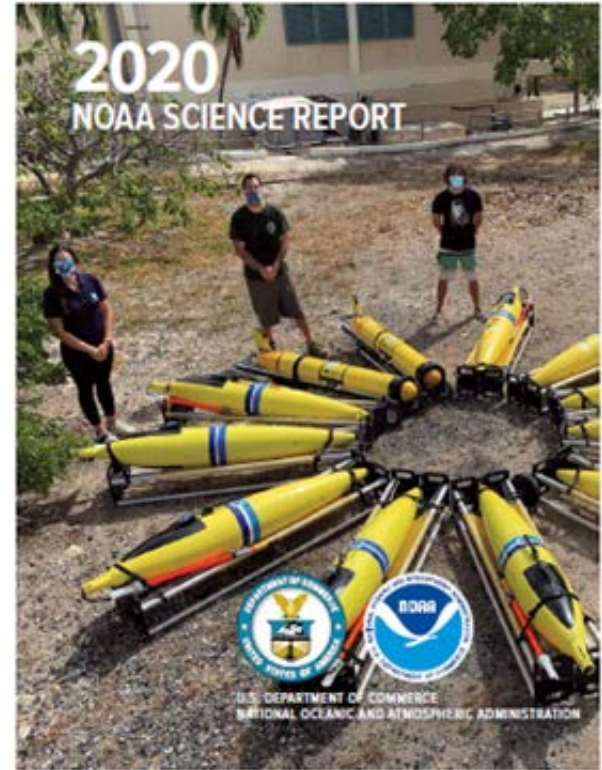
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The reports inform the North Pacific Fishery Management Council's determination of annual harvest levels

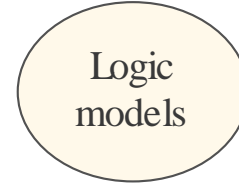
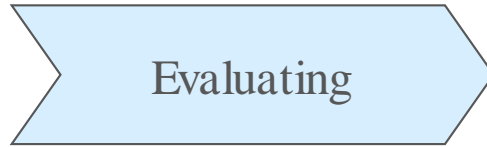
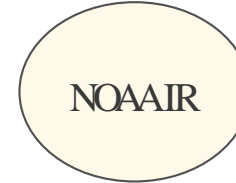
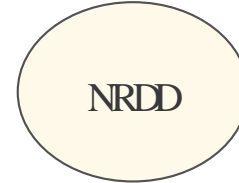
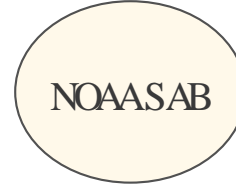
Reporting - NOAA Science Report

- The NOAA Science Report is an annual report of NOAA's scientific accomplishments
- For 2021, the NOAA Science Report will incorporate logic models in a hybrid manner
 - Enable clearer communication for the chain of activities from R&D to societal outcomes



Recap

NOAA Policy on Research and Development





Thank you for your
attention

Questions?

Credits: This presentation included
template graphics from Slidesgo

Back-up slides

NOAA scientific integrity

- NOAA has a robust [scientific integrity policy](#)
 - NOAA is working to ensure implementation of President Biden's new Executive Order "[Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#)."
- The [NOAA Scientific Integrity Commons website](#) contains links to more information, including training, annual reports, and policy documents

NOAA diversity and inclusion

- NOAA is committed to increasing diversity and inclusion
 - There is much work to be done
- Education pathways
 - Educational Partnership Program with Minority Serving Institutions
- [NOAA 2020-2024 Diversity and Inclusion Strategic Plan](#)