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(Original Signature of Member)

115TH CONGRESS
2D SESSION

H. R. _____

To provide for a study by the Ocean Studies Board of the National Academies of Science 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 Ocean Studies Board of the National Academies of Science examining the impact of ocean acidification and other stressors in estuarine environments.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Estuaries and
5 Acidification Research Act of 2018” or the “NEAR Act
6 of 2018”.

1 **SEC. 2. CONGRESSIONAL FINDINGS.**

2 Congress finds the following:

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

6 (2) The current understanding of ocean acidifi-
7 cation impacts on estuarine ecosystems is inadequate
8 to fully prepare and manage for changing environ-
9 mental conditions in nearshore locations.

10 (3) While pH can be measured with high preci-
11 sion and accuracy in open ocean environments, more
12 understanding of the carbonate system in estuarine
13 ecosystems is needed for precise and accurate meas-
14 urements and observations.

15 (4) The interaction of multiple stressors, includ-
16 ing salinity, pH, temperature, sea-level rise and nu-
17 trient-input, within estuarine ecosystems, is inad-
18 equately understood for managing the health, eco-
19 nomic, recreational and environmental impacts driv-
20 en by these interactions.

21 (5) A better understanding is needed of how
22 anthropogenic influences in coastal environments af-
23 fect estuarine ecosystems.

24 (6) More integration and coordination is needed
25 between regional, national, and global environmental
26 observations in estuarine environments, supporting

1 prior investments in related topics such as nutrient
2 loading, hypoxia, ocean acidification, and harmful
3 algae bloom research and observational systems.

4 **SEC. 3. STUDY EXAMINING THE IMPACT OF OCEAN ACIDIFI-**
5 **CATION AND OTHER ENVIRONMENTAL**
6 **STRESSORS ON ESTUARINE ENVIRONMENTS.**

7 (a) IN GENERAL.—Not later than 60 days after the
8 date of enactment of this Act, the Secretary of Commerce
9 shall make appropriate arrangements with the Ocean
10 Studies Board of the National Academies under which the
11 Board shall conduct a study that—

12 (1) examines the existing science of ocean acidi-
13 fication in estuarine environments;

14 (2) examines the challenges to studying ocean
15 acidification and ocean acidification's interactions
16 with other environment stressors in estuarine envi-
17 ronments;

18 (3) provides recommendations for improving fu-
19 ture research; and

20 (4) identifies pathways for applying science in
21 management and mitigation decisions.

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

24 (1) the current state of data collection, inter-
25 pretation, storage, and retrieval and observational

1 infrastructure of abiotic and biotic parameters in es-
2 tuarine ecosystems;

3 (2) how environmental and anthropogenic
4 changes or disturbances could affect abiotic and bi-
5 otic processes within estuaries;

6 (3) how estuarine biotic and abiotic processes
7 will be affected under predicted environmental
8 changes;

9 (4) the behavior of the carbonate system within
10 estuarine environments;

11 (5) the interactions of the carbonate system
12 with other biotic and abiotic characteristics of estua-
13 rine ecosystems;

14 (6) the gaps that exist in understanding the
15 socio-economic and health impacts of ocean acidifica-
16 tion in estuaries;

17 (7) future directions for scientific research; and

18 (8) pathways for applying science in manage-
19 ment and mitigation decisions

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