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.

IN THE HOUSE OF REPRESENTATIVES

Mr. Posey introduced the following bill; which was referred to the Committee on ______________________

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.

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

2 SECTION 1. SHORT TITLE.

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

117TH CONGRESS
1ST SESSION

H. R. _____

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April 2, 2021 (12:35 p.m.)
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 Na-
tional 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.