

118TH CONGRESS
2D SESSION

S. 5599

To require the Under Secretary of Commerce for Oceans and Atmosphere
to conduct a project to improve forecasts of coastal marine fog.

IN THE SENATE OF THE UNITED STATES

DECEMBER 18 (legislative day, DECEMBER 16), 2024

Mr. CRUZ introduced the following bill; which was read twice and referred to
the Committee on Commerce, Science, and Transportation

A BILL

To require the Under Secretary of Commerce for Oceans
and Atmosphere to conduct a project to improve fore-
casts of coastal marine fog.

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 “Fog Forecast Improve-
5 ment Act”.

6 **SEC. 2. PROJECT TO IMPROVE FORECASTS OF COASTAL**
7 **MARINE FOG.**

8 (a) IN GENERAL.—The Under Secretary shall con-
9 duct a project to improve forecasts of coastal marine fog.

1 (b) GOAL.—The goal of the project required under
2 subsection (a) is to enhance vessel safety and reduce the
3 economic impact of coastal marine fog events, with a focus
4 on—

5 (1) increasing the number of marine-based ob-
6 servations through additional Federal Government
7 platforms and commercially acquired observations in
8 locations where impacts from marine fog and re-
9 duced visibility have major safety and economic im-
10 pacts, including through the use of—

11 (A) buoys;

12 (B) meteorological stations measuring visi-
13 bility, temperature, dewpoint, and wind speed
14 and direction as a stand-alone or co-located
15 with water level sensors, such as those that are
16 part of the physical oceanographic observation
17 system program of the National Oceanic and
18 Atmospheric Administration;

19 (C) stationary platforms or drifting instru-
20 ments;

21 (D) vessels;

22 (E) unmanned systems;

23 (F) remote sensing technologies, including
24 rapid refresh hyperspectral satellite imagery;
25 and

1 (G) advanced algorithms that extract ac-
2 tionable information from observational data,
3 including early detection and regular moni-
4 toring of marine fog;

5 (2) advancing geographic coverage, resolution,
6 skill, and accuracy of marine fog modeling, includ-
7 ing, when feasible, additional locations and advance-
8 ments in marine channel forecast capability;

9 (3) improving communication of marine fog
10 advisories by the National Oceanic and Atmospheric
11 Administration;

12 (4) communicating risks posed by hazardous
13 marine fog events in a way that maximizes informed
14 decision making by the public; and

15 (5) providing decision support services based on
16 environmental information that is actionable to the
17 recipient of a marine fog advisory.

18 (c) STAKEHOLDER ENGAGEMENT.—In implementing
19 the project required under subsection (a), the Under Sec-
20 retary shall meet with public and private stakeholders re-
21 garding the planning, development, and implementation of
22 the project.

23 (d) PROJECT PLAN.—Not later than one year after
24 the date of the enactment of this Act, the Under Secretary
25 shall develop a plan for the project required under sub-

1 section (a) that details the specific research, development,
2 and technology transfer activities, as well as corresponding
3 resources and timelines, necessary to achieve the goal set
4 forth under subsection (b).

5 (e) UNDER SECRETARY DEFINED.—In this section,
6 the term “Under Secretary” means the Under Secretary
7 of Commerce for Oceans and Atmosphere.

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