

TO DIRECT THE SECRETARY OF COMMERCE, ACTING THROUGH THE ADMINISTRATOR OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, TO IMPROVE SCIENCE, DATA, AND SERVICES THAT ENABLE SOUND DECISION MAKING IN RESPONSE TO COASTAL FLOOD RISK, INCLUDING IMPACTS OF SEA LEVEL RISE, STORM EVENTS, CHANGING GREAT LAKES WATER LEVELS, AND LAND SUBSIDENCE

NOVEMBER 16, 2022.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. GRIJALVA, from the Committee on Natural Resources,  
submitted the following

R E P O R T

[To accompany H.R. 3228]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 3228) to direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, changing Great Lakes water levels, and land subsidence, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

**SECTION 1. AUTHORIZATION OF NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ACTIVITIES.**

(a) IN GENERAL.—The Administrator shall, in consultation with other Federal agencies, develop within the National Oceanic and Atmospheric Administration a comprehensive suite of coastal flood and coastal land loss, sea level rise, Great Lakes bathymetry water level, and vertical land motion data, products, and services, and conduct the research and development necessary to support those products and services that—

- (1) augment existing capacities and combine existing observations, modeling, predictions, products and services into a coordinated decision-support framework;
  - (2) produce and maintain authoritative and timely data, maps, and information services, including improving existing and new information products and services targeted to end-user needs, that allow coastal communities across the United States to plan for present and future coastal flood and coastal land loss risk; and

(3) engage with, ensure accessibility by, and provide technical assistance to, end users, with particular attention to historically underserved and at risk communities and populations, and also including other Federal agencies, regional ocean partnerships, states, local governments, Tribal governments, and Indigenous communities, on the appropriate application of these data and tools and to better assess information gaps, needs, and solutions relating to the risk posed by coastal flooding and coastal land loss, including sea level rise.

(b) DATA ARCHIVING.—The Administrator shall publish and maintain archives of the data and metadata generated under this Act and shall maximize distribution, access, and use of such data and metadata.

(c) USE OF EXISTING ADVISORY COMMITTEES.—The Administrator may consult with and seek input from existing agency advisory committees to provide recommendations on systems, products, and services relating to coastal flooding and coastal land loss, including sea level rise.

(d) TECHNICAL ASSISTANCE TO OTHER FEDERAL AGENCIES.—To assist in carrying out this Act and to facilitate collaboration, the Administrator may provide technical assistance to other Federal agencies on a reimbursable or non-reimbursable basis, including by entering into an agreement with another Federal agency to detail, for a period of not more than 3 years, an employee of the National Oceanic and Atmospheric Administration to such other Federal agency.

(e) INTERNATIONAL ENGAGEMENT.—The Administrator, in consultation with the Secretary of State, may work with international counterparts to provide and receive technical assistance, data sharing, and capacity building on matters pertaining to coastal flooding and coastal land loss, sea level rise, and inundation, including participation in relevant international bodies.

(f) REPORT.—The Administrator shall, not later than 1 year after the date of enactment of this Act and every 3 years thereafter, provide the Committee on Natural Resources of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate with a report on actions taken to implement this Act and containing an evaluation of the need to expand and improve agency observations, modeling, predictions, products, and services to—

(1) improve the understanding of the processes that drive coastal flood and coastal land loss risk, including sea level rise, storm events, changing Great Lakes water levels, and land subsidence; and

(2) track and report how observed rates of sea level rise compare to the sea level rise trends and predictions published within the quadrennial National Climate Assessments and related reports.

(g) ADMINISTRATOR.—In this section, the term “Administrator” means the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration.

(h) AUTHORIZATION OF APPROPRIATIONS.—To carry out this Section, there are authorized to be appropriated \$3,000,000 for each of fiscal years 2022 through 2026.

## SEC. 2. INTERAGENCY COORDINATION.

(a) IN GENERAL.—The Director of the Office of Science and Technology Policy, in consultation with the Administrator, shall—

(1) facilitate interagency cooperation and alignment of Federal Government activities conducted with respect to coastal flooding and coastal land loss, including sea level rise, to improve the ability of the United States to prepare for, avoid, mitigate, respond to, and recover from potentially devastating impacts; and

(2) coordinate the activities of the interagency subcommittee established under subsection (b).

(b) COASTAL FLOODING, COASTAL LAND LOSS, AND SEA LEVEL RISE SUBCOMMITTEE.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the President, acting through the appropriate interagency committee or task force, shall establish an interagency subcommittee on coastal flooding, coastal land loss, and sea level rise (referred to in this section as the “Subcommittee”).

(2) PURPOSES.—The Subcommittee shall—

(A) examine the latest science and technologies for measuring, predicting, and delivering information related to coastal flood and coastal land loss risk, including sea level rise;

(B) coordinate executive branch actions and activities that improve measurements, predictions, and service delivery of information related to coastal flood and coastal land loss risk, including sea level rise;

(C) identify gaps in observations, data, information, and modeling relating to coastal flood and coastal land loss risk and ensure that agency activities relating to coastal flood and coastal land loss risk are complementary;

(D) consult and coordinate with other interagency climate and ocean policy efforts and bodies as appropriate;

(E) coordinate the scientific efforts of Federal agencies and the provision of data and technical assistance from such agencies on matters relating to coastal flooding and coastal land loss; and

(F) define and prioritize needs from other Federal agencies that could be addressed by enhancements to Federal data and services, including National Oceanic and Atmospheric Administration products and services.

(3) LEADERSHIP.—The Subcommittee shall be co-chaired by the Director of the Office of Science and Technology Policy and the Administrator.

(4) MEMBERSHIP.—The Subcommittee shall be composed of representatives of each of the following agencies:

(A) The National Oceanic and Atmospheric Administration.

(B) The National Aeronautics and Space Administration.

(C) The United States Geological Survey.

(D) The United States Army Corps of Engineers.

(E) The Federal Emergency Management Administration.

(F) The Environmental Protection Agency.

(G) The Department of Defense.

(H) The Department of Energy.

(I) The National Science Foundation.

(J) Such other White House offices and Federal agencies the Director of the Office of Science and Technology Policy determines appropriate.

(5) AGREEMENTS.—

(A) IN GENERAL.—To carry out activities under this Act, the heads of agencies represented on the committee may enter into agreements with each other, and transfer, receive, and expend funds made available by a Federal or State agency or any person.

(B) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AND NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.—The Administrator of the National Aeronautics and Space Administration and the Administrator shall enter into an interagency agreement providing for cooperation and collaboration in the development of sea level rise and coastal flood and coastal land loss related instruments, technologies, data sets, and products in accordance with this Act.

(C) UNITED STATES GEOLOGICAL SURVEY AND NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.—The Director of the United States Geological Survey and the Administrator shall enter into an interagency agreement providing for cooperation and collaboration in the development, quality control, processing, and delivery of coastal hazards and sea level rise related data, modeling, mapping, and services in accordance with this Act.

(6) INTERNATIONAL, ACADEMIC COMMUNITY, AND COMMERCIAL SECTOR COLLABORATION.—The heads of each Federal agency participating in the Subcommittee established under paragraph (1) shall, to the extent practicable, engage and cooperate with the international community, academic community, and commercial sector on the observational infrastructure, data, scientific research, and service delivery and technical assistance necessary to advance the monitoring, forecasting, and prediction of, preparation for, and protection from coastal flooding and coastal land loss, sea level rise, changing Great Lakes water levels, and land subsidence.

(c) ADMINISTRATOR.—In this section, the term “Administrator” means the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration.

#### PURPOSE OF THE BILL

The purpose of H.R. 3228 is to direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, changing Great Lakes water levels, and land subsidence.

## BACKGROUND AND NEED FOR LEGISLATION

Coastal flooding poses a hazard to millions of people and billions of dollars in key infrastructure. Roughly 129 million Americans (or nearly 40 percent of the U.S. population) live in coastal counties threatened by sea-level rise and extreme weather.<sup>1</sup> Already, flooding has cost the United States approximately \$155 billion in property damage over the last decade.<sup>2</sup> Moreover, due to rising sea levels, the frequency of yearly high tide flooding in the United States is increasing and, in the case of the Southeast Atlantic coastline, has more than quadrupled since 2000.<sup>3</sup> These catastrophes are expected to become more frequent and severe, posing a danger to national and economic security.

H.R. 3228 would require the National Oceanic and Atmospheric Administration (NOAA) to develop a comprehensive suite of the coastal flood, sea-level rise, Great Lakes water level, and vertical land motion data, products, and services. In addition, it would require NOAA to produce and maintain timely data and maps that allow coastal communities to plan for flood risk and engage with end-users to address information gaps and needs. The bill requires a report within one year of enactment and every three years thereafter. The bill would authorize \$300 million for each fiscal year from 2022 to 2027 for these purposes.

The bill would also direct the Director of the Office of Science and Technology Policy, in consultation with NOAA, to facilitate interagency cooperation and alignment of federal government activities conducted for coastal flooding and sea-level rise and improve the ability of the United States to prepare for, avoid, mitigate, respond to, and recover from potentially devastating impacts. The bill requires increased engagement with the international and academic communities and the commercial sector regarding these activities.

## COMMITTEE ACTION

H.R. 3228 was introduced on May 15, 2021, by Representative Nydia M. Velázquez (D-NY). The bill was referred to the Committee on Natural Resources, and in addition to the Committee on Science, Space, and Technology. Within the Natural Resources Committee, the bill was referred to the Subcommittee on Water, Oceans, and Wildlife. On June 17, 2021, the full Committee held a hearing on the bill. On January 19, 2022, the Natural Resources Committee met to consider the bill. The Subcommittee was discharged by unanimous consent. Chair Raúl M. Grijalva (D-AZ) offered an amendment in the nature of a substitute. By unanimous consent, Rep. Garret Graves (R-LA) offered amendments designated Graves #4, Graves #5, and Graves #6 *en bloc* to the amend-

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<sup>1</sup> NOAA, DIGITAL COAST, SOCIOECONOMIC DATA SUMMARY (2021), <https://coast.noaa.gov/data/digitalcoast/pdf/socioeconomic-data-summary.pdf>.

<sup>2</sup> An Examination of Federal Flood Maps in a Changing Climate: Joint Hearing Before the Subcomm. on Env't and Subcomm. on Investigations & Oversight of the H. Comm. on Sci., Space, & Tech., 116th Cong. 23 (2020) (statement of Michael Grimm, Assistant Adm'r for Risk Mgmt., Fed. Ins. & Mitigation Admin., FEMA, DHS), <https://www.govinfo.gov/content/pkg/CHRG-116hhrg39836/pdf/CHRG-116hhrg39836.pdf>; see also FIRST ST. FOUND., THE FIRST NATIONAL FLOOD RISK ASSESSMENT: DEFINING AMERICA'S GROWING RISK (2020), [https://assets.firststreet.org/uploads/2020/06/first\\_street\\_foundation\\_first\\_national\\_flood\\_risk\\_assessment.pdf](https://assets.firststreet.org/uploads/2020/06/first_street_foundation_first_national_flood_risk_assessment.pdf).

<sup>3</sup> High Tide Flooding, NOAA (2022), <https://coast.noaa.gov/states/fast-facts/recurrent-tidal-flooding.html> (last modified Oct. 27, 2022).

ment in the nature of a substitute. The *en bloc* amendments were agreed to by unanimous consent. The Grijalva amendment in the nature of a substitute, as amended, was agreed to by voice vote. The bill, as amended, was adopted and ordered favorably reported to the House of Representatives by voice vote.

#### HEARINGS

For the purposes of clause 3(c)(6) of House rule XIII, the following hearing was used to develop or consider this measure: hearing by the full Committee held on June 17, 2021.

#### COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources' oversight findings and recommendations are reflected in the body of this report.

#### COMPLIANCE WITH HOUSE RULE XIII AND CONGRESSIONAL BUDGET ACT

1. *Cost of Legislation and the Congressional Budget Act.* With respect to the requirements of clause 3(c)(2) and (3) of rule XIII of the Rules of the House of Representatives and sections 308(a) and 402 of the Congressional Budget Act of 1974, as well as clause 3(d) of rule XIII of the Rules of the House of Representatives, the Committee has received the following estimate for the bill from the Director of the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, July 29, 2022.*

Hon. RAÚL M. GRIJALVA,  
*Chairman, Committee on Natural Resources,*  
*House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3228, a bill to direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, changing Great Lakes water levels, and land subsidence.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Robert Reese.

Sincerely,

PHILLIP L. SWAGEL,  
*Director.*

Enclosure.

**H.R. 3228, a bill to direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, changing Great Lakes water levels, and land subsidence**

As ordered reported by the House Committee on Natural Resources on January 19, 2022

By Fiscal Year, Millions of Dollars	2022	2022-2027	2022-2032
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	0	21	not estimated
Statutory pay-as-you-go procedures apply?	No	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2033?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

H.R. 3228 would direct the National Oceanic and Atmospheric Administration (NOAA) to research coastal flooding, coastal land loss, sea level rise, and the water levels of the Great Lakes and to use the resulting data to help affected communities plan for current and future risks of flooding.

- Section 1 would authorize the appropriation of \$3 million annually over the 2022–2026 period to NOAA for those purposes, and
- Section 2 would create an interagency subcommittee for research concerning the science and technology used to measure, predict, and deliver information about the risk of coastal flooding.

The costs of the legislation, detailed in Table 1, fall within budget function 300 (natural resources and environment).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER H.R. 3228

	By fiscal year, millions of dollars—						
	2022	2023	2024	2025	2026	2027	2022–2027
<b>NOAA Research Activities:</b>							
Authorization .....	3	3	3	3	3	0	15
Estimated Outlays .....	0	4	4	3	3	1	15
<b>Interagency Subcommittee:</b>							
Estimated Authorization .....	0	1	1	1	1	2	6
Estimated Outlays .....	0	1	1	1	1	2	6
<b>Total Changes:</b>							
Estimated Authorization .....	3	4	4	4	4	2	21
Estimated Outlays .....	0	5	5	4	4	3	21

NOAA = National Oceanic and Atmospheric Administration.

Assuming appropriation of the authorized amounts, CBO estimates that implementing section 1 would cost \$15 million over the 2022–2027 period. In 2022, NOAA allocated a total of \$110 million for all of its current coastal science and assessment activities.

The interagency subcommittee would require NOAA to collaborate with the National Aeronautics and Space Administration to develop technology to measure and predict coastal flooding and sea level rise and with the U.S. Geological Survey to map and model sea level rise and other coastal hazards. Using information about similar interagency committees, CBO expects the subcommittee would need eight full-time-equivalent positions, which would be provided by the 10 member agencies. On that basis, and accounting for anticipated inflation, CBO estimates that implementing section 2 would cost \$6 million over the 2022–2027 period; spending would be subject to the availability of appropriated funds.

The CBO staff contact for this estimate is Robert Reese. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

*2. General Performance Goals and Objectives.* As required by clause 3(c)(4) of rule XIII, the general performance goals and objectives of this bill are to direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to improve science, data, and services that enable sound decision making in response to coastal flood risk, including impacts of sea level rise, storm events, changing Great Lakes water levels, and land subsidence.

#### EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

#### UNFUNDED MANDATES REFORM ACT STATEMENT

According to CBO, this bill contains no unfunded mandates as defined by the Unfunded Mandates Reform Act.

#### EXISTING PROGRAMS

This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program.

#### APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

#### PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

Any preemptive effect of this bill over state, local, or tribal law is intended to be consistent with the bill's purposes and text and the Supremacy Clause of Article VI of the U.S. Constitution.

#### CHANGES IN EXISTING LAW

If enacted, this bill would make no changes to existing law.

## COMMITTEE CORRESPONDENCE

EDDIE BERNICE JOHNSON, Texas  
CHAIRWOMANFRANK D. LUCAS, Oklahoma  
RANKING MEMBERCongress of the United States  
House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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August 31, 2022

The Honorable Raul Grijalva  
 Chairman  
 Committee on Natural Resources  
 1324 Longworth House Office Building Washington,  
 DC 20515

Dear Chairman Grijalva,

I am writing to you concerning H.R. 3228, the "National Coastal Resilience Data and Services Act." This legislation was referred sequentially to the Committee on Science, Space, and Technology ("Science Committee"). I appreciate your willingness to work cooperatively on this legislation. In order to expedite consideration before the House, the Science Committee agrees to waive its formal consideration of this legislation.

The Science Committee takes this action with the mutual understanding that in doing so the Committee does not waive any jurisdiction over the subject matter contained in this or similar legislation. The Science Committee reserves the right to seek appointment of conferees to any House-Senate conference involving this or similar legislation.

The Science Committee requests that a response to this letter confirming this understanding and asks that a copy of this exchange of letters on this matter be included in the *Congressional Record* to memorialize our understanding. I am grateful for your continued cooperation.

Sincerely,

Eddie Bernice Johnson Chairwoman  
 Committee on Science, Space, and Technology

cc:

The Honorable Nancy Pelosi, Speaker of the House  
 Ranking Member Frank D. Lucas, Committee on Science, Space, and Technology Ranking  
 Member Bruce Westerman, Committee on Natural Resources  
 Jason Smith, Parliamentarian

RAÚL M. GRIJALVA OF ARIZONA  
CHAIRMAN

DAVID WATKINS  
STAFF DIRECTOR

BRUCE WESTERMAN OF ARKANSAS  
RANKING REPUBLICAN

VIVIAN MOEGLEN  
REPUBLICAN STAFF DIRECTOR

**U.S. House of Representatives**  
**Committee on Natural Resources**  
**Washington, DC 20515**

September 1, 2022

The Honorable Eddie Bernice Johnson  
Chair  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

Dear Chair Johnson,

I write to you concerning H.R. 3228, the "National Coastal Resilience Data and Services Act."

I appreciate your willingness to work cooperatively on this legislation. I recognize that the bill contains provisions that fall within the jurisdiction of the Committee on Science, Space, and Technology. I acknowledge that your Committee will not formally consider H.R. 3228 and agree that the inaction of your Committee with respect to the bill does not waive any future jurisdictional claim over the matters contained in the bill that fall within your Committee's Rule X jurisdiction.

Additionally, the Committee on Natural Resources confirms our mutual understanding that the Committee on Science, Space, and Technology will be appropriately consulted and involved as the bill or similar legislation moves forward so that you may address any remaining issues within your jurisdiction. I am pleased to support the appointment of members of the Committee on Science, Space, and Technology to any conference committee to consider such provisions.

I will ensure that our exchange of letters is included in the *Congressional Record* during floor consideration of the bill. I appreciate your cooperation regarding this legislation and look forward to continuing to work with you as this measure moves through the legislative process.

Sincerely,

Raúl M. Grijalva  
Chair  
House Natural Resources Committee

Cc: The Honorable Nancy Pelosi, Speaker of the House  
The Honorable Bruce Westerman, Ranking Member, Committee on Natural Resources  
The Honorable Frank Lucas, Ranking Member, Committee on Science, Space, and Technology  
The Honorable Jason Smith, Parliamentarian

SUPPLEMENTAL, MINORITY, ADDITIONAL, OR DISSENTING VIEWS

None.

