

I, once again, urge my colleagues on both sides of the aisle to support this bipartisan bill.

Mr. Speaker, I yield back the balance of my time.

Mr. POSEY. Mr. Speaker, I'm proud to join Congresswoman BONAMICI as an original cosponsor.

For those of us who live on the "coast," the coast is that unique place where our lives, our environment, and our economy participate in a special relationship with the ocean.

In my own State of Florida, we know that about 6 million people work in our coastal counties. They earn nearly \$280 billion dollars in wages and produce close to \$700 billion in gross domestic product.

Life on the coast is rich in rewards, but also uncertain and often perilous.

Those of us who live on the coast have known for a long time how important sustainability and resilience are for our coasts. We have weathered the storms of the past and we must do so in the future.

Science and research are our best hope for continuing to live in harmony with our coasts.

Research can prepare us for assaults on our coasts and help us defend our wildlife and biodiversity from threats like acidification.

We must take care of our precious coasts so that we can continue to enjoy the lifestyle and the economic well-being we cherish.

That is why I've joined Congresswoman SUZANNE BONAMICI in directing NOAA to pick up the role of leading research for coastal acidification.

I ask my colleagues to support the COAST Research Act.

The SPEAKER pro tempore (Mr. CUELLAR). The question is on the motion offered by the gentlewoman from Oregon (Ms. BONAMICI) that the House suspend the rules and pass the bill, H.R. 1447, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. ROSENDALE. Mr. Speaker, on that I demand the yeas and nays.

The SPEAKER pro tempore. Pursuant to section 3(s) of House Resolution 8, the yeas and nays are ordered.

Pursuant to clause 8 of rule XX, further proceedings on this motion are postponed.

NATIONAL ESTUARIES AND ACIDIFICATION RESEARCH ACT OF 2021

Ms. BONAMICI. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 2533) to provide for a study by the National Academies of Sciences, Engineering, and Medicine examining the impact of ocean acidification and other stressors in estuarine environments.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 2533

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Estuaries and Acidification Research Act of 2021" or the "NEAR Act of 2021".

SEC. 2. FINDINGS.

Congress finds the following:

(1) Ocean acidification impacts human health, natural resources, and the environmental, economic, and recreational uses of the coastline.

(2) The current understanding of ocean acidification impacts on estuarine ecosystems is inadequate to fully prepare and manage for changing environmental conditions in nearshore locations.

(3) While pH can be measured with high precision and accuracy in open ocean environments, more understanding of the carbonate system in estuarine ecosystems is needed for precise and accurate measurements and observations.

(4) The interaction of multiple stressors, including salinity, pH, temperature, sea level rise, and nutrient input, within estuarine ecosystems is inadequately understood for managing the health, economic, recreational, and environmental impacts driven by these interactions.

(5) A better understanding is needed of how anthropogenic influences in coastal environments affect estuarine ecosystems.

(6) More integration and coordination is needed among regional, national, and global environmental observations in estuarine environments, supporting prior investments in related topics such as nutrient loading, hypoxia, ocean acidification, and harmful algae bloom research and observational systems.

SEC. 3. STUDY EXAMINING THE IMPACT OF OCEAN ACIDIFICATION AND OTHER ENVIRONMENTAL STRESSORS ON ESTUARINE ENVIRONMENTS.

(a) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Secretary of Commerce shall make appropriate arrangements with the National Academies of Sciences, Engineering, and Medicine (referred to in this Act as the "National Academies") under which the National Academies shall conduct a study that—

(1) examines the existing science of ocean acidification in estuarine environments;

(2) examines the challenges to studying ocean acidification and ocean acidification's interactions with other environment stressors in estuarine environments;

(3) provides recommendations for improving future research with respect to ocean acidification in estuarine environments; and

(4) identifies pathways for applying science in management and mitigation decisions relating to ocean acidification in estuarine environments.

(b) CONTENTS OF STUDY.—The study described under subsection (a) shall include—

(1) the behavior of the carbonate system within estuarine environments;

(2) the interactions of the carbonate system with other biotic and abiotic characteristics of estuarine ecosystems;

(3) how environmental and anthropogenic changes or disturbances could affect abiotic and biotic processes within estuaries;

(4) how estuarine biotic and abiotic processes will be affected under predicted environmental changes;

(5) the current state of data collection, interpretation, storage, and retrieval and observational infrastructure of abiotic and biotic parameters in estuarine ecosystems;

(6) the gaps that exist in understanding the socio-economic and health impacts of ocean acidification in estuaries;

(7) future directions for scientific research; and

(8) pathways for applying science in management and mitigation decisions.

(c) REPORT.—In entering into an arrangement under subsection (a), the Secretary shall request that the National Academies transmit to Congress a report on the results of the study not later than 24 months after the date of enactment of this Act.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section \$1,000,000.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Oregon (Ms. BONAMICI) and the gentleman from Oklahoma (Mr. LUCAS) each will control 20 minutes.

The Chair recognizes the gentlewoman from Oregon.

GENERAL LEAVE

Ms. BONAMICI. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 2533, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Oregon?

There was no objection.

Ms. BONAMICI. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise today in support of Congressman POSEY's National Estuaries and Acidification Research Act. I am an original cosponsor of this bipartisan bill, which would direct the National Academies of Sciences, Engineering, and Medicine to conduct a study that examines the science of ocean and coastal acidification in estuaries and provide recommendations to improve future research and management to inform mitigation decisions.

As co-chair of both the House Oceans Caucus and Congressional Estuary Caucus, I know that acidification is not only affecting the open ocean, estuaries and nearshore waters are also absorbing tremendous amounts of carbon pollution and becoming more acidic.

Our understanding of ocean acidification and its interactions with other environmental stressors, such as hypoxia, harmful algal blooms, and warming waters, is rapidly evolving, but is still limited in scope.

Ocean and coastal acidification are often present in the context of other coastal processes, like runoff, erosion, and upwelled water from the oceans, making it difficult to measure its individual effects on estuaries.

Our estuaries and nearshore waters are also experiencing the consequences of our inaction to address the climate crisis, and research has not kept pace with the needs of coastal communities. The NEAR Act will help address significant research gaps and the urgent need to improve our understanding of the ecological and socioeconomic effects of ocean and coastal acidification.

I thank Congressman POSEY for his leadership on this bipartisan bill and his efforts to preserve our Nation's estuaries. I also thank Chairwoman JOHNSON and Ranking Member LUCAS for making this bill a priority.

Mr. Speaker, I urge my colleagues to support it, and I reserve the balance of my time.

HOUSE OF REPRESENTATIVES, COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,

Washington, DC, April 16, 2021.

Chairman RAÚL M. GRIJALVA,
Committee on Natural Resources,
Washington, DC.

DEAR CHAIRMAN GRIJALVA: I am writing to you concerning H.R. 2533, the "National Estuaries and Acidification Research Act of 2021," which was referred to the Committee on Science, Space, and Technology as lead committee and sequentially referred to the Committee on Natural Resources on April 14, 2021.

I appreciate your willingness to work cooperatively on this bill. I recognize that the bill contains provisions that fall within the jurisdiction of the Committee on Natural Resources. I acknowledge that your Committee will waive further consideration of H.R. 2533 and that this action is not a waiver of future jurisdictional claims by the Committee on Natural Resources over this subject matter.

I will make sure to include our exchange of letters in the Congressional Record and will support the appointment of the Committee on Natural Resources conferees during any House-Senate conference. Thank you for your cooperation on this legislation.

Sincerely,

EDDIE BERNICE JOHNSON,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON NATURAL RESOURCES,
Washington, DC, April 20, 2021.

Hon. EDDIE BERNICE JOHNSON,
Chairwoman, Committee on Science, Space, and
Technology, Washington, DC.

DEAR CHAIRWOMAN JOHNSON: In recognition of the goal of expediting consideration of H.R. 2533, a bill to provide for a study by the National Academies of Sciences, Engineering, and Medicine examining the impact of ocean acidification and other stressors in estuarine environments, the Committee on Natural Resources agrees to waive formal consideration of the bill as to provisions that fall within the Rule X jurisdiction of the Committee on Natural Resources.

The Committee on Natural Resources takes this action with the mutual understanding that, in doing so, we do not waive any jurisdiction over the subject matter contained in this or similar legislation, and that the Committee will be appropriately consulted and involved as the bill or similar legislation moves forward so that we may address any remaining issues within our jurisdiction. Our Committee also reserves the right to seek appointment of conferees to any House-Senate conference involving this or similar legislation.

Thank you for agreeing to include our exchange of letters in the Congressional Record. 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.

Mr. LUCAS. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 2533, the National Estuaries and Acidification Research Act of 2021, a bipartisan bill sponsored by Congressman BILL POSEY, my esteemed colleague on the Science Committee.

This legislation directs the Secretary of Commerce to coordinate a study with the National Academies of Sciences, Engineering, and Medicine to

examine the effects of ocean acidification on estuary environments, and to submit that report to Congress within 2 years.

□ 1615

Specifically, this study will be led by the Ocean Studies Board of the National Academies and provide Congress a better understanding of the biological and economic impacts of ocean acidification on inland marine environments.

Estuaries are economically important water ecosystems that occur when inland rivers meet oceans. This mix of fresh and salt waters is a delicate balance of nature that possesses unique biological characteristics. To date, there have been few studies on the effects ocean acidification has on these ecosystems.

We can't manage and mitigate the effects of something we don't fully understand. That is why H.R. 2533 is still needed today to bridge our knowledge gaps by utilizing the best expertise and resources to gain a better understanding of this important issue.

While Oklahoma is a landlocked State without estuaries, I recognize the economic and environmental effects acidification has on all of our Nation's waterways and other natural treasures. The waters of Oklahoma's rivers, streams, and tributaries feed into larger systems and eventually make it to the ocean. At the end of the day, being a conservationist doesn't stop at geographic barriers. It is a nationwide effort.

Mr. Speaker, this important word-for-word bill passed the House last Congress with the same bipartisan support it has here today. Unfortunately, it didn't move further in the Senate. So, 1 year later, we still need to improve our knowledge of coastal acidification and estuaries.

I thank Mr. POSEY for leading this important legislation. I know his constituents and the Indian River Lagoon community appreciate his efforts to protect their surrounding environment. I also thank my Science Committee colleague across the aisle, Ms. BONAMICI, for leading the effort on the majority side.

Mr. Speaker, as the saying goes, knowledge is power. This simple bipartisan bill advances our knowledge and gives us the power to quantify the effects estuary communities face when faced with coastal acidification.

The National Academies are a tremendous resource. Their studies are thorough, informative, and world class. I look forward to seeing the final product directed by this bill.

By preserving our Nation's estuaries, we are saving businesses from closing, ecosystems from dying, and people from getting sick. I, again, thank Representative BILL POSEY and the entire Congressional Estuary Caucus for leading on this important topic.

Mr. Speaker, I urge my colleagues to support this bill, and I yield back the balance of my time.

Ms. BONAMICI. Mr. Speaker, this is a commonsense bill to address the urgent need for research on ocean and coastal acidification in estuaries.

I appreciate the partnership and leadership from Chairwoman JOHNSON, Ranking Member LUCAS, and Congressman POSEY to protect the health of our oceans and estuaries.

Mr. Speaker, I once again urge my colleagues on both sides of the aisle to support this bipartisan bill, and I yield back the balance of my time.

Mr. POSEY. Mr. Speaker, I'm pleased to rise in support of H.R. 2533, The National Estuaries and Acidification Research (NEAR) Act.

I want to thank Congresswoman SUZANNE BONAMICI and Congressman BRIAN MAST for working with me to advance this important legislation.

I also want to thank the National Academies of Sciences, Engineering, and Medicine for their valuable input.

The NEAR Act is a national proposal with a very special personal connection. People in my district—the 8th district of Florida—understand in a very deep way, the economic and environmental importance of the ocean and our estuary—the Indian River Lagoon.

This bill focuses on estuaries—those wondrous nurseries and homes for sea life.

Unfortunately, the Indian River Lagoon, and other valuable estuaries throughout the country, are being threatened by ocean acidification, along with other stressors.

Scientists tell us that when carbon dioxide is released into the atmosphere, about one third of that carbon dioxide is absorbed by seawater, creating carbonic acid.

Shellfish and other marine organisms don't do well in acidic waters. We know that.

We have over a decade of research on the impacts of acidification in the open ocean. Unfortunately, we don't have the same kind of knowledge about acidification in estuaries and waters near our shores.

We need to deepen our investment in research in our estuaries so we can protect and restore our estuaries and defend our environment and coastal economy.

The story of my district and the Indian River Lagoon plays out along our entire national coastline. More than half of the U.S. population lives in coastal areas.

Five years ago, Congresswoman BONAMICI and I cofounded the bipartisan Congressional Estuary Caucus to preserve and restore our estuaries. Coastal watershed counties provide an estimated 69 million U.S. jobs and contribute an estimated \$7.9 trillion to the GDP annually.

The National Academy study authorized by the NEAR Act is a great step toward filling in the gaps in our knowledge of how acidification affects our estuaries—both environmentally and economically.

Mr. Speaker, when we take care of our environment, we take care of ourselves, and therefore, I ask my colleagues to join me in taking this important step toward understanding how ocean acidification affects our precious estuaries and support this bill today.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Oregon (Ms. BONAMICI) that the House suspend the rules and pass the bill, H.R. 2533.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. ROSENDALE. Mr. Speaker, on that I demand the yeas and nays.

The SPEAKER pro tempore. Pursuant to section 3(s) of House Resolution 8, the yeas and nays are ordered.

Pursuant to clause 8 of rule XX, further proceedings on this motion are postponed.

RURAL STEM EDUCATION RESEARCH ACT

Ms. BONAMICI. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 210) to coordinate Federal research and development efforts focused on STEM education and workforce development in rural areas, including the development and application of new technologies to support and improve rural STEM education, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 210

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Rural STEM Education Research Act”.

SEC. 2. FINDINGS.

Congress finds the following:

(1) The supply of STEM workers is not keeping pace with the rapidly evolving needs of the public and private sector, resulting in a deficit often referred to as a STEM skills shortage.

(2) According to the Bureau of Labor Statistics, the United States will need one million additional STEM professionals than it is on track to produce in the coming decade.

(3) Many STEM occupations offer higher wages, more opportunities for advancement, and a higher degree of job security than non-STEM jobs.

(4) The 60,000,000 individuals in the United States who live in rural settings are significantly under-represented in STEM.

(5) According to the National Center for Education Statistics, nine million students in the United States—nearly 20 percent of the total K–12 population—attend rural schools, and for reasons ranging from teacher quality to shortages of resources, these students often have fewer opportunities for high-quality STEM learning than their peers in the Nation’s urban and suburban schools.

(6) Rural areas represent one of the most promising, yet underutilized, opportunities for STEM education to impact workforce development and regional innovation, including agriculture.

(7) The study of agriculture, food, and natural resources involves biology, engineering, physics, chemistry, math, geology, computer science, and other scientific fields.

(8) Employment in computer and information technology occupations is projected to grow 11 percent from 2019 to 2029. To help meet this demand, it is important rural students have the opportunity to acquire computing skills through exposure to computer science learning in grades Pre-K through 12 and in informal learning settings.

(9) More than 293,000,000 individuals in the United States use high-speed broadband to work, learn, access healthcare, and operate their businesses, while 19,000,000 individuals

in the United States still lack access to high-speed broadband. Rural areas are hardest hit, with over 26 percent of individuals in rural areas in the United States lacking access to high-speed broadband compared to 1.7 percent of individuals in urban areas in the United States.

SEC. 3. NIST ENGAGEMENT WITH RURAL COMMUNITIES.

(a) MEP OUTREACH.—Section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) is amended—

(1) in subsection (c)—

(A) in paragraph (6), by striking “community colleges and area career and technical education schools” and inserting the following: “secondary schools (as defined in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801)), community colleges, and area career and technical education schools, including those in underserved and rural communities;” and

(B) in paragraph (7)—

(i) by striking “and local colleges” and inserting the following: “local high schools and local colleges, including those in underserved and rural communities;” and

(ii) by inserting “or other applied learning opportunities” after “apprenticeships”; and

(2) in subsection (d)(3) by striking “, community colleges, and area career and technical education schools,” and inserting the following: “and local high schools, community colleges, and area career and technical education schools, including those in underserved and rural communities.”

(b) RURAL CONNECTIVITY PRIZE COMPETITION.—

(1) PRIZE COMPETITION.—Pursuant to section 24 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719), the Secretary of Commerce, acting through the Under Secretary of Commerce for Standards and Technology (referred to in this subsection as the “Secretary”), shall, subject to appropriations, carry out a program to award prizes competitively to stimulate research and development of creative technologies in order to deploy affordable and reliable broadband connectivity to underserved rural communities.

(2) PLAN FOR DEPLOYMENT IN RURAL COMMUNITIES.—Each proposal submitted pursuant to paragraph (1) shall include a plan for deployment of the technology that is the subject of such proposal in an underserved rural community.

(3) PRIZE AMOUNT.—In carrying out the program under paragraph (1), the Secretary may award not more than a total of \$5,000,000 to one or more winners of the prize competition.

(4) REPORT.—Not later than 60 days after the date on which a prize is awarded under the prize competition, the Secretary shall submit to the relevant committees of Congress a report that describes the winning proposal of the prize competition.

(5) CONSULTATION.—In carrying out the program under subsection (a), the Secretary may consult with the heads of relevant departments and agencies of the Federal Government.

SEC. 4. NITR-D BROADBAND WORKING GROUP.

Title I of the High-Performance Computing Act of 1991 (15 U.S.C. 5511 et seq.) is amended by adding at the end the following:

“SEC. 103. BROADBAND RESEARCH AND DEVELOPMENT WORKING GROUP.

“(a) IN GENERAL.—The Director shall establish a broadband research and development working group to address national research challenges and opportunities for improving broadband access and adoption across the United States.

“(b) ACTIVITIES.—The working group shall identify and coordinate key research prior-

ities for addressing broadband access and adoption, including—

“(1) promising research areas;

“(2) requirements for data collection and sharing;

“(3) opportunities for better alignment and coordination across Federal agencies and external stakeholders; and

“(4) input on the development of new Federal policies and programs to enhance data collection and research.

“(c) COORDINATION.—The working group shall coordinate, as appropriate, with the Rural Broadband Integration Working Group established under section 6214 of the Agriculture Improvement Act of 2018 (Public Law 115-334) and the National Institute of Food and Agriculture of the Department of Agriculture.

“(d) REPORT.—The working group shall report to Congress on their activities as part of the annual report submitted under section 101(a)(2)(D).

“(e) SUNSET.—The authority to carry out this section shall terminate on the date that is 5 years after the date of enactment of the Rural STEM Education Act.”

SEC. 5. NATIONAL ACADEMY OF SCIENCES EVALUATION.

(a) STUDY.—Not later than 12 months after the date of enactment of this Act, the Director shall enter into an agreement with the National Academy of Sciences under which the National Academy agrees to conduct an evaluation and assessment that—

(1) evaluates the quality and quantity of current Federal programming and research directed at examining STEM education for students in grades Pre-K through 12 and workforce development in rural areas;

(2) assesses the impact of the scarcity of broadband connectivity in rural communities has on STEM and technical literacy for students in grades Pre-K through 12 in rural areas;

(3) assesses the core research and data needed to understand the challenges rural areas are facing in providing quality STEM education and workforce development; and

(4) makes recommendations for action at the Federal, State, and local levels for improving STEM education for students in grades Pre-K through 12 and workforce development in rural areas.

(b) REPORT TO DIRECTOR.—The agreement entered into under subsection (a) shall require the National Academy of Sciences, not later than 24 months after the date of enactment of this Act, to submit to the Director a report on the study conducted under such subsection, including the National Academy’s findings and recommendations.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Director to carry out this section \$1,000,000 for fiscal year 2022.

SEC. 6. GAO REVIEW.

Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall conduct a study on the engagement of rural populations in Federal STEM programs and submit to Congress a report that includes—

(1) an assessment of how Federal STEM education programs are serving rural populations;

(2) a description of initiatives carried out by Federal agencies that are targeted at supporting STEM education in rural areas;

(3) an assessment of what is known about the impact and effectiveness of Federal investments in STEM education programs that are targeted to rural areas; and

(4) an assessment of challenges that state and Federal STEM education programs face in reaching rural population centers.