

116TH CONGRESS  
1ST SESSION

# H. R. 988

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.

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## IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 6, 2019

Mr. POSEY (for himself, Ms. BONAMICI, and Mr. MAST) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## 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 2019” or the “NEAR Act  
6 of 2019”.

1 **SEC. 2. 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 among 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 with respect to ocean acidification in  
20 estuarine environments; and

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

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

1           (1) the current state of data collection, inter-  
2           pretation, storage, and retrieval and observational  
3           infrastructure of abiotic and biotic parameters in es-  
4           tuarine ecosystems;

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

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

11          (4) the behavior of the carbonate system within  
12          estuarine environments;

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

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

19          (7) future directions for scientific research; and

20          (8) pathways for applying science in manage-  
21          ment and mitigation decisions.

22          (c) REPORT.—In entering into an arrangement under  
23          subsection (a), the Secretary shall request that the Board  
24          transmit to Congress a report on the results of the study

1 not later than 24 months after the date of enactment of  
2 this Act.

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