

117TH CONGRESS
2D SESSION

H. R. 9027

To direct the Secretary of Energy to establish a pilot program on ocean restoration research and development, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 29, 2022

Mr. MCKINLEY (for himself, Mr. MICHAEL F. DOYLE of Pennsylvania, and Mr. CARTER of Georgia) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To direct the Secretary of Energy to establish a pilot program on ocean restoration research and development, and for other purposes.

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 “Ocean Restoration Re-
5 search and Development Act of 2022”.

6 **SEC. 2. OCEAN FERTILIZATION RESEARCH AND DEVELOP-**
7 **MENT PILOT PROGRAM.**

8 (a) ESTABLISHMENT.—The Secretary of Energy
9 shall establish a pilot program for the research and devel-

1 opment of ocean replenishment and restoration tech-
2 nologies and techniques that have the potential to achieve
3 regional-to-global scale ocean restoration, enhancement of
4 fisheries, conservation of marine mammals, and emissions
5 reductions.

6 (b) REQUIREMENTS.—The pilot program established
7 under subsection (a) shall include—

- 8 (1) a research and development program;
- 9 (2) demonstration projects, including pilot
10 projects; and
- 11 (3) front-end engineering, design, and economic
12 analysis.

13 (c) CONSULTATION.—In carrying out the pilot pro-
14 gram established under subsection (a), the Secretary shall
15 consult and collaborate with, as necessary—

- 16 (1) the heads of other relevant Federal depart-
17 ments and agencies, including—
 - 18 (A) the Administrator of the National Oce-
19 anic and Atmospheric Administration;
 - 20 (B) the Administrator of the Environ-
21 mental Protection Agency;
 - 22 (C) the Director of the Bureau of Ocean
23 Energy Management; and
 - 24 (D) the Director of the National Science
25 Foundation;

1 (2) institutions of higher education;

2 (3) the National Oceanographic Partnership
3 Program; and

4 (4) representatives from other relevant private
5 and public sector organizations.

6 (d) PROGRAM GOALS AND OBJECTIVES.—In con-
7 sultation with the entities described in subsection (c), the
8 Secretary shall develop goals and objectives for the pilot
9 program established under subsection (a) to be applied to
10 the transformational technologies and practices developed
11 under such program, taking into consideration—

12 (1) the acceleration of the development of tech-
13 nologies and practices that have transformational
14 ocean restoration, carbon removal, or carbon storage
15 characteristics;

16 (2) the utilization of, to the maximum extent
17 practicable, environmental data collected by—

18 (A) the entities described in subsection (c);

19 (B) the Defense Advanced Research
20 Projects Agency through the Ocean of Things
21 program;

22 (C) the National Aeronautics and Space
23 Administration through the Plankton, Aerosol,
24 Cloud, ocean Ecosystem mission; and

1 (D) the United States Navy through the
2 Marine Mammal Program;

3 (3) support for sites for safe testing and dem-
4 onstration;

5 (4) the need to enter into cooperative agree-
6 ments to carry out and expedite small-scale dem-
7 onstration projects;

8 (5) compliance with relevant international laws
9 and treaties; and

10 (6) any benefits or barriers to the commercial
11 deployment of any such technologies and practices.

12 (e) PRIORITIES.—In carrying out the pilot program
13 established under subsection (a), the Secretary shall, to
14 the maximum extent practicable, prioritize activities
15 that—

16 (1) take place in pelagic waters; and

17 (2) will not stimulate phytoplankton production
18 that causes or accelerates harmful algal blooms in
19 coastal waters.

20 (f) REPORT TO CONGRESS.—Not later than 3 years
21 after the date of enactment of this Act, the Secretary shall
22 submit to Congress a report describing—

23 (1) the program goals and objectives adopted
24 under subsection (d);

1 (2) the effectiveness of the pilot program estab-
2 lished under subsection (a) on reducing carbon diox-
3 ide levels in the atmosphere and recommendations
4 for improving such program;

5 (3) any results, successes, and related co-bene-
6 fits to marine mammals and fisheries, and failures
7 of carrying out the pilot program established under
8 subsection (a);

9 (4) the potential to undertake large-scale dem-
10 onstration projects and utilize international waters
11 for demonstration projects; and

12 (5) any other information the Secretary con-
13 siders relevant.

14 (g) AUTHORIZATION OF APPROPRIATIONS.—There
15 are authorized to be appropriated to carry out this section
16 \$33,000,000 for each of fiscal years 2023 through 2027.

17 (h) DEFINITIONS.—In this section:

18 (1) COASTAL WATERS.—The term “coastal
19 waters” means the land and sea areas bordering the
20 shoreline where hypoxic conditions exist or are likely
21 to occur due to excess nutrients.

22 (2) OCEAN RESTORATION.—The term “ocean
23 restoration” includes the research and development
24 of technologies and techniques that support the ad-
25 dition of nutrients to the upper layers of the ocean

1 for the purpose of stimulating phytoplankton activ-
2 ity.

3 (3) PELAGIC WATERS.—The term “pelagic
4 waters” means the part of the open sea or ocean
5 other than coastal waters.

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